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Corporate Social Responsibility and Voluntary Disclosure: empirical
evidences from different contexts in the financial sector

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Index

Introduction.....	7
1. Corporate Social Responsibility and Voluntary disclosure	9
1.1 Company and Corporate Social Responsibility Reporting	13
1.2 Corporate Social Responsibility Impact on Stakeholders and Shareholders Value	14
1.3 Information asymmetry and company Market Price	17
1.4 Criticism against Corporate Social Responsibility	19
1.5 Corporate Social Responsibility Assurance	21
1.6 Company's Code of Conduct	22
1.7 Factors of influence on Corporate Social Responsibility integrated reports.....	23
1.8 Firms' cultural difference and Corporate Social Responsibility	25
1.9 Models of national capitalism and difference in Corporate Social Responsibility reporting	32
1.10 The Growing Relevance of the Investor Relations and Integrated Reporting	36
1.11 Global Initiatives made on Integrated Reporting and Corporate Social Responsibility	37
1.12 Definition of the research question	42
2. Methodology of assessment and purpose of the research.....	47
2.1 Definition of the Sample	47
2.2 Definition of the Key Pillars	52
2.3 Definition of the Key Indicators.....	53
2.4 Data Collection	54
2.5 Methodology of assessment of the data and explanation of the model of analyses	55
2.6 Unit of analyses of the Economic Performance	59
2.7 Method for establish if CSR activities are Correlated to Economic performance.....	59
3. Empirical evidence from the banking sector.....	63
3.1 Statistical tools to support the results.....	63
3.2 Results and comparison of the banks' sample analysed	65
3.3 Results and comparison of the CSR documents analysed	69
3.4 Overall results.....	70
3.5 ESG and the Economic Performance: Coefficient of Correlation.....	75
3.6 Results and interpretations by Nation.....	81
3.7 Overall results combination	91
3.8 ANOVA tests and Linear Regression Model	93
4. Conclusions	98
4.1 Discussion of the results	102
4.2 Limits of the research and possible future directions	104
References	106
Appendix.....	112

Introduction

Corporate Social Responsibility represents nowadays an essential element that every Corporation must consider in order to craft, develop and share an effective business strategy.

Today, in the majority of the existent markets, the possibility of creating value pass through the capacity of respecting the overall environment which surrounds the idea of business and the ability of communication of this capacity. For that reason, every day academic literatures, journals and business articles are constantly drafted about this topic.

After the 2007-2012 “Great Recession”, the level of commitment required by the companies in matters related to sustainability, has particularly grown in all industries. Among the sector in which this event has assumed the highest intensity, there is the financial one. In this latter industry in fact, financial stakeholders became increasingly sceptical, and the evaluation of the strategy adopted by the companies in which they are engaged turned out to be central.

These findings motivate the following study related to the sustainability and to the existent disclosure systems characterizing the financial industry and in particular the banking sector. This research has the aim to analyse the characteristics of the Corporate Social Responsibility and the reporting strategies existents among different cultural contexts. Because of the lack of a univocal vision, the analysis is particularly focused on the determination of the impact of sustainability reports on economic performances regarding a specific sample of banks. The sample is composed by the top five banks (accordingly to the total assets held) of four different Nations: United states of America, Germany, China and South Africa.

In the first chapter of this thesis are reported theoretical aspects based on the literature. The concepts of sustainability, voluntary disclosure and their implications are elaborated.

The aspects related to Corporate Social Responsibility impact on stakeholders and shareholders value are theoretically analysed. An important section is dedicated to the theory against the Corporate Social Responsibility development. In this chapter, the empirical study finds its roots: (Campbell and Slack, 2008) found four categories to measure enterprises’ content of Corporate Social Responsibility disclosure, that are: community involvement, environmental impact, human resources and social products and services quality. This thesis takes inspirations from these categories to measure the content of sustainability reported by the firms analysed in the empirical part.

After the definition of these aspects, there is a fundamental analysis of the existents cultural differences that influence firms’ ability to develop and disclose sustainability reports.

Thanks to the study and the analysis of Hofstede model, the comparison between the features of the four aforementioned Nations are developed. Finally, there are listed the main global

initiatives concerning the development of reliable Corporate Social Responsibility reports, that every company might adopt, such as: IIRC Guiding Principles, UNGC, GRI, ISO 26000 and the Principles of the King Report on Governance for South Africa 2009 (King III).

In the second chapter, it is reported the sample of banks analysed and the methodology of assessment through which they are evaluated. This chapter is therefore essential for the achievement of the aim of the entire research. The definition and comparison of the banks analysed is based on the disclosure of their different features through a quantitative analysis, while the methodology of assessment is based both on quantitative and qualitative analyses. This chapter includes a personal model developed to evaluate the information related to the sustainability reports and its explanation.

The third chapter contains the results of the evaluation of the banks analysed and their interpretation. Firstly, it is reported the overall result of the research, then there are reported the results by Nations.

The fifth chapter includes the conclusions of the research and the discussion of the results obtained thanks to the empirical analyses, with a section dedicated to expose the limits of the model developed and some purposes useful to future researches.

1. Corporate Social Responsibility and Voluntary disclosure

Corporate Social Responsibility assumes an important role in nowadays activity reports for every kind of firm, independently by the sector or by its dimension.

This fundamental instrument represents a key connection between company and stakeholders. The weight given to CSR (Corporate Social Responsibility) for an enterprise depends ultimately by its dimensions, or better, by its availability of resources.

The bigger the company, the higher the need to develop this aspect.

In fact, as reported by Global Reporting Initiatives (GRI, 2017) in 2017 93% of the largest 250 corporations made a report on their sustainability performances (KPMG Survey of Corporate Responsibility Reporting, 2017).

The main reason behind this logic is attached to the requirements coming from the diversity of stakeholders that a big firm has. The role of State restrictions, or international rules, have a higher impact in this type of companies. Moreover, from another point of view many professional investors require documentations and proves about CSR.

Voluntary disclosure in this case represents one of the main proves of real commitment and effort towards the achievement of the requirements stated above.

Corporate Social Responsibility vs Voluntary disclosure concepts

According to Jizi, Nehme and Salama (2016), CSR can be seen as the interaction between the firm and its stakeholders through addressing their social and environmental concerns with business activities. It has been demonstrated that the informative content of CSR disclosure is appreciated by stock participants and is of value. The reported results signal investors' interest in and consideration to CSR disclosure when valuing assets.

The strength and impact of CSR is most likely determined by the effective communication of the firm's CSR activities to the largest group of stakeholders and the level of involvement, which reflects commitment to society and unselfishness (Godfrey et al., 2009). Therefore, the typical content of the voluntarily disclosed CSR information contains information addressing the firm's impact on social, environmental and human resources issues (Campbell and Slack, 2008).

“CSR is how firms incorporate their social and environmental concerns into their business activities to support the development of their communities and create wealth” (Cormier, 2001, p. 615).

Definition of Corporate Social Responsibility

In order to define the concept behind CSR, it is necessary to analyse deeply the reason behind its creation. The origin of the theme found its roots in the early twentieth century, in the United States, Japan and Western Europe, where the second phase of the industrial revolution took place.

This latter imposed some shortcomings in the management systems: labour and social conditions were not considered an important issue. Consequently, the welfare state was really low for the majority of the people. This was due to the logic connected to the consolidation of the capitalism as an economic philosophy (Martínez, 2016).

Authors as Weber and Clark, decided therefore, at that time, to express the need to create a new framework of social responsibility in order to educate businesspeople.

The definition of the actual CSR changed many times since the twentieth, and taking the definition provided by European Commission (2011) it is possible to define it as *the process of integration in the organizational activities of social, environmental, ethical and human concerns from their interest groups, with two objectives: (1) to maximize value creation for these parts, and (2) to identify, prevent and mitigate the adverse effects of organizational actions on the environment.*

Concept of Corporate Social Responsibility

Regardless the variety of the definition existing in literature of CSR, it is necessary to understand the concept of it. For Milton Friedman (Strategic Management: A Stakeholder Approach, 1984, p. 74) “*There is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits*”. This vision changed in the last few decades and according to Peter Senge (2008), the actual way of thinking is deductible by his metaphor: “*Profit for a company is like oxygen for a person. If you don’t have enough of it, you’re out of the game. But if you think your life is about breathing, you’re really missing something*” (Senge, 2008, p. 12).

Following the approach proposed in “The Journal of Institute of Public Enterprise” in 2016, it is possible to state that CSR is a multi-layered concept having four main aspects took by Carroll (1991):



Figure 1. CSR Pyramid. Source: personal elaboration

As reported in the same Journal, any firm should satisfy all of the four elements reported in the scheme above in order to be active concerning Corporate Social Responsibilities.

CSR is the instrument through which the company can communicate with its stakeholders beyond the financial aspects, giving the possibility to understand information on environmental and social decisions took by management.

Useful for understanding the varieties of the sides in which CSR acts, the definition of the World Bank (2009) defines it has the commitment of businesses to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their lives in ways that are good for business and for development, might explain again, in different words, the importance of this topic on normal life day of everyone.

Becomes clear that CSR is how formally firms incorporate their social and environmental concerns into their business activities to support the development of their communities and create wealth (Cormier, 2001).

Campbell and Slack (Narrative reporting: Analysts' perceptions of its value and relevance., 2008, p. 35) define this concept as "*Voluntary disclosure containing information on the company's impacts upon a range of social and environmental constituencies or stakeholders. Typical contents include information on human resources, communities, environmental resource consumption and environmental impact*". The impact of CSR is achieved by effectively communicating CSR initiatives to stakeholders, conveying the level of community involvement and unselfishness (Godfrey et al., 2009).

In the following scheme list, is reported the categories useful to analysed the degree of CSR disclosure in every kind of firm. Studying these aspects, it is possible to obtain a reliable outcome useful to verify how and in which mode a company has developed sustainability.

4 categories to measure the content of CSR disclosure



Figure 2. Categories of CSR disclosure. Source: personal elaboration

Voluntary disclosure

Corporate Social Responsibility is embedded with voluntary disclosure concept, because this latter is a manifestation of the previous one. Since CSR is not mandatory for every firm (actually is mandatory only for a minimal part of the existing ones), become incredibly clear that the disclosure of information on this topic is voluntary. The majority of the firms, dependently by the State in which is located, have to respond to compulsory rules and requirements. These are not necessarily about CSR themes, and moreover are not the same in every State.

South African listed companies on Johannesburg stock exchange are subjected to a Mandatory Disclosure, and for that reason they represent the greater example of enterprises active in CSR. Today, the rate of harmonization existent on this topic is not sufficiently high to create a valid and easy comparison among firms belonging to different markets and sectors. An instrument that can demonstrate corporations' efforts is therefore voluntary disclosure.

Anyway, not all of the firms that are engaged in developing corporate sustainable strategy are disclosing it to their stakeholders. So, what just stated is an explanation of the difference between the concepts of CSR and Voluntary Disclosure.

Corporate Social responsibility as a Triple Bottom Line

Elkington in (1997) provided a definition of CSR that became used by the majority of the scholars in the literature from then on.

Following the majority of the authors, the approach of the Triple Bottom Line (TBL) consists in the three Ps:

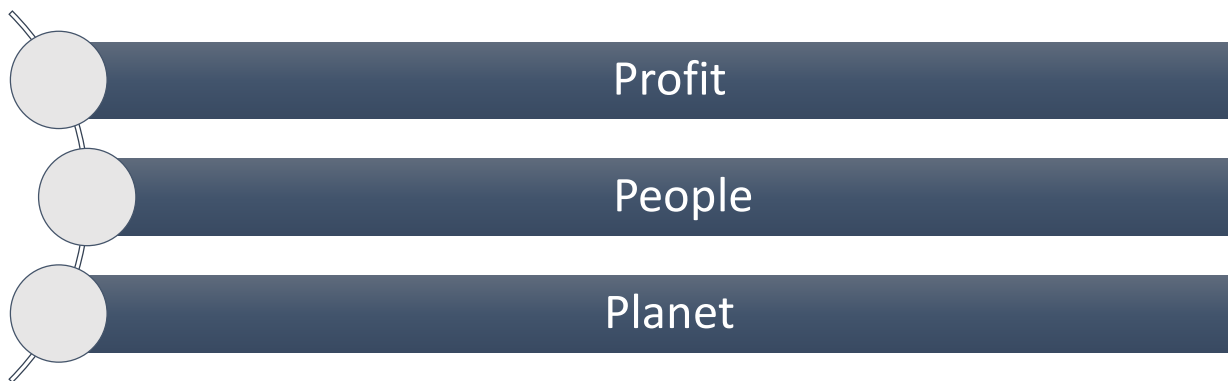


Figure 3. TBL approach. Source: personal elaboration

Every firm that is engaged on CSR activities, has to consider separately the aspects of the scheme above. Profit represents the “bottom line” regarding precisely economic profit and loss of the company. The second instead, regards how socially responsible an organization has been throughout its operations. Finally, the third aspect concerns a measure of how the enterprise is environmentally responsible.

The message behind this approach is that: only the companies that are taking in consideration all of these aspects is actively considering the total cost of doing business.

This lead necessary to a broad concept of performance it-self of a company:

- Profit performance
- Social performance
- Environmental performance

The principal shortcoming of taking in consideration separately TBL items is that becomes really tough to measure and manage separately the aspects treated in this theory.

This is evident also empirically, and this is a possible reason behind the fact that there were no cohesive and general rules that firms have to adopt regarding CSR reporting.

1.1 Company and Corporate Social Responsibility Reporting

The TBL approach and its theory are not compulsory rules that every firm has to adopt. Many times, and in many cases, there are companies that are actually engaged in developing only two aspects of this approach. Starting by the economic principle, every firm should put its effort at least concerning the profit performance. CSR represents therefore not the primal activity of

interest of every entrepreneur. This leads to three different groups concerning CSR reporting (Vukic, 2015):

1. Companies who decide to do not disclose information regarding social and environmental impacts, because they are not considered relevant this information for their business activities
2. Companies who decide voluntarily to disclose information regarding social and environmental activities on a regular basis
3. Companies who choose to disclose information on CSR reports only due to their size or industry, or due to pressures coming from government or other stakeholders

In order to disclose information companies can choose among different tools, that will be explained further on. Generally, they might be grouped into two main categories: CSR reports or integrated company reports.

1.2 Corporate Social Responsibility Impact on Stakeholders and Shareholders Value

Corporate social responsibility impacts both on stakeholder's and shareholder's value.

In order to show this theme, it is easier to start from the fact that CSR information is important for stakeholder as a whole, but particularly for investors' wealth (Social Investment Forum, 2010). For that reason, it has been demonstrated that especially after the 2008 world crisis, investors are looking for new reliable source of information about CSR performances either from public or through private channels, before making an investment.

The reason linked to this requirement is embedded to the reduction of the information asymmetry existent between them and the company.

Institutional Theory

It is useful to mention this theory in order to better understand the role held by CSR. According to it, a firm have to adapt its organization and its structure for meeting institutional expectations surrounding important issues (Deegan, 2002). In fact, this theory focuses on the influence of political, social and economic systems on firm's behavior and legitimacy (Vaz, 2016). It is clear that the institutional context is the main cause of different accounting regulation, and at the same time, of different features of CSR reports.

DiMaggio and Powell in (DiMaggio, 1983) identified three main types of institutionalization mechanisms (Larrinaga, 2007):

1. Coercive: focus on rules setting, monitoring, reward and punishment
2. Normative: based on non-imposed norms and value
3. Mimetic: based on the imitation of fellow companies perceived to be successful

It is possible to affirm that institutional pressure is acting in a positive way on integrated reporting (Villiers, 2014). In fact, the international Integrated Reporting Committee (IIRC) created in 2010 and the King Report on Corporate Governance in South Africa created in 2009, represent the main initiatives advocating the use of integrated reporting as the best method to disclose CSR.

Moreover, IIRC promotes also integrated thinking, not only integrated reporting.

The approach of “old- institutionalism”, help to understand why organizations view the imitation of behaviours identified in their environment, as able to ensure the legitimacy of the groups and institutions that have shaped it. Anyway, the new institutional trend, conceived as “neo-institutionalism”, suggests that organizations and their strategies are substantially influenced by cultural factors, legal, historical and political institutions that define specific patterns of behavior for different regions or countries (Doh, 2006).

Stakeholder Theory

Freeman in 1984 developed this theory, basing it on the assumption that stakeholders are fundamental agents for the survival of a company. Freeman defined stakeholders as “*any group or individual who can affect or be affected by the decisions and the achievement of corporate objectives*” (Freeman R. , 1984, p. 25). Hence, satisfying stakeholders’ interests are the main interest of the firm it-self. For that reason, managers need to disclose information in a way that can increase the value of the company from stakeholders’ point of view, addressing their expectations. As already stated above in this document, reporting concerns a variety of issues, beyond the mere financial performance of the company. Since TBL approach and sustainability reporting became more and more relevant for enterprises, different kind of stakeholders’ interests can be grouped and disclosed either through integrated reports or more generally through CSR reports.

Perrini and Tencati in (2008), developed a system of sustainability based on three modules:

1. Overall reporting system: annual report, social report, environmental report and a set of integrated performance indicators from a business perspective
2. Integrated communication system: it allows to collect, process and share data
3. Key performance indicators for corporate sustainability: allow to map company's relationship with its stakeholders

According to Mitchell et al. (1997), taking in consideration CSR's implementation actions, stakeholder theory shows that the behavior of the company will be influenced not only by agents directly belonging to the organization (shareholders, employees, investors, etc.), but also by other outside groups such as social and environmental activists, professional critics, media, etc. Henriques and Sadorsky (1999) found that the commitment adopted by companies in their practices is influenced particularly by interests promoted by some agents, active for example in environmental cause. For these reason Phillips, Freeman, and Wicks (2003) decided to review stakeholder's theory in order to simplify it and to create a different approach concerning the internal groups belonging to the company. Phillips also proposes six specific external groups.

Stakeholders' Groups

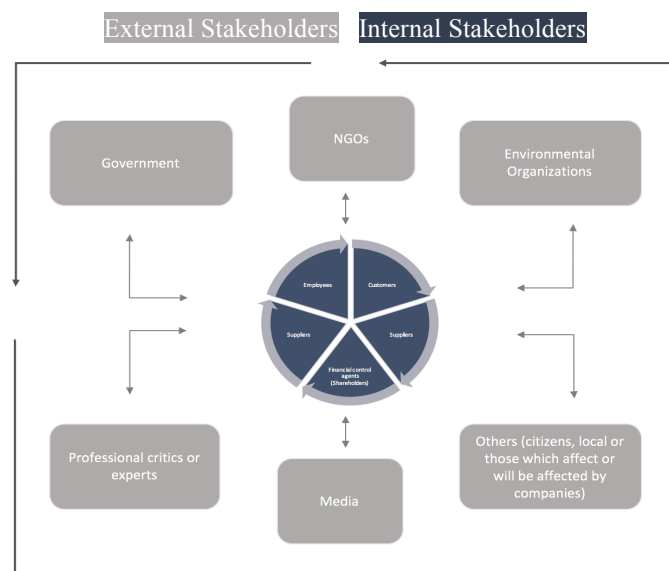


Figure 4. Stakeholder Groups. Source: personal rielaboration

Legitimacy concept for Lee (2011) represents the reason of why agents that are not directly involved within the company, have a great grade of influenced on it. The concept of legitimacy “is not a commodity to be possessed or exchanged by companies, but rather a condition that reflects the cultural alignment, normative support, or consonance with the rules or laws of the environment” (Scott W. R., 2007, p. 57).

It is possible to affirm that together, Stakeholders Theory and Institutional Theory are the two key elements useful to understand the logic and the reasoning linked to the Corporate Social Responsibility actions that every day firms have to take in consideration.

Corporate social responsibility assumes the role of conducting business in an ethical way and balancing shareholder wealth maximization with the interests of the wider community (Rath, 2016). Taking in consideration the previous general economic theories mentioned before, which constitute the ground also for CSR activities, it is possible to understand and talk about the existent theories developed about Corporate Social Responsibility itself:

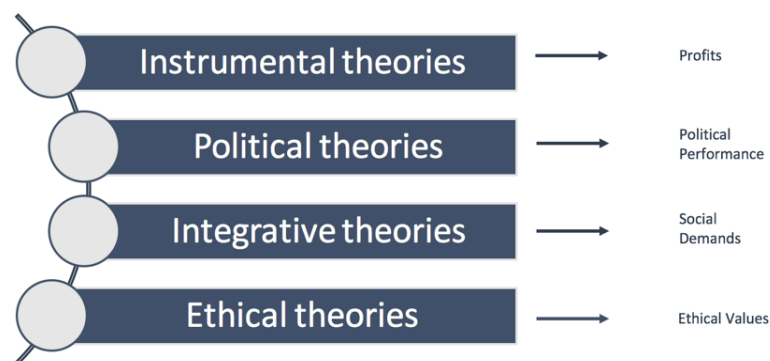


Figure 5. Theoretical theories on CSR. Source: personal elaboration

Instrumental theory: the corporation is seen as an instrument for achieving economic purposes, and the related social activities are seen only as necessary for achieving them.

The second ones regard the possibility of using the power generated into corporations for the society, in a responsible way, as a political force.

The third ones instead see the enterprise as an instrument to satisfy all stakeholders' demands, including the society.

Finally, last theories concerning the vision of the corporation based on moral responsibilities to society and for that reason they see corporations as ethical organizations.

The theories presented above, represent the four blocks containing empirical evidence on CSR. These four blocks are linked respectively to four dimensions that shaped them: Profits, Political Performance, Social Demands and Ethical Values (Rath, 2016).

1.3 Information asymmetry and company Market Price

It has been demonstrated that information asymmetry influence behaviours and attitudes of stakeholders. The less the stakeholders are informed, the more they are reluctant on investing in the company (not only as mere investors, also as clients or suppliers and so on).

Following the Agency Theory proposed by Meckling and Jensen in (1976), there is a principal-agent problem that can be well used to explain the relationships between enterprises and stakeholders.

Nowadays, investors for example are really hard to please, and moreover they try to be as much aware as possible on firm's overall activities. Especially after the recent financial crisis, voluntary disclosure activities and Corporate Social Responsibility reporting became an important tool through which communicate and share company's value. CSR performance activities (both positive and negative) have for this purpose a positive impact on information asymmetry (Cho, 2013).

CSR and particularly voluntary disclosure activities are seen as instruments that increase the efficiency within the market. This is reflected in the company Market Price that can be perceived as fair increasing the overall firm's reliability.

Anyway, it is possible to affirm that both positive and negative CSR activities have a positive impact on the market, because of the information shared to investors.

Information about CSR performance and activities also affects equity pricing indirectly by reducing uncertainty and information asymmetry about the value consequences of CSR activities (Cho, 2013). Following Healy and Palepu (2001, p. 422) is reported that "*Decreasing information asymmetry and enhancing confidence among investors by disclosing CSR information facilitate stock trading activities and might also decrease a firm's cost of capital relatively to other firms with poor disclosure practice*".

Following Simpson, Kohers et al. (2002), it is possible to state that Corporate Social Responsibility Disclosure impact principally on three aspects related to the company:

1. On firm's performance
2. On firm's reputation
3. On firm's risk level

For that reason, CSR should represent a protection both for firms and for stakeholders in a broader sense. In fact, especially when firms have to face negative events, this tool became a key channel for the communication of firm's actions and for shared firm's values (Godfrey et al., 2009).

Richardson et al. (1999), affirm that in efficient markets all available information, financial and non-financial, are reflected in equity value. Consequently, improving the disclosure practice and reducing information asymmetry is reflected on firms' cost of capital and return volatility (Kothari, 2009), enhancing share prices (Welker, 1995). Disclosing voluntary information and

enhancing its content have the purpose to raise certainty and encourage investors to place larger orders, which leads to improve company's stock price ((Kim, 1994); (Diamond, 1991)). Based on an empirical study (on the link between CSR disclosure and stock price behavior) conducted by Jizi, Nehme and Salama and published on “*The Journal of Developing Areas*” (2016, p. 34), “*informative content of CSR disclosure is valued by stock participants and shows improvements on stock prices*”. Appear clear that market's participants evaluate CSR information economically. Voluntary Disclosure have therefore a signalling effect for stakeholders and it have a positive impact on firms' stock performances.

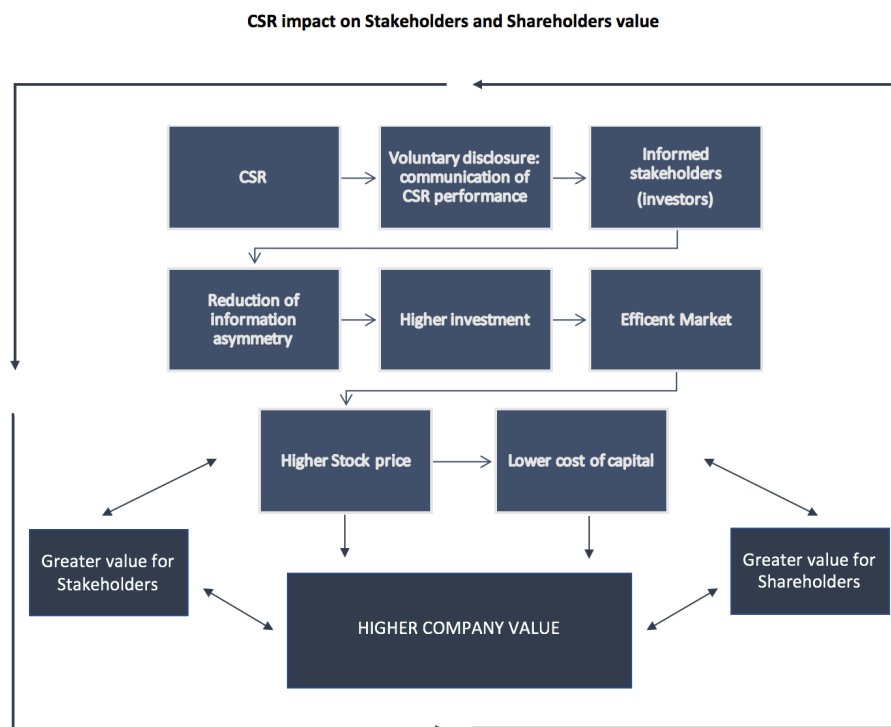


Figure 6. The process from CSR to higher company value. Source: personal elaboration

1.4 Criticism against Corporate Social Responsibility

There are several debates behind the strategy pursued by CSR advocates, regarding the moral obligations to society and the principle of maximization of company's profits. CSR supporters argue that shareholders and investors prefer investing in enterprises that have higher level of social responsibility (Rath, 2016). Among the variety of strategies useful to create competitive advantage, CSR promotes values that can enhance company's competitive advantage; moreover, it is a solid base to build-up loyal relationship between the enterprise and ethically conscious customers. Benefits of CSR involve:

- Enhanced financial performance
- Increased customer loyalty

- Increased attraction and retention of employees
- Greater motivation of workforce
- Better public image
- Long term sustainability of the corporation

Anyway, the other side of the coin reflects aspects that are not linked with moral and ethical action like the bundle promoted by supporters.

Friedman theory comes again important since, as many people reported, the principal aim of the majority of the corporation is earnings' maximization, in order to satisfy shareholders' claims. Taking into consideration this fact, CSR is seen as a mean to achieve higher profits. The principal impeachment moved to the companies that are promoting CSR activities, is to do it only for create higher profits. Enterprises, and especially multinational ones, are accused to create a false sense of social responsibility in order to enhance public image and to avoid critics. Many reviewers argue that ethical corporation is an oxymoron, because of the cost of CSR implementation and consequently the different vision respect to earnings' maximization principle (Rath, 2016).

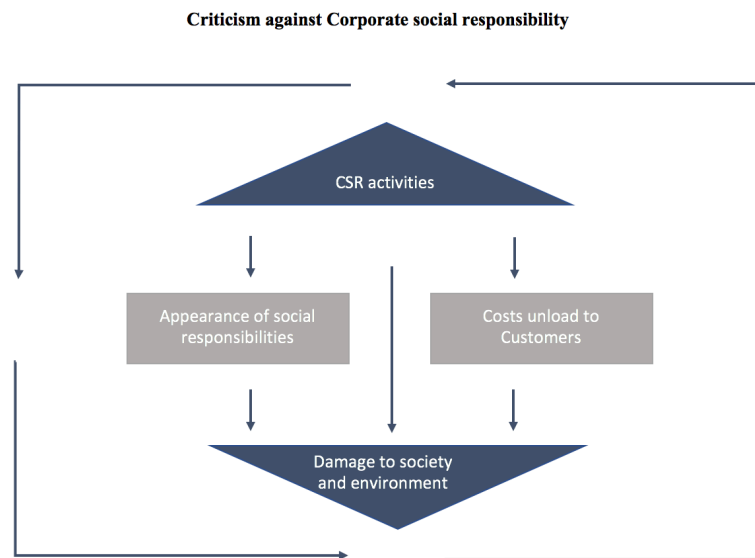


Figure 7. CSR criticisms. Source: personal elaboration

Enterprises might espouse documents or promotions on Corporate Social Responsibility, conducting at the same time activities that are damaging the environment and hence the society itself. Thus, becomes incredibly clear that sustainability is focused on “sustaining” corporate profits. Environment, society and people become important only when they might also improve long-term profitability. Following this line of thinking, they become part of the black box of independent variables that lead to profit (Hart, 2003).

It is worth to underline the fact that in this complicated mechanism, Voluntary Disclosure is not spared by criticism: since CSR is not mandatory for almost the entirety of the existing firms, the few that decide to adopt its principles, are seeing as unreliable supporters.

For the aforementioned reasons the conclusion of the critics is that to develop a socially sustainable system, the entire community has to be regulated by mandatory CSR requirements, that can be processed and monitored by law.

1.5 Corporate Social Responsibility Assurance

In order to fight against the problem of the falsification of the CSR company's reports, it has been introduced a specific assurance mechanism provided by external agents. This tool has the general name of Corporate Social Responsibility assurance and consists in a certification provided principally by three kind of professional agents: auditors, consultants and stakeholders themselves.

These figures, differs in the way in which they are operating, but they have the same effect on the market: CSR assurance enhances stakeholder's confidence.

The mechanism of the assurance is useful to evaluate the quality of the reports and enhance its perception, increasing company's value. Since CSR is not mandatory for almost all of the firms, they have to decide whether make the assurance on the CSR report or whether not. Adams and Evans in (2004), concluding their research on the Association of Chartered Certified Accountants (ACCA) Sustainability Reporting Awards, stated that the two key criteria used by the judging panels are completeness and credibility. External assurance statements improve external credibility, by examining the internal control process. Internal credibility of the CSR information provided by CSR assurance has the potential to improve instead the quality of the reports.

Anyway, different types of assurance provider give different levels of trust. It is therefore useful to analyse them one by one.

Simnett et al. (2009, p. 945) classified auditors as high quality assurance providers, because the profession has *“well-developed “global” standards, a body of ethics and independence requirements, as well as quality-control mechanisms at both the firm and engagement levels that help ensure that the assurance provided is of consistently high quality”*.

An alternative to financial auditors is held by consultants. Consultants may possess a higher level of expertise than auditors, with respect to the content of CSR reports (Simnett R, 2009). However, Ball et al. (2000) noted that a CSR assurance market monopolized by consultants may result in a reduction of Corporate Social Responsibility to a public relations medium.

Finally, the role held by stakeholders is increasingly important. In this case, shortcomings of this type of assurance provider might be:

- A potential lack of technical expertise and understanding of corporate affairs
- A narrow vision that does not cover the interests of all stakeholders
- The trustworthiness perceived by all stakeholders
- The threat to their task as an alarm watch in society

It is possible to affirm that the highest level of confidence is embodied by auditors, and especially by the Big Four audit firms. The reason is linked to the fact that those large corporation are not dependent on a single client (fee dependency) and has a large base of expertise within their organizations. Moreover, the output quality of the Big Four is also subject to internal mechanisms of control (De Beelde, 2015). Although what just stated, Simmet (2009) reported that only 26% of the firms that buy auditing by Big Four auditors, decided to do assurance certification by them.

1.6 Company's Code of Conduct

Following the principles dictated by Corporate Social Responsibility, becomes clear that every company has a responsibility on society for the impact due to its business activities, regardless the mere economic one. This concept leads to different actions that a company has to do in order to respect legislative's requirements on this topic.

- 93% of the largest corporations across the major developed countries such as US and UK, have a statement called Code of Conduct (KPMG, 2013)
- The percentage of large corporation that used a Code of Conduct varies among States
- As reported by Campbell et al. (2007), the main reason is linked to the difference in CSR priorities imposed by national level institutions
- Another important factor is represented by the level of development of the economic stage of their countries
- Less restrictive and less focused on this topic

Code of conduct is defined by the words of Kaptein (2004, p. 22) "*as an independent, company-specific document which delineates company responsibilities towards stakeholders and/or*

employee responsibilities”. Therefore, it is important to underline his double sharing values function:

1. Within the firm, it can increase the adherence by employees to its philosophy and ethical rules. Moreover, in this way, management can reach elevated standard throughout the entire organization, from the top to the bottom;
2. Outside the firm, it is a CSR tool that can signal trustworthiness to the entire bundle of stakeholders.

However, it is important to underline the criticism moved by Vogel (2010) in which he affirmed that in any case, codes of conduct have not for their nature the same clout as government regulation. In fact, there are great differences among different firms’ statements on this matter. It emerges that these differences generate different degree of quality, which reflect on the effectiveness of the statements themselves. Therefore, taking in consideration this last aspect, it is important to underline that Code of Conduct is a useful tool to communicate and share value. It is valid to demonstrate firm’s philosophy and ethical commitment towards society, but in some cases, it never achieves enough effectiveness in matter of CSR.

1.7 Factors of influence on Corporate Social Responsibility integrated reports

Corporate social responsibility information can be reported in an integrated report or in a unique document separated by the financial information of the company or rather through other instruments such as conference call or investors’ day.

The integration of the CSR activities in a unique document, as for example in the Annual Report, depends on different factors (Vitolla, 2016):

1. Macro-environment
2. Competitive context
3. Management philosophy

For what concerns the first aspect, it is important to underline the role held by different external elements by the company such as the macro-social phenomena, the pressure moved by government and non-governmental organizations (NGOs) and by the corporate interest groups. The competitive context impacts on the capacity of the firm to be able to held a predetermined market position inside its market’s segment.

Anyway, management philosophy represents the key factor useful to understand the incorporation of CSR in a firm activity report. It is based on mental models, values and goals that are the basis for the management to take operative and strategic decisions.

It is possible to identify four types of management philosophy:

- Altruistic management, in which the management is engaged in the satisfaction of public welfare (Bowen, 1953)
- Economic management philosophy, based on Friedman assumption, in which companies have the only aim of maximization of the profits or market value
- Enlightened economic-type management philosophy, in which firms have to an “enlightened self-interest” to respond adequately to social issue where the social relationship help to enhance the competitive advantage and to improve financial performance (Jones, 1995)
- Holistic management philosophy, in which the firms have a role that is both social and economic (De Woot, 2005) and they must respond synergistically to stakeholders’ expectations (Freeman R. a., 2001)

Based on these findings, it is now possible to identify also the reasons that connects CSR to management strategy. Following the theory proposed by Galbreath in (2006), there are basically four options useful to explain this connection:

1. The shareholder strategy, which is focused on short run financial goals
2. The altruistic strategy, which is related to philanthropic activities
3. The reciprocal strategy, which supports the theory in which firms should establish relationships with stakeholders that are mutually beneficial to both parties
4. The citizen strategy, which is instead linked to the simultaneous achievement of different objectives, which are responsibility, transparency, sustainability and accountability

It is possible to conclude that, based both on theory and on research conducted by Vitolla et al (2016), external conditions influence CSR management, but the company’s success is connected to a management philosophy that can transform external pressure into management opportunities. The role held by management philosophy is therefore central, because proactive managements can find successful solution in order to lead to effective CSR integrated reports.

1.8 Firms' cultural difference and Corporate Social Responsibility

In matter of Corporate Social Responsibility there exist differences in the way in which, company located in different States, usually report their activities. This is true also in other fields of actions, such as the data of publication of the Annual Reports or the accountability system used. Concerning the argument of this thesis, it is important to understand that culture matter more than other factors. For this reason, it is useful to analyse some different aspects that characterize values and culture of different countries.

In order to study in depth, the influence of the culture on CSR activities, it is useful to analyse the model proposed by Geert Hofstede at the end of 1970s. His model is founded on the study of people's behaviours coming from 50 different countries. The result is the famous model called Hofstede's Six Dimensions of Culture. It is important to show one by one the elements that characterizes this scheme for understanding deeply the classification of the countries (Hofstede, 2010):

Hofstede's Six Dimensions of Culture

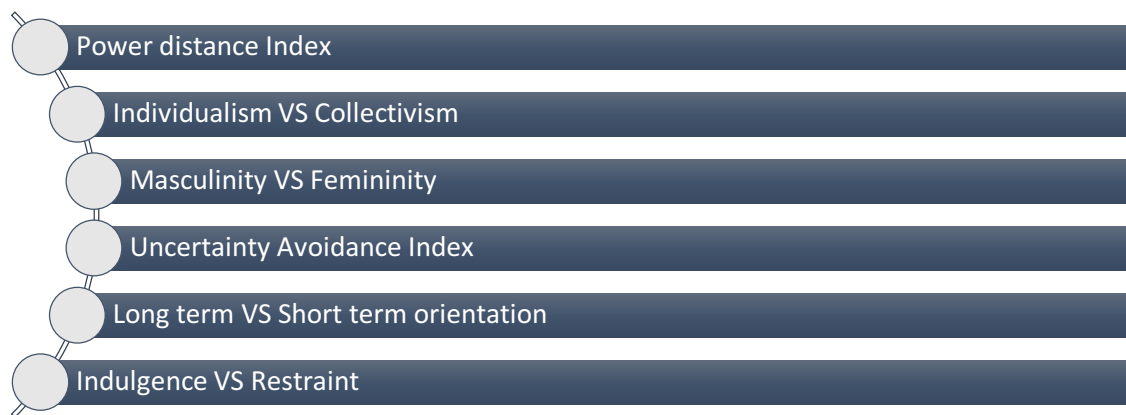


Figure 8. Hofstede model. Source: personal elaboration

Power Distance Index

It is defined as “*the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally*”¹. In this dimension, inequality and power is perceived from the followers, or the lower level. A higher degree of the Index indicates that hierarchy is clearly established and executed in society, without doubt or reason. A lower degree of the Index means that people question authority and attempt to distribute power.

¹ This and the subsequent sentences in quotes are took directly by the word of Hofstede, thanks to online source as <https://www.hofstede-insights.com/models/national-culture/> and Wikipedia.

Individualism VS Collectivism

This dimension explores the “*degree to which people in a society are integrated into groups*”. Individualistic societies have loose ties that often only relates an individual to his/her immediate family. They emphasize the “*I*” versus the “*we*” concept. Its counterpart, collectivism, describes a society in which tightly-integrated relationships tie extended families and others into in-groups. These in-groups are laced with undoubted loyalty and support each other when a conflict arises with another in-group.

Masculinity VS Femininity

Masculinity in this model represents “*a preference in society for achievement, heroism, assertiveness and material rewards for success*”. Its counterpart represents “*a preference for cooperation, modesty, caring for the weak and quality of life*”. Femininity is therefore representative of “*women’s society*”, characteristic that is perceived with different values. In societies characterized by a high degree of masculinity, women are more competitive and emphatic (but less emphatic than men).

Uncertainty Avoidance Index

This index signals “*a society's tolerance for ambiguity*”, in which people embrace or avert an event of something unexpected, unknown, or away from the status quo. In the societies that have a high degree of this index, guidelines, code of behaviours and laws rely on truth. Weak societies maintained a more relaxed attitude and rely more on practice counts than on principles.

Long term VS Short Term Orientation

In this dimension, the past is in connection with the present and the future. It means that a lower degree of this dimension indicates respect of traditions (Short Term Orientation), while a high degree means an adaptation to the circumstances, and a usage of problem-solving practices as a necessity. Usually, short term oriented countries have little or no economic development, while long term oriented ones have a tradition to a continuous development.

Indulgence VS Restraint

This last dimension, indicates the degree of happiness of the population. “*A society that allows relatively free gratification of basic and natural human desires related to enjoying life and having fun*”. Its counterpart is defined as “*a society that controls gratification of needs and regulates it by means of strict social norms*”.

For that reason, indulgent societies believe to be in control of their emotions and of their life. People who live in Restraint societies instead, believe that other factors influence their life and emotions.

Once took in consideration the characteristics of Hofstede model, it is useful to apply it, in order to create a field of action in which it is possible to create a study for comparing different ways of integrated reporting actually existent.

The field of action of this research is focused on four different cultural contexts:

- United States of America
- Germany
- China
- South Africa

These countries represent different market in which firms operate and they offer the possibility of a good comparison, thanks to the different cultures which characterized themselves.

USA and Hofstede’s Six Dimensions of Culture

Applying the model created by Hofstede and analysing one by one its features can help us to depict a clear picture of US cultural context: taking the data from Hofstede’s web site, it is possible to state that on average, American’s people are all unequal because every subject is unique. From this assumption:

- The Power Distance is accepted by people and in combination with one of the highest value of Individualism create a society that are looking for liberty and justice for all of its members
- Hierarchy is established for convenience and superiors are perceived as achievable. Managers and employees relies each other’s, and the communication is frequently

informal. American society is based on the principle of free movement within the States, and this means a relatively scarce possibility of developing deep friendships. Meritocracy is at the base of the business relationship

- It is possible to define this society Masculine, and for that reason the society is driven by competition, achievements and success
- Uncertainty Avoidance factor: Americans usually perceived the context in which they live as important, and accept that new ideas or products can enhance their conditions
- The long-term orientation of this population is really low, consequently many people are defined as not pragmatic. Anyway, thanks to the “can-do” mentality, American people are convinced to do by themselves everything they need
- This population can be defined with a relatively weak control over the impulses, and for that reason it has a high degree of Indulgence rather than Restraint

American Cultural Context

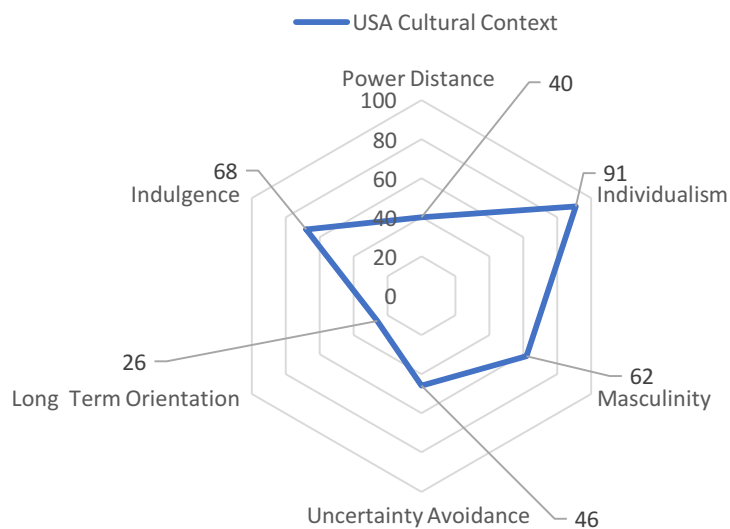


Figure 9. USA Hofstede's overall evaluation. Source: personal elaboration

Germany and Hofstede's Six Dimensions of Culture

Taking into consideration the German case, emerges that:

- It has a lower Power Distance level, and it is one of the lower Power Distance country of the world
- Individualism prevails on the society, in fact the value that measures the degree of interdependence society existing among its members is relatively high. “I” prevails on “We”, and the context impose to be honest, rather than false

- Germany can be defined as a Masculine society because success, competition and their achievement are dominants
- Considering the dimension of Uncertainty Avoidance, Germany prefers to give a systematic overview over the fact that will happen. This is reflected by the law system, where details are important for governing people. Germans tend to prefer to compensate for their higher uncertainty by strongly relying on expertise
- Taking in consideration the dimension of Long Term orientation, it is possible to establish that Germany is a pragmatic country. Truth for this people, depend on context, situation and time. People show propensity to save and invest and perseverance in achieving results
- German's society is characterized by Restraint rather than Indulgence

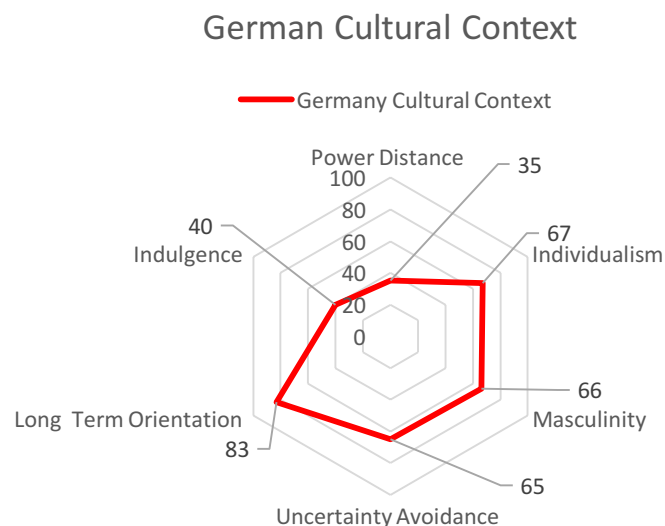


Figure 10. German Hofstede's overall evaluation. Source: personal elaboration

China and Hofstede's Six Dimensions of Culture

- China held one the highest position concerning the Power Distance index, in fact its population accept inequalities among people. There is no defence against power abuse by superior and individuals usually no have aspiration beyond their rank
- People feel collectivism as a characteristic of its own, in fact this index is really low. In-group considerations affect hiring and promotions mechanisms and employee commitment to organization is generally low. Personal relationships prevail over task and company

- This type of society is characterized by high degree of Masculinity, indicating a success oriented and driven population. Notwithstanding, people in China sacrifice family for work
- China has a low score on Uncertainty Avoidance and for that reason Chinese people feel comfortable with ambiguity. Anyway, this society is marked by a high degree of entrepreneurship and adaptation
- The Long-Term orientation index, indicates that China has a strong pragmatic culture. People therefore believe that truth depends on situation, context and time
- Hofstede indicates that Chinese people is strongly characterized by Restraint, in fact this population results to be very cynic and pessimist

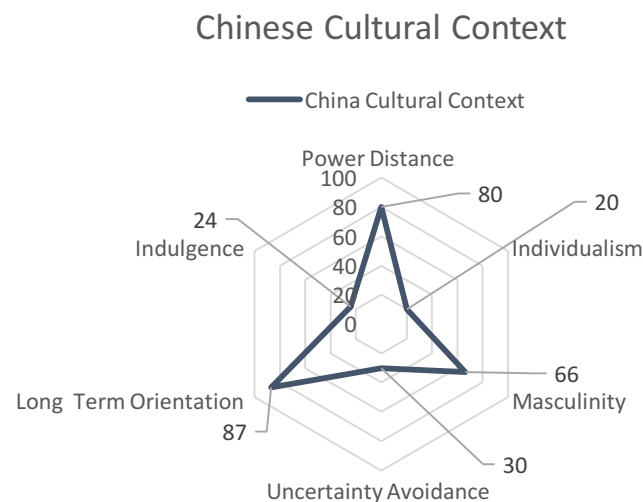


Figure 11. Chinese Hofstede's overall evaluation. Source: personal elaboration

South Africa and Hofstede's Six Dimensions of Culture

Following the model proposed by Hofstede, South Africa represents a country in which people accept a hierarchical order and in which everybody has a place and where inequalities exists:

- The Power Distance index is in the middle, in fact subordinates expect to be advised on what they have to do and the boss is seen as a benevolent and autocratic person.
- Society is characterized by a good level of individualism, and the hiring- promotion relationships should be based on meritocratic system
- Masculinity prevails on Femininity, and for that reason managers tend to be decisive and assertive. The emphasis is on equity, competition and on performance

- South African society has a low preference for avoiding uncertainty, in fact practice counts more than principles. People work hard only if it is necessary and precision and punctuality do not come naturally
- Concerning the orientation of the society, the index indicates a low score equivalent to a culture that is more normative than pragmatic. Traditions are prominent and people have a small propensity to save for the future, and have a high propensity for achieving short term results
- Last dimension states that this country has a culture of Indulgence, and for that reason its society exhibit a willingness to realise their impulses and desires. People have a tendency towards optimism. The result promoted by Hofstede is in this case based on white people, while the majority of the South African people is black and have different behaviours

South African Cultural Context

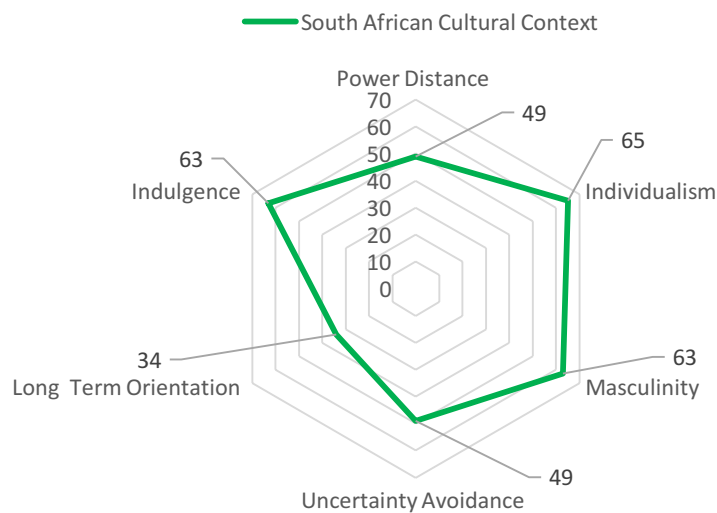


Figure 12. South African Hofstede's overall evaluation. Source: personal elaboration

After having analysed the four different countries, turns out to be useful to compare the different results in a unique model.

As it is possible to see by the following graph, these countries have only few common features. For this reason, is interesting verify if this cultural differences have an impact in companies' CSR reporting activities.

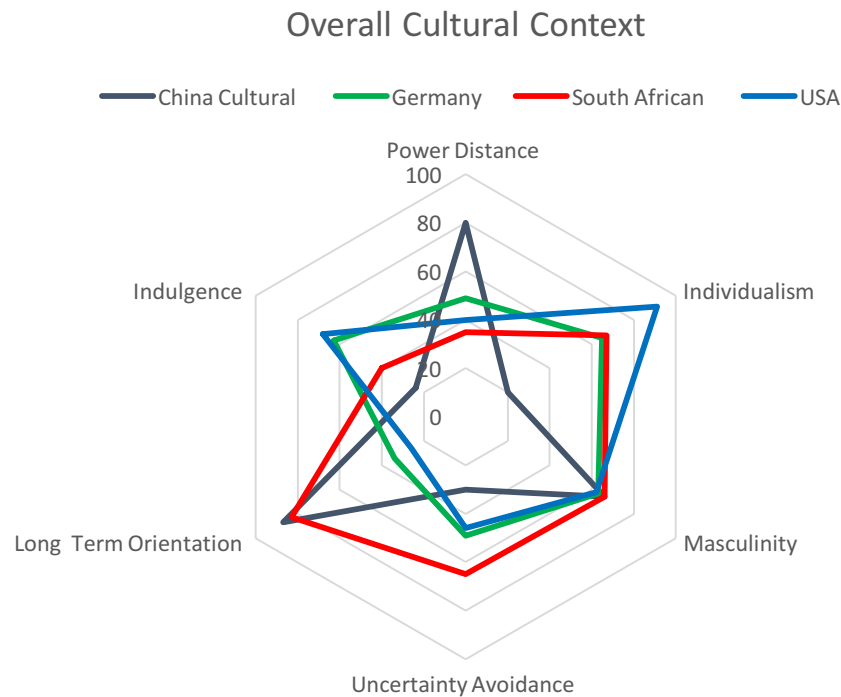


Figure 13. Overall Hofstede's evaluation. Source: personal elaboration

1.9 Models of national capitalism and difference in Corporate Social Responsibility reporting

It is a matter of fact that exist different types of capitalism in different part of the world, that have shaped the economic system of determinate countries. Principally, literature indicates the existence of two broad branches in which countries have developed their model of business: the American one and the German one.

Hence, Capitalism results to be the predominant economic system operating in the 21st century and it is essentially a socio-economic system of governance, which promoted private ownership of capital and market for labor unrestricted, in which price signals are the principal mechanisms used for the allocation of the capital (Scott B. , 2009).

As reported by Marx (1996), capitalism is itself the antithesis of a sustainability, because for the concept itself of capitalism, there is the need to exploit the resources in order to achieve the maximization of the profits. Taking in consideration this, depending by national historical backgrounds, countries developed its own model of capitalism based on the two models already quoted above.

The first branch, following the American one, developed a capitalism based on a liberal market economy, which rely on market forces to govern the economy. The second branch instead, developed a capitalism based on a coordinated market economy, inspired by Germany, which rely much more on non-market institutions to govern economic transactions (Judge, 2014).

Liberal market economies are driven by a decentralized decision making and a self-regulation of the entire system, in which the State act as the famous Smith's "*Invisible*" hand on the market, enhancing the concept of efficient market. In any case, it has been demonstrated that this model creates also panic and economic depressions and recessions.

Coordinated market instead, aims more on economic quality over economic efficiency, and rely on the intervention of the State as a "*Visible*" hand for governing the mechanism of the market. In this case, it is possible to affirm that personal initiatives are less important than economic equality. After having explained the difference between the principal historical models, it is possible to list 5 different model of modern capitalism existing nowadays (Amable, 2003):



Figure 14. Model of national capitalism. Source: personal elaboration

USA: National Capitalism and Corporate Social Responsibility activity

In the US, the concept of present-day capitalism reflects the evolution of what historically is represented by the idea of the liberal market economy:

- People and entrepreneurs act as protagonists with no relevant intervention by the government
- USA belongs to Amable's Market-Based model of national capitalism
- The term neo-liberal market capitalism, represent the status quo of this country
- The orientation to the profit of the firms present in this territory, leads to an underdevelopment of the initiatives related to CSR reporting
- Within this territory, there is no mandatory rules about CSR activities for all of the companies
- Shareholders are oriented to the maximization of the profits, with a submission of the aspects related to the impact on environment

- The governmental system has no Green Party² active in CSR reporting
- The government rely on the initiatives of the private agents and make them free to decide also on CSR matters
- US companies are more engaged in social areas as health and pension, and in the development of the infrastructure (Einwiller, 2016)
- World ranking system developed by environmental performance index ranked 26 over 180 USA in 2016

Germany: National capitalism and Corporate Social Responsibility activity

Germany represents the territory in which the other branch of the historical capitalism took form. Today, the capitalism that shapes the economy of this country belongs to the Market-Based model, with different settings leaved by the historical Coordinated market economy system.

- People and entrepreneurs act with a relevant intervention by the government
- Germany put the attention on its citizens, thanks to the contribute of the socio-political engagement of the State
- The intervention of the State is high
- Since 1970s, a politic force called Green Party, fought in favour of CSR matters
- Government and stakeholders encouraged corporation to promote and take actions environmentally sustainable (Einwiller, 2016)
- Thanks to this aspect, Germany gain therefore the image of a global environmental leader along last decades
- World ranking system developed by environmental performance index ranked 30 over 180 USA in 2016.

China: National capitalism and Corporate Social Responsibility activity

China represents a particular case in which, because of the dimension of its territory, it is possible to find a multitude of different currents of the same capitalism. Taking the model proposed by Amable in 2003, China belongs to Social-Democratic Based type of capitalism.

² Green Party: political party that belongs to movement related to social and environmental activism, widespread particularly in Northern European countries.

This kind of capitalism, have characteristics that reflect in part some features of both the two historical forms (liberal and coordinate market system). In this particular case, it is possible to find elements of the Coordinated market economy, because of the communism existent as a political system. However, especially after Mao Zedong's death, economic initiatives of a liberal market style took off.

- The culture of this territory is completely different by USA and Germany
- People take care only on governmental rules and have no personal initiatives on CSR matter
- The collectivism diffused on the Chinese population, create the floor for the respect of the others and for profits' share
- The development of NGOs active in the promotion of CSR activities is started only recently
- Chinese government has already promulgated some laws in favour of the environmental impact caused by industry activity, but the excessive intervention has created fear among firms on the voluntary disclosure activities promoted with CSR reporting
- The gap existent between China and Western countries is principally due to the economic development stage and to the maturity of modern corporations (Hou, 2014)
- China is 109 over 180 following the environmental performance index, a result that signal the status of the low overall commitment that characterized this country in matters concerning sustainability

South Africa: National capitalism and Corporate Social Responsibility activity

South Africa represents another particular case in which the cultural context has shaped the economy in a different manner respect to the countries previously analysed.

Using Amable subdivision of the existing forms of capitalism, South African case belongs, as Chinese case, to the Social-Democratic Based.

- In this country, the freedom of trading is submitted to the willingness of the State.
- It is necessary to underline that military actions are widespread and there are different contexts inside the region itself, due to the co-existence of different cultures and the existence of primitive populations
- It is important to underline that for simplicity in this thesis it is took in consideration only white population of South Africa

- Private initiatives submitted to the governmental rules. It is important for this study, to analyse this country, because there
- It has been introduced a mandatory integrated report since 2011. In fact, all companies listed on Johannesburg Stock Exchange (JSE) are required to publish integrated reports (Maniora, 2017)
- Although the introduction of this measure, CSR activity in this country it is perceived as “*an ethical obligation of a company in its role of corporation citizen*” (Eccles, 2010, p. 65)
- South Africa is actually 81 over 180 following the environmental performance index, indicating an overall not sufficient result achieved by the State in sustainability matter

1.10 The Growing Relevance of the Investor Relations and Integrated Reporting

It is worthwhile to spend some words talking about the growing relevance of these two tools for the communication between company and stakeholders.

Following the words reported in an interview by the President and CEO of the National Investor Relation Institute (NIRI) Jeff Morgan and by the Vice president of the V.P. investor relations AMD in 2014, the role of the investor relations is pivotal. They said that in order to achieve efficient and effective communication, starting from board members and finishing with stakeholders, investor relations department is now the principal tool used by large corporation. The role held by IR department today is essential, because of the multiplicity of aspects in which it has to work:

- The process of integration of this department with others is increasing in the last decade
- Stand-alone departments resulted to be less effective in the communication of different aspects of the corporation (Kirk, 2016)
- Since IR is become the most used tool exploited by large corporations’ communication strategy, it is clear that its relevance impact also on integrated reporting strategy
- As affirmed by Deloitte (2016), integrated reporting allows to unify different purposes about different aspect related to firm’s activities

The importance of the integrated reporting is nowadays central, because of the requirement moved by different actors that are present within enterprises area of activity: government, NGOs, employees and other elements, put a lot of pressure on Corporate Social Responsibility actions and on corporation’s sustainability. Sometimes different teams prepared different reports in different times, creating and diffusing information that are not in line with each other.

Martinuzzi and Margula (2011) argue that the most powerful stakeholder in CSR action is the government, which act principally through five policy instruments:

- Legal: law, directives and regulations
- Financial: taxes and treasury actions
- Informational: government-sponsored campaigns, guidelines, training and websites
- Partnering: public-private partnership, negotiated agreements or stakeholders' forum
- Hybrid: combination of two or more instruments mentioned above

These public policies about CSR might belonging to four class of action:

The first has the scope to raise awareness, build capacities and put them into action.

The second aims to improve disclosure and transparency of the firms.

The third regards the incentive of increasing Socially Responsible Investment (SRI).

The last is about the governmental capacity of promulgating public sustainable actions that enable and incentive corporations to act responsibly.

An example of a governmental promulgation on CSR is the guidelines provided by Germany called German Corporate Governance Code.

Regardless cross-countries differences existing on the adoption of CSR rules, the principal lack in this field remains the absence of international standards in matter of CSR reporting which enables the comparison among different reports published by company located in different nations and allow harmonization.

International Integrated Reporting Council

In order to respond to the deficiency of the world system, in 2010 was created the International Integrated Reporting Council (IIRC). Its mandate is to develop a framework for integrated reporting and to promote its use. *“The purpose of the Framework is to establish Guiding Principles and Content Elements that govern the overall content of an integrated report, and to explain the fundamental concepts that underpin them”* (International Integrated Reporting website, 2018). IIRC Framework, issued on December 2014, is principles-based document that does not specify particular disclosure requirements or provide a standard format for integrated reports (Barth, 2017). It sets out seven guiding principles and eight content elements.

IIRC Guiding Principles	
Strategic focus and future orientation	An integrated report should provide insight into the organization's strategy, and how it relates to the organization's ability to create value in the short, medium and long term, and to its use of and effects on the capitals
Connectivity of information	An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time
Stakeholder relationships	An integrated report should provide insight into the nature and quality of the organization's relationships with its key stakeholders, including how and to what extent the organization understands, takes into account and responds to their legitimate needs and interests
Materiality	An integrated report should disclose information about matters that substantively affect the organization's ability to create value over the short, medium and long term
Conciseness	An integrated report should be concise
Reliability and completeness	An integrated report should include all material matters, both positive and negative, in a balanced way and without material error
Consistency and comparability	The information in an integrated report should be presented: (a) on a basis that is consistent over time; and (b) in a way that enables comparison with other organizations to the extent it is material to the organization's own ability to create value over time.

Figure 16. IIRC Guiding principles. Source: personal elaboration.

IIRC Content Elements	
Organizational overview and external environment	What does the organization do and what are the circumstances under which it operates?
Governance	How does the organization's governance structure support its ability to create value in the short, medium and long term?
Business model	What is the organization's business model?
Risks and opportunities	What are the specific risks and opportunities that affect the organization's ability to create value over the short, medium and long term, and how is the organization dealing with them?
Strategy and resource allocation	Where does the organization want to go and how does it intend to get there?
Performance	To what extent has the organization achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals?

Outlook	What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance?
Basis of presentation	How does the organization determine what matters to include in the integrated report and how are such matters quantified or evaluated?

Figure 17. IIRC Content Elements. Source: personal elaboration.

“Integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization’s ability to create value over time” (IIRC website, 2018). Thus, IIRC Framework purpose is to guarantee the achievement of two objectives: improving information for external users and improving internal decision making.

United Nations Global Compact

Another relevant action made for supporting CSR development is United Nations initiative called United Nations Global Compact (UNGC). This initiative is a principle-based framework for business born to encourage corporations to adopt sustainable and socially responsible policies (Rath, 2016). The framework is founded on ten principles covering 4 different areas: human rights, labor, environment and anti-corruption.

UNGC 10 Principles	Areas of action
1. Businesses should support and respect the protection of internationally proclaimed human rights	Human Rights
2. Make sure that they are not complicit in human rights abuses	
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Labour
4. The elimination of all forms of forced and compulsory labour	
5. The effective abolition of child labour	
6. The elimination of discrimination in respect of employment and occupation	
7. Businesses should support a precautionary approach to environmental challenges	Environment
8. Undertake initiatives to promote greater environmental responsibility	
9. Encourage the development and diffusion of environmentally friendly technologies	

10. Businesses should work against corruption in all its forms, including extortion and bribery	Anticorruption
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Figure 18. UNGC principles. Source: personal elaboration.

Global Reporting Initiatives

Global Reporting Initiatives (GRI) established in 1997, is an independent international organization that now represents the leader in sustainability reporting. GRI Sustainability Reporting Standards are developed with true multi-stakeholder contributions and rooted in the public interest (Global Reporting Initiatives website, 2018). The latest version of GRI guidelines issued in 2013, is called G4 and, according to Aktas, Kayalidere, & Kargin (2013), represents the widely applied guideline for sustainability reporting.

GRI is actually working on four areas:

- Creation of standards and guidance to advance sustainable development
- Harmonization of the sustainability landscape
- Leading efficient and effective sustainability reporting
- Driving effectively the use of sustainability information to improve performance

Organization for Economic Cooperation and Development

Organization for Economic Cooperation and Development (OECD) is an organization that have the aims of helping government to foster prosperity and fighting poverty through economic growth and financial stability. It provides guidelines useful to ensure the application of requirements useful to environmental and social developments (OECD website, 2018). Today it counts on 35 members distributed all over the world, and it works in contact also with the countries analysed in this thesis. In 2010 OECD issued new guidelines for multinational enterprises in matter of CSR. The recommendations are made by the adhering governments and, although not binding, they imply the commitments to promote their observance. The themes in which the 2010 guidelines are founded are focused on three areas: supply chain, human rights and climate change. The respect of this guidelines ensures responsible business conduct.

ISO 26000

Introduced in 2010, ISO means International Organization for Standardization, and it is an independent, non-governmental international organization with a membership of 162 national standards bodies. ISO 26000 “*provides guidance on how businesses and organizations can operate in a socially responsible way*” (ISO 26000 website, 2018). The function of this instrument is hence to be a guidance rather than requirements. It helps business organization to translate social and environmental principles into actions and shared best practices related to CSR.

Principles of the King Report on Governance for South Africa 2009 (King III)

After march 2010, listed company on Johannesburg Stock Exchange were required to have integrated reporting following the introduction of the Principles of the King Report on Governance for South Africa 2009 (King III). In order to create a guidance useful to create integrated reporting, on 25 January 2011, Integrated Reporting Council issued the world’s first Discussion Paper on a framework for integrated reporting report. Released by the IIRC in December 2013, in March 2014 IRC endorsed the International IR Framework (Integrated Reporting Committee of South Africa website, 2018).

South Africa hence represents the pioneer country in mandatory integrated reporting and in the adoption of CSR actions.

1.12 Definition of the research question

In the first chapter of this thesis it has been introduced the concept of Corporate Social Responsibility and of Voluntary Disclosure. Beyond the definitions, what is relevant to underline is the growing importance of these topics. Nowadays in fact, every kind of large corporation has to cope with national or over national regulations, pressures coming from NGOs and particularly from investors on environmental and business’ social sustainability. Indeed, after the recent world recession, stakeholders’ engagement pass more through the capacity of the company to demonstrate the fulfilment in the adoption of CSR actions. It has been demonstrated that CSR impacts directly on shareholders’ value through the enhancement of the company profitability, thanks to a reduction on the cost of capital, and more in general on stakeholders’ value, thanks principally to the reduction of the overall information asymmetry. The principal way in which CSR actions are communicated is based on Voluntary Disclosure

of the information related to financial and non-financial firm's operations. Although the birth of actual concepts related to CSR was in the middle of the twentieth century, only in the last decades they became pivotal for enterprises. Also for this reason, there are many differences existent on the promotion and the adoption of sustainability mechanisms by companies located in different countries.

Even though recently many actions have been made internationally, the critical point on CSR is related to rules' harmonization. A lack of mandatory international standards, impacts negatively on the capacity of enterprises, belonging to different country, to adopt a standard form of reporting.

Several steps have been done for solving this problem, such as the development of international principles promoted by IIRC or international guidance developed by GRI and other initiatives reported above.

As long as the disclosure of information regarding CSR remains voluntary, the creation and the adoption of an international common framework on sustainability reporting results to be difficult.

As reported above, integrated reporting is actually depicted as the best way in matter of sustainability reporting. It is hence interesting to develop a study on the capacity of reporting by companies located in different States. Among the factors that impact on the differences in reporting strategy, cultural context seems to be the most relevant element that shaped corporations' capacity of reporting. In fact, in this chapter it has been demonstrated that different cultures give different priority on environmental and social aspects.

In order to create a fair comparison, there is the need to analyse firms belonging to the same sector of industry, but that are located in different Nations.

Thanks to Hofstede's Six Dimensions of Culture, it has been established that United States, Germany, China and South Africa are appropriate samples where it is possible to develop a deep comparison. These countries belonging to different continent and have different cultural values.

In the last Great Recession, Bank's social behaviours have had a triggering role. As a consequence of the mechanisms of fear and panic generated in the financial sector, a world crises exploded. After that moment, investors and stakeholders as a whole became more and more sceptical on banks way of doing business. The adoption of integrated strategy and Voluntary Disclosure in this sector represents a world signal to respond to requirements demanded by investors, especially in matter of Corporate Social Responsibility.

It is interesting to underline that there is a lack of univocal vision, in the determination of the impact of sustainability reports on economic performances.

In the light of this fact, the following chapters have the objective of creating a comparison based on empirical evidence on financial sector, for responding to the following

research question: “Does a significant relationship exist between different levels of CSR disclosure and economic performances of banks belonging to different cultures?”.

In order answer to the research question, it is useful to define the fields of comparison on which data gathering from the different firms will be based.

Taking into consideration the theory above turn out to be centrals, in the development of a case study, the Triple Bottom Line concept developed by Elkington in 1994 and the four categories for measuring CSR disclosure developed by Jizi et al. in 2013.

In this thesis, the content analysis will be based on the analysis of the Environmental, Social, Economic and Governance aspects related to different companies, which represent the fields of action on which CSR is developed.

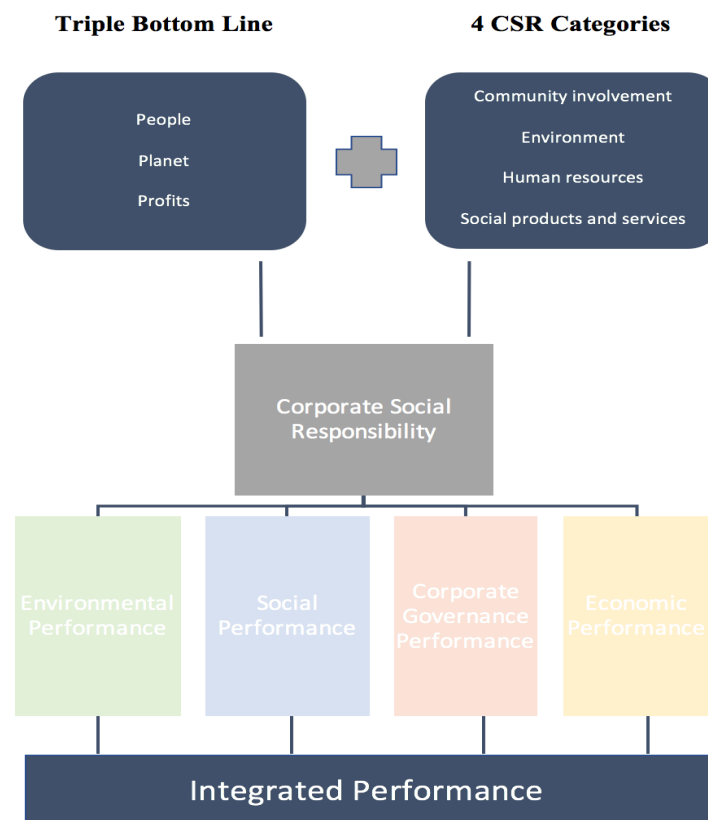


Figure 19. From theory to practice. Source: personal elaboration

Below are reported in the grid key pillars and key indicators, useful to make a content analysis.

Key pillars	Key indicators
Environmental Performance	<ul style="list-style-type: none"> • Bank’s environmental policies and concerns • Implemented systems for environmental management • Environmental projects such as recycling and protection of natural resources • Energy saving in performing business operations • Pollution: declaration of CO2 emissions and others
Social Performance	<ul style="list-style-type: none"> • Health and safety policies and measures for employees • Equal opportunities in employment (e.g. minorities, women) • Training and education provided to employees • Employee assistance-benefits • Employee compensation programs • Policies adopted regarding staff profit sharing • Contributions and donations to charities, NGOs and community activities • Provision if support to students to continue their education and sponsoring sport activities • Participation in social government campaigns • Diversity of social products (e.g. donation for public works, educational loans etc.) • Provision for disabled, frail and difficult-to-reach customers • Investments in social responsibility activities • Strategies and plans for future expansion in social products and services • Loyalty programs and gifts to customers
Corporate Governance Performance	<ul style="list-style-type: none"> • Board structure • Compensation Policy • Shareholder Rights • Integrated Business Model • Integrated Business Plan • Code of conduct • CSR reports • Integrated report
Economic Performance	<ul style="list-style-type: none"> • ROA • ROE • ROI • Earnings/ total number of share • Leverage

Figure 20. Key pillars and Key Indicators. Source: personal elaboration

2. Methodology of assessment and purpose of the research

Once defined the variables (key indicators) object of analysis, it is essential to define the way through which it is possible to analyse them.

The industry sector on which it is based this thesis is the financial one, with a particular focus on the banking system. The reasons linked to this choice are principally three:

1. Bank's sector was heavily hit by last crisis. After that fact, firms operating inside this sector adopted stricter regulations
2. In this sector stakeholders (in particular the category of investors), required high level of engagement in CSR actions by the companies, which directly impacts on their performance
3. The dimension that top corporations have assumed in this sector, allows to developed an in-depth comparison

Literature theories established that exists differences in the way in which firms, operating in different markets, disclosed information (particularly sustainability ones). This is due to several reasons: above all, different cultures impact on the lack of standard international rules, decreasing the chance to have harmonization.

Thanks to Hofstede model, it has been shown that USA, GERMANY, CHINA, and SOUTH AFRICA have different cultural backgrounds. For that reason, they result to be suitable for the development of an empirical case study.

The aim of this thesis, according to the research question, is hence to analyse and assess the impact of CSR disclosure on different firms' economic performance.

Based on the articles of journal, books, content analyses cases, and other documents consulted for drafting this thesis, it has been developed a personal methodology of analyses useful to answer to the research question.

2.1 Definition of the Sample

Based on the reasons just stated above, it is now important to define the sample of companies on which will be based the empirical research. Based on the dimension expressed in local currency, the sample is composed by 20 corporations, 5 for each country of study. The selection therefore includes top 5 local banks based on the value of total assets held.

In order to gather data about the sample, it has been chosen the website <https://www.relbanks.com>.

Country and local currency	Bank's name and ranking position respect to the State of belonging	Assets Value local currency	Assets Value in dollars (Trillions)	Code
USA (Dollars)	JPMorgan Chase & Co.	2,563	2,563.000	SU1
	Bank of America Corp.	2,284	2,284.000	SU2
	Wells Fargo & Co.	1,935	1,935.000	SU3
	Citigroup Inc.	1,889	1,889.000	SU4
	Goldman Sachs Group Inc.	930.1	0,930.000	SU5
GERMANY (Euro)	Deutsche Bank	1,568.73	1,917.300	GE1
	DZ Bank Group	513.358	0,627.468	GE2
	Commerzbank	487.260	0,595.550	GE3
	HypoVereinsbank (UniCredit Bank AG)	294.598	0,360.050	GE4
	Landesbank Baden-Württemberg	255.050	0,311.161	GE5
CHINA (Yuan)	ICBC	25,514.046	3,987.234	CH1
	China Construction Bank	21,692.067	3,389.950	CH2
	Agricultural Bank of China	20,573.586	3,215.158	CH3
	Bank of China	19,425.980	3,035.815	CH4
	China Development Bank ³	14,100.100	2,203.649	CH5
SOUTH AFRICA (Zar)	Standard Bank Group	1,952.52	0,159.000	SA1
	FirstRand Ltd	1,217.71	0,099.000	SA2
	Barclays Africa Group	1,137.88	0,093.000	SA3
	Nedbank Group	965.830	0,079.000	SA4
	Investec Bank Ltd	425.687	0,034.000	SA5

Figure 21. Banks' asset value. Source: personal elaboration Exchange rate January 21, 2018. Data belonging to 2016.

In order to represent a clear and consistent picture of the entire sample of banks chosen, it is fundamental to report some other features: values of Revenue, Net Income (Loss) and Market Capitalization are expressed in Millions of Dollars.

³ N°5 top SA top bank is Absa Bank, but since it is a wholly owned subsidiary of Barclays Africa Group, in this sample it is taken the 6th, Investec Bank Ltd.

Bank	Headquarter	Foundation Year	Revenue	Net income (Loss)
JPMorgan Chase & Co.	New York	1799	95,66	24,73
Bank of America Corp.	Charlotte	1927	83,70	17,90
Wells Fargo & Co.	San Francisco	1852	88,26	21,93
Citigroup Inc.	New York	1811	69,90	14,9
Goldman Sachs Group Inc.	New York	1869	30,61	7,30
Deutsche Bank	Frankfurt	1870	37,26	(1,68)
DZ Bank Group	Frankfurt	2016	7,58	1,99
Commerzbank Group	Frankfurt	1870	12,31	0,47
HypoVereinsbank	Munich	1998	5,10	1,36
Landesbank B-W	Stuttgart	1999	3,23	0,01
ICBC	Beijing	1984	101,58	44,17
China Construction Bank	Beijing	1954	88,63	36,78
Agricultural Bank of China	Beijing	1951	80,74	29,13
Bank of China	Beijing	1912	76,86	29,13
China Development Bank	Beijing	1994	21,44	17,36
Standard Bank Group	Johannesburg	1862	8,41	1,94
FirstRand Ltd	Johannesburg	1998	6,03	2,02
Barclays Africa Group	Johannesburg	1888	6,10	1,26
Nedbank Group	Sandton	2003	2,22	0,13
Investec Bank Ltd	Johannesburg	1974	2,74	0,59

Figure 22. Sample information table (1). Source: personal elaboration

Bank	Net income per share Diluted	Book Value per share	ROE	Market Capitalization
JPMorgan Chase & Co.	6,19	64,06	10%	307,29
Bank of America Corp.	1,50	24,04	6,71%	222,16
Wells Fargo & Co.	3,99	35,18	11,49%	281,00
Citigroup Inc.	4,72	74,26	6,6%	165,00
Goldman Sachs Group Inc.	16,29	182,47	9,4%	94,50
Deutsche Bank	(1,21)	53,07	(2,3%)	29,53

DZ Bank Group	n.a. ⁴	n.a.	7%	n.a. ⁵
Commerzbank	0,27	28,37	1,17%	112,58
HypoVereinsbank	0,19	n.a.	5,30%	n.a.
Landesbank B-W	n.a. ⁶	n.a.	1,1%	n.a.
ICBC	0,12	15,69	15,24%	100,81
China Construction Bank	0,14	0,90	15,54%	30,40
Agricultural Bank of China	0,08	14,52	14,55%	20,79
Bank of China	0,08	0,68	12,58%	18,20
China Development Bank	n.a. ⁷	n.a.	9,82%	n.a.
Standard Bank Group	1,15	7,12	15,3%	1,51
FirstRand Ltd	0,33	11,12	24%	n.a.
Barclays Africa Group	2,87	15,86	16,6%	12,05
Nedbank Group	1,75	1,05	15,3%	0,59
Investec Bank Ltd	0,47	n.a.	13,7%	n.a.

Figure 23. Sample information table (2). Source: personal elaboration

Top 5 Bank's Total Assets in Trillion of Dollars

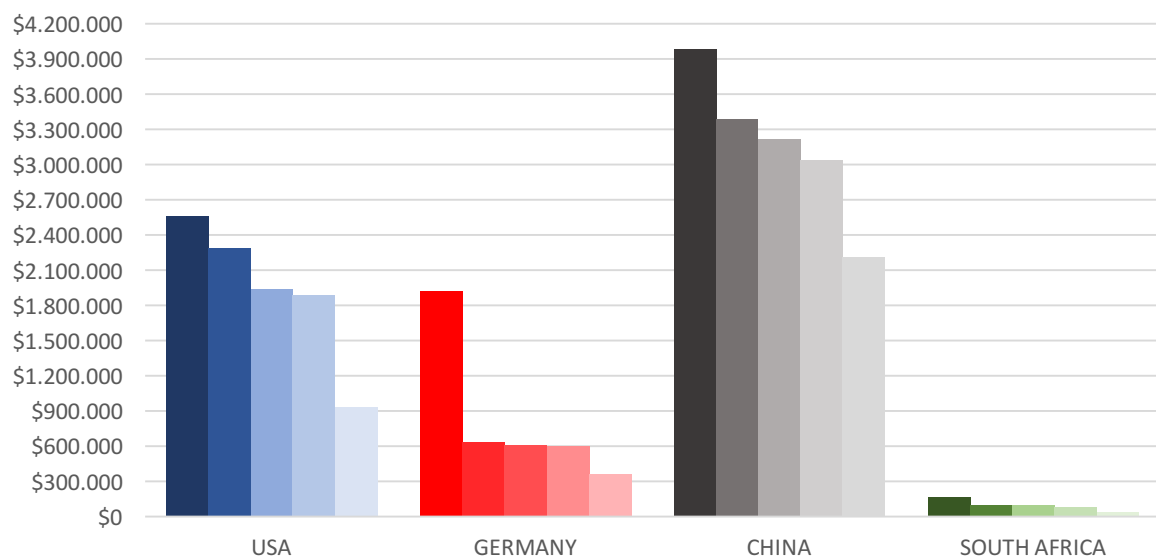


Figure 24. Banks' comparison based on Total Assets. Source: personal elaboration

⁴ This bank is not listed. Consequently, information concerning Net income per share diluted, Book Value and Market Capitalization are not available.

⁵ n.a.: this is information is not provided because not disclosed or disclosed with different values among documents.

⁶ This bank is not listed. Consequently, information concerning Net income per share diluted, Book Value and Market Capitalization are not available.

⁷ This bank is not listed. Consequently, information concerning Net income per share diluted, Book Value and Market Capitalization are not available.

In the above graph, it is reported a graphical representation in which is reported the overall total assets of the banks object of analysis. This is useful to compare the dimension of the banks. Emerges that China, within these countries, has the largest banks. South Africa instead has banks that have the lowest value expressed in assets. This graph is important because assets' dimension can communicate also to readers the operational dimension of these institutes. In fact, China in last decade, have shared the leading position in the financial market with USA. These data are centrals because following the theories, since CSR activities become essential especially for investors, in these market the required level of adoption of sustainability report must be high. Although South Africa has the lowest values, it is an important case because of the adoption of the mandatory disclosure system for the enterprises belonging to JSE. Before explaining the method of investigation of the variables (Key Indicators) that are useful to answer to the research question, it is essential to analyse in more depth way the sample of firms.

The variables object of analysis helpful to know better the sample banks are reported below:

Variables	Description	Method of assessment
IR	Presence of Integrated Reporting	1 yes, 0 no
ESG R	Environmental Social Governance Report presented as Stand-alone document	1 yes, 0 no
ESG AR	Environmental Social Governance Report presented in the Annual Report	1 yes, 0 no
NO ESG	Absence of Environmental Social Governance Report	1 absence, 0 presence
PCOM	Presence of Public Commitment by company's top management	1 yes, 0 no
SEP	Presence of Stakeholder Engagement Programs	1 yes, 0 no
CSR ASS	Presence of CSR assurance	1 yes, 0 no
BIG 4	Presence of BIG 4 (Deloitte, EY, PWC, KPMG) assurance provider	1 yes, 0 no
LIS	Listed company	1 yes, 0 no
IFRS	IFRS Adoption	1 yes, 0 no
ISA	International Standard Adoption (GRI, ISO 26000, others)	1 yes, 0 no
MD	Mandatory Disclosure	1 yes, 0 no
I OWN	Presence of Institutional Owners	% Institutional Ownership
FR	Frequency of CSR information disclosure	Year or Month
FY	Financial Year of analysis	Number

Figure 25. Description of the variables useful to compare the characteristic of the sample. Source: personal elaboration

Taking the variables reported above and associated them to the sample took in consideration,

it is possible to obtain a clearer framework that defines in depth a snapshot of the firms' CSR activities.

2.2 Definition of the Key Pillars

The definition of the Key Pillars from which it has been chosen the variables (Key Indicators) is Pivotal. The areas in which the analysis is conducted is 4:

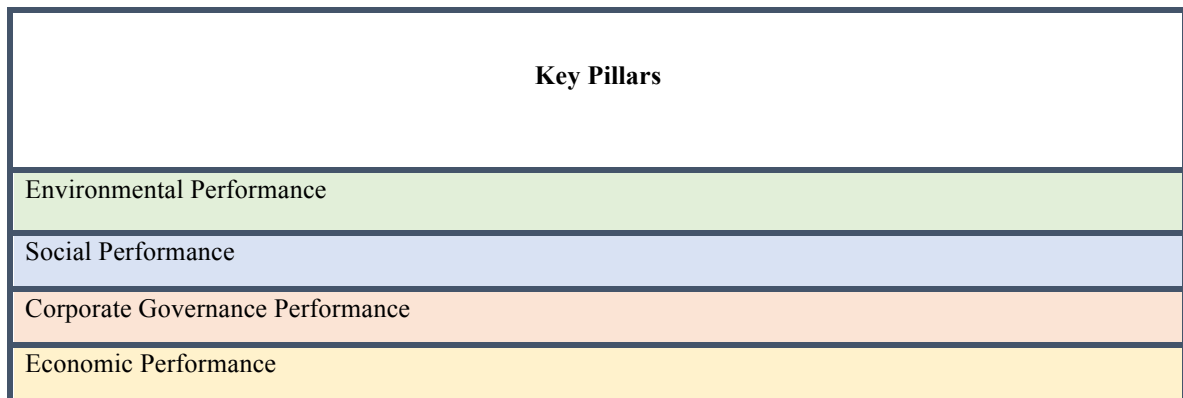


Figure 26. Key pillars. Source: personal elaboration

ESG Performances index

Regarding the four Key Pillars, they have been chosen based on theoretical principles and on empirical evidence: comparing different sustainability reports, of different sectors and markets, the common point is represented by ESG index (Environmental, Social, Governance). This index in fact, embraces the fields of action on which CSR should be developed by firms: measuring the ESG performances, stakeholders can have a complete framework regarding activities and behaviors of the corporations.

Economic Performance

The economic performance has been introduced in this empirical research because of the relevance that it comprehends: beyond theories and critics, the aim of this research is to determine the impact of CSR activities on the economic performance of the companies.

Moreover, the majority of the stakeholders are interested above all in the profitability of the firms. If a company, sustaining CSR behaviors and activities, can't achieve positive economic performances can't also respond to interests held by stakeholders.

These four pillars are essentials for the selection of the Key Indicators useful to analyse each bank. In fact, the composition of these Key Indicators is based on the connection with the pillars.

2.3 Definition of the Key Indicators

Starting from the areas defined by Key Pillars, the choice of the Key Indicators is based taking inspiration by the variables used by different providers, leaders in the field of gathering information on sustainability reporting:

- Bloomberg, which provides 700 indicators and over 11.000 company reports
- Thomson Reuters, which provides 400 indicators and over 6.000 company reports
- MSCI KLD 400 Social Index, one of the first Socially Responsible Investing (SRI) indexes

Below it is reported a table containing 32 Key Indicators which are the basement for the evaluation of CSR reporting strategy of each bank.

Key Indicators	Code
Bank's environmental policies and concerns	EP.1
Implemented systems for environmental management	EP.2
Environmental projects such as recycling and protection of natural resources	EP.3
Energy saving in performing business operations	EP.4
Pollution: declaration of CO2 emissions and others	EP.5
Health and safety policies and measures for employees	SP.6
Equal opportunities in employment (e.g. minorities, women)	SP.7
Training and education provided to employees	SP.8
Employee assistance-benefits	SP.9
Employee compensation programs	SP.10
Policies adopted regarding staff profit sharing	SP.11
Contributions and donations to charities, NGOs and community activities	SP.12
Provision if support to students to continue their education and sponsoring sport activities	SP.13
Participation in social government campaigns	SP.14
Diversity of social products (e.g. donation for public works, educational loans etc.)	SP.15
Provision for disabled, frail and difficult-to-reach customers	SP.16
Investments in social responsibility activities	SP.17
Strategies and plans for future expansion in social products and services	SP.18
Loyalty programs and gifts to customers	SP.19
Board structure	CG.20
Compensation Policy	CG.21
Shareholders rights	CG.22

Integrated Business Model	CG.23
Integrated Business Plan	CG.24
Code of conduct	CG.25
CSR (ESG) reports	CG.26
Integrated report	CG.27
ROA	ECP.28
ROE	ECP.29
ROI* ⁸	ECP.30
Earnings/total number of share	ECP.31
Leverage ⁹	ECP.32

Figure 27. Key Indicators. Source: personal elaboration

In order to allow the comprehension of the Key Indicators, it has been decided to divide it following the four pillars, giving to each one a code that simplify their use. The code in fact, reports the belonging pillar thanks to an abbreviation and a number of identification.

Example: EP1 indicates Economic Performance 1, corresponding to the Key Indicator named Bank's environmental policies and concerns.

2.4 Data Collection

In order to gather data, internet connection have represented the best option. Through banks' websites, the information related to sustainability (ESG) reports and economic performances have been analysed. The process of screening of the information has been based on the usage of the KEY WORDS related to the Key Indicator examined. Through the function SEARCH, it has been possible to find the information in the documents analysed. Immediately, this operation has given the presence or not of the examined variable or KI, allowing also the judgment of the quantity of information disclosed.

The types of information analysed and successively reported belong to two categories:

1. Quantitative information
2. Qualitative information

⁸ ROI index is generally not shown by the banks object of this analyses. Its study is relevant therefore to discover if this fact is linked to a possible negative signal that this index might give to the market. Together with ROA and ROE, it represents one of the most common index used to assess economic performance, since it expresses profitability and efficiency.

The symbol *, when applied after ROI (example: ROI*), means that the value indicated is not shown by the company and it has been calculated manually following the general formula expressed it in percentage: $ROI = \text{Net income} / \text{Total Investment}$.

⁹ Ratios presented are calculated under the Basel III Transitional rules, which became effective on January 1, 2014, and for the capital ratios, represent the Collins Floor. Prior to 2014, the ratios were calculated under the Basel I rules.

Regarding the first category, this kind of information is related to numbers, and usually is used to communicate financial results (included the Economic Performance). The second category of information instead, is usually used to communicate strategic and non-financial results. This last category is in fact essential for the analyses of the information related to Environmental, Social and Corporate Governance actions undertaken by the companies.

Since corporations have different way of communication, the information analysed of each firm (regarding both types of category) belong to:

- Annual Reports
- Investor Relations Sections related to CSR
- Sustainability Reports Section (if they are present)

Since the collection of the data turned out to be hard to complete, it has been necessary consulting other sources of information, in order to create a solid comparison. The informational providers consulted are: Financials.morningstar, Ycharts, Finance.yahoo, Thomson Reuters, PricewaterhouseCoopers, Financial24 and Aastocks.

Within the sample of banks analyzed in fact, there are different ways of reporting financial and non-financial activities: this fact has made the collection of the data harder, especially about the collection of quantitative data. It is necessary to underline that, beyond of the different unit of currency on which are exposed the financial data, dependently by the state of belonging, there are many different items' names which expressed the same financial information. Hence, the harmonization of the data required a level of precision and accurateness really high. In order to do that, financial data are reported in a unique unit of currency, which is USA Dollars. Moreover, quantitative data concerning economic performances are taken as disclosed in banks' Annual Reports. It might exist difference between numerical data reported along the document, and data about economic performance expressed through the index ROA. This difference is due to several factors: the most important, it is the different formula of calculation used to obtain the value of ROA index by the different banks analysed.

2.5 Methodology of assessment of the data and explanation of the model of analyses

Starting from the definition of the banks object of analysis, the next step is to disclose the method of assessment of this sample. Taking into consideration the information gathered by corporations' websites, it has been analysed a set of variables for create an in-depth knowledge

of them. In order to create a good field of comparison, it has been decided to assess the variables thanks to a binary system:

- The presence of the variable in question is indicated by 1, and the absence is indicated by 0
- The variable Y indicates the Financial Year from which information has been gathered
- The variable I OWN is indicated through the percentage of the ownership held by institutional figures
- The variable FR is indicated by Year or Month

Once assessed and evaluated the banks object of analysis, it is interesting to report the results in order to complete the knowledge about the sample: taking into consideration the total number of the banks analysed and the different State of belonging, it is compelling to expressed in percentage the positive results (expressed by the number 1), thanks to the method of the assessment.

The variables I OWN, FR and FY are excluded from this operation because expressed in a way not adapt for the comparison in percentage.

In this way, it is possible to develop a valid comparison that immediately gives information about the features of the firms.

Once assessed companies' characteristics, it is fundamental to define the methodology to assess the key indicators about sustainability reporting of the sample. Key Indicators are evaluated based on 4 communication principles:

Principles of Evaluation of Key Indicators	Code
Clarity	CL
Concreteness	CN
Adherence to International Standards (GRI, ISO 26000, OECD, IIRC, UNGC)	AIS
Quantity of Information Disclosed	QIF
Total Quality of Information Disclosed	TQID

Figure 28. Evaluation's principles. Source: personal elaboration

Clarity

The principle of Clarity, refers to the capacity of a company to convey a message in a way that allows receivers to interpret and understand that message. Concretely, a personal elaboration and evaluation of the contents related to the Key Indicator in question, based on this principle, generates a personal judgment on the capacity of the company to be clear in conveying the information about the examined KI.

Concreteness

The principle of Concreteness, refers to the capacity of a company to convey a message that should be specific, definite and vivid rather than vague and general. Concretely, a personal elaboration and evaluation of the contents related to the Key Indicator in question, based on this principle, generates a personal judgment on the concrete capacity of the company to transmit the information about the examined KI.

Adherence to International Standards (GRI, ISO 26000, OECD, IIRC, UNGC)

The principle of Adherence to International Standards, refers to the capacity of the company of disclosing information that are in line with guidance or principles promoted by GRI, ISO 26000, OECD, IIRC or OECD. Concretely, a personal elaboration and evaluation of the contents related to the Key Indicator in question, based on this principle, generates a personal judgment on the adherence to International Standard of the company.

Quantity of Information Disclosed

The principle measuring the Quantity of Information Disclosed, measures the effective quantity of information disclosed about the Key Indicator examined.

Total Quality of Information Disclosed

The Total Quality of Information Disclosed is obtained through the mean of the results took by the 4 principles of evaluation: hence, this value represents the landmark to construct the overall personal evaluation of the KI.

In order to develop a model which could present a reliable comparison among the key indicators, it has been decided to create an evaluation system based on rating.

The method of analysis consists in an evaluation of the Key Indicators based on the four principles reported above. The evaluation is rated thanks to a scale from 0 to 4.

Description of the rating method	Rating scale
Information not disclosed or not available	0
Information disclosed evaluated not sufficiently	1
Information disclosed evaluated sufficiently	2
Information disclosed evaluated in a good way	3
Information disclosed evaluated in a wide way	4

Figure 29. Rating method description table (1). Source: personal elaboration

Concerning the principle assessing the Quantity of information disclosed, the rating system is slightly different, based precisely on the measurement of the quantity of pages dedicated to the disclosure of the information related to the Key Indicators:

Description of the rating method	Rating scale
Information not disclosed or not available	0
Information disclosed in less than 1 page	1
Information disclosed in 1 page	2
Information disclosed in 2 pages	3
Information disclosed in more than 2 pages	4

Figure 30. Rating description method table (2). Source: personal elaboration

Once completed the operations of data collection and evaluation, it is fundamental to explain how it is possible to answer to the research question.

First, it is important to specify that among the four Key Pillars, only Environmental, Social and Corporate Governance Performances allow to exploit the methodology of analyses provided in this thesis. The analyses of the Key Indicators belonging to the Economic Performance Pillar, is based directly on a quantitative data collection and for that reason does not allow a qualitative evaluation.

Anyway, the importance of this dimension must be included in the research. In fact, data are collected to allow readers to make a personal comparison of these Key Indicators.

2.6 Unit of analyses of the Economic Performance

In order to obtain a reliable index of the Economic Performance of a company, it has been decided to use the Key Indicator ROA. This Key Performance Indicator, is particularly important in the financial sector, since it expressed the bank's performance respect to the asset held. ROA in fact means Return On Assets, and specify the capacity of a company to generate positive profits taking into consideration the entire bundle of assets held.

The higher the value expressed by this index, the higher the solidity of the bank analysed.

The calculation of this value is obtained by this formula: $\text{Net Income} / \text{Total Assets}$.

The reason related to the choice of taking this indicator as a representative of the Economic Performance are principally three:

1. It allows a solid and reliable comparison among different companies belonging to the same sector
2. It is directly dependent by the capacity of the company to make profit
3. It gives CONSISTENCY to this research, because it is related to the assets held by each bank. Based on the total assets held in fact, it has been established the dimension of the banks object of analyses

Therefore, this index represents the economic unit of analyses useful to complete this research. In order to go even deeper in the analysis of the impact of the ESG reports on the economic performance, it has been decided to take into consideration also another Key Performance Indicator: ROE. This indicator provides useful information about the Return On Equity of the company object of study, and hence it is suitable to gives more consistency to the results obtainable by the empirical analysis.

2.7 Method for establish if CSR activities are Correlated to Economic performance

Now it is essential to focus the attention in the effective way used to establish if different strategies of sustainability reporting, are correlated to different economic performances.

In order to determine the effective level of CSR activities adopted by each bank, it has been taken each value attributed to the Total Quality of Information Disclosed. This value, collects the characteristics of the company, since it is obtained through the mean of the four principles used to evaluate Key Indicators.

It is interesting to know the correlation existent between the Economic Performance and the entire ESG index of each bank, and between the Economic Performance and each single pillar's performance of each bank: Environmental one, Social one and Governance one.

- The Economic Performance is given by the index ROA of the company object of analyses
- Each pillar's performance is composed by the mean of the value rated in the Total Quality of Information Disclosed in its Key Indicators
- The ESG index is obtained by the mean of the Key Indicators' value rated in the Total Quality of Information Disclosed, belonging to Environmental, Social and Governance performance

Once obtained the outcomes, it is relevant to classify them by Nation. In this way in fact, it is possible to verify the existence of a correlation based on the average results obtained by State of belonging.

- The Economic Performance of each State is obtained by the mean of the ROA of its banks
- Each pillar's performance of each State is obtained by the mean of that banks' pillar of that State
- The ESG index of each State is obtained by the mean of the ESG indexes of the banks of that State

Acting in this manner, thanks to the total outcomes divided by Nations, it is also possible to verify an important theoretical assumption given by literature: different cultures determine different Corporate Social Responsibility activities.

Once obtained the results taking into consideration the unit of analyses ROA, it has been decided to give more consistency to the study itself, repeating the assessment using also another Key Performance Indicator, ROE.

In this way, the results of the analyses have been more reliable.

Coefficient of Correlation

In order to study if exists and, in case of positive/negative response, the grade of the correlation existent between Economic Performance and ESG Performances of a bank, it has been taken the Coefficient of the Correlation (r).

This index allows to show the linear relationship between two sets of data, establishing their grade of correlation:

- The range of the results are included between -1 and 1
- Values between $0+\varepsilon$ and 1 signal the existence of a positive correlation. The closer the value to 1, the higher the grade of positive correlation. 1 signal perfect positive correlation
- Values between $0-\varepsilon$ and -1 signal the existence of a negative correlation. The closer the value to -1, the higher the grade of negative correlation. -1 signal perfect negative correlation

The calculation of the Index of Correlation, implies the study and the calculation also of the Covariance (S_{xy}) and the Standard Deviation (S_x).

It has been necessary to developed 5 classes of belonging useful to evaluate the degree of relation provided by the coefficient of correlation.

Range	Evaluation
Value between $0+\varepsilon$ and 0,15 ($0-\varepsilon$ and -0,15)	Really low degree of relation
Value between 0,15 and 0,30 (-0,15 and -0,30)	Low degree of relation
Value between 0,30 and 0,70 (-0,30 and -0,70)	Moderate degree of relation
Value between 0,70 and 0,85 (-0,70 and -0,85)	High degree of relation
Value between 0,85 and $1-\varepsilon$ (-0,85 and $-1+\varepsilon$)	Really degree of high

Figure 31. Coefficient of correlation evaluation's range. Source: personal elaboration

Once completed the operations and obtained also the Coefficient of Correlation, it is interesting to expose the results in a graph. In order to achieve this purpose, the graphical representation through a Scatter Plot results to be the best option. Indeed, putting the Economic Performance on X axis, and putting ESG performance on Y axis, allow to develop an efficient and effective

comparison. In this way, it is possible to expose the results obtained by each single bank, facilitating the comprehension of the entire empirical study.

Finally, the development of some statistical tests, gives to the results provided a higher level of significance. The choice of the statistical elements and their explanation, are directly treated in the next chapter, since they are formed and developed to support the results provided.

3. Empirical evidence from the banking sector

The aim of this chapter is to establish the existence of a relation between CSR reporting and the economic performance of the banks analysed. Since the methodology of assessment of the quality of CSR reporting it has been already explained in the previous chapter, the results obtained through the study of the sample will be now exposed.

First, will be reported the analyses conducted in order to assess and compare the sample of the banks analysed, and after this operation, will be exposed the results of the analyses of the Key Indicators used to evaluate the documents related to CSR reporting.

The scheme adopted to show the results starts from the disclosure of the overall result, going later to the particular results divided by Nation.

3.1 Statistical tools to support the results

Statistics instruments are the most relevant elements able to support and give consistency to the analyses provided in every kind of economic research.

For that reason, it is necessary to develop and include some statistical tools that must allow to develop, standardize and support the results obtained. Although the total bundle of data collected is quite large, the number of banks observed is relatively low. The choice of the most appropriate tools that can be exploit to support the results obtained turned out to be tough. The branch of the statistic called inferential statistic, developed by authors as Pearson, Fisher et. al., supported this research, since it can provide solid answers, starting from a small number of observations respect to the entire population. Hence, thanks to parametric statistics, turned out to be possible to support this research. According to a common vision, the reliability of a sample depends uniquely by its dimension. Different studies demonstrate that this assumption is not completely valid: obviously, the bigger the sample, the more precise and reliable the results will be. However, the methodology of sampling demonstrates that the quality of the data is more important than its number. Moreover, another common opinion is that the sample size should be proportionate to the size of the population studied. Statistics laws show instead that this assumption is completely false: it has been possible to demonstrate that the standard error of a proportion is in inverse relation with the sample size, but does not depend at all on the number of the population studied. In fact, for example, in the calculation of the 95% confidence interval of a proportion, the number of the population from which the sample comes is not considered. The goodness of a statistical study, is measurable from two perspectives:

1. Internal validity: measure how much the results of a study are correct for the sample of data who have been studied
2. External validity: measure the degree of inferencing of the conclusions obtained from a study

Taking into consideration what reported above, it has been decided to support this research thanks to the analyses of variance “ANOVA” and to linear regression model.

ANOVA test belongs to the parametric statistic and hence is suitable for the analyses of the data based on a small number of observations; in fact, its outputs achieve a good level of reliability although a small number of observations.

Linear regression model is suitable for the study of the relation existent between a dependent variable and one or more independent variables, and hence turns out to be the best statistical tool that can support the results obtained in this research. It is necessary to underline that the answers provided by this latter are influenced negatively by the small sample size.

However, it is important to study it for achieving a higher overall level of consistency, specifying the limits of the conclusions deductible from it.

Once again, as indicated above, the quality of the data influence the reliability of the outputs.

It is worthwhile to spend some words to explain the relevant role held by the degree of freedom defined as the number of "observations" (pieces of information) in the data that are free to vary when estimating statistical parameters. In other words, the number of degrees of freedom is the number of independent observations in a sample of data that are available to estimate a parameter of the population from which that sample is drawn.

Both in ANOVA and Linear regression model, they have a fundamental role because the construction and the interpretation of the results are directly dependent by them.

Performing a linear regression, a parameter is estimated for every term in the model: consequently, each one consumes a degree of freedom. Therefore, including excessive terms in a multiple regression model reduces the degrees of freedom available to estimate the parameters' variability. In fact, if the amount of data is not sufficient for the number of terms of the model, there may not even be enough degrees of freedom for the error term and no p-value or F-values can be calculated at all. Therefore, degrees of freedom do have real and tangible effects on data analysis and must be considered in the selection of the variable to be included in the model. Taking into consideration this research, the number of degrees of freedom available is minimum.

The low number of observations that compose the sample impacts negatively into the external validity of the outputs. However, statistical tests can enhance the internal validity of this research, and hence should be conducted. The purpose of the statistical tests made in this research support and give reliable answers adapted only for the sample analysed. The personal mechanism linked to data collection and evaluation provided in this research, do not allow a study based on a more appropriate sample dimension. However, the conduction of statistical analyses heavily supports the result obtained only considering the answer provided by the study of the coefficients of correlation, and gives further valuable information to understand in depth the sample analysed.

3.2 Results and comparison of the banks' sample analysed

In order to explore the specific features which characterized the reporting strategy of each bank object of analyses, it is useful to study the entire sample of banks took in consideration for the construction of the entire case study.

For achieving this purpose, it has been decided to create an evaluation grid which includes and examines some important characteristics of each bank.

The entire grid is composed by 15 features (called variables), that are evaluated in order to create a field of comparison that gives to reader a general vision about the reporting strategy of the banks studied. Below, it is reported a grid that contains only 12 variables, which expressed in percentage a summary of the results. The other three variables are not included because not adapted to be expressed in percentage.

Variables	USA (Average rate %)	Germany (Average rate %)	China (Average rate %)	South Africa (Average rate %)	% Bank positive response/ total
IR	40%	100%	100%	100%	85%
ESG R	100%	100%	100%	80%	95%
ESG AR	0%	60%	40%	100%	50%
NO ESG	0%	0%	0%	0%	0%
PCOM	100%	100%	100%	100%	100%
SEP	60%	100%	100%	100%	90%
CSR ASS	20%	60%	100%	100%	70%
BIG 4	100%	100%	100%	100%	100%
LIS	100%	60%	100%	100%	90%

IFRS	0%	100%	100%	100%	75%
ISA	80%	100%	100%	100%	95%
MD	0%	0%	0%	100%	25%

Figure 32. Table of comparison of sample's features. Source: personal elaboration

The grid reported above shows that the banks have many common characteristics, but in some cases, presents some substantial differences, especially if considered by Nation.

- IR: it indicates a very high level of homogeneity for the banks analyzed, with the exception of the American ones, which presents only two banks that adopt IR
- ESG R: it indicates a very high level of homogeneity in the sample, in which only one South African bank does not present an ESG report
- ESG AR: it indicates a great degree of heterogeneity in the sample analyzed, with a relevant case represented by American banks, which do not present in their AR information about Environment, Social or Corporate Governance related to sustainability
- NO ESG: it indicates a perfect homogeneity, which tells to reader that all banks report information about CSR, although in different ways
- PCOM: it indicates a perfect homogeneity, which tells to reader that all banks report information related to the Public Commitment in matter of CSR
- SEP: it indicates a very high level of homogeneity for the banks analyzed, with the exception of the American ones, which presents two banks that do not present Stakeholders Engagement Programs
- CSR ASS: it indicates a high level partial level of homogeneity. Only in China and South Africa, all banks present a CSR Assurance. It is interesting to note that only one American bank, presents a CSR Assurance
- BIG 4: it indicates a perfect homogeneity, which tells to reader that all banks present report recurring to external auditors belonging to BIG 4 audit companies. Two South African banks recur to two external auditors among the BIG 4
- LIS: it indicates a very high level of homogeneity for the banks analyzed, with the exception of the German ones, which presents two banks that are not Listed.
- IFRS: it indicates a very high level of homogeneity for the banks analyzed, with the exception of the American banks that do not use IFRS principles and rules to form their ARs or other reports. Anyway, it is noticeable to underline that all of the American banks used GAAP principles and rules to form their ARs and other reports

- ISA: it indicates a very high level of homogeneity for the banks analyzed, with the exception of one American bank, that does not declare the adoption of International Standard Adoption in matter of CSR reporting
- MD: it indicates a very high level of homogeneity for the banks analyzed, with the exception of the South African ones, which all presents belonging to a national system which presents Mandatory Disclosure

Additional information:

It is important to underline that almost all banks disclose with a yearly Frequency information about CSR activities; only an American disclose CSR information every two years. One German and one Chinese bank, do not present available information about Frequency.

The documents analysed (ARs, ESG reports, etc.) belong to 2016. Only two banks, one German and one Chinese, present documents related to CSR belonging to 2015.

Banks' results by Nation

United States of America

Variables	SU1	SU2	SU3	SU4	SU5
IR	0	1	0	0	1
ESG R	1	1	1	1	1
ESG AR	0	0	0	0	0
NO ESG	0	0	0	0	0
PCOM	1	1	1	1	1
SEP	0	1	0	1	1
CSR ASS	0	1	0	0	0
BIG 4	1, PWC	1, PWC	1, KPMG	1, KPMG	1, PWC
LIS	1	1	1	1	1
IFRS	0	0	0	0	0
ISA	1	1	1	0	1
MD	0	0	0	0	0
I OWN %	74,36	69,72	76,89	82,76	73,82
FR	Yearly	Yearly	Yearly	Every 2Years	Yearly
FY	2016	2016	2016	2016	2016

Figure 33. American banks' assessment results. Source personal elaboration

Germany

Variables	GE1	GE2	GE3	GE4	GE5
IR	1	1	1	1	1
ESG R	1	1	1	1	1
ESG AR	1	1	1	0	0
NO ESG	0	0	0	0	0
PCOM	1	1	1	1	1
SEP	1	1	1	1	1
CSR ASS	1	0	0	1	1
BIG 4	1, KPMG	1, EY	1, PWC	1, DEL	1, KPMG
LIS	1	0	1	1	0
IFRS	1	1	1	1	1
ISA	1	1	1	1	1
MD	0	0	0	0	0
I OWN %	21,02	n.a.	19,4	n.a.	43,91
FR	Yearly	Yearly	n.a.	Yearly	Yearly
FY	2016	2016	2015	2016	2016

Figure 34. German banks' assessment results. Source personal elaboration

China

Variables	CH1	CH2	CH3	CH4	CH5
IR	1	1	1	1	1
ESG R	1	1	1	1	1
ESG AR	1	1	0	0	0
NO ESG	0	0	0	0	0
PCOM	1	1	1	1	1
SEP	1	1	1	1	1
CSR ASS	1	1	1	1	1
BIG 4	1, KPMG	1, PWC	1, PWC	1, EY	1, PWC
LIS	1	1	1	1	1
IFRS	1	1	1	1	1
ISA	1	1	1	1	1
MD	0	0	0	0	0
I OWN %	n.a.	n.a.	n.a.	n.a.	100
FR	Yearly	Yearly	Yearly	n.a.	Yearly
FY	2016	2016	2016	2015	2016

Figure 35. Chinese banks' assessment results. Source personal elaboration

South Africa

Variables	SA1	SA2	SA3	SA4	SA5
IR	1	1	1	1	1
ESG R	1	1	0	1	1
ESG AR	1	1	1	1	1
NO ESG	0	0	0	0	0
PCOM	1	1	1	1	1
SEP	1	1	1	1	1
CSR ASS	1	1	1	1	1
BIG 4	1, KPMG, PWC	1, KPMG	1, EY, PWC	1, DEL, KPMG	1, KPMG, EY
LIS	1	1	1	1	1
IFRS	1	1	1	1	1
ISA	1	1	1	1	1
MD	1	1	1	1	1
I OWN %	n.a.	n.a.	n.a.	n.a.	n.a.
FR	Yearly	Yearly	Yearly	Yearly	Yearly
FY	2016	2016	2016	2016	2016

Figure 36. South African banks' assessment results. Source personal elaboration

3.3 Results and comparison of the CSR documents analysed

The analyses of the documents related to CSR activity disclosed by the banks object of study, is based on the evaluation of the 32 Key Indicators, which belong to the 4 Key Pillars that allow to enhance a good degree of Corporate Social Responsibility development.

Starting from the overall result, it is interesting to analyze and compare also the existing differences among Nations about CSR reporting.

The value reported in the table below, are subdivided following the membership class to the 4 principles of evaluation used to assess the data. This table includes only 3 Key Pillars, since the evaluation of the Economic one does not fit the model.

The results are obtained taking into consideration the entire sample analyzed, divided by Key Indicators. The value reported are obtained by the MEAN of the data related to the Key Indicator in question, for the entire sample.

This table gives an overall vision about the results obtained through the empirical research conducted in the financial sector, with the focus on the banking system.

Once observed the MEAN of each KI, it is interesting to focus on the results obtained by membership class: Environmental, Social and Corporate Governance Performance.

In this way, it is possible to obtain values that directly tell to reader the performance observed about CSR. It is therefore useful to discover the ESG index as a whole, taking into consideration the MEAN value by each of the four classes (CL, CN, AIS and QIF) before discover the final value obtained thanks to the class TQID.

3.4 Overall results

Key Pillars	Key Indicators	Mean Value CLARITY	
		Abs. value	%
Environmental Performance	Bank's environmental policies and concerns	3,80	95,00
	Implemented systems for environmental management	3,75	93,75
	Environmental projects such as recycling and protection of natural resources	3,60	90,00
	Energy saving in performing business operations	3,79	94,74
	Pollution: declaration of CO2 emissions and others	3,80	95,00
Social Performance	Health and safety policies and measures for employees	3,10	77,50
	Equal opportunities in employment (e.g. minorities, women)	3,50	87,50
	Training and education provided to employees	2,95	73,75
	Employee assistance-benefits	1,80	45,00
	Employee compensation programs	2,25	56,25
	Policies adopted regarding staff profit sharing	0,90	22,50
	Contributions and donations to charities, NGOs and community activities	3,55	88,75
	Provision if support to students to continue their education and sponsoring sport activities	2,10	52,50
	Participation in social government campaigns	3,60	90,00
	Diversity of social products (e.g. donation for public works, educational loans etc.)	3,60	90,00
	Provision for disabled, frail and difficult-to-reach customers	0,75	18,75
	Investments in social responsibility activities	3,15	78,75
	Strategies and plans for future expansion in social products and services	3,95	98,75
	Loyalty programs and gifts to customers	1,25	31,25
Corporate Governance Performance	Board structure	3,90	97,50
	Compensation Policy	3,05	76,25
	Shareholders rights	1,30	32,50
	Integrated Business Model	1,25	31,25
	Integrated Business Plan	0,20	5,00
	Code of conduct	3,00	75,00
	CSR (ESG) reports	3,45	86,25
	Integrated report	2,35	58,75

Figure 37. Overall results (Clarity principle). Source: personal elaboration

CL Environmental Performance (MEAN value of the Indicators): 3,75 or 93,70%.

CL Social Performance (MEAN value of the Indicators): 2,60 or 65,09%.

CL Corporate Governance Performance (MEAN value of the Indicators): 2,31 or 57,81%

CL ESG index (MEAN value of the Indicators): 2,73 or 68,23%.

Key Pillars	Key Indicators	Mean Value CONCRETENESS	
		Abs. value	and %
Environmental Performance	Bank's environmental policies and concerns	3,60	90,00
	Implemented systems for environmental management	3,60	90,00
	Environmental projects such as recycling and protection of natural resources	3,50	87,50
	Energy saving in performing business operations	3,60	90,00
	Pollution: declaration of CO2 emissions and others	3,70	92,50
Social Performance	Health and safety policies and measures for employees	3,00	75,00
	Equal opportunities in employment (e.g. minorities, women)	3,55	88,75
	Training and education provided to employees	2,80	70,00
	Employee assistance-benefits	1,60	40,00
	Employee compensation programs	2,20	55,00
	Policies adopted regarding staff profit sharing	0,90	22,50
	Contributions and donations to charities, NGOs and community activities	3,50	87,50
	Provision if support to students to continue their education and sponsoring sport activities	2,10	52,50
	Participation in social government campaigns	3,25	81,25
	Diversity of social products (e.g. donation for public works, educational loans etc.)	3,50	87,50
	Provision for disabled, frail and difficult-to-reach customers	0,75	18,75
	Investments in social responsibility activities	3,15	78,75
	Strategies and plans for future expansion in social products and services	3,55	88,75
Loyalty programs and gifts to customers	1,15	28,75	
Corporate Governance Performance	Board structure	3,85	96,25
	Compensation Policy	3,05	76,25
	Shareholders rights	1,30	32,50
	Integrated Business Model	1,25	31,25
	Integrated Business Plan	0,20	5,00
	Code of conduct	2,85	71,25
	CSR (ESG) reports	3,25	81,25
	Integrated report	2,10	52,50

Figure 38. Overall results (Concreteness principle). Source: personal elaboration

CN Environmental Performance (MEAN value of the Indicators): 3,60 or 90,00%.

CN Social Performance (MEAN value of the Indicators): 2,50 or 62,50%.

CN Corporate Governance Performance (MEAN value of the Indicators): 2,23 or 55,78%.

CN ESG index (MEAN value of the Indicators): 2,62 or 65,60%.

Key Pillars	Key Indicators	Mean Value AIS	
		Abs. value	and %
Environmental Performance	Bank's environmental policies and concerns	3,40	85,00
	Implemented systems for environmental management	3,60	90,00
	Environmental projects such as recycling and protection of natural resources	3,25	81,25
	Energy saving in performing business operations	3,40	85,00
	Pollution: declaration of CO2 emissions and others	3,30	82,50
Social Performance	Health and safety policies and measures for employees	2,15	53,75
	Equal opportunities in employment (e.g. minorities, women)	2,80	70,00
	Training and education provided to employees	1,35	33,75
	Employee assistance-benefits	0,55	13,75
	Employee compensation programs	0,80	20,00
	Policies adopted regarding staff profit sharing	0,40	10,00
	Contributions and donations to charities, NGOs and community activities	3,40	85,00
	Provision if support to students to continue their education and sponsoring sport activities	1,35	33,75
	Participation in social government campaigns	2,55	63,75
	Diversity of social products (e.g. donation for public works, educational loans etc.)	2,75	68,75
	Provision for disabled, frail and difficult-to-reach customers	0,45	11,25
	Investments in social responsibility activities	3,10	77,50
	Strategies and plans for future expansion in social products and services	3,50	87,50
	Loyalty programs and gifts to customers	0,25	6,25
Corporate Governance Performance	Board structure	3,15	78,75
	Compensation Policy	0,80	20,00
	Shareholders rights	0,00	0,00
	Integrated Business Model	1,20	30,00
	Integrated Business Plan	0,20	5,00
	Code of conduct	2,50	62,50
	CSR (ESG) reports	2,75	68,75
	Integrated report	2,00	50,00

Figure 39. Overall results (Adherence to Interantional Standard principle). Source: personal elaboration

AIS Environmental Performance (MEAN value of the Indicators): 3,39 or 84,75%.

AIS Social Performance (MEAN value of the Indicators): 1,81 or 45,36%.

AIS Corporate Governance Performance (MEAN value of the Indicators): 1,58 or 39,38%.

AIS ESG index (MEAN value of the Indicators): 2,04 or 50,88%,

Key Pillars	Key Indicators	Mean Value QIF	
		Abs. value	%
Environmental Performance	Bank's environmental policies and concerns	3,45	86,25
	Implemented systems for environmental management	3,30	82,50
	Environmental projects such as recycling and protection of natural resources	3,25	81,25
	Energy saving in performing business operations	2,55	63,75
	Pollution: declaration of CO2 emissions and others	2,45	61,25
Social Performance	Health and safety policies and measures for employees	2,20	55,00
	Equal opportunities in employment (e.g. minorities, women)	2,20	55,00
	Training and education provided to employees	1,90	47,50
	Employee assistance-benefits	1,00	25,00
	Employee compensation programs	1,70	42,50
	Policies adopted regarding staff profit sharing	0,95	23,75
	Contributions and donations to charities, NGOs and community activities	3,45	86,25
	Provision if support to students to continue their education and sponsoring sport activities	1,80	45,00
	Participation in social government campaigns	3,00	75,00
	Diversity of social products (e.g. donation for public works, educational loans etc.)	3,50	87,50
	Provision for disabled, frail and difficult-to-reach customers	0,50	12,50
	Investments in social responsibility activities	2,90	72,50
	Strategies and plans for future expansion in social products and services	3,75	93,75
	Loyalty programs and gifts to customers	0,95	23,75
Corporate Governance Performance	Board structure	3,85	96,25
	Compensation Policy	2,95	73,75
	Shareholders rights	1,25	31,25
	Integrated Business Model	0,65	16,25
	Integrated Business Plan	0,15	3,75
	Code of conduct	3,05	76,25
	CSR (ESG) reports	3,75	93,75
	Integrated report	2,60	65,00

Figure 40. Overall results (Quantity of information disclosed principle). Source: personal elaboration

QIF Environmental Performance (MEAN value of the Indicators): 3,00 or 75,00%.

QIF Social Performance (MEAN value of the Indicators): 2,13 or 53,21%.

QIF Corporate Governance Performance (MEAN value of the Indicators): 2,28 or 57,03%.

QIF ESG index (MEAN value of the Indicators): 2,34 or 58,38%.

Key Pillars	Key Indicators	OVERALL TQID	
		Abs. value	%
Environmental Performance	Bank's environmental policies and concerns	3,56	89,06
	Implemented systems for environmental management	3,56	89,06
	Environmental projects such as recycling and protection of natural resources	3,40	85,00
	Energy saving in performing business operations	3,33	83,23
	Pollution: declaration of CO2 emissions and others	3,31	82,81
Social Performance	Health and safety policies and measures for employees	2,61	65,31
	Equal opportunities in employment (e.g. minorities, women)	3,01	75,31
	Training and education provided to employees	2,25	56,25
	Employee assistance-benefits	1,24	30,94
	Employee compensation programs	1,74	43,44
	Policies adopted regarding staff profit sharing	0,79	19,69
	Contributions and donations to charities, NGOs and community activities	3,48	86,88
	Provision if support to students to continue their education and sponsoring sport activities	1,84	45,94
	Participation in social government campaigns	3,10	77,50
	Diversity of social products (e.g. donation for public works, educational loans etc.)	3,34	83,44
	Provision for disabled, frail and difficult-to-reach customers	0,61	15,31
	Investments in social responsibility activities	3,08	76,88
	Strategies and plans for future expansion in social products and services	3,69	92,19
	Loyalty programs and gifts to customers	0,90	22,50
Corporate Governance Performance	Board structure	3,69	92,19
	Compensation Policy	2,46	61,56
	Shareholders rights	0,96	24,06
	Integrated Business Model	1,09	27,19
	Integrated Business Plan	0,19	4,69
	Code of conduct	2,85	71,25
	CSR (ESG) reports	3,30	82,50
	Integrated report	2,26	56,56

Figure 41. Overall results (Total Quality of Information Disclosed principle). Source: personal elaboration

TQID Environmental Performance (MEAN value of the Indicators): 3,43 or 85,83%.

TQID Social Performance (MEAN value of the Indicators): 2,26 or 56,54%.

TQID Corporate Governance Performance (MEAN value of the Indicators): 2,10 or 52,50%.

TQID ESG index (MEAN value of the Indicators): 2,43 or 60,77%.

Interpretation of the results

Although the knowledge of the singular result by Key Indicator is important, the most relevant elements are the total performances reported below the tables.

The indexes reported below each table, tell directly to reader the level of the Environmental, Social or Corporate Governance Performance related to the principle of belonging (CL, CN, AIS, QIF, TQID). Last index instead, tell to reader the information necessary to understand the overall level of CSR performance related to the principle analysed.

Last table includes values obtained as a mean of the entire sample of data collected.

For this reason, it displays the values that are most important for this research: they tell to reader the overall level of CSR performance thanks to ESG index, and the level of CSR performance by single pillar.

In this last table, the ESG index indicates that the overall level of CSR performance in the sample of bank analyzed is around 60%. It is interesting to note that, observing the results by pillars, Environmental aspects results to be more developed (85%) than Social and Corporate Governance aspects (56% and 52%).

Once established the overall level of the Corporate Social Responsibility observed, it is interesting to explore how it impacts in the Economic Performance of the banks analyzed.

3.5 ESG and the Economic Performance: Coefficient of Correlation

In order to study the type of relation existent between ESG index and the Economic Performance, it is necessary to create two sets of data: the first is composed by the ESG index of the entire sample of bank, while the second is composed by the ROA values of the entire sample of bank. Hence, both sets are formed by 20 values; in this way, it is possible to verify and assess the correlation existent between CSR and the Economic Performance.

In the same way, it is possible to verify and assess the correlation between each component of the ESG index, that are Environmental, Social and Corporate Governance Performance and the Economic Performance, represented by ROA.

In order to give a higher grade of consistency to the research, it is necessary to verify and study the impact of the ESG index (and each single aspect) and the Economic Performance, represented by another unit of analyses, that is ROE.

A fundamental tool that is suitable to expose the results is represented by the scatter plot, which includes the bundle of the result provided by the study of the correlation.

Correlation between ESG index and ROA

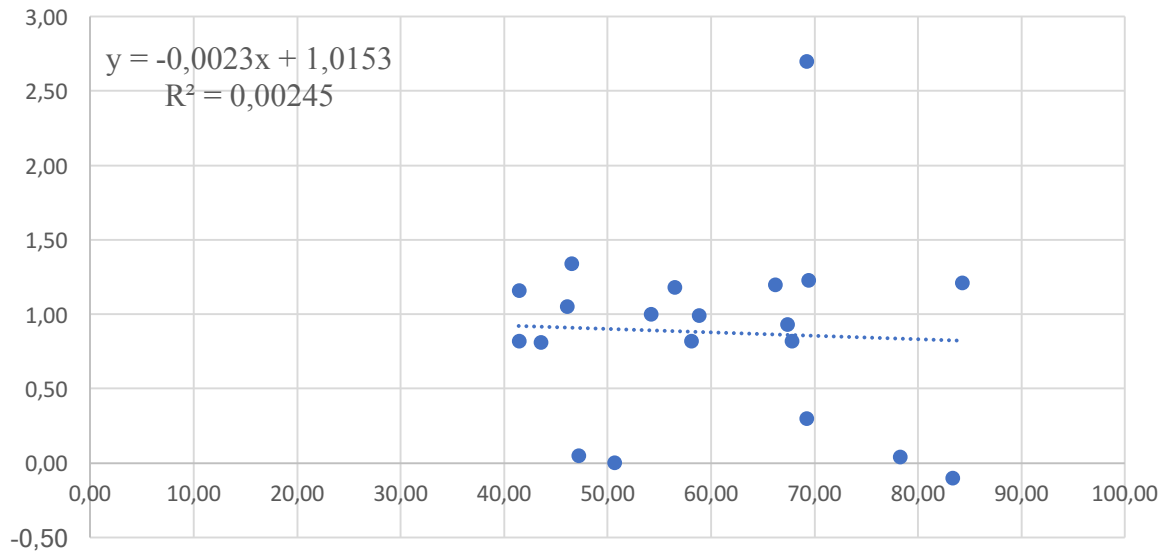


Figure 42. Correlation result graph (1). Source: personal elaboration

Correlation between ESG index and ROA: -0,04950625

Correlation between ESG index and ROE

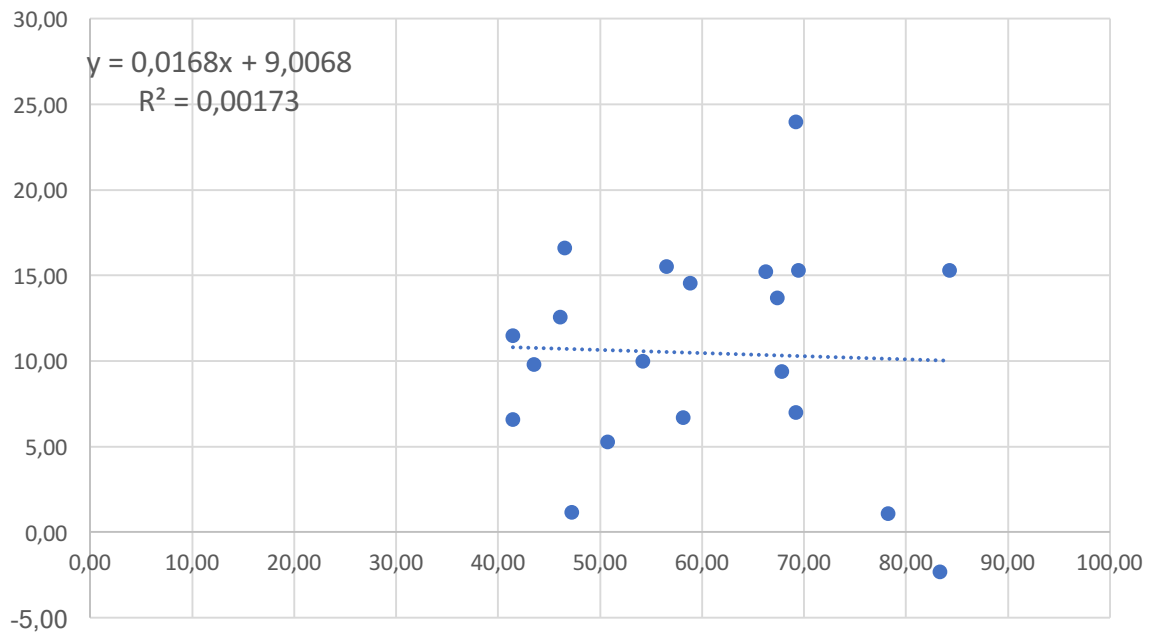


Figure 43. Correlation result graph (2). Source: personal elaboration

Correlation between ESG index and ROE: -0,038462749

Correlation between E and ROA

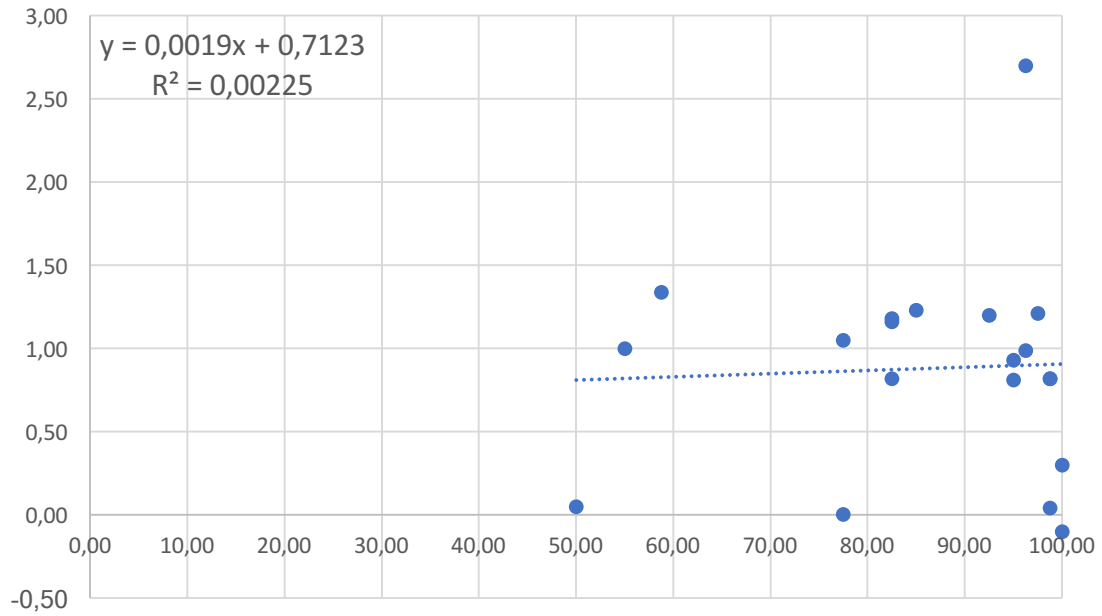


Figure 44. Correlation result graph (3). Source: personal elaboration

Correlation between Environment and ROA: 0,04747941

Correlation between E and ROE

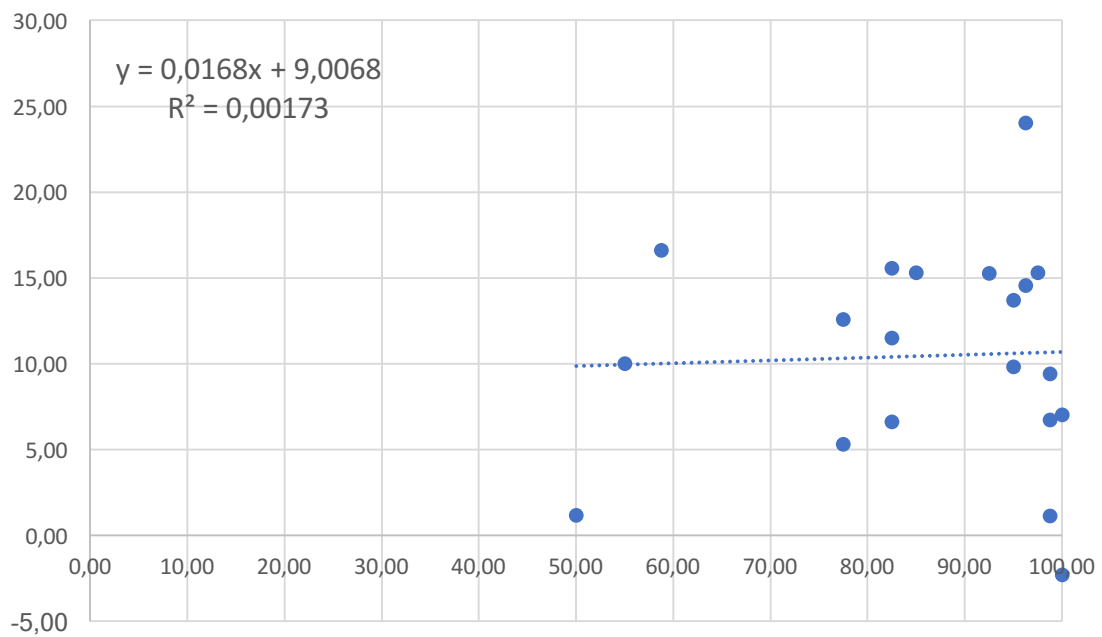


Figure 45. Correlation result graph (4). Source: personal elaboration

Correlation between Environmental Performance and ROE: 0,041593416

Correlation between S and ROA

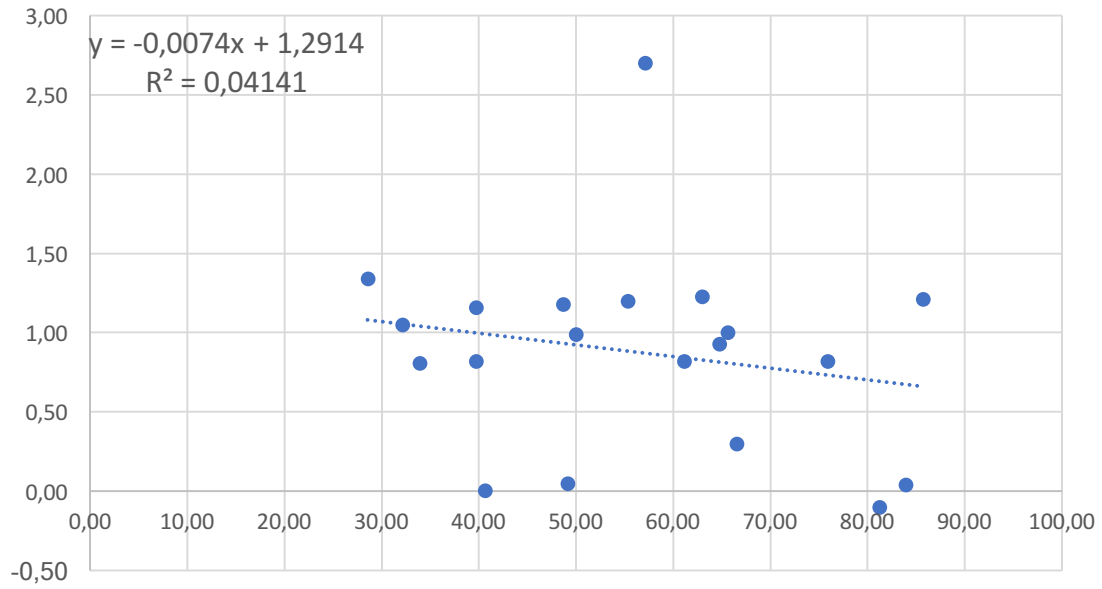


Figure 46. Correlation result graph (5). Source: personal elaboration

Correlation between Social Performance and ROA: -0,203502049

Correlation between S and ROE

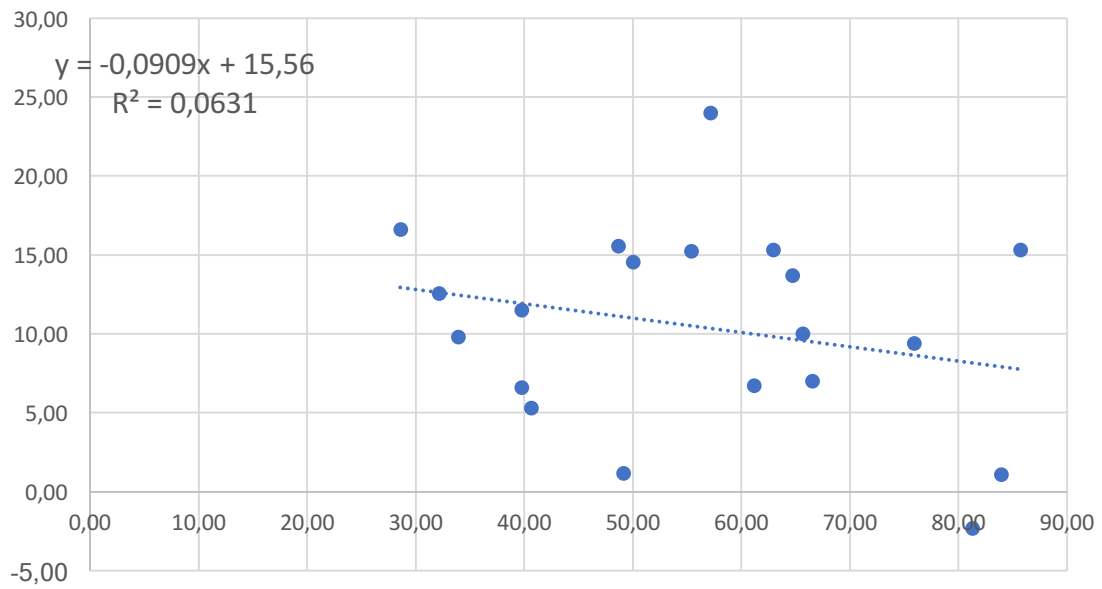


Figure 47. Correlation result graph (6). Source: personal elaboration

Correlation between Social Performance and ROE: -0,251191362

Correlation between CG and ROA

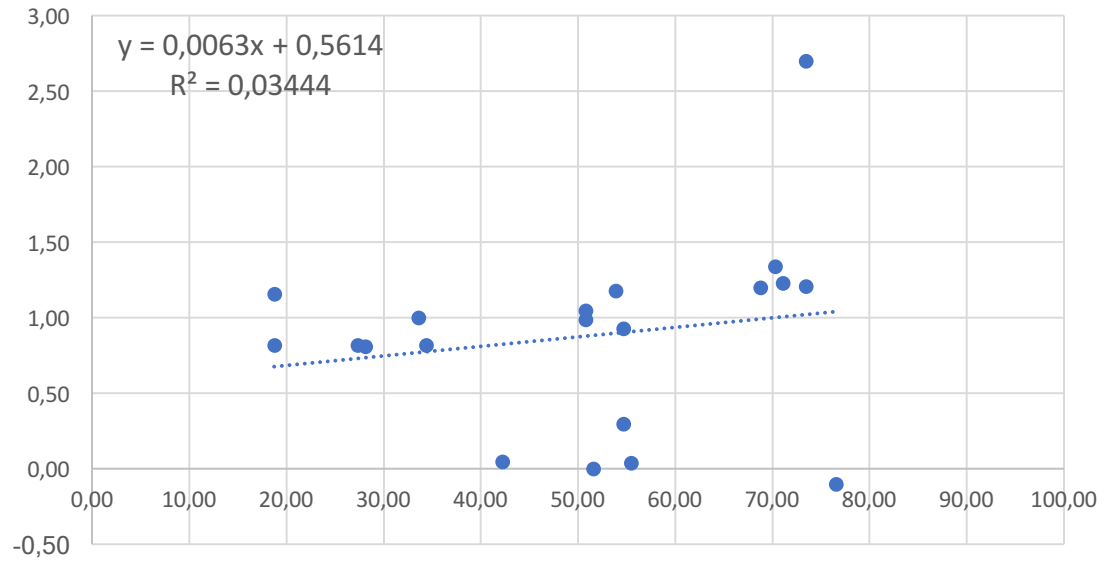


Figure 48. Correlation result graph (7). Source: personal elaboration

Correlation between Corporate Governance and ROA: 0,185573888

Correlation between CG and ROE

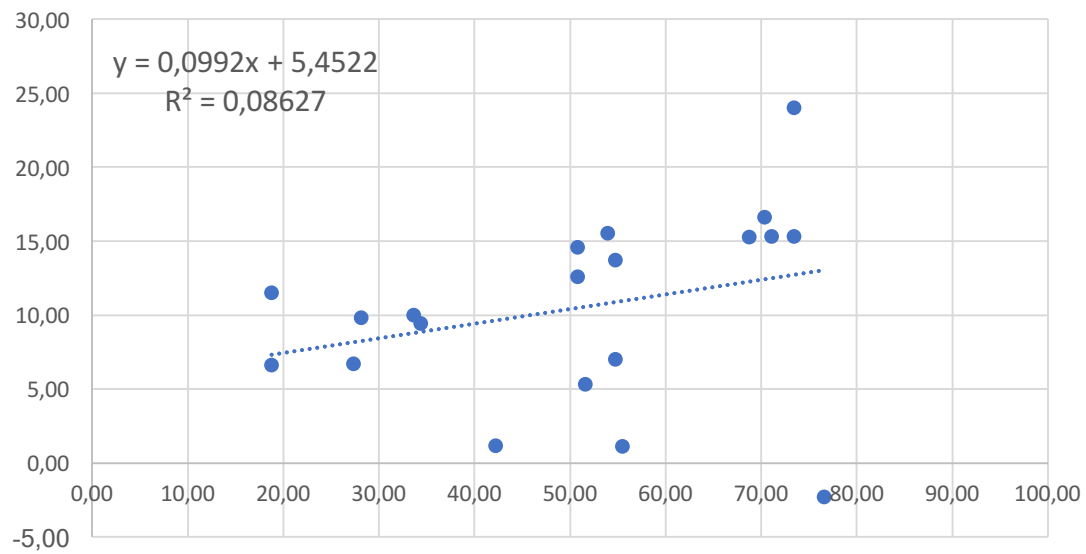


Figure 49. Correlation result graph (8). Source: personal elaboratio

Correlation between Corporate Governance and ROE: 0,293713382

Interpretation of the results

Correlation between ESG index and Economic Performance

The coefficient of correlation studied between the sets of data composed by ESG Index and ROA, tell to reader that the degree of relation is really weak. In fact, the value obtained is - 0,0495. This means that exists a really week negative relation between them. The chart, confirms the results: the trend line is slightly downward sloping.

The same judge is provided analysing the coefficient of correlation existent between ESG index and ROE. The result is -0,0384, that confirmed the really low degree of relation existent between CSR and Economic Performance. These results are the most important, since they enhance the data sets related to the overall sample.

It is interesting to analyse the results provided by the study of the correlation coefficient between each Key Pillar and the economic performance.

Correlation between Environmental Performance and Economic Performance

The coefficient of correlation between Environmental Performance and Economic Performance is really low: 0,0474. This value, means that exists a really low positive relation. The trend line, confirms the results, in fact it is slightly upward sloping.

The same judge is provided analysing the coefficient of correlation existent between Environmental Performance and ROE. The result is 0,0416, that confirmed the really low degree of relation existent between Environmental and Economic Performance.

Correlation between Social Performance and Economic Performance

The coefficient of correlation between Social Performance and Economic Performance is low: -0,2035. This value, means that exists a low negative relation. The trend line, confirms the results, in fact it is downward sloping.

The same judge is provided analysing the coefficient of correlation existent between Social Performance and ROE. The result is -0,2511, that substantially confirmed the low degree of relation existent between Social and Economic Performance.

Correlation between Corporate Governance Performance and Economic Performance

The coefficient of correlation between Corporate Governance Performance and Economic Performance is low: 0,1855. This value, means that exists a low positive relation. The trend line, confirms the results, in fact it is upward sloping.

The judge provided analysing the coefficient of correlation existent between Corporate Governance Performance and ROE, is slightly different: the result is 0,2937, that confirmed the positive grade of relation, but indicates a higher degree of relation existent Corporate Governance and Economic Performance. It means in fact a degree of relation that is substantially moderate.

3.6 Results and interpretations by Nation

Once completed the explanation of the overall results, it is fundamental to analyse them Nation by Nation, in order to find possible analogies and differences in the way of disclosure among the banks studied¹⁰. In this way, the reader can get a deeper knowledge about the role held by each Nation in the determination of the overall results.

United States of America

Key Pillars	Key Indicators	OVERALL TQID	
		Abs. value	%
Environmental Performance	Bank's environmental policies and concerns	3,40	85,00
	Implemented systems for environmental management	3,70	92,50
	Environmental projects such as recycling and protection of natural resources	3,65	91,25
	Energy saving in performing business operations	3,00	75,00
	Pollution: declaration of CO2 emissions and others	2,95	73,75
Social Performance	Health and safety policies and measures for employees	2,95	73,75
	Equal opportunities in employment (e.g. minorities, women)	3,30	82,50
	Training and education provided to employees	2,35	58,75
	Employee assistance-benefits	1,60	40,00
	Employee compensation programs	1,75	43,75
	Policies adopted regarding staff profit sharing	0,80	20,00
	Contributions and donations to charities, NGOs and community activities	4,00	100,00
	Provision if support to students to continue their education and sponsoring sport activities	0,95	23,75
	Participation in social government campaigns	3,45	86,25
	Diversity of social products (e.g. donation for public works, educational loans etc.)	3,60	90,00
	Provision for disabled, frail and difficult-to-reach customers	1,00	25,00
Investments in social responsibility activities	3,20	80,00	

¹⁰ In this chapter, the results by Nation provides only the most explicative data. Further information about the results and their calculation are included in the appendix attached at the end of this thesis.

	Strategies and plans for future expansion in social products and services	4,00	100,00
	Loyalty programs and gifts to customers	0,00	0,00
Corporate Governance Performance	Board structure	2,90	72,50
	Compensation Policy	1,15	28,75
	Shareholders rights	0,00	0,00
	Integrated Business Model	0,00	0,00
	Integrated Business Plan	0,00	0,00
	Code of conduct	4,00	100,00
	CSR (ESG) reports	3,25	81,25
	Integrated report	0,00	0,00

Figure 50. American Overall Total Quality of Information results. Source: personal elaboration

TQID Environmental Performance (MEAN value of the Indicators): 3,34 or 83,5%.

TQID Social Performance (MEAN value of the Indicators): 2,35 or 58,84%.

TQID Corporate Governance Performance (MEAN value of the Indicators): 1,41 or 35,31%.

TQID ESG index (MEAN value of the Indicators): 2,26 or 56,44%.

The results provided by the analyses of the Key Indicators, suggests that American banks are substantially in line with the overall results of the research: the comparison between Environmental, Social and ESG Index provided by TQID (Total Quality of Information Disclosed) of USA and the same overall results of the research are substantially equal; however, the value of the TQID related to Corporate Governance indicators is significantly lower respect to the overall result: USA CG 35% vs Overall CG 60%. This value tells to reader that American banks have a lower level of development concerning Corporate Governance activities than the average results obtained in this research.

Considering the ESG index as the unit of comparison, American banks have a moderate lower level of development of the CSR activities than the average results obtained in this research.

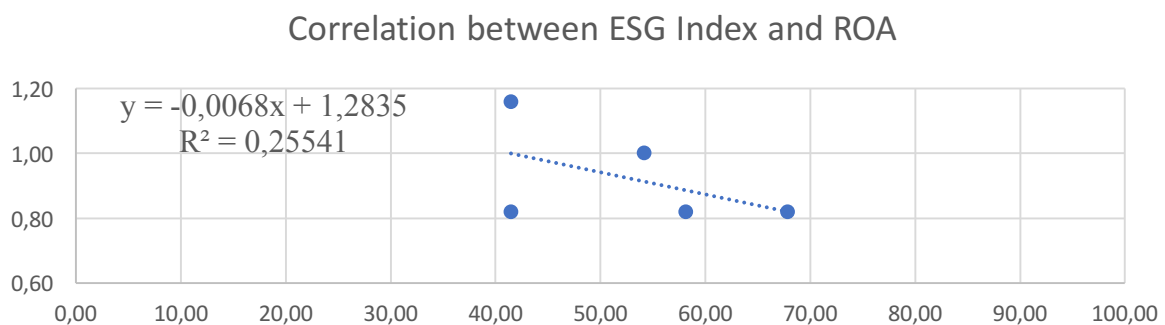


Figure 51. American Correlational graph (1). Source: personal elaboration

Correlation between American ESG index and ROA: -0,50538363

Correlation between ESG Index and ROE

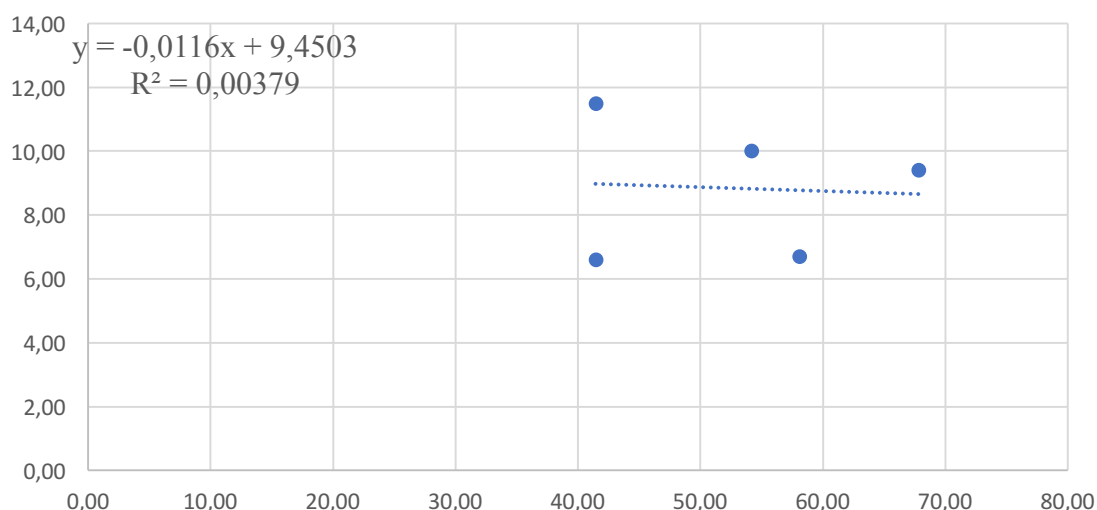


Figure 52. American Correlational graph (2). Source: personal elaboration

Correlation between American ESG Index and ROE: -0,061571699

Correlation between American ESG index and Economic Performance

The coefficient of correlation studied between the sets of data composed by ESG Index and ROA, tell to reader that the degree of relation is moderate. In fact, the value obtained is -0,5053. This means that exists a negative relation between them. The chart, confirms the results: the trend line is downward sloping.

Significantly difference is provided analyzing the coefficient of correlation existent between ESG Index and ROE. The result is -0,0615, and indicates a really low degree of relation existent between CSR and Economic Performance of the American banks.

This difference might be due to several reasons, but principally because of the overall limited sample of banks analysed and by Nation.

Germany

Key Pillars	Key Indicators	OVERALL TQID	
		Abs. value	%
Environmental Performance	Bank's environmental policies and concerns	3,60	90,00
	Implemented systems for environmental management	3,65	91,25
	Environmental projects such as recycling and protection of natural resources	3,00	75,00
	Energy saving in performing business operations	3,47	86,84
	Pollution: declaration of CO2 emissions and others	3,50	87,50

Social Performance	Health and safety policies and measures for employees	2,60	65,00
	Equal opportunities in employment (e.g. minorities, women)	3,65	91,25
	Training and education provided to employees	2,65	66,25
	Employee assistance-benefits	1,30	32,50
	Employee compensation programs	1,70	42,50
	Policies adopted regarding staff profit sharing	2,35	58,75
	Contributions and donations to charities, NGOs and community activities	3,50	87,50
	Provision if support to students to continue their education and sponsoring sport activities	3,05	76,25
	Participation in social government campaigns	2,40	60,00
	Diversity of social products (e.g. donation for public works, educational loans etc.)	3,00	75,00
	Provision for disabled, frail and difficult-to-reach customers	0,70	17,50
	Investments in social responsibility activities	4,00	100,00
	Strategies and plans for future expansion in social products and services	3,85	96,25
	Loyalty programs and gifts to customers	1,25	31,25
Corporate Governance Performance	Board structure	4,00	100,00
	Compensation Policy	2,55	63,75
	Shareholders rights	0,55	13,75
	Integrated Business Model	0,90	22,50
	Integrated Business Plan	0,00	0,00
	Code of conduct	3,40	85,00
	CSR (ESG) reports	3,40	85,00
	Integrated report	3,15	78,75

Figure 53. German Overall Total Quality of Information results. Source: personal elaboration

TQID Environmental Performance (MEAN value of the Indicators): 3,44 or 86,12%.

TQID Social Performance (MEAN value of the Indicators): 2,57 or 64,29%.

TQID Corporate Governance Performance (MEAN value of the Indicators): 2,24 or 56,09%.

TQID ESG index (MEAN value of the Indicators): 2,64 or 65,90%.

The results provided by the analyses of the Key Indicators, suggests that German banks are substantially in line with the overall results of the research for what concerns the Environmental Performance. The comparison between Corporate Governance and ESG Index provided by TQID (Total Quality of Information Disclosed) of Germany and the same overall results of the research shows a difference about 5% higher in both cases.

The value of the TQID related to Social indicators is moderately higher respect to the overall result obtained in this research: German S 64% vs Overall S 56%. This value tells to reader that German banks have a higher level of development concerning Social activities than the average results obtained in this research.

Considering the ESG index as the unit of comparison, German banks have a moderate higher level of development of the CSR activities than the average results obtained in this research.

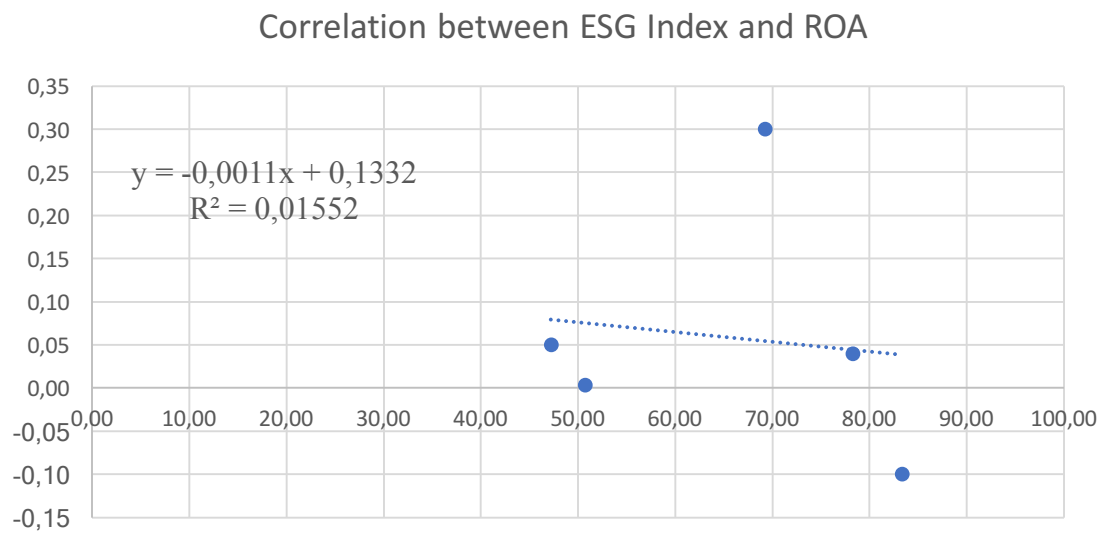


Figure 54. German Correlational graph (1). Source: personal elaboration

Correlation between German ESG Index and ROA: -0,124566602

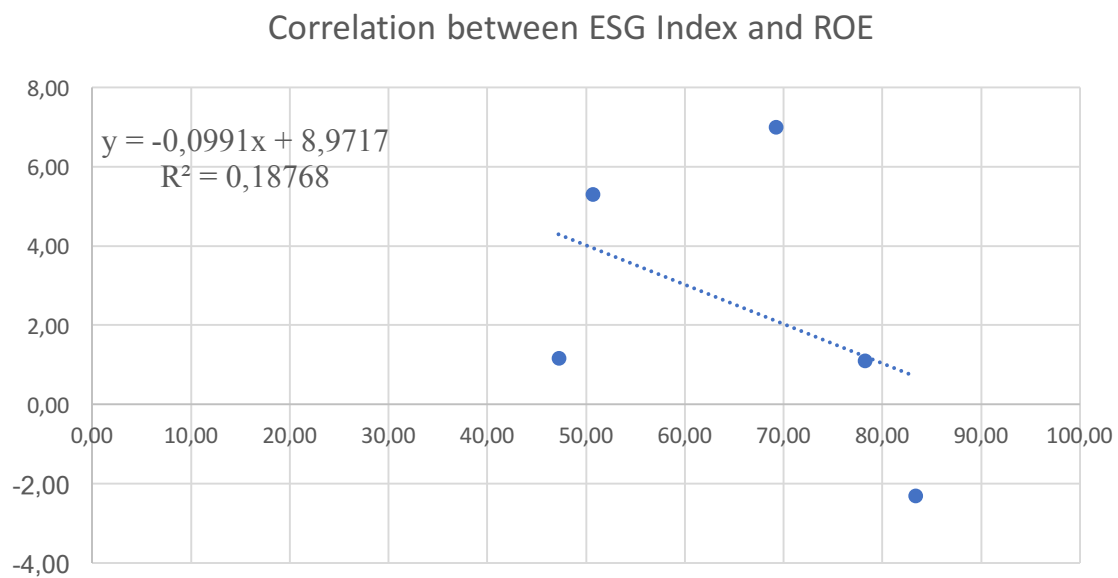


Figure 55. American Correlational graph (2). Source: personal elaboration

Correlation between German ESG Index and ROE: -0,433222236

Correlation between German ESG index and Economic Performance

The coefficient of correlation studied between the sets of data composed by ESG Index and ROA, tell to reader that the degree of relation is really low. In fact, the value obtained is -0,1245. This means that exists a really low negative relation between them. The chart, confirms the results: the trend line is slightly downward sloping.

Significantly difference is provided analysing the coefficient of correlation existent between ESG Index and ROE. The result is -0,4332, and indicates a negative moderate degree of relation existent between CSR and Economic Performance of the German banks.

As in the American case, the significance difference in the results provided comparing ROA and ROE is due to the overall limited sample of banks analysed and by Nation.

China

Key Pillars	Key Indicators	OVERALL TQID	
		Abs. value	%
Environmental Performance	Bank's environmental policies and concerns	3,75	93,75
	Implemented systems for environmental management	3,45	86,25
	Environmental projects such as recycling and protection of natural resources	3,55	88,75
	Energy saving in performing business operations	3,55	88,75
	Pollution: declaration of CO2 emissions and others	3,45	86,25
Social Performance	Health and safety policies and measures for employees	2,20	55,00
	Equal opportunities in employment (e.g. minorities, women)	1,80	45,00
	Training and education provided to employees	0,95	23,75
	Employee assistance-benefits	0,45	11,25
	Employee compensation programs	0,55	13,75
	Policies adopted regarding staff profit sharing	0,00	0,00
	Contributions and donations to charities, NGOs and community activities	3,20	80,00
	Provision if support to students to continue their education and sponsoring sport activities	1,10	27,50
	Participation in social government campaigns	3,30	82,50
	Diversity of social products (e.g. donation for public works, educational loans etc.)	3,80	95,00
	Provision for disabled, frail and difficult-to-reach customers	0,75	18,75
	Investments in social responsibility activities	2,20	55,00
	Strategies and plans for future expansion in social products and services	3,50	87,50
	Loyalty programs and gifts to customers	0,85	21,25
Corporate Governance Performance	Board structure	3,90	97,50
	Compensation Policy	2,40	60,00
	Shareholders rights	2,30	57,50
	Integrated Business Model	0,00	0,00
	Integrated Business Plan	0,00	0,00
	Code of conduct	1,15	28,75
	CSR (ESG) reports	3,65	91,25
	Integrated report	2,75	68,75

Figure 56. Chinese Overall Total Quality of Information results. Source: personal elaboration

TQID Environmental Performance (MEAN value of the Indicators): 3,55 or 88,75%.
 TQID Social Performance (MEAN value of the Indicators): 1,76 or 44,02%.
 TQID Corporate Governance Performance (MEAN value of the Indicators): 2,02 or 50,47%.

TQID ESG index (MEAN value of the Indicators): 2,17 or 54,21%.

The results provided by the analyses of the Key Indicators, suggests that Chinese banks are substantially in line with the overall results of the research for what concerns the Environmental and Corporate Governance Performances. The comparison between Social Performance provided by TQID (Total Quality of Information Disclosed) of China and the same overall results of the research shows a difference about 12% lower. This value tells to reader that Chinese banks have a lower level of development concerning Social activities than the average results obtained in this research.

The value of the TQID related to ESG index is moderately lower respect to the overall result: China ESG index 54% vs Overall ESG index 60%.

Considering the ESG index as the unit of comparison, Chinese banks have a moderate lower level of development of the CSR activities than the average results obtained in this research.

Correlation between ESG Index and ROA

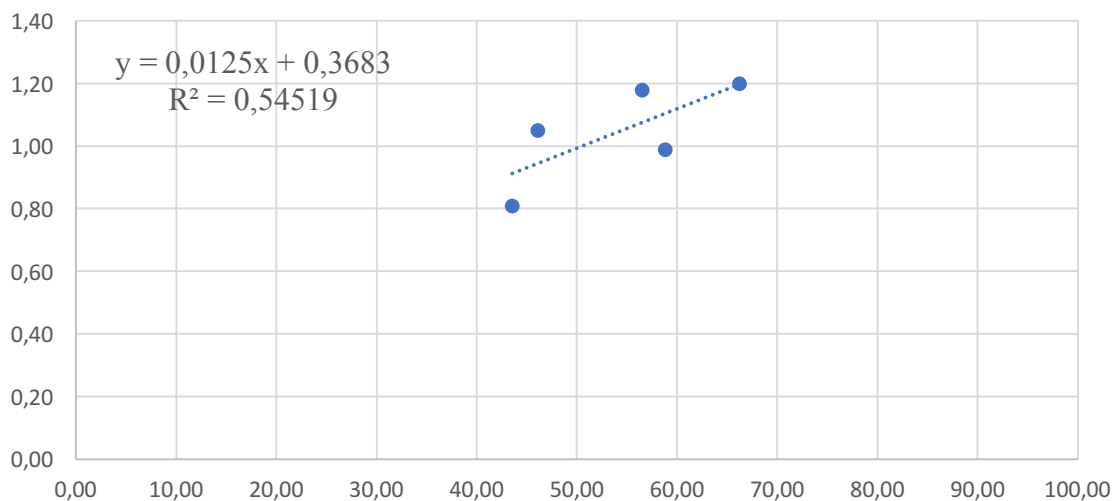


Figure 57. Chinese Correlational graph (1). Source: personal elaboration

Correlation between Chinese ESG index and ROA: 0,738368489

Correlation between ESG Index and ROE

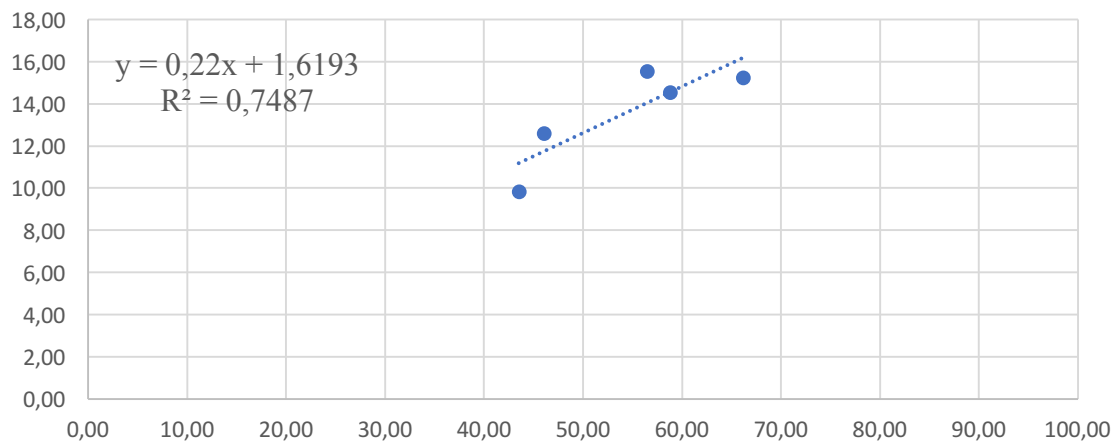


Figure 58. Chinese Correlational graph (2). Source: personal elaboration

Correlation between Chinese ESG Index and ROE: 0,865273911

Correlation between Chinese ESG index and Economic Performance

The coefficient of correlation studied between the sets of data composed by ESG Index and ROA, tell to reader that the degree of relation is high. In fact, the value obtained is 0,7383. This means that exists a high positive relation between them. The chart, confirms the results: the trend line is quite upward sloping.

Analyzing the coefficient of correlation existent between ESG Index and ROE the result is 0,8652. It not only confirms the positive relation; it indicates also a really high degree of relation existent between CSR and Economic Performance of the Chinese banks.

South Africa

Key Pillars	Key Indicators	OVERALL TQID	
		Abs. value	%
Environmental Performance	Bank's environmental policies and concerns	3,50	87,50
	Implemented systems for environmental management	3,45	86,25
	Environmental projects such as recycling and protection of natural resources	3,40	85,00
	Energy saving in performing business operations	3,30	82,50
	Pollution: declaration of CO2 emissions and others	3,35	83,75
	Health and safety policies and measures for employees	2,70	67,50
	Equal opportunities in employment (e.g. minorities, women)	3,30	82,50
	Training and education provided to employees	3,05	76,25
	Employee assistance-benefits	1,60	40,00
	Employee compensation programs	2,95	73,75
	Policies adopted regarding staff profit sharing	0,00	0,00

Social Performance	Contributions and donations to charities, NGOs and community activities	3,20	80,00
	Provision if support to students to continue their education and sponsoring sport activities	2,25	56,25
	Participation in social government campaigns	3,25	81,25
	Diversity of social products (e.g. donation for public works, educational loans etc.)	2,95	73,75
	Provision for disabled, frail and difficult-to-reach customers	0,00	0,00
	Investments in social responsibility activities	2,90	72,50
	Strategies and plans for future expansion in social products and services	3,40	85,00
	Loyalty programs and gifts to customers	1,50	37,50
Corporate Governance Performance	Board structure	3,95	98,75
	Compensation Policy	3,75	93,75
	Shareholders rights	1,00	25,00
	Integrated Business Model	3,45	86,25
	Integrated Business Plan	0,75	18,75
	Code of conduct	2,85	71,25
	CSR (ESG) reports	2,90	72,50
	Integrated report	3,15	78,75

Figure 59. South African Overall Total Quality of Information results. Source: personal elaboration

TQID Environmental Performance (MEAN value of the Indicators): 3,40 or 85,00%.

TQID Social Performance (MEAN value of the Indicators): 2,36 or 59,02%.

TQID Corporate Governance Performance (MEAN value of the Indicators): 2,73 or 68,13%.

TQID ESG index (MEAN value of the Indicators): 2,66 or 66,53%.

The results provided by the analyses of the Key Indicators, suggests that Chinese banks are substantially in line with the overall results of the research for what concerns the Environmental and the Social Performances. The comparison between Corporate Governance Performance provided by TQID (Total Quality of Information Disclosed) of China and the same overall results of the research shows a difference about 16% higher. This value tells to reader that South African banks have a higher level of development concerning Corporate Governance activities than the average results obtained in this research.

The value of the TQID related to ESG index is moderately higher respect to the overall result: South African ESG index 66% vs Overall ESG index 60%.

Considering the ESG index as the unit of comparison, South African banks have a moderate higher level of development of the CSR activities than the average results obtained in this research.

Correlation Between ESG Index and ROA

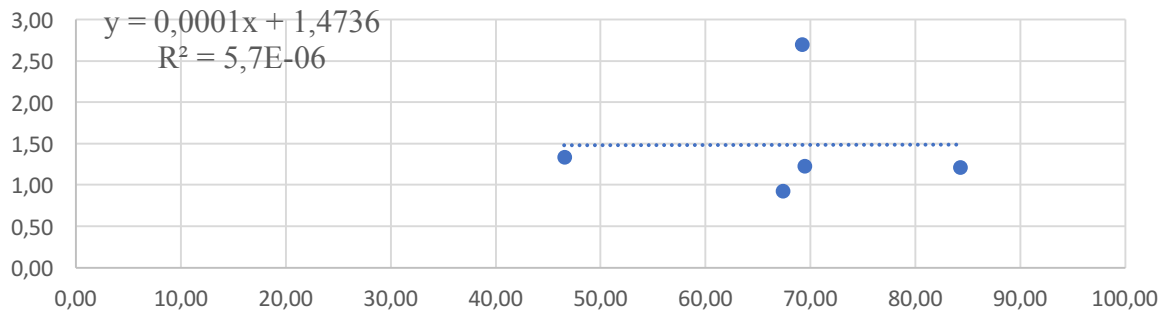


Figure 60. South African Correlational graph (1). Source: personal elaboration

Correlation between South African ESG Index and ROA: 0,002397769

Correlation between ESG Index and ROE

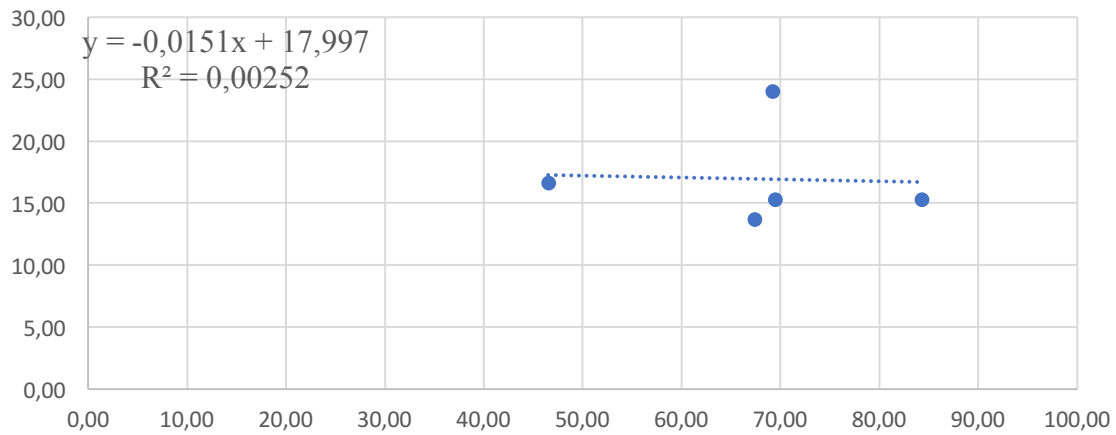


Figure 61. South African Correlational graph (2). Source: personal elaboration

Correlation between South African ESG Index and ROE: -0,050201187

Correlation between Chinese ESG index and Economic Performance

The coefficient of correlation studied between the sets of data composed by ESG Index and ROA, tell to reader that the degree of relation is substantially null. In fact, the value obtained is 0,0023. This means that does exist only a minimum degree of relation between them. The chart, confirms the results: the trend line substantially does have no slope.

Analyzing the coefficient of correlation existent between ESG Index and ROE the result is -0,0502. The result provides a similar judgment. It indicates a really low negative degree of relation existent between CSR and Economic Performance of the Chinese banks.

3.7 Overall results combination

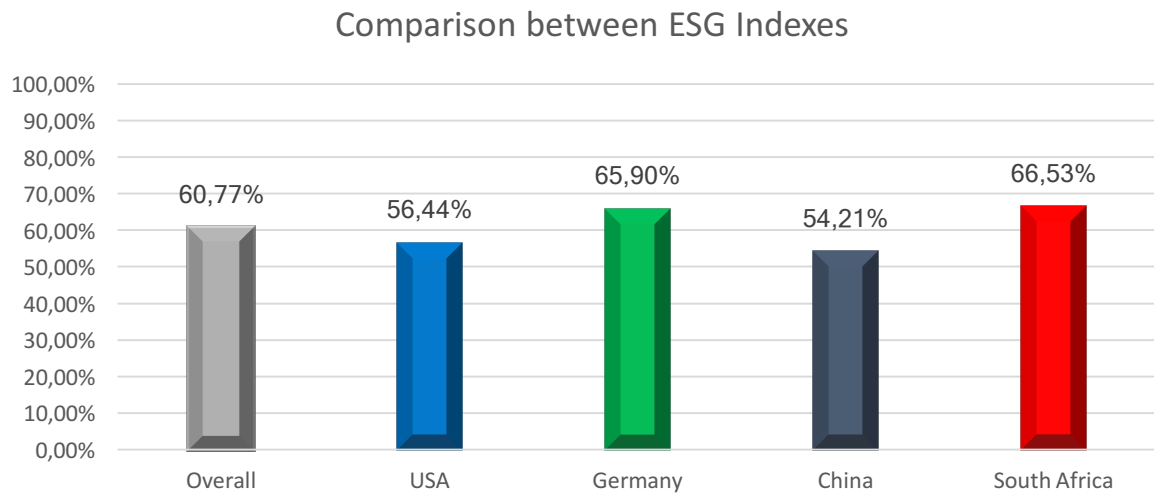


Figure 62. ESG indexes comparison (total vs by country). Source: personal elaboration

Thanks to the representations of the ESG index overall result and the ESG indexes of each Nations, the reader can directly gain a clear picture of results reached through this research. It is possible to affirm that the overall level of CSR disclosure about 60% is relatively low, considering a potential maximum value of 100. It means that the sample of banks analysed could enhance the level of disclosure (and hence of development) of 40%.

It is worthwhile to discuss also the results obtained by Nation, because they reflect the existent situation of the banks of that country. It is important hence to underline that American and Chinese banks, achieved an overall level of disclosure lower than 60%, that is below the sufficiency threshold. This is due to several factors, and among the principals, the lack of an international adoption of a mandatory disclosure system linked to some cultural characteristics might represent the greater factors of influence.

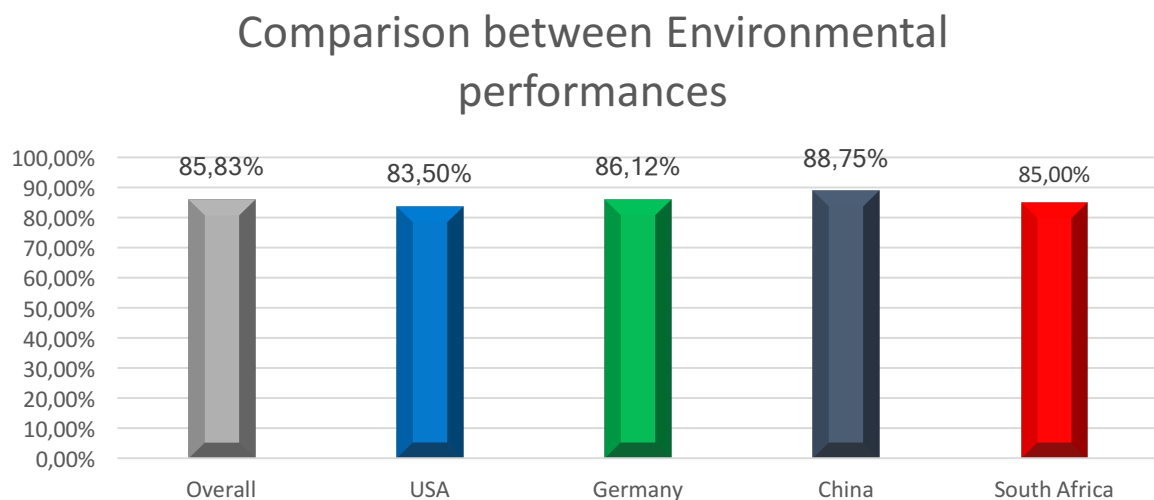


Figure 63. Environmental indexes comparison (total vs by country). Source: personal elaboration

Comparing the Environmental Performances, it emerges that substantially a good level of disclosure of the activities related to the respect of the environment is achieved by the whole sample.

Comparison between Social performances

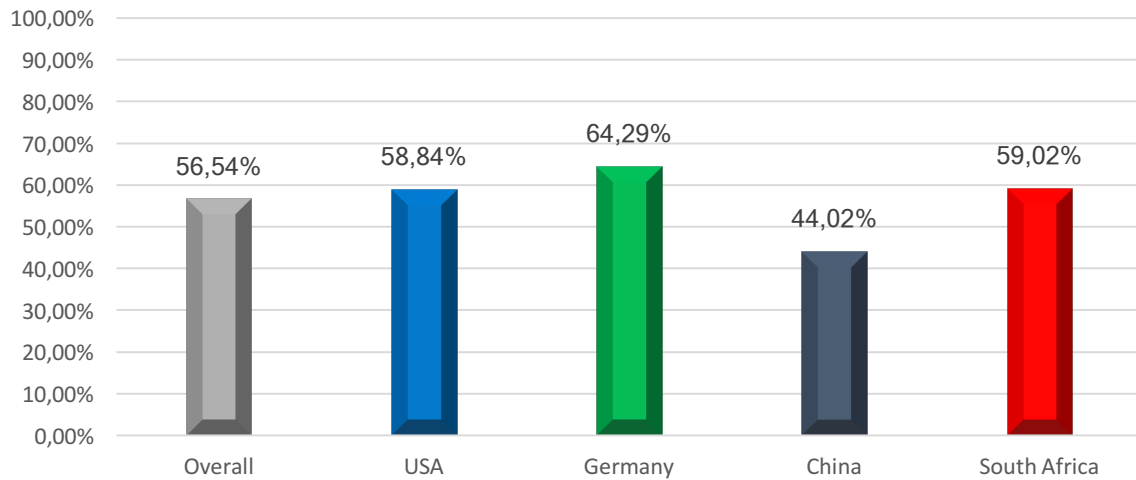


Figure 64. Social indexes comparison (total vs by country). Source: personal elaboration

Taking into consideration the Social Performances, it emerges that only German banks resulted to achieved the sufficiency threshold of 60%. Anyway, only Chinese banks resulted to be rather underdeveloped in the disclosure of the Social actions. These results are interesting because they well reflect cultural aspects analysed theoretically through Hofstede’s model.

Comparison between Corporate Governance performances

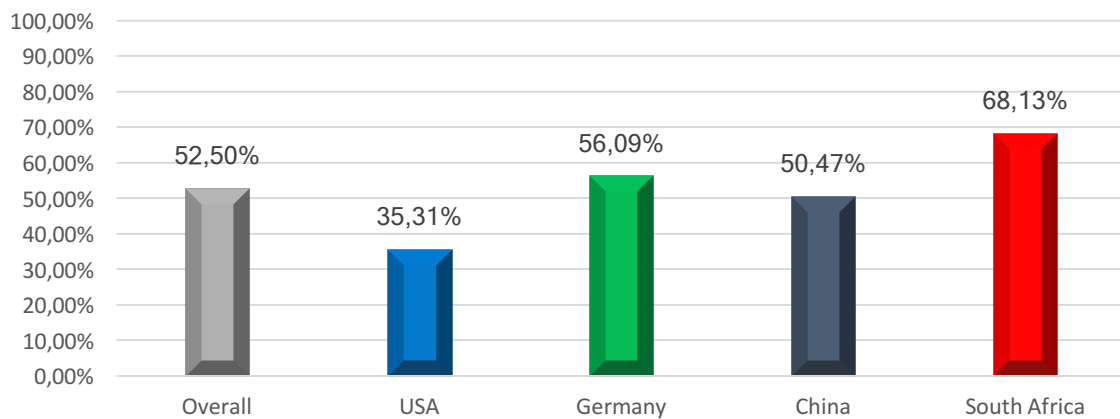


Figure 65. Corporate Governance indexes comparison (total vs by country). Source: personal elaboration

Taking into consideration the Corporate Governance performances, it emerges immediately the lower result achieved by the American banks: the disclosure of the information about the Key

Indicators used is seriously insufficient. It is interesting to note that in this case a meritocratic system of business developed collides with a lack of transparent information.

Considering the results divided by Nations, and especially decomposing the ESG index, it emerges that among the four categories in which CSR is evaluated, only the Environmental one results to be well developed.

In fact, the other two pillars never reach the general threshold of sufficiency.

Considering each result by Nation, only in two cases (German Social performance and South African Corporate Governance performance) the performances disclosed and assessed resulted to be sufficiently developed. This confirmed again what reported in the theories that are developed every day, which formed the foundations of this research.

3.8 ANOVA tests and Linear Regression Model

In order to achieve a higher level of significance and robustness of the results found through the coefficients of correlation, it is necessary to include in the research some other statistical analyses: considering the variety of the existent tools, the purpose and the panel of data available in this study, it has been decided to conduct an ANOVA single factor, an ANOVA two-way with replication test, and the development of a linear regression model.

1. What is an ANOVA single factor test? The single factor analysis of variance (ANOVA) is a test used to determine whether there are any statistically significant differences among means belonging to three or more independent (unrelated) sets of data. Therefore, thanks to this test it is possible to assess if there exist statistically significant differences in the mean of the value representing the ESG indexes of the countries object of study. The comparison is based on a direct evaluation of the values of the 27 indexes assessed to create the ESG index of each country. Since the correlation coefficient obtained comparing the ESG indexes and the indexes ROA returns a value close to zero, the hypothesis developed in this research is that there are no differences among the means of the ESG indexes belonging to the different Nations. The null hypothesis of this test expects that there are no statistically significantly differences among the sets of data, while the alternative hypothesis expects that there are at least two groups means that are statistically significantly different from each other. Alpha is set at 0,05.

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
USA TQID	27	1523,75	56,435185	1330,8538		
GERMANY TQID	27	1779,342105	65,901559	842,14449		
CHINA TQID	27	1463,75	54,212963	1183,0707		
SOUTH AFRICA TQID	27	1796,25	66,527778	763,02083		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	3274,297	3	1091,4323	1,0598772	0,369518	2,6919786
Within Groups	107096,34	104	1029,7725			
Total	110370,63	107				

Figure 66. ANOVA Single Factor Excel output. Source: personal elaboration

Interpreting the results provided by the test, it is possible to conclude that the null hypothesis is accepted. This conclusion is based on two elements: first, F value compared to F crit value is lower, and second the P-value is higher than 0,05. Both elements impose that the null hypothesis cannot be rejected.

The ANOVA one-way test confirmed the hypothesis provided by the research, and support it also by a statistical point of view.

- Now, it is interesting to test in which way Environmental, Social and Governance performances, impact on the ESG index obtained by each Nation and at the same time, if there are differences among the ESG indexes divided by Nations: the statistical tool that allows this complex comparison is the ANOVA two-factor with replication test. This last, in fact tests more hypotheses together: the first null hypothesis, expects no statistically significantly differences among the means of data compared by single pillar (E-S-G), while its alternative hypothesis expects at least a statistically significantly difference between two means of data. The second null hypothesis expects no statistically significantly differences among the composition of the means of the sets divided by Nations, while its alternative hypothesis expects at least a statistically significantly difference between two means of two Nations.

In order to develop the model, respecting its assumptions, the means of each bank have been taken, considering them also by Nation. The result is a comparison based on 15 variables for each country (5 representing Environmental, 5 Social and 5 Governance performances). The first hypothesis developed considering the different results provided by the coefficient of correlations developed for comparing each pillar respect to ROAs

and ROEs (for a deep analysis, the reader can consult data provided in the appendix of this thesis), is that there exist differences among the composition of the ESG indexes; the second hypothesis, considering the differences reported in this thesis in the percentages of development of the single pillar observed among different Nations, is that there exist differences among the composition of each pillar also by Nation. Alpha is set at 0,05.

Anova: Two-Factor With Replication						
SUMMARY	USA	CHINA	GERMANY	SOUTH AFRICA	Total	
1						
Count	5	5	5	5	20	
Sum	418,75	426,25	443,75	432,5	1721,25	
Average	83,75	85,25	88,75	86,5	86,0625	
Variance	319,53125	480	68,75	265,15625	242,150493	
2						
Count	5	5	5	5	20	
Sum	282,13	321,44	220,09	299,1	1122,76	
Average	56,426	64,288	44,018	59,82	56,138	
Variance	260,82513	367,14302	107,207	421,9855	303,338291	
3						
Count	5	5	5	5	20	
Sum	141,40375	280,47	252,35	342,97	1017,19375	
Average	28,28075	56,094	50,47	68,594	50,8596875	
Variance	39,4967903	158,77403	211,315	62,36583	323,533006	
Total						
Count	15	15	15	15		
Sum	842,28375	1028,16	916,19	1074,57		
Average	56,15225	68,544	61,07933	71,638		
Variance	726,576355	448,9071829	528,2609	346,22006		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Sample	14417,1619	2	7208,581	31,31272876	1,9827E-09	3,190727336
Columns	2229,07349	3	743,0245	3,227559575	0,03051219	2,798060635
Interaction	3232,14144	6	538,6902	2,339969741	0,04613802	2,294601313
Within	11050,1991	48	230,2125			
Total	30928,5759	59				

Figure 67. ANOVA Two Factors with repetition Excel output. Source: personal elaboration

Interpreting the results provided by the test reported in the above table, it is possible to conclude that the both null hypotheses must be rejected. These conclusions are based on two elements: both P-values are lower than 0,05 and both values of F are greater compared to F crit. Both elements impose the rejection of the null hypotheses.

Although the interpretation of the results rejected the null hypotheses, the low level of significance of the results makes them unreliable.

The test provides also another important element that is the degree of interaction existent among the data analysed, which also turns out to be not statistically significant. In this case, therefore, the hypotheses provided by the test cannot be considered reliable, and therefore it is not possible to verify with certainty the correctness of the hypotheses developed in this research statistically.

3. In order to obtain definitely a reliable conclusion that answer to the research question proposed (hence assess if the economic performances of the banks analysed are correlated to the degree of development of their CSRs), it is necessary to support statistically the conclusion achieved through the analyses of the coefficients of correlation between ESG indexes and ROA indexes (ROE).

The construction of a linear regression model, allows to measure the degree of relation existent between a dependent variable (in this thesis represented by the economic performance expressed by the index ROA) and one or more independent variables.

In order to construct a linear regression model that can be reliable, it is necessary to extract some sets of data that must respect model's assumptions: starting from almost 1000 raw-data collected for analyse, evaluate and compare the sample of this research, it is necessary to select the most important to give high significance to the model.

In order to demonstrate. The set of the dependent variable is composed by 20 ROA indexes that represent the economic performances of the banks; the sets of the independent variables are composed by 20 ESG indexes that represent the degree of development achieved by each bank and other 2 variables of control that should enhance the results of the model, which are the dimension of the banks analysed expressed in USD revenues, and the country of origin. It is important to specify that, because of the lack of observations, it has been possible to include only 2 variables of control; this is due to avoid the infringement of the constrained represented by the degrees of freedom. Trying to add another variable(s) the results has been a lower significance of the entire model. To give further consistency to the linear regression model, it is necessary to include the second control variable through the dummy variables method, to allow to the variable called countries to fit the model. Since the Nations are four, in order to avoid the dummy variables trap, only three variables are included within the model through the binary system (1-0), while the last is considered as the base of the model and it is indicated by the 0 values of the other countries.

Once again, considering the coefficient of correlation obtained by ESG indexes and ROA indexes, the hypothesis is that the variation of the dependent variable is not explained by the independent variable representing the ESG indexes.

Alpha is set at 0,05.

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0,84671542							
R Square	0,716927002							
Adjusted R Square	0,615829503							
Standard Error	0,390975467							
Observations	20							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	5	5,420053129	1,084010626	7,09144151	0,001693204			
Residual	14	2,140065421	0,152861816					
Total	19	7,56011855						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	1,532097834	0,544880654	2,811804425	0,013854576	0,363445061	2,700750607	0,363445061	2,700750607
ESG index	-0,00100948	0,007709296	-0,1309434	0,897683105	-0,017544276	0,015525314	-0,017544276	0,015525314
Dimension in Revenue	0,003509967	0,004647904	0,755172026	0,462661951	-0,006458796	0,01347873	-0,006458796	0,01347873
USAX3	-0,81343203	0,432513948	-1,88070705	0,080977051	-1,741082188	0,114218129	-1,741082188	0,114218129
GERMANYX4	-1,45310308	0,250658951	-5,7971322	4,62636E-05	-1,990713058	-0,915493094	-1,990713058	-0,915493094
CHINAX5	-0,6905829	0,428736339	-1,61074031	0,129545226	-1,610130896	0,228965091	-1,610130896	0,228965091

Figure 68. Multiple regression model Excel output. Source: personal elaboration

Interpreting the results provided by the linear regression model it is possible to understand that a wide part of the variation on the dependent variable is explained by the independent variables. This is justified taking into consideration the value of the R^2 (coefficient of determination) of 0,7169%, that directly tells to readers that the percentage of the dependent variable variance explained by the independent variables is about 72%.

Analysing the F value, it is possible to assess the entire model, because it represents the regression equation: since it is higher than F crit, it is possible to reject the null hypothesis; hence alternative hypothesis provides a statistical significance.

Considering instead the coefficients' value (representing the independent variables), considering each P-values, it is possible to conclude that only German have a statistically significantly level of influence (on ROA) different than zero, considering the alpha set at 0,05. Revenues results to be not statistical significant for that model.

Finally, the independent variable ESG indexes results to be completely not statistically significantly in the explanation of the variation of the ROA indexes.

In conclusion, this model confirms and supports statistically the hypothesis elaborated in this research, enhancing the overall solidity of the results, affirming that the degree of CSR does not affect directly the economic performances of the sample of banks analysed. Moreover, it offers several ideas that might be the starting point for future researches.

Notwithstanding the small number of observations, statistical tools confirms an essential fact that is discussed everyday about CSR: the lack of standardization rules, and the consequent lack of harmonization, that make the comparison of the sustainability action really hard to do. GRI standards supporters seems to have valid reasons to claim for its global adoption.

4. Conclusions

Corporate Social Responsibility and its development must be considered essential for the creation of a solid strategy of business. The creation of value, for every kind of stakeholders, pass through the disclosure of the information concerning this topic.

After the 2007-2012 “Great depression”, the entire world of business required an overall enhancement of the industrial behaviors. This fact was valid especially for the economic category of the investors, which pretended an overall higher level of requirements: for that reason, Socially Responsible Investment (SRI) and the adoption of Corporate Social Responsibility (CSR) requirements, gained a pivotal position in the world scenario.

Among the existent industry, the analysis of the financial one resulted to be interesting to create a case study: particularly, the banking system presented differences in the way of developing and disclosing information about sustainability actions undertook by the banks object of analyses.

It is relevant to underline that many theories have been developed to sustain the importance of the sustainability disclosure, because of the great impact that it might have on the markets.

The industrial sector on which is based this thesis is the financial one, with a particular focus on the banking system. The reasons linked to this choice are principally three:

1. Bank’s sector was heavily hit by last crisis. After that fact, firms operating inside this sector adopted stricter regulations.
2. In this sector stakeholders (in particular the category of investors), required high level of engagement in CSR actions by the companies, which directly impacts on their performance.
3. The dimension that top corporations have assumed in this sector, allows to developed an in-depth comparison.

This thesis study the differences in the strategy adopted by a sample of banks, in the development and disclosure of the document inherent to CSR actions undertaken by them.

The final aim of this research is to verify and determine if the theoretical connection between CSR (development and disclosure) and economic performance

1. exists and
2. can be demonstrated also through empirical evidence.

The first chapter concerns the analysis of the principal theories about firm's sustainability activities. In literature, Corporate Social Responsibility has had different definitions, but this thesis relies on the one expressed by the European Commission (2011): *“the process of integration in the organizational activities of social, environmental, ethical and human concerns from their interest groups, with two objectives: (1) to maximize value creation for these parts, and (2) to identify, prevent and mitigate the adverse effects of organizational actions on the environment”*. The measurement of the level of development achieved by a firm in matter of CSR takes inspiration also from the aforementioned definition: Community involvement, Environment, Human resources and Social products/services quality resulted to be essential categories for the achievement of a field of comparison useful to build a case study. From the study of the theories, it emerges also that sustainability reporting is not mandatory for every firm (actually is mandatory only for a minimal part of the existing ones); for that reason, become incredibly clear that the disclosure of information related to CSR is generally voluntary. The approach suggested by Elkington in 1994 (it is known as Triple Bottom Line (TBL) approach) implies the creation of a system of evaluation of the firms' sustainability actions, based on three fundamental elements:

- Profit performance
- Social performance
- Environmental performance

Examining different theories such as the Institutional Theory the Stakeholder Theory and others, it is possible to understand in which way CSR impacts on stakeholders and shareholders value: they assume the role of conducting business in an ethical way, balancing shareholder wealth maximization with the interests of the wider community (Rath, 2016).

CSR and particularly voluntary disclosure activities are seen as instruments that increase the efficiency within the market. This is reflected in the company Market Price that can be perceived as fair and hence more reliable.

Following Simpson, Kohers et al. (2002), it is possible to state that Corporate Social Responsibility disclosure impacts principally on three aspects related to the company:

1. On firm's performance
2. On firm's reputation
3. On firm's risk level

There are several debates behind the strategy pursued by CSR advocates, regarding the moral obligations to society and the principle of maximization of company's profits.

Enterprises might espouse documents or promotions on Corporate Social Responsibility, conducting at the same time activities that are damaging the environment and hence the society itself. Critics argue particularly on company's management because of the lack of transparency in matter of CSR practices and for the possibility of enhance company's profitability. This last aspect, seems to be the only one that triggered managerial sustainability choices.

In order to fight against the problem of the falsification of the CSR company's reports, it has been introduced a specific assurance mechanism provided by external agents. This tool has the general name of Corporate Social Responsibility assurance and consists in a certification provided principally by three kind of professional agents: auditors, consultants and stakeholders themselves.

The existent set of rules concerning CSR matters, does not allow the creation of an international field of comparison useful to evaluate sustainability actions/ disclosures undertook by companies belonging to different Nations. Among the factors of influence that might determine differences in CSR strategical approach, the cultural factor resulted to be the most relevant one. In order to conduct an empirical analysis for responding to the aim of this research, it has been necessary to find four different States that belong to different cultures.

Thanks to Hofstede's Six Dimensions of Culture model, it has been possible to verify that United States of America, Germany, China and South Africa cultures are different, and hence they are a suitable sample of Nations where it is possible to develop an empirical analysis.

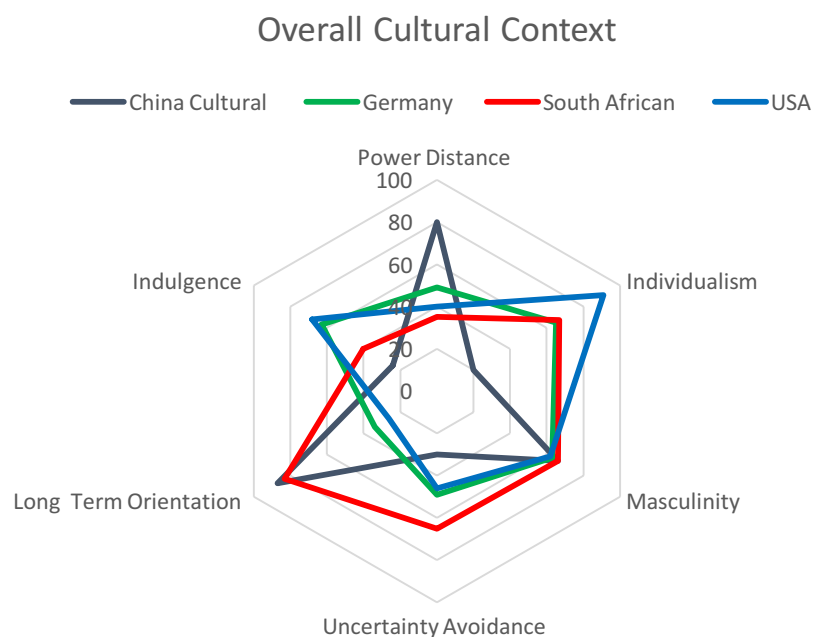


Figure 69. Overall Hofstede's evaluation (2). Source: personal elaboration

In the last part of the chapter are reported the principal international guidelines (IIRC Guiding Principles, UNGC, GRI, ISO 26000 and the Principles of the King Report on Governance for South Africa 2009 (King III) existents nowadays about the sustainability reporting; they are useful to determine the creation of a personal model of comparison of the firms' CSR level of activities.

In the second chapter, there is explained the methodology used to create, develop and exploit a model useful to answer to the research question of this thesis, that is: "Does a significant relationship exist between different levels of CSR disclosure and economic performances of banks belonging to different cultures?"

It has been conducted an analysis on a sample of 20 banks, 5 belonging to each of the four Nation previously selected based on Hofstede's model.

Since the real verification of the actions undertook by the banks in the field of CSR, for the elaboration of this thesis, is physically impossible to achieve, it has been chosen to conduct an analysis based on the evaluation of the document disclosed by the banks object of analyses.

The sample is constructed on the top 5 banks for each Nations, based on the number of total assets held (the information was taken through the website <https://www.relbanks.com>).

The research started with the analyses of the documents obtained from the corporations' website and from others professional sources of information, such as Bloomberg or Thomson Reuters.

The document from which information are analysed are: Annual Reports, Investor Relations Sections related to CSR and Sustainability Reports Section (if they are present).

After the communication of general data, it has been developed a grid for the evaluation of the macro features about CSR development of the banks object of analyses, thanks to a binary system based on the study of 15 dummy variables. In this way, the reader can immediately gain confidence with the sample and can start to collect data about the differences presented.

Once defined the methodology to assess the sample of banks, it has been necessary to create a model useful to evaluate the level of the CSR disclosure of the banks object of analyses.

The model is constructed through another evaluation grid, which contains 32 variables called Key Indicators, belonging to 4 categories, called Key Pillars. Without going into the details of the indicators, the four pillars defined are: Environmental Performance (E), Social Performance (S), Corporate Governance Performance (CG) and Economic Performance (ECP). The first three categories are essential to evaluate the degree of development of the CSR reports analysed. The fourth, contains information about the economic performance of the banks. The model is constructed to evaluate the 27 Key Indicators belonging to the ESG categories.

These indicators are assessed through 4 principles: Clarity (CL), Concreteness (CN), Adherence to International Standards (AIS) and Quantity of information disclosed (QIF).

The first three evaluate the quality of the information disclosed, while the last one evaluates the quantity of information disclosed. The range of evaluation is between 0 and 4.

In order to harmonize the results, it has been created another principle called Total Quality of the Information Disclosed (TQID): it is obtained by the MEAN value of the results obtained in the same indicators by the other 4 principles.

In order to compute the results, it has been necessary to use the software Microsoft Excel.

Thanks to this model, it has been possible to obtain the overall CSR disclosure value of the bank analysed taking the result obtained by mean of the TQID of each Key Indicator (ESG index), or divided by categories (E, S, G). In the same way, it is possible to obtain the overall results of the entire sample of banks analysed, or by Nations.

The last 5 Key Indicators, belong to the economic performance; they reflect the data as reported in the document analysed and hence does not fit the model.

In order to answer to the research question, and hence to achieve the aims of this thesis, it has been necessary to verify if exists a relation between the level of CSR disclosure, that is represented by ESG index and the economic performance. It has been decided to use the value reported in the Key Indicator called ROA to represent the economic performance of the banks, maintaining consistency with the selection criterion of the banks.

In this way, it has been possible to compute the correlation existent between the overall sample of data, and within each Nation. To verify the resulted obtained, it has been decided to conduct the analysis of the correlation using another Key Indicators of economic performance, that is ROE, and to compare the results obtained.

In order to enhance the reliability of the entire research, it has been conducted further statistical analyses: thanks to ANOVA tests, it has been possible to assess if there exist statistically significantly differences in the mean of the value representing the ESG indexes of the countries object of study and moreover it has been tested in which way Environmental, Social and Governance performances, impact on the ESG index obtained by each Nation and at the same time, if there are differences among the ESG indexes divided by Nations.

Finally, in order to find a solid answer that statistically supported the personal model developed in this thesis, it has been developed a linear regression model; in fact, it allows to measure the degree of relation existent between a dependent variable (in this thesis represented by the economic performance expressed by the index ROA) and one or more independent variables.

4.1 Discussion of the results

The discussion of the results achieved in this research is focused on the values obtained through the model of the evaluation of the CSR disclosure levels.

Overall results of the research

Typology of the indicator	Val. Abs.	Val. %
TQID ESG index	2,43	60,77%
TQID Environmental Performance	3,43	85,83%
TQID Social Performance	2,26	56,54%
TQID Corporate Governance Performance	2,10	52,50%
Correlation between ESG index and ROA	-0,04950625	
Correlation between ESG index and ROE	-0,038462749	

Figure 70. Table of the overall results. Source: personal elaboration

Results by Nation

Nation	TQID ESG index		Correlation between ESG index and ROA	Correlation between ESG index and ROE
	Val. Abs	%		
USA	2,26	56,44%	-0,50538363	-0,061571699
Germany	2,64	65,90%	-0,124566602	-0,433222236
China	2,17	54,21%	0,738368489	0,865273911
South Africa	2,66	66,53%	0,00239776	-0,050201187
Overall ESG index	2,43	60,77%	-0,0495062	-0,038462749

Figure 71. Table of the results by Nation. Source: personal elaboration

The first table encloses the results which refers to the study belonging to the entire sample of banks object of analyses, while the second enclose a comparison of the results by Nation.

It is possible to affirm that the overall level of CSR disclosure about 60% is relatively low, considering a potential maximum value of 100. It means that the sample of bank analysed could enhance the level of disclosure (and hence of development) of 40%.

Anyway, this result reflects the theory, since represents an overall lack of optimal achievements in the development of the sustainability engagement. As underlined in the theoretical part, this fact might be due to the deficiency on the harmonization of the rules concerning these topics. Moreover, CSR is still too tied up to the voluntary disclosure system. In order to achieve an overall world enhancement of the level of development of sustainability development and reporting, international “step by step” actions must be undertaken: it must be introduced a

mandatory system concerning the adoption and the disclosure of firms' CSR activities, first as a necessary requirement to the world listed company, then it should be introduced by class of dimension, for all the others.

It is worthwhile to discuss also the results obtained by Nation, because they reflect the existent situation of the banks of that country. It is important hence to underline that American and Chinese banks, achieved an overall level of disclosure lower than 60%, that is below the sufficiency threshold. It is interesting to note that German banks, although achieved an overall sufficient result, presented the worst results in terms of economic performances. Following the theory, this might indicate that banks' management is now engaged in CSR activities, for enhancing the economic performances exploiting the theoretical advantages related to them. Last but not least, it is possible to affirm that South African banks resulted to have the best overall levels of disclosure in matter of sustainability. Since in this country there is present a mandatory disclosure system, this fact reflects the theoretical expectation but at the same time reveals a ESG index result about 66%, that is not so distant by the results of the other banks assessed. Anyway, it is essential to underline that as reported in chapter 3, decomposing the ESG index and considering both the overall results (E-S-G) achieved and the results by Nation, none of them achieved the sufficiency threshold (with the exception of only two cases). Based on the results provided by the empirical analyses conducted, it is possible to answer to the research question, stating that does not exists a significant relationship between different levels of CSR disclosure and the economic performances of banks belonging to different cultures. It is relevant to note that comparing the overall results obtained by measuring the correlations existent between ESG index and ROA, and ESG index and ROE, there is an optimal level of consistency, that increased the solidity of the results.

In conclusion, the linear regression model based only on five observation for each State results to be not adapt to extract solid answers valid for the entire population; for that reason, this research provides only superficial analyses that must be conducted in more depth to be used to enhance the external validity of the results founded. Anyway, it is interesting to underline that statistics confirmed the lack of harmonization among different States denounced in matter of CSR by GRI, and hence indicate the further need to a serious global improvement.

4.2 Limits of the research and possible future directions

The principal limit of this research that must be recognized and reported, is represented by the limited number of banks analysed for the achievement of the results. This is principally due to: the difficulty of access to homogeneous data and the long time needed to assess them correctly.

Consequently, the statistical results can support only partially the answer founded: the linear regression model developed, provides data to create a study that is considered superficial and must be developed further to be a reliable representation of the entire real world. Statistical analyses must be supported by other tests; the selection of the data that composed ANOVA tests or the regression model, should be tested or studied more in depth. These operations required high level of statistical competences that should include further statistical academic studies. Moreover, the study cannot verify physically the effective development and adoption of the CSR actions included in the document examined; consequently, it must rely only on the evaluation of the information disclosed by the companies. Hence, the validity of the information reported cannot be measured. CSR external assurance represents the only way to reinforce the level of goodness of the documents: only 70% presented CSR external assurances: This fact represents another limit that might influence the reliability of the results. The time horizon in which data have been collected is limited to the financial year 2016 (or in some cases 2015). The personal model elaborated has some shortcomings such as the limited number of variables analysed, a present degree of subjectivity in the judgements provided in the evaluation of the documents and a lack of further mathematical computations that support the results. Finally, the development of a method adapted to harmonize the collection and evaluation of quantitative data and the evaluation of qualitative data, might have affected negatively the results obtained. Future directions to enhance the reliability of the analyses might be:

- The adoption of a model of assessment that supports a higher number of variables
- The adoption of a larger sample of banks and the inclusion of more countries
- The development of a more sophisticated benchmarking to evaluate the economic performances
- The adoption of a Linear Regression model based on a wider sample size, for achieving statistical results that might be adapt to predict the economic consequences of the adoption and disclosure of CSR actions
- The enlargement of the field of actions provided by this research, based on the analyses on other sector/industry

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Consulted websites

Top 5 banks of America:
<https://www.relbanks.com>

Bloomberg:
<https://www.bloomberg.com/>

Thomson Reuters:
<https://financial.thomsonreuters.com/en.html>

KLD index:
<https://www.msci.com/msci-kld-400-social-index>

Financial data:
<http://financials.morningstar.com>
<https://ycharts.com>

<https://finance.yahoo.com/>
<https://www.reuters.com/finance/>
<https://www.pwc.com/gx/en/audit-services/assets/pdf/global-top-100-companies-2017-final.pdf>
<https://www.fin24.com/>
<http://www.aastocks.com/>
<http://www.nasdaq.com/>

KPMG Survey of Corporate Responsibility Reporting, 2017:

<https://home.kpmg.com/xx/en/home/campaigns/2017/10/survey-of-corporate-responsibility-reporting-2017.html>

OECD:

<http://www.oecd.org/daf/inv/mne/corporateresponsibilityreinforcingauniqueinstrument-2010annualreportontheoecdguidelinesformultinationalenterprises.htm>

Integrated Reporting Committee of South Africa:

<http://integratedreportingsa.org/king-iv-report-on-corporate-governance/>

ISO 26000:

<https://www.iso.org/iso-26000-social-responsibility.html>

Global Reporting Initiatives:

<https://www.globalreporting.org/information/about-gri/Pages/default.aspx>

International Integrated Reporting:

<http://integratedreporting.org/resource/international-ir-framework/>

Hofstede website:

<https://www.hofstede-insights.com/models/national-culture/>

Appendix

In order to provide further support to understand the base of data in which this research has been constructed, below are reported some of them, directly taken by Excel Software. Data are not arranged to fit the thesis, and unlikely the resolution does not allow a perfect vision. Anyway, softwares should help in reading them. The tables reported are only a small part, and contain data that are already elaborated; however, they might be the support to understand and developed further calculation. Once again, the form in which Excel structured the data cannot allow the attachment of the raw data, and reduce the possibility to include the majority of calculation, although would be interesting to every reader to know them.

																				TQID ABSOLUTE VALUE			
CL	CL	CL	CL	CL	CN	CN	CN	CN	CN	AID	AID	AID	AID	AID	QI	QI	QI	QI	QI	TQID	%	MEAN	
4	4	3	3	4	4	4	3	3	4	4	4	3	0	4	4	4	3	2	4	3,40	85,00		
4	4	4	3	4	3	4	4	3	4	4	4	4	3	4	3	4	4	3	4	3,70	92,50		
3	4	4	4	4	3	4	4	4	4	4	4	2	3	4	4	4	4	2	4	3,65	91,25		
0	4	4	4	4	0	4	4	4	4	0	4	4	2	4	0	4	2	2	4	3,00	75,00		
0	4	4	4	4	0	4	4	4	4	0	4	3	4	4	0	4	2	2	4	2,95	73,75 E	3,34	83,5
4	4	3	1	4	3	3	2	1	4	3	4	4	1	4	4	4	2	1	3	2,95	73,75		
3	3	4	4	4	4	4	4	4	4	0	4	3	0	4	3	4	4	2	4	3,30	82,50		
4	2	1	4	4	4	2	1	4	4	0	2	0	0	4	2	2	1	2	4	2,35	58,75		
4	2	0	0	4	4	2	0	0	4	0	0	0	0	4	2	2	0	0	4	1,60	40,00		
4	2	2	3	2	4	2	2	3	2	0	0	0	0	0	4	2	0	2	1	1,75	43,75		
2	3	0	0	0	2	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0,80	20,00		
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4,00	100,00		
0	1	0	0	4	0	1	0	0	4	0	0	0	0	4	1	0	0	0	4	0,95	23,75		
4	4	4	4	4	4	4	3	3	4	4	4	0	0	4	4	4	2	4	4	3,45	86,25		
4	4	4	4	4	4	4	4	4	4	4	0	0	4	4	4	4	4	4	4	3,60	90,00		
1	3	1	0	2	1	3	1	0	2	1	0	0	0	0	0	3	1	0	1	1,00	25,00		
4	4	0	4	4	4	4	0	4	4	4	4	4	4	4	4	4	4	0	4	3,20	80,00		
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4,00	100,00		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00 S	2,35	58,84
4	3	4	3	4	4	3	4	3	4	0	0	0	0	4	4	4	3	3	4	2,90	72,50		
0	1	1	2	4	0	1	1	2	4	0	0	0	0	0	0	1	0	2	4	1,15	28,75		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00		
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4,00	100,00		
4	4	1	4	4	4	4	1	4	4	3	4	1	0	4	4	4	3	4	4	3,25	81,25		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00 G	1,41	35,31
																				ESG	MEAN	2,26	56,44

Figure 72. American banks. Value obtained to extract ESGindex and E-S-G. Source: personal elaboration

																				TQID ABSOLUTE VALUE							
CL	CL	CL	CL	CL	CN	CN	CN	CN	CN	CN	AID	AID	AID	AID	AID	QI	QI	QI	QI	QI	TQID	%	MEAN				
4	4	3	4	4	4	4	3	2	4	4	4	4	2	4	4	4	4	4	2	4	4	3,60	90,00				
4	4	3	3	4	4	4	3	3	4	4	4	3	4	4	4	4	4	4	2	4	4	3,65	91,25				
4	4	1	2	4	4	4	1	2	4	4	4	1	0	4	4	4	4	4	2	3	4	3,00	75,00				
4	4	4	4	4	4	4	1	4	4	4	4	1	4	4	4	4	4	4	1	3	4	3,47	86,84				
4	4	4	4	4	4	4	3	3	4	4	4	1	3	4	4	4	4	3	2	3	4	3,50	87,50	E	3,44 86,12		
4	3	3	2	4	4	3	3	3	4	4	0	0	0	0	4	3	2	1	2	3	4	2,60	65,00				
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	3	2	2	4	3,65	91,25				
4	4	4	0	4	4	3	4	0	4	4	0	4	0	4	0	0	4	3	4	0	3	2,65	66,25				
2	4	0	0	4	2	4	0	0	4	0	0	0	0	0	0	2	1	0	0	3	4	1,30	32,50				
4	4	0	0	4	4	4	0	0	4	0	0	0	0	0	4	3	1	0	0	2	4	1,70	42,50				
4	2	0	4	3	4	2	0	4	3	4	0	0	4	0	4	4	0	4	0	4	1	2,35	58,75				
4	4	4	3	4	4	4	4	2	4	4	4	4	4	0	4	4	4	4	4	1	4	3,50	87,50				
4	3	4	4	4	3	3	4	4	4	4	0	0	4	0	3	1	1	4	4	4	4	3,05	76,25				
4	4	0	0	4	4	4	0	0	4	4	4	0	0	4	4	4	0	0	4	4	4	2,40	60,00				
4	4	4	0	4	4	4	4	0	4	4	4	4	0	0	4	4	4	4	0	4	4	3,00	75,00				
0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	4	0	0	0	0	2	4	0,70	17,50				
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4,00	100,00				
4	4	3	4	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3,85	96,25				
3	1	0	0	4	3	1	0	0	4	0	0	0	0	0	4	1	0	0	0	4	4	1,25	31,25	S	2,57 64,29		
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4,00	100,00				
4	4	4	2	3	4	4	4	3	2	0	0	0	0	0	4	3	4	4	4	2	4	2,55	63,75				
2	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0,55	13,75				
4	1	0	0	0	4	1	0	0	0	4	0	0	0	0	0	3	1	0	0	0	0	0,90	22,50				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00				
4	0	4	4	4	4	4	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3,40	85,00				
4	4	2	2	4	4	4	2	2	4	4	4	2	2	4	4	4	4	4	4	4	4	3,40	85,00				
4	4	0	4	4	4	4	0	3	4	4	4	0	4	4	4	4	4	0	4	4	4	3,15	78,75	G	2,24 56,09		
																				ESG	MEAN	2,64	65,90				

Figure 73. German banks. Value obtained to extract ESGindex and E-S-G. Source: personal elaboration

																				TQID ABSOLUTE VALUE							
CL	CL	CL	CL	CL	CN	CN	CN	CN	CN	CN	AID	AID	AID	AID	AID	QI	QI	QI	QI	QI	TQID	%	MEAN				
4	4	4	3	4	4	4	4	3	4	4	4	4	4	3	4	4	3	4	4	3	4	3,75	93,75				
4	2	4	4	4	4	4	2	4	4	4	4	3	4	4	4	3	2	4	2	3	4	3,45	86,25				
4	2	4	4	4	4	4	2	4	4	4	4	4	4	3	4	3	3	4	2	4	4	3,55	88,75				
4	4	4	4	4	4	4	4	3	4	4	4	4	4	2	4	3	3	3	2	3	4	3,55	88,75				
4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	4	2	3	2	2	2	4	3,45	86,25	E	3,55 88,75		
4	4	4	3	0	4	4	4	3	0	0	0	4	2	0	1	1	4	2	2	0	4	2,20	55,00				
4	0	0	4	4	4	0	0	4	3	4	0	0	4	1	2	0	0	0	1	1	4	1,80	45,00				
3	4	0	1	0	3	3	0	1	0	0	0	0	0	0	1	2	0	0	1	0	4	0,95	23,75				
0	0	4	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0,45	11,25				
4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0,55	13,75				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00				
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3,20	80,00				
2	0	0	0	4	3	0	0	0	4	0	0	0	0	0	3	2	0	0	0	0	4	1,10	27,50				
4	4	4	4	4	4	4	1	4	4	4	4	4	4	4	4	4	4	4	2	1	2	3,30	82,50				
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3,80	95,00				
0	4	0	0	0	0	4	0	0	0	0	4	0	0	0	0	3	0	0	0	0	0	0,75	18,75				
4	4	4	0	0	4	4	4	4	2	3	4	4	4	4	0	3	4	4	4	2	4	2,20	55,00				
4	4	4	4	4	4	4	4	2	3	4	4	4	4	4	0	3	4	4	4	2	4	3,50	87,50				
0	0	4	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0,85	21,25	S	1,76 44,02		
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	4	4	3,90	97,50				
4	4	4	4	0	4	4	4	4	0	0	0	0	0	0	4	4	4	4	4	4	4	2,40	60,00				
4	4	4	4	0	4	4	4	4	0	0	0	0	0	0	0	4	4	4	3	3	0	2,30	57,50				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00				
4	0	0	0	4	4	0	0	0	2	4	0	0	0	0	4	4	0	0	0	0	1	1,15	28,75				
4	4	4	4	4	4	4	4	3	3	4	4	4	4	2	3	4	4	4	4	4	4	3,65	91,25				
4	3	4	4	4	4	4	2	4	3	0	4	4	1	2	0	4	4	4	4	4	4	2,75	68,75	G	2,02 50,47		
																				ESG	MEAN	2,17	54,21				

Figure 74. Chinese banks. Value obtained to extract ESGindex and E-S-G. Source: personal elaboration

CL	CL	CL	CL	CL	CN	CN	CN	CN	CN	CN	AID	AID	AID	AID	AID	QU	QU	QU	QU	QU	TQID	%	MEAN	
4	4	4	4	4	4	4	4	5	5	4	4	4	1	3	4	4	4	1	3	4	3,50	87,50		
4	4	4	4	4	4	4	4	3	4	3	4	4	0	4	3	3	4	2	4	3	3,45	86,25		
4	4	4	4	4	4	5	4	5	4	3	4	1	4	4	4	4	1	1	4	1	3,40	85,00		
4	4	4	4	4	4	4	4	4	4	4	4	4	1	4	4	1	3	1	1	3	3,30	82,50		
4	4	4	4	4	4	4	4	4	4	4	4	4	1	4	4	2	2	1	1	4	3,35	83,75 E	3,40	
4	4	4	4	4	3	4	4	0	4	3	4	3	0	4	2	4	4	0	1	2	2,70	67,50		
4	4	4	4	4	4	4	4	4	4	4	4	3	1	4	4	3	1	2	1	3	3,30	82,50		
4	4	4	4	4	4	4	4	3	4	4	4	0	1	4	4	2	1	1	1	4	3,05	76,25		
4	0	4	4	4	0	4	0	1	4	0	4	0	1	2	0	2	0	1	1	0	1,60	40,00		
4	4	4	4	4	4	4	4	3	0	4	4	4	0	4	4	4	4	4	4	0	2,95	73,75		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00		
4	4	0	4	4	4	4	4	4	4	4	4	4	0	4	4	4	4	0	4	4	3,20	80,00		
4	4	0	4	4	4	4	4	0	4	4	4	4	0	4	4	1	0	0	4	4	2,25	56,25		
4	4	4	4	4	4	4	5	5	4	3	4	3	1	0	3	4	4	1	4	4	3,25	81,25		
4	4	0	4	4	4	4	4	0	4	2	4	4	0	4	3	4	3	0	4	3	2,95	73,75		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0,00	0,00		
4	4	0	4	4	4	5	4	4	0	4	3	4	4	4	2	4	4	4	0	3	2,90	72,50		
4	4	4	4	4	4	4	4	1	4	3	4	3	1	4	3	4	4	4	2	4	3,40	85,00		
4	4	4	4	4	2	4	4	3	0	2	4	0	0	1	3	0	2	0	1	1	1,50	37,50 S	2,36	
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3,95	98,75		
4	4	4	4	4	4	4	4	4	4	4	4	4	0	4	4	3	4	4	4	4	3,75	93,75		
0	4	3	0	0	0	4	3	0	0	0	0	0	0	0	0	2	4	0	0	0	1,00	25,00		
4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1	3	0	1	3,45	86,25		
0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0,75	18,75		
4	4	4	4	4	0	4	3	4	4	0	3	0	3	4	0	4	4	4	4	0	2,85	71,25		
4	4	0	4	4	4	4	3	0	4	3	3	3	0	4	2	4	4	4	0	4	2,90	72,50		
4	4	1	4	4	5	5	5	1	4	3	3	3	1	3	3	4	4	4	4	4	3,15	78,75 G	2,73	
																					ESG	MEAN	2,66	66,53

Figure 75. South African banks. Value obtained to extract ESGindex and E-S-G. Source: personal elaboration

USA 1	USA 2	USA 3	USA 4	USA 5	Germany 1	Germany 2	Germany 3	Germany 4	Germany 5	China 1	China 2	China 3	China 4	China 5	South Africa 1	South Africa 2	South Africa 3	South Africa 4	South Africa 5	MEAN	MEAN %		
4	4	3	3	4	4	4	2,5	3,5	4	3,75	4	4	3	4	4	4	2,25	3,25	4	3,61	90,31		
3,5	4	4	4	4	4	4	2,75	3,5	4	3,75	2,25	4	3,5	3,75	3,75	4	2,25	4	3,25	3,61	90,31		
3,5	4	3	3	4	4	4	1,25	1,75	4	3,75	2,75	4	3,25	4	4	4	2,25	3,25	4	3,39	84,69		
0	4	3,5	3,5	4	4	4	0,75	3,75	4	3,75	3,75	3,75	2,75	3,75	3,75	3,75	2,5	3,25	3,75	3,31	82,81		
0	4	3,25	3,25	4	4	4	2,75	3	3,75	3,5	3,75	3,5	3	3,5	4	3,5	2,5	3,25	4	3,33	83,13		
3,5	3,75	2,75	2,75	3,75	3,75	2	1,75	1,75	3,75	2,25	2,25	4	2,5	0	3,75	3,75	0	3,25	2,5	2,69	67,19		
2,5	3,75	3,75	3,75	4	3,5	3,75	3,5	3,5	4	3,5	0	0	3,25	2,25	3,5	3	2,75	3,25	3,75	3,06	76,56		
2,5	2	0,75	0,75	4	4	2,5	4	0	2,75	1,75	2,25	0	0,75	0	3,25	2,25	2,25	3,25	4	2,15	53,75		
2,5	1,5	0	0	4	1,5	2,25	0	0	2,75	0	0	2,25	0	0	3,5	0	1,75	2,75	0	1,24	30,94		
3	1,5	1	1	1,25	2,75	2,25	0	0	3,5	2,75	0	0	0	0	4	4	2,75	0	4	1,69	42,19		
1,75	2,25	0	0	0	4	2	0	4	1,75	0	0	0	0	0	3,75	0	0	0	0	0,98	24,38		
4	4	4	4	4	4	4	4	1,5	4	4	4	4	4	4	3,5	4	0	4	4	3,45	86,25		
0,25	0,5	0	0	4	3,5	1,75	3	4	3	1,75	0	0	0	3,75	3,5	0	0	4	4	1,85	46,25		
4	3	2,25	2,25	4	4	4	0	0	4	4	4	3,5	1,5	3,5	4	3,5	2,25	3	3,5	3,01	75,31		
4	3	3	3	4	4	4	4	4	4	3	4	3	4	4	4	4	0	4	3	3,09	77,19		
0,75	2,25	0,75	0,75	1,25	0	0	0	0	3,5	0	3,75	0	0	0	4	0	0	0	0	0,85	21,25		
4	4	0	0	4	4	4	4	4	4	3	4	4	4	0	3,25	4	0	3,75	2,75	2,84	70,94		
4	4	4	4	4	4	4	4	3,25	4	4	4	4	4	2	3,5	4	3,75	2	4	3,25	81,25		
0	0	0	0	0	2,5	0,75	0	0	3	0	0	2,25	0	2	4	4	0	2,25	0	1,5	0,91	22,81	
3	2,5	2,75	2,75	4	4	4	4	4	4	4	4	3,75	4	3,75	0	4	4	4	4	3,75	3,51	87,81	
0	0,75	0,5	0,5	3	3	2,75	3	2,25	1,75	3	3	3	3	0	4	4	3	4	4	2,43	60,63		
0	0	0	0	0	1,75	1	0	0	0	3	3	2,75	2,75	0	4	2,5	2,5	0	0	1,16	29,06		
0	0	0	0	0	3,75	0,75	0	0	0	0	0	0	0	0	3,75	3,25	3,75	3	3,25	1,08	26,88		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	3,75	0	0	0,39	9,69		
4	4	4	4	4	1	4	4	4	4	4	0	0	0	1,75	3,75	2,75	3,75	4	0	2,85	71,25		
3,75	4	1,5	1,5	4	4	4	2,5	2,5	4	4	4	3,5	3,25	3,5	0	3,5	0	4	3,25	3,04	75,94		
0	0	0	0	0	4	4	0	3,75	4	4	4	3,25	3,25	3,25	0	4	3,5	1,75	3,75	3,25	2,29	57,19	
																					MEAN	2,425	60,625

Figure 76. Overall values obtained by TQID of each banks. Source: personal elaboration

Key Pillars	SU1	SU2	SU3	SU4	SU5	GE1	GE2	GE3	GE4	GE5	CH1	CH2	CH3	CH4	CH5	SA1	SA2	SA3	SA4	SA5
Environmental performance	55,00	98,75	83,75	82,50	98,75	100,00	100,00	50,00	77,50	98,75	92,50	82,50	96,25	77,50	95,00	97,50	96,25	58,75	85,00	95,00
Social Performance	65,62	61,16	39,73	39,73	75,89	81,25	66,52	49,11	40,63	83,93	55,36	48,66	50,00	32,14	33,93	85,71	57,14	28,57	62,95	64,73
Corporate Governance performance	33,59	27,34	27,34	18,75	34,38	76,56	54,69	42,19	51,56	55,47	68,75	53,91	50,78	50,78	28,13	73,44	73,44	70,31	71,09	54,69
Total ESG performance	54,16	58,10	44,21	41,44	67,82	83,33	69,21	47,22	50,69	78,24	66,20	56,48	58,80	46,06	43,52	84,26	69,21	46,53	69,44	67,36
Economic performance ROA	1,00	0,82	1,16	0,82	0,82	-0,10	0,30	0,05	0,00	0,04	1,20	1,18	0,99	1,05	0,81	1,21	2,70	1,34	1,23	0,93
Economic performance ROE	10,00	6,71	11,49	6,60	9,40	-2,30	7,00	1,17	5,30	1,10	15,24	15,54	14,55	12,58	9,82	15,30	24,00	16,60	15,30	13,70

USA				
			Mean ROA	Mean ROE
Average Total E	83,75		USA	0,92
Average Total S	56,43		GE	0,06
Average Total CG	28,28		CH	1,05
Average Total ESG	53,15		SA	1,48

GERMANY				
			Mean ROA	Mean ROE
Average Total E	85,25		USA	0,92
Average Total S	64,29		GE	0,06
Average Total CG	56,09		CH	1,05
Average Total ESG	65,74		SA	1,48

CHINA				
			Mean ROA	Mean ROE
Average Total E	88,75		USA	0,92
Average Total S	44,02		GE	0,06
Average Total CG	50,47		CH	1,05
Average Total ESG	54,21		SA	1,48

SOUTH AFRICA				
			Mean ROA	Mean ROE
Average Total E	86,50		USA	0,92
Average Total S	59,82		GE	0,06
Average Total CG	68,59		CH	1,05
Average Total ESG	67,36		SA	1,48

ESG total results Value for ANOVA calculation Total Correlation Correlation USA Correlation Germany Correlation China Correlation South Africa Results combination

Figure 77. Values obtained by ESG indexes and used to compute correlation coefficients. Source: personal elaboration

Overall	ESG index	Overall	Corporate G Overall
TQID Environmental Performance (MEAN value of the Indicators): 3,43 or 85,83%	85,83	USA	0,525
TQID Social Performance (MEAN value of the Indicators): 2,26 or 56,54%	56,54	USA	0,3531
TQID Corporate Governance Performance (MEAN value of the Indicators): 2,10 or 52,50%	52,50	Germany	0,5609
TQID ESG index (MEAN value of the Indicators): 2,43 or 60,77%	60,77	China	0,5047
		South Africa	0,6813

USA	Environmental	Overall
TQID Envir or 83,5%	83,50	85,83%
TQID Social Performance (MEAN value of the Indicators): 2,23 or 58,84%	58,84	USA
TQID Corp or 35,31%	35,31	Germany
	56,44	China
TQID ESG index (MEAN value of the Indicators): 2,26 or 56,44%		South Africa

Germany	Environmental	Overall
TQID Environmental Performance (MEAN value of the Indicators): 3,44 or 86,12%	86,12	83,50%
TQID Social Performance (MEAN value of the Indicators): 2,57 or 64,29%	64,29	Germany
TQID Corp or 56,09%	56,09	China
	65,90	South Africa
TQID ESG index (MEAN value of the Indicators): 2,64 or 65,90%		

China	Social	Overall
TQID Envir or 88,75%	88,75	56,54%
TQID Social Performance (MEAN value of the Indicators): 1,76 or 44,02%	44,02	USA
TQID Corp or 50,47%	44,02	Germany
	50,47	China
TQID ESG index (MEAN value of the Indicators): 2,17 or 54,21%	54,21	South Africa

South Africa	Social	Overall
TQID Envir or 85,00%	85,00	56,54%
TQID Social Performance (MEAN value of the Indicators): 2,36 or 59,02%	59,02	USA
TQID Corp or 68,13%	68,13	Germany
	66,53	China
TQID ESG index (MEAN value of the Indicators): 2,66 or 66,53%		South Africa

Comparison between ESG indexes
Overall: 61%
USA: 56%
Germany: 88%
China: 54%
South Africa: 67%

Comparison between Environmental performances
Overall: 85,83%
USA: 83,50%
Germany: 86,12%
China: 88,75%
South Africa: 85,00%

Comparison between Social performances
Overall: 56,54%
USA: 58,84%
Germany: 64,29%
China: 44,02%
South Africa: 59,02%

Comparison between Corporate Governance performances
Overall: 0,525
USA: 0,3531
Germany: 0,5609
China: 0,5047
South Africa: 0,6813

Corporate Governance Overall
0,525

Figure 78. Raw data for the creation of the results combination. Source: personal elaboration

USA TQID	GERMANY TQID	CHINA TQID	SOUTH AFRICA TQID
85,00	90,00	93,75	87,50
92,50	91,25	86,25	86,25
91,25	75,00	88,75	85,00
75,00	86,84	88,75	82,50
73,75	87,50	86,25	83,75
73,75	65,00	55,00	67,50
82,50	91,25	45,00	82,50
58,75	66,25	23,75	76,25
40,00	32,50	11,25	40,00
43,75	42,50	13,75	73,75
20,00	58,75	0,00	0,00
100,00	87,50	80,00	80,00
23,75	76,25	27,50	56,25
86,25	60,00	82,50	81,25
90,00	75,00	95,00	73,75
25,00	17,50	18,75	0,00
80,00	100,00	55,00	72,50
100,00	96,25	87,50	85,00
0,00	31,25	21,25	37,50
72,50	100,00	97,50	98,75
28,75	63,75	60,00	93,75
0,00	13,75	57,50	25,00
0,00	22,50	0,00	86,25
0,00	0,00	0,00	18,75
100,00	85,00	28,75	71,25
81,25	85,00	91,25	72,50
0,00	78,75	68,75	78,75

Figure 79. 27 Values obtained to compute ANOVA Single Factor calculation. Source: personal elaboration

VALUES TAKEN BY TQID ABSOLUT VALUE FOR EACH BANKS, HENCE OVERALL AND OFFICIA

	USA	CHINA	GERMANY	SOUTH AFRICA
1	55,00	100,00	92,50	97,50
1	98,75	100,00	82,50	96,25
1	83,75	50,00	96,25	58,75
1	82,50	77,50	77,50	85,00
1	98,75	98,75	95,00	95,00
2	65,62	81,25	55,36	85,71
2	61,16	66,52	48,66	57,14
2	39,73	49,11	50,00	28,57
2	39,73	40,63	32,14	62,95
2	75,89	83,93	33,93	64,73
3	33,59	76,56	68,75	73,44
3	27,34	54,69	53,91	73,44
3	27,34	42,19	50,78	70,31
3	18,75	51,56	50,78	71,09
3	34,38	55,47	28,13	54,69

Figure 80. Values obtained to calculate ANOVA Two Factors with repetition. Source: personal elaboration