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**CORPORATE SOCIAL RESPONSIBILITY: STRATEGIES, PROCESSES AND
MANAGEMENT CONTROL SYSTEMS**

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INDEX

INTRODUCTION	1
CHAPTER 1 - THE CONCEPT OF CORPORATE SOCIAL RESPONSIBILITY	4
1.1 WHAT IS CORPORATE SOCIAL RESPONSIBILITY FOR BUSINESSES	4
1.2 WHY CSR IS IMPORTANT	5
1.2.1 <i>Engaging with CSR to act in favour of customers</i>	6
1.2.2 <i>Engaging with CSR to enhance employee loyalty</i>	6
1.2.3 <i>Engaging with CSR to attract new investors</i>	6
1.2.4 <i>Engaging with CSR to improve relationships with the community and the Regulator</i>	7
1.2.5 <i>Engaging with CSR to enhance financial performance</i>	7
1.3 CSR REGULATION WORLDWIDE AND IN EUROPE	8
CHAPTER 2 – CSR STRATEGIES	12
2.1 STEPS FOR THE IMPLEMENTATION OF A CSR STRATEGY	12
2.2 TYPES OF CSR STRATEGIES	14
2.3 THE INTEGRATION PROCESS OF CSR AND CORPORATE STRATEGIES	17
CHAPTER 3 - CSR WITHIN BUSINESS PROCESSES	23
3.1 PATH TO ADAPT PROCESSES TO CSR	23
3.2 THE MAIN PROCESSES INVOLVED IN CSR	26
3.2.1 <i>An example of sustainability-related risks in the supply chain: the Nike scandal</i>	27
3.2.2 <i>Analysis of the risks</i>	28
3.2.3 <i>Materiality matrix assessment</i>	31
3.2.4 <i>Supply-chain sustainable innovation</i>	32
3.3 THE PEOPLE DIMENSION OF CSR	34
3.3.1 <i>The “relational” process</i>	35
3.3.2 <i>The role of the Chief Sustainability Officer</i>	37

CHAPTER 4 - CSR AND ITS INFLUENCE ON ORGANIZATION'S CONTROL SYSTEMS 39

- 4.1 MANAGEMENT CONTROL SYSTEMS DEFINITION 40**
- 4.2 THE TRIPLE BOTTOM LINE APPROACH..... 40**
- 4.3 FURTHER DEVELOPMENTS 44**
 - 4.3.1 Control systems package.....45*
 - 4.3.2 The importance of cultural controls51*
 - 4.3.3 The empirical evidence of the discrepancy between formal and informal control systems.....54*
- 4.4 TYPES OF MANAGEMENT CONTROL SYSTEMS APPLIED TO CSR..... 57**
 - 4.4.1 Cost management controls: budgeting, variance analysis and life-cycle costing57*
 - 4.4.2 Eco-controls.....59*
 - 4.4.3 Levers of controls.....62*
 - 4.4.5 The balanced scorecard67*
 - 4.4.6 Material Flow Cost Accounting73*
- 4.5 REWARDING SYSTEMS 77**
 - 4.5.1 Monetary rewards.....78*
 - 4.5.2 The impact of rewards on CSR.....80*
- 4.6 WRAPPING UP 83**

CHAPTER 5 – EMPIRICAL RESEARCH 85

- 5.1 METHODOLOGY 86**
- 5.2 UNILEVER 87**
- 4.6 PATAGONIA 93**
- 4.6 ALCOA CORPORATION 97**
- 4.6 NESTLÉ..... 102**
- 4.6 BNP 107**
- 4.6 IBERDROLA 110**
- 4.6 INTEL 114**
- 4.6 DANONE 117**
- 4.6 NOVO NORDISK..... 121**
- 4.6 DISCUSSION 124**

CONCLUSIONS.....129
REFERENCES.....137
SITOGRAPHY145

INTRODUCTION

Nowadays, sustainability has become an every-day issue for corporations. Although the concept of sustainability has a broad range of applicability, Corporate Social Responsibility (CSR) refers to sustainability within organizations. The concept finds its roots in the 1990s, when scepticism rose around society about the ethical values embedded in the firms' procedures. New stakeholders came up wondering whether the role of corporations in the capital markets and production sites justified the damage of some ethical principles like child labour exploitation and environmental pollution. This has been only the starting point since today the concept has broadened until the cyber data security. The commitment with a set of activities to meet the needs of the stakeholders is the foundation of the CSR. It has increasingly become an important factor both for business operations and people perception. Even if the sensibility has grown, there is still a lot to do to understand the potential of CSR and make it an enduring key factor of business success in both financial and non-financial dimensions.

Companies have constantly to justify their operations to society through the disclosure of information in their reports. As a matter of fact, there has been a surge of the companies disclosing non-financial information in their report, with North America that has the highest sustainability reporting rate of 90% (KPMG, 2020, p. 11). Generally, it has been a great step ahead because sustainability and CSR help to improve the business processes and they also diminish the disparities between developed and emerging countries. However, some limitations in the measurement of non-financial performance are still observed and, in some contexts, the sustainability reporting activities are done to justify the organization's presence in the market and enhance its reputation.

The purpose of this research is to demonstrate that whereas the sustainability reporting has been subjected to a great development, management control systems applied to sustainability are still marginal within organizations, by presenting some integration problems that will be discussed. Therefore, MCS lag behind reporting in the context of sustainability. By ascertaining this lack both in the literature and in the reality, this research has the objective to provide a comprehensive framework of the best solutions to apply MCS to sustainability, supported by a sample of companies which pursue the best practices in this context.

The research will be divided in five main chapters; in the first one, it will be reported the concept of CSR and its application within organizations, identifying the main trends of regulation; in the second one, it will be analysed the main CSR strategies that a company may integrate with the corporate strategy, highlighting which are the main limitations in the process of integration. In particular, three main strategies will be identified and will be used as a reference point for all the analysis and observations. These three strategies are: CSR strategy focused on internal stakeholders, CSR strategy focused on external stakeholders, interested either in social or environmental concerns. The third chapter will investigate how to align the existing corporate processes to the established sustainability goals by describing the risk evaluation procedures connected with changes in processes and by identifying the main processes subjected to changes, such as the procurement process and the selection and hiring procedures.

The fourth chapter will be dedicated to the analysis of management control systems. Indeed, once the company has recognised the sustainability objectives, developed an action plan and integrate new activities within the corporate processes, it should incentivise employees to pursue the new activities efficiently, find the best way to monitor the results and use these results in the decision-making process. The classification of MCS will generally follow the distinction of formal and informal controls. The literature has pointed out different problems in the implementation of effective MCS related to sustainability, finding that management control systems and the so-called “sustainable control systems” may force employees to make a trade-off between financial and non-financial performance and this is very common, as it will demonstrate by several practical examples. Moreover, even when the two dimensions of control systems are aligned, it is difficult to find a good integration of formal and informal dimensions within sustainable control systems. In spite of these problems, few academic researches offer specific solutions and they are not supported by empirical evidence. Therefore, all the main theories and solutions about CSR management control systems will be scrutinized, by underlining their pros and cons, supported by case-study organizations.

Finally, the fifth chapter will provide an overall illustration of the current trends related to “sustainable control systems” and will analyse a sample of companies that represents the best performers in the application and union of formal and informal control systems. It will be provided an overview of their size, industry and country of incorporation,

highlighting which could be the best solutions for all the companies that are intended to develop control systems to integrate sustainability in the corporate strategy in the future. The results will show that one of the first tools of integration is the change of the organizations' governance structure, with the introduction of boards which fulfil the role related to sustainability. Moreover, in all the companies there is a cultural component to facilitate the fitting of personal values with company's beliefs and objectives. Finally, the development of the United nations SDGs will result to be crucial for the measurement and monitoring of non-financial performance.

Chapter 1 - THE CONCEPT OF CORPORATE SOCIAL RESPONSIBILITY

1.1. What is corporate social responsibility for businesses

According to United Nations definition, Corporate Social Responsibility is understood as being the way through which a company achieves a balance of economic, environmental and social imperatives (United Nations Industrial Development Organization, 2021), which means to broadening the concept of the shareholders' value creation and to acknowledge that the impact of a business involves a wider range of stakeholders. This is because the actions of the companies have an impact on citizen lives (EU Commission, 2011) and should exploit their position of influence to make those impact as good as possible. In fact, another popular definition of CSR is the one provided by the World Business Council for Sustainable Development (WBCSD, 1999) that defines CSR as “the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large”.

An important word that well describes CSR is “voluntary” since it consists in going beyond what the regulators require (Portney, 2008, p. 1). Furthermore, the CSR is more effective for a firm that changes the culture of the company as a whole. In fact, the evidence reveals that in some cases, CSR is pursued by the management team in order to increase the consumer acceptance and, ultimately, profits. At the same time, the most successful cases of CSR are those that change the company philosophy, readapting the mission and vision to the new sustainable development. A strong and clear message, which the top managers of large multinationals demonstrate they share: it appears unavoidable that in the near future the focus will increasingly be towards business choices oriented towards sustainability objectives, summarized in the acronym ESG (Environmental, Social, and corporate Governance), as the only strategy capable of giving new impetus to the business and allow it to gain competitive advantage.

The concept of CSR finds its roots in the stakeholder theory and legitimacy theories. A stakeholder can be defined as “any group or individual who can affect or be affected by the objectives of companies” (Freeman, 1984, p. 46). This means that an organization has to consider how it will respond to stakeholders and how it will commit to their requirements. An additional layer to this theory is that, nowadays, the stakeholders can be identified as customers, suppliers, employees, investors but also as communities and

all the entities that indirectly might have interests in the company's performance. For these reasons, the ethical business theory requires that the business should be managed ethically and follow moral principles in order to create value for all the stakeholders involved, including all the ones related to environmental and social stakes. The ultimate implication of this theory is that the management body of the company should rethink about the mission, goals and strategies since it cannot be the merely value creation through profits and stock price increase. This last example would mean to consider only the shareholders perspective and although this type of measures may assure a short-term success it cannot be the same for the long-term perspective. Therefore, the stakeholder theory requires corporations to identify what are the factors that make all the stakeholders better-off and apply those factors to the decision-making processes because the company is no more seen as a business to increase shareholders return but rather as an organization coordinated to satisfy stakeholders interests, based on the fiduciary relationship that exists between the two parties.

The second theory about legitimacy starts by assuming that there is an inevitable social contract between companies and society based on expectations of the parties. On one side, the company should be oriented on the production of goods and services desired by the society; on the other side, society should commit to deliver some economic and political benefits to the firms. According to Suchman (1995), legitimacy is a measure of the attitude of the society towards a corporation and its activities. Based on this definition, two deductions can be asserted: firstly, this theory is about to make an alignment between societal and corporate expectations and, secondly, companies have to take actions that justify their presence in the market.

In conclusion, it can be affirmed that a company should consider all its stakeholders and all their values and how they are impacted by company's activities as well as commit to align its beliefs with society and produce the outcomes that it requires.

1.2. Why CSR is important

There are different reasons why a company might decide to engage with CSR and this section aims to explore all these reasons, from the mere objective of doing something good for society by improving the environment in which the company operates, to the opportunistic purpose of enhancing financial returns because CSR, as many companies think, "it's good business". As Elhague (2005) argues, "the only actions on the part of corporations that are worthy of mention in the same breath as CSR are those that are

“profit sacrificing””, that is, when companies allocate capital for ethical purposes being aware that those resources may not be recoup. This represents only one side of the coin. On the other side, companies engage with CSR because these actions will trigger a lot of advantages that will ultimately enhance financial performance and, in this way, their behaviours of over-compliance become opportunistic rather than altruistic.

1.2.1. Engaging with CSR to act in favour of customers

This is particularly true for consumer goods. In the majority of cases, the beyond-compliance is related to the supply chain, where the company ensures a fair treatment of workers and quality of raw materials. In the book “The Green Giant” is presented a good case of CSR in the food and beverage industry that is Chipotle. Chipotle is an American chain which main plate is burritos. Its peculiarity is related to the supply chain because the meat comes exclusively from pork, beef and chicken that are naturally raised. Thanks to this organic production policy, Chipotle has been able to build customers loyalty and gain a competitive advantage. It is important to note that the major part of Chipotle’s annual revenues is directly attributable to its commitment with a responsible supply chain.

1.2.2. Engaging with CSR to enhance employee loyalty

This is connected with the fact that employees prefer to work for an employer who is respected, that ultimately improve the reputation of the entire firm. A good place to work, following the classification of the “great places to work” is based on working conditions such as equity and respect but also flexible working schedule and bonuses. Companies that adopt these internal policies are conscious that in this way they reduce the costs of employee turnover and attract the best talented workers.

1.2.3. Engaging with CSR to attract new investors

In this last decade, the trend of investment has overturned by becoming less speculative and more “socially responsible” oriented. This is because of the increasing conviction of investors that the stock prices of companies that commit with CSR have the possibility to yield a higher return due to the better company’s performance. This is particularly true if we look at the extreme case of sustainable products: Tesla Motors. The stock price of the firm has never stopped to grow since 2013 when the first well-developed vehicle, Model

S, started to be sold in the US market as well as in Europe and Asia. However, the same argument can be applied to other companies that have demonstrated to accomplish very impactful programs for the society over the years. Two good examples can be Unilever and Chipotle. The first one, formalized the Unilever Sustainable Living Plan in 2010 which ultimately objective is to address the social problem by being part of the solution; starting from 2010, the Unilever stock price increase of 91% by the end of 2020, almost the double. The second one, Chipotle, implemented a strategy of organic and more expensive supply chain by overturning the fast-food business model based on the concept to use ingredients as cheapest as possible and since its quotation in March 2006 it has never stopped to increase, marking the all-time-high in January 2021. In about 15 years the equity price passes from 55,39\$ to 1500\$. These exemplary cases of stock appreciation are reported as company success due to CSR commitment.

1.2.4. Engaging with CSR to improve relationships with the community and the Regulator

It can be said that “having the approval” of the community is fundamental most of all when the company could be involved in local disputes. In some cases, if there is a certain level of collaboration between the over-compliant company and the Regulator, the former may encourage the latter to set new stringent standards based on the beyond-compliance performance of the company and, hence, this may gain a competitive advantage. For example, DuPont, the largest chlorofluorocarbons producer in the world in the 1980s, decided to look at an alternative to eliminate this substance that was proved to be damaging for the ozone hole. The DuPont effort to find an alternative to the chlorofluorocarbons production represent an opportunity under a political point of view and, in 10 years, the Regulator approved a ban for the chlorofluorocarbons production supported by the DuPont, which gain a political and economic advantage.

1.2.5. Engaging with CSR to enhance financial performance

This reason probably is not the first reason why a company should engage with CSR. In fact, this should not be considered a reason that pushes companies to adopt responsible behaviours because CSR has been established over the years to take into account the consequences of entities’ activities and create a positive social impact through their operations. However, nowadays, many organizations opportunistically leverage the CSR

to gain a competitive advantage. This practice is so diffuse that has been named as “greenwashing”, a utilitarian practice that looks at CSR as a mere superficial change to enhance the company image and reputation. By not judging this approach, it is worth to say that it may create a boomerang effect since the company conduct the CSR operations in a separate way with respect to the core business strategy and this feed an expectation gap for stakeholders, which will exhibit over the years with all the negative consequences attached, such as the decline of reputation and loss of trust. Another approach that should be avoided is the “to do list” approach, a systematic and aseptic execution of a set of predetermined actions. This is an approach that should be avoided because even if initially it may seem the most effective and the least expensive, the right approach to CSR is to embed sustainability in the core strategy, evaluate the actions to implement and realize an ad hoc business plan for the integration of sustainability within the organization. Generally, it is common to see instances of companies that takes a short-term advantage from CSR activities characterised by an opportunistic feature, but this type of behaviours will lead to higher costs and loss of opportunities, as it will be seen in the next chapters.

1.3. CSR regulation worldwide and in Europe

As it has been examined, there are different reasons that push companies to engage with CSR and even if its concept is related to the aspect of voluntary actions, the recent climate changes and social inequality have led Regulators to provide guidelines and principles that favour companies to operate responsibly.

One of the moments that significantly affected the role of the CSR within an enterprise occurred with the establishment of the Social Development Goals (SDGs). From that moment, companies knew the areas and operations of their business that they could improve to meet what was required in order to be considered a sustainable company.

In September 2015, more than 150 international leaders met at the United Nations to aid global development, promote human well-being and protect the environment. The States involved have approved the 2030 Agenda for sustainable development, the essential elements of which are the 17 Sustainable Development Goals and 169 sub-goals, that aim to end poverty, to fight against inequality and to social and economic development. They

also consider aspects of fundamental importance for sustainable development such as tackling climate change and building peaceful societies by the year 2030.

The SDGs is a division of the United Nations Department of Economic and Social Affairs (UNDESA) which primary objective is the support for all the entities, private and public, to address the issues that the United Nations have identified as the most sensitive for a sustainable development such as water, energy and working conditions. The process of support is iterative because the UN Division works with political bodies at different levels, international, regional and local, and it aids to transform sustainable development goals into tangible policies. Moreover, thanks to this tight collaboration the Division achieve its objective to inform citizens about the main issues for the 2030 Agenda at international level.

Another important entity which plays a key role in providing guidelines for the formulation and application of responsible initiatives is the International Standard Organization (ISO). It is the most important organization in the world for definition of technical standards and it carries out advisory functions for the United Nations Organization for education, science and culture (UNESCO) and for the United Nations Organization (UN). It deals with defining the technical standards that an individual or company must respect for complying with specific evaluation parameters in order to obtain a specific ISO certification. ISO certifications represent an important certification for a business that wants to stand out the competition, making use of the appropriate professional tools that prove the compliance of their business process and management systems a standard dictated by technical regulations. The guidelines issued by ISO certifications are voluntary: adherence to them is in fact not mandatory by law, but it is becoming increasingly necessary to obtain them. These certifications are responsible for certifying the company's compliance with assessment criteria aimed at establishing the presence of specific elements within the business processes. An ISO standard is a document that defines the characteristics and standards of a process or a product or service. The standard can be of three types and therefore takes on a different name a depending on the reference: we speak of an international standard (ISO), a European standard (EN) and national standard (UNI). The fundamental characteristics of the law are: consensus, democracy, transparency and voluntariness.

At regional level, the European Commission developed a CSR strategy in 2011 that was modified in 2019. This strategy endeavours, on one hand, to align the European and global strategy about CSR with a particular attention to the United Nations Sustainable Development Goals (SDGs); on the other hand, it encourages firms to commit with a sustainable approach to their business. In this way, the European Commission not only promotes a good sustainable conduct but also improves working conditions and human rights. In the strategy overview, one reflection affirms that many companies have made the CSR part of their missions but more can still be done in order to make the responsible conduct even more tangible and measurable. Furthermore, the European Commission stresses out that there is a need for public financial as well as non-financial information to increase transparency. On this regard, “The Non-Financial Reporting Directive 69 requires about 6,000 of the largest EU companies to disclose, amongst other things, the due diligence process that they implement with regard to environmental and social issues” (European Commission, Corporate Social Responsibility, Responsible Business Conduct, and Business & Human Rights: Overview of Progress, p. 21). And great steps ahead have been done on this front if we think that, based on a study made by KPMG, almost all sectors exceed the 70% in reporting non-financial information (The time has come- The KPMG Survey of Sustainability Reporting 2020, 2020, p. 16). Moreover, the European Union developed “Principles for Better Self- and Co-Regulation” that, combined with the CSR strategy, attempt to improve company sustainable development and help to make voluntary actions more effective. The principles offer a guideline about how to best implement the initiatives. Some common patterns are that a company should be always open to changes, according to the environment in which it operates. Then, in the implementation phase, few general steps that can be followed are the iterative improvements which means “learning by doing”. The monitoring phase that is the capability to meet the objectives and, finally, the evaluation of the results which determines the effectiveness of the improvements produced by a company.

The commonly agreed approach used to spread the CSR strategy is a horizontal approach which includes working with Member States, combined with specific attitudes for certain sectors and policy matters.

All the regulations developed over the years has allowed firms to change their organizational framework. As a matter of fact, regulation has open the possibility to

develop new approaches such as the interpretation of companies as vehicles to improve the social and environmental wealth. For this reason, companies have started to introduce systems which model the decision-making approach and the organizational structure. For example, many firms combine the environmental and social dimensions with the more traditional form of economic performance measurement and evaluation through the elaboration of specific Key Performance Indicators that also allow to convey a different message of the company's purposes both inside and outside (C. Mio, Sustainability, a success factor for businesses and banks, p.11). In the following chapters, it will be studied the impact of CSR on the main corporate dimensions that are the strategy and its application, processes and its adaptation to sustainable measures and, in particular, management control systems and their alignment with MCS designed for economic performance monitoring.

Chapter 2 - CSR STRATEGIES

In the previous chapter, it has been possible to understand that CSR is an increasingly recurring issue related to corporate proposition and that the external environment is constantly developing new expectations towards firms. Therefore, this chapter will theoretically provide the most used CSR strategies by investigating the steps to follow in order to develop the strategy and include it in the routinely activities, and by investigating the types of strategy adopted according to the different market conditions and internal resources.

2.1. Steps for the implementation of a CSR strategy

Corporate Social Responsibility can assume different forms according to the size and industry of the company. When the company is privately held and it is relatively small, there is a higher freedom in doing philanthropy. For example, in smaller realities, the company's managers are directly integrated in the local community where the organization operates. If the employer as well as the employees carry on their causes for the local communities with little donations and voluntary activities, this can be considered CSR although it is not aligned with the business philosophy. Furthermore, in the private companies, this type of CSR initiatives cannot be classified as investments that will generate a tangible financial advantage but instead these actions will contribute to improve the firm reputation and image. In the publicly held companies the structure is different. The CSR initiatives are formalized in an out-and-out action plan incorporated in the business strategy and the likelihood of obtaining a return increases (Rangan, 2012). Three main stages can be identified in the formulation of a CSR strategy:

- 1) evaluation of social and environmental indicators: it deals with the understanding of which are the main CSR issues and how they should be measured and assessed;
- 2) engagement with a wide range of stakeholders and attempt to respond to the majority of their requirement: it deals with a learning process in order to adapt the organizational structure to effectively manage social and environmental issues;
- 3) formulation of action plans to effectively address stakeholders' issues: this step includes the formulation of policies and change of processes.

The formalization of the strategy and business processes will lead to an analysis focused on the publicly held companies in this research and that will be developed in the following chapters.

The need to integrate corporate strategy with social policy has led to a change in the business management. For example, top management has also to consider investments in sustainable projects in the budgeting process and, in many cases, these investments are considered as a way to gain a social or environmental competitive advantage. Therefore, the acknowledgement of stakeholders' needs plays a key role in formulating a new business strategy that directly affect also the business process management.

According to the report "The time has come- The KPMG Survey of Sustainability Reporting 2020" (KPMG, 2020), the engagement with CSR is a way to gain a "non-financial competitive advantage", which is more concerning the enhancement of reputation. Moreover, in the strategic management view of Corporate Social Responsibility, it is affirmed that, ascertaining that a firm should take into account different stakeholders perspectives and interests, the company should focus more on a specific group of stakeholders in order to adapt its business processes efficiently. In addition, the role of management in developing a CSR strategy should consider the connection between the various CSR projects, stakeholders' interests and the business processes in order to leverage the potential synergies between social and business agendas. Otherwise, as explained by Sitaloppi et al. (2020) the peripheral approach, that is the separate execution of the core business activities from the social initiatives, will produce results that lack internal consistency and, consequently, they will fail to have a positive impact both on business and societal outcomes. Therefore, it is important for that company to find the internal alignment between corporate strategy and CSR practices to avoid a mere waste of resources.

Based on the academic article of Husted and Allen (2006), the model to implement a CSR strategy is influenced by four elements: industry structure, internal resources, corporate philosophy and stakeholders' relationships.

Starting from the industry structure, it is represented by the level of competitiveness, the threats of substitute products and the barriers to entry. For example, when the barriers to entry are high, that is, significant investments are required to access the industry, the

established companies may decide to focus on the external stakeholders and eco-friendly technologies, in order to innovate and keep the barriers “high”. Or, again, when there is a strong threat for substitute products, the established companies may decide to focus on stakeholders concerning social issues to have a high customers’ loyalty. Secondly, the internal resources may be considered not only the information systems of a company, but also its employees. So, a company that pursues a CSR strategy focusing on internal stakeholders will have the internal resources more efficient. The third element, the corporate philosophy, is important to give an idea to the external environment of the reasons why the company exists and operates. The corporate philosophy will largely affect the CSR strategy, because, according to the long-term objectives of the firm, the CSR strategy will be adapted and oriented towards the accomplishment of certain stakeholders’ requirements. Finally, the stakeholders’ relationships are the pillar of the CSR strategy. Indeed, a company cannot expect to maintain the same type of relationship with every stakeholder group and, based on different variables like the type of products, the country in which it operates, the role of regulations etc, it should focus on determined stakeholders’ groups by improving those relationships, always maintaining a good level of interaction also with the ones that play a more marginal role.

2.2. Types of CSR strategies

As it has been stated so far, the decision-making process for the CSR strategy is composed by internal and external evaluations that will result in a clear action plan that defines the policies that the company will adopt to satisfy stakeholders’ expectations. The definition of the action plan will change according to some variables, both internal and external, which are industry structure, internal resources, corporate philosophy and stakeholders’ relationships.

As outlined in the previous paragraph, given that the composition of stakeholder groups is heterogeneous, a company should target and prioritize certain groups rather than others. The most important groups are the ones most interested in the company success and these are defined as strategic groups with high priority. After having identified which are the high-priority groups, the management should start a process of long-term strategy identification with stakeholder needs at the base.

The model proposed by this study, according to Husted and Allen (2006), identifies three types of stakeholders' groups prioritization. Firstly, the company might implement a strategy with a focus on internal stakeholders that are the firm's employees. Based on this objective, the management has a limited number of actions that can make an impact that, in turn, will be limited as well. The main benefits associated with this strategy are the strong development of solid human capital and the formulation of a socially oriented corporate culture that will be reflected in a high staff loyalty; the main business processes that are going to change are the workers training programs, and the benefits offered such as flexible working hours, high-quality business equipment and a good balance of work-private life. However, as the strategy suggests, the results remain circumscribed within the organization which in the medium-term will enhance company's competitiveness.

Secondly, the management might decide to focus on external stakeholders and in particular with those related to environmental issues. In this case, the range of tools available for the strategy is much wider than internal stakeholders focus and the particular reason for this circumstance is that, to achieve this goal, it is necessary the redesign of the value chain which may lead to results both upward and downward with a sustainable supply development on one side and with responsible consumption on the other. In this way, the company will reach the efficiency in production and the economic success through the development of CSR programs along the entire value chain thanks to the joint collaboration with partners, clients and suppliers.

Lastly, the third CSR strategy identified is the one focused on external stakeholders and local community in particular. This type of strategy will ensure the non-financial competitive advantage since the corporate philosophy will be aligned with the one on the environment in which the company operates. The integration of the company in the local community will guarantee good relationships with potential customers and suppliers which means that the community will legitimate the company operations since it will be capable of reducing reputational risks, increasing innovation, and the likelihood to expand in new markets. The nature of investment concerns actions such as the development of sustainable technologies, infrastructure enhancement, improvement of education and healthcare; however, these operations will be not considered as philanthropist donations, rather they will be considered the investments made to ensure long-term stability, success of the organisation and brand strengthening. In the last two

cases, the most impactful, the company recognises the growing shared value of creating new technologies, with the forecasted reduction of costs, the improvement of working conditions and environmental impact. Moreover, in these cases, there is the generation of financial returns thanks to the innovation so results will be more tangible, in addition to the social benefits.

To identify the most successful strategy, according to the empirical study conducted by Rangan (2012) for the Harvard Business School on a 50 CSR managers companies committed with CSR initiatives, the majority of companies identifies a combination of 40% of strategy number one, 40% of the number two, and 20% of the number three. The strategy number one is the most limited to the simple improvement of company reputation but seems to be the most effective in increasing employees' motivation and it is suitable for companies with a low budget for CSR initiatives. The others are the most concrete in improving the companies' bottom-line but these are the ones that also require a high investment even if the costs are more than offset in the medium and long run. So, it is important to underline is that a precise CSR strategy to fulfil does not exist; in the majority of situations it results in a mix of two of them.

As regards the key business participants involved in the CSR development and implementation processes, the participants involved in the CSR strategy are different depending on the type of strategy adopted. Assumed that the corporate executives as well as the community affairs managers play a key role in all the three scenarios, in the first strategy the programs are scattered so that business unit managers may be involved. In the second strategy, the main managers involved are the operational managers and the procurement and logistics supervisors. For instance, as reported by Rangan (2012), a company operating in the coffee industry was implementing a program in CO₂ emission reduction along the supply chain and the managers that monitor the standards upward the production chain was the procurement managers while the community affairs managers monitor the responsible conduct of the distribution channel. Moving forward on the third scenario, this strategy involves the highest management levels such as the CEO and the CSR officers. One of the most important means that pools all the different areas and levels of the business participants in the CSR strategy is a solid communication system. According to Chaudhri (2014), communication among participants will be the key instrument used to build awareness, share information and garner support for CSR

activities. This means that whereas external communication is essential to build trustworthy relationships with stakeholders, internal communication is important as well to increase the level of commitment of all the business participants, from CEO to employees.

Furthermore, the implications of the different participants in the CSR strategies are a different decision-making process. In the first case, the initiatives are more bottom-up projects and, as it has been noted, they might be originated from the business unit managers; in the second strategy, the decision-making process is a mixed fashion because it can involve operational and executive managers; finally, the third is the one that follows a more top-down approach since the directives are usually issued by the senior executives. On the basis of the research conducted by Rangan (2012), it can be deduced that the first strategy is more “local”, whilst the second and third are more “global”. Indeed, the CSR strategies might be seen under a different point of view that is the centralized or decentralized strategy. According to Muller (2006), “A global strategy might involve an efficient transmission of (proactive) CSR practices throughout the organization worldwide, but may also lack ownership and legitimacy at the local level. While much more responsive, a local strategy could be fragmented” (p. 189). In particular, the centralized strategy is easier to manage when the company has solid channels of communication, whilst the decentralized strategy has the advantage to enhance the relationship with local Regulators. Most importantly, whereas the decentralized strategy might be suitable to develop ad hoc responses to stakeholders’ requirements, it might be risky because it depends on the location of the subsidiaries. This theory proposed by Muller (2006) is based on the evidence that when a multinational has subsidiaries in countries which request lower environmental and social standards than the ones required in the parent country, this might lead to an inconsistent and unbalanced CSR strategy. Therefore, this implies that the adoption of either a centralized or decentralized strategy should be reasonably assessed based on the stakeholders’ requirements and, in addition, on the location of the parent and the subsidiaries.

2.3. The integration process of CSR and corporate strategies

The implementation of a CSR strategy is different from one company to another. It depends on a large amount of variables such as the industry structure and the company’s tangible and intangible resources which will lead to a different prioritization of the

stakeholders' groups and, thus, a different strategy. As mentioned, three main strategies have been identified:

- Internal stakeholders focus (e.g. employees)
- External stakeholders focus whose main interests are environment related
- External stakeholders focus whose main interests are society related

In many cases, the CSR strategy results in a combination of all these three or two of them, in particular in multinational companies. The different weight given to each stakeholder group and so to each CSR strategy, will also impact on different processes and, thus, will involve different business participants.

However, it has been noted that every strategy has some common steps for its formulation and implementation, which are the evaluation of CSR concerns, the engagement with stakeholders to understand their expectations, and the realization of an action plan to achieve the established goals.

According to Gazzola and Colombo (2014), the result from the development and implementation of a CSR strategy should be the interconnected relationship among management, organization, community and strategy.

So, the three common stages identified should end with the integration of CSR and corporate strategy. According to Husted and Allen (2006), the first stage requires the internal auditor to grasp all the information about all the sustainable programs in place, their costs and projected benefits. This phase is characterized by the collection of information that will have an impression on external stakeholders whereas, at the same time, all the initiatives, especially the most hidden bottom-line, should be taken into account.

After having recognised the programs, depending on the strategy in which they are identified, the company will follow a different integration process. In the first case model, the company should lead all the philanthropic initiatives in a unique strategy view, oriented to act in favour of employees but with few corporate strategy distortions; in the second and third strategies related to the value chain, it should provide quantitative indicators of the CSR strategy impacts which usually translate in an annual sustainability report that, in order to be more credible for stakeholders, should account both the

positive and negative externalities of company operations. An example of the quantifiable impacts is, for instance, the cost reduction thanks to the energy consumption efficiency during product transformation.

The third step is called the “connection of the dots” since it is the sum of the previous steps once the company have identified the CSR programs, they should be translated in a comprehensive structure that is mainly oriented toward one of the three CSR strategies and that provide quantifiable results that should be added to the financial disclosure. However, as previously mentioned, the connection of the dots can be also referred to the identification of simultaneous different strategies because a company may have all the three strategies in place at the same time and therefore they have to be coordinated.

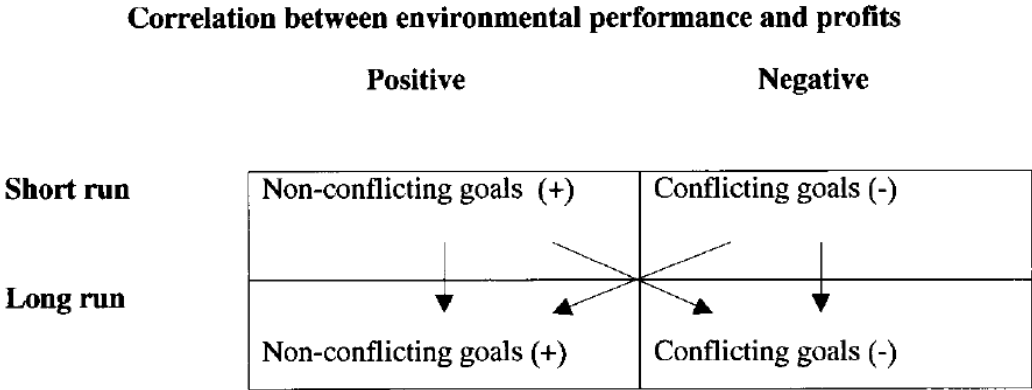
So, the three strategies, whatever is in place, should reflect the company leaders mission and vision in order to be consistent with the corporate identity. Indeed, “the corporate identity could provide the catalyst and optimal platform for developing and implementing CSR in congruence with what the company stands for” (Tourky et al., 2020, p. 694). This means that the evaluation of ethical practices may be conducted through the lens of the corporate identity constructs and these values may be used as a starting point for the CSR strategy adoption.

However, as it has been noted in the first chapter, the CSR activities may be pursued for the mere social and environmental purposes or for a more opportunistic purpose. It should be underlined that not always the CSR activities are profit-sacrificing, rather there are some conditions in which CSR may also improve the bottom-line. This depends on the degree of integration of corporate and CSR strategy and on its propose, that is opportunistic or altruistic because, as it will be examined, whereas the opportunistic behaviours may generate profits in the short-run, they will create a boomerang effect in the long-run and, on contrary, whereas the altruistic behaviours may seem profit-sacrificing in the short-run, they will guarantee a long-term success.

Lothe et al. (1999) demonstrated in the academic research “Compensation systems for improving environmental performance”, which are the cases in which corporate and CSR objective are aligned to improve both financial and non-financial performance- being consistent with the corporate strategy- and which, on contrary, are those scenarios in which they are in contrast.

The theory of the CSR strategies is more developed in the context of environmental compliance because it has been the issue that require the main monitoring in the course of the years while the social concerns is a relatively new theme. In the process of environmental strategy implementation, different companies may face different challenges, depending on whether the CSR strategy is correlated with financial objectives. In fact, CSR strategy may be also profit-generating when, for example, aims to save raw material waste and, improving the relationships with regulators, improve company's image and sales. On contrary, a conflict in the strategies exists when CSR requires investments with uncertain payback periods or when additional expenses are required in the operations without a congruence in the increase of revenues. In general, the first scenario has been identified by Porter and Kramer (2006) as strategic CSR, in which it is part of the strategy and the level of firm commitment is higher; the second scenario is more in line with responsive CSR, which has a lower level of commitment. The types of conflicts may be summarized in the following matrix:

Fig 1. Different categories of CSR strategies application



Source: Compensation systems for improving environmental performance”, Lothe et al. (1999)

As it may be noted, the challenges depend on the relationship between CSR and corporate performance in the short and long run, that are directly affected also by the industry in which the company operates. In some cases, making the products more “green” increase profitability both in the short and long term, by reducing raw materials costs and increasing market shares. Other companies will face high initial costs- for example in new technologies to reduce CO2 emissions- that will be paid back in the long run through

emission tax reduction and production efficiency improvements. In this latter case, the long-term results may be undermined by the managerial myopia. Indeed, Gong and Ho (2018) investigated that firms' managers engaging with CSR tend to achieve opportunistic cost reduction to enhance short-term performance at the expense of responsible investments, such as certain types of R&D costs. From this observation it can be deduced that although the CSR and corporate performance may be aligned in the long-run, the organizational structure calls for an effective rewarding system linked to responsible behaviours.

Then, there are two cases of corporate goals conflicts. The first one, is when the CSR investments never payback and thus the correlation between environmental performance and profits is negative both in the short and in the long run. In these circumstances, managers invoke the trade-off between socially responsible behaviour and profitability (McWilliams and Siegel, 2000).

The second one, corresponds with the case of engaging in CSR for opportunistic purposes and, in particular, to only increase the bottom-line. There seems to be a correspondence between the two strategies because the company invests in poor quality technologies that improve CSR performance in the short run, but the investment turns out to be very costly when, in the long run, more advanced technology outlays are required.

Overall, whatever the position of a company is, it should be considered that profit-related measures are expressed in numeric terms and follow accounting principles; the CSR performance have quantitative and qualitative methods that change case-by-case, depending on which field of CSR a company decides to focus on, meaning employees, environment or community. Nevertheless, Li and Toppinen (2011) highlighted that "a lasting case for CSR in business could only be made by embracing CSR principles with radical changes in the fundamental values, policy principles and operational procedures through double-loop organizational learning" (p.113).

Along with the focus on single stakeholders' groups, a company may decide to focus on a wide range of stakeholders that will lead to combined effects that should be carefully evaluated. Nevertheless, the general effects that pool all the three strategies identified is that the CSR strategy will, in many cases, increase the employees' satisfaction which will lead to an increasing quality of customers services. The higher customers satisfaction will

translate in a higher loyalty which will positively affect the firm's returns. If the company guarantees higher returns, it will achieve the fundamental goal of increasing the shareholders' value. The positive correlation of financial and non-financial performance is not a synonym of company's opportunistic behaviours. Indeed, in many situations, the CSR activities such as the reduction of energy and water consumption will lead to a higher cost efficiency, as well as the environmental improvement. Moreover, the engagement with local community will increase the acceptance of the firm and will attract new customers, which, in turn, might increase sales. On the other hand, there could be situations in which the company is not capable to obtain any significant advantage when investing in CSR activities and, thus, they result profit sacrificing. This may be attributable to a poor CSR strategy formulation and integration or to a wrong identification of the key stakeholders.

Even though the positive correlation between financial and non-financial performance reflects the application of a good CSR strategy aligned with the corporate one, when the company increases the returns in the short-run that do not keep following this path in the long-run, it may be, in some circumstances, a synonym of an attempt to engage with CSR with the mere purpose of boosting profits (Lothe et al. 1999).

Chapter 3 - CSR WITHIN BUSINESS PROCESSES

As it may be noted from the above-mentioned strategies, the business processes are subjected to changes, independently from the type of strategy adopted. The business process can be defined as a series of interrelated activities with the ultimate objective to deliver value to clients and create a positive economic result for the company (Appian, 2021). With this definition in mind, it can be said that in the first strategy the main processes that change are the ones related to the Human Resources department, in the second and third strategy the processes of production through the implementation of new technologies and the operations of the procurement department. As Husted and Allen (2006) have highlighted, the second and third strategies, the one focused on external environment and local communities, will require a major change on business processes, depending on the range of stakeholders involved along the value chain whilst the first one will generate little impacts on business processes with the main adjustment on the interests and perspective of company's owners, management and staff. Lastly, the CSR strategy does not have to be interpreted as a different strategy from the corporate one, rather it has to be integrated in the main business processes to guarantee both the financial and non-financial success of the entity.

3.1. Path to adapt processes to CSR

As reported by Yuan et al. (2011), one of the most challenging hurdle for the implementation of an efficient CSR strategy is to "routinize" the CSR initiatives that have been selected as the best ones to achieve the established sustainability goals. Indeed, it can be said that a business process improvement occurs when a CSR initiative becomes a CSR "practice", that is the "stable pattern of decision making and action intended to improve every new CSR initiative's internal coherence with other CSR practices, as well as internal and external consistency, respectively, with prevailing business routines and external stakeholder demands, and to maximize the resulting contribution to business performance, in terms of profitability and growth". (Yuan et al., 2011). Thus, CSR may lead to business process improvements when it is integrated with day-to-day activities.

The path that the management should follow in order to improve the business processes is suggested by Kerremans (2008) and summarizes in six essential phases. This model is offered since many companies do not have an overall understanding of the business

processes but on contrary they are often scattered and not formalized so the consistency between existing and new practices may be difficult to find. The path starts with the awareness of some business processes improvement opportunities or existing problems that need to be figured out. To some extent, it should be identified the scope of the business process improvement and the stakeholders involved. Basically, in this first phase the company analyses the overall picture of the business activities and the external environment in which it operates. Then, the second phase is characterized by the identification and analysis of the single process governance, structure and performance metrics. This means that also the potential improvements for the business processes start to emerge. The third phase is the most decision-making phase, in which the management should decide which is the course of actions to follow in order to make the business process more efficient. It is based on the choice about which initiatives to consider and the implications for the other business processes that should integrate with each other. This phase includes also the integration with the outside partners' business processes. Once the processes improvement has been identified, the company should start to acquire the resources needed which include equipment as well as personnel, in phase four. Going ahead with the following step, at this point the process improvement should be successfully implemented and the link between it and the corporate goals should become automatic and dynamic. On the final stage, the improvement has been applied, the business structure should have become more efficient and agile and a new criterion of monitoring has to be implemented in order to measure the performance obtained by the enhancement.

Overall, this process improvement approach has been presented because it can be applied to every type of business process change, being it for operative or sustainable purposes. Indeed, as highlighted by Yuan et al. (2011), the systematic conceptualization of the path for business process changes helps to establish the linkage between CSR practices and prevailing business routines. Furthermore, as it has been reported in the previous chapter, whereas the research on the different types of CSR strategy focuses on the evaluation of stakeholders' expectations, the integration of CSR activities within business processes and the achievement of an improvement focus more on the bundling of CSR within core activities, which means that a major emphasis is given to the organizational and managerial patterns rather than the societal aspect.

This model is based on the assumption that the improvement of the business processes will lead to a lean management and ultimately enhance corporate performance. It can be applied to the CSR strategy because, as it has been highlighted, a new corporate strategy which embed a CSR strategy, will partially or radically change the business process of a company and lead to some benefits that can be generally summarized as long-term success. In fact, as it has been proved by the study of Kamyshnykova (2019), taking into consideration a wide range of stakeholder requirements and, thus, developing a CSR strategy, will create the basis for the development of specific activities to improve the business processes. “The range of improvements can vary from continuous improvements to radical restructuring (reengineering) and leads to increasing the company's competitiveness and its sustainability”. (Kamyshnykova, 2019, p. 9)

After having considered the significant elements that composed a business process improvement, it should be analysed the organizational dimension and the role that it plays and how it has to be modified in order to make the improvement concrete. As the business process improves, some characteristics of the business process should evolve as well. According to Chen et al. (2018), the first one is a tough trait to change and sometimes its reformulation may be dispendious: the organizational behaviour. When talking about organizational behaviour, it is meant the corporate culture and the linkage with stakeholders. The improvement will add a new element to the organizational construct so new messages has to be transmitted about the relevance of the new business process in order to redesign the corporate culture. The second characteristic is human resources; common beliefs that shape the organizational behaviours are translated in the corporate attitudes needed in each business process initiative. The restructuring of a business process should be firstly guided by an effective governance which defines the decision-making, accountability and monitoring of processes execution. Then, the methods and techniques, the third trait in a business organization, will support the actions to be taken in order to operate the business process consistently with the governance directives. Finally, the technology will help the work flow of knowledge within the organization to generate an efficient productivity thanks to the new business process. If all these aspects go towards the same direction, the business process improvement will be achieved and this will result in a good strategy implementation.

The triggers for a business process improvement are usually related to some people acknowledgement of the need to change some procedures. However, when we talk about CSR, the process may be inverted in the sense that common values can start to spread out in the organization, that will lead to change in business process, which just need to be formalised with the above-mentioned business process improvement. This means that in this case the enhancement starts from the human resources and their behaviours.

After having identified the different CSR strategies and the integration path in the business processes, it is important to highlight which are the main processes affected by the CSR strategy implementation. In the following section, it will be studied all the major changes that a sustainability strategy may bring to the business process and an additional role added to the management structure, introduced in the recent years to deal with sustainability issues, that is the Chief Sustainability Officer.

3.2. The main processes involved in CSR

From the literature review, it emerges that the main process affected by the CSR policies is the supply chain for its potential of reorganizing the use of the raw materials, making it more cost efficient and environmentally sustainable, with the increasing importance to extend responsible initiatives to the supply chain's partners (Maloni and Brown, 2006). Today, the supply chain is identified as the most important process of an industrial company; the outsourcing business trends as well as the information technology and globalization have led to the organization's awareness that the supply chain is also the riskiest business process to manage since they have become global chains which are more exposed to risks. For example, "consumers and non-government organizations (NGOs) criticized the apparel company Nike regarding sweatshop labour issues at its overseas suppliers" (Maloni and Brown, 2006), as it will be examined in the next paragraph. The role of CSR in the supply chain is increasingly relevant in mitigating these risks by enhancing competitiveness and gathering sustainable funds from "green investors" (Trkman and McCormack, 2009). In fact, as reported by Valdez-Juárez et al. (2018), when CSR is combined with an efficient supply chain management, it may lead to significant quantitative and qualitative benefits for business. On the other hand, additional risks should be considered, including those ones related to the future challenges of environment and society as well as the costs that it will face to make its supply chain more sustainable.

3.2.1. An example of sustainability-related risks in the supply chain: the Nike scandal

To better explain the concept of CSR, it can be reported an exemplary case of the importance of the evaluation of the supply chain risks. In June 1996, the magazine *Life* published a shocking image of a 12-year-old Pakistani boy that was sewing a Nike soccer ball on the floor. The company was severally embarrassed by the scandal, mainly because it was considered a respectable one until that moment, with millions of customers. From investigations emerged that some of the manufacturing contracted in Vietnam was exposed to toxic fumes dozens of times over the Vietnamese legal limit and that they employed child workforce. Moreover, the weekly hours worked amounted to 60 with a salary of 60 cents per day. So, a real scandal for a company that in the previous years faced a huge growth. However, it is because of this rapid growth that the top management did not take into account some standards and code of conduct that the supply should had respected, since they only consider which producer would had been able to manufacture Nike products at the lowest cost. This was just the first scandal affecting Nike image because in the following years more factories were found out. Only two years later, in 1998, the CEO Phil Knight confirmed in a speech at the National Press Club in Washington D.C. that “The Nike products has become synonymous with slave wages, forced overtime, and arbitrary abuse”. From this point, Knight seized the moment to introduce a new company’s philosophy for its supply chain. He committed to Nike to take the responsibility for the workers of its contractors, eliminating child labour and implementing a monitoring system to ensure the respect of human rights. This was the starting point for a path that sees Nike as the promoter of Corporate Social Responsibility by setting a program of audit for all the factories involved in Nike supply chain. In 2001, the corporation changed its governance structure as well, by introducing a committee for corporate social responsibility and become one of the first companies to draft a Sustainability Report and, in 2005, it took the tough decision to disclosure the names of the factories partnered with. All the contractors have been rated every year, in order to follow a good code of conduct. Then, in 2011 Nike established the Manufacturing Index, sourcing Standards that Nike expects its suppliers to respect. In this way, Nike extends its ethical mindset also beyond its four walls factories since it requires to contract manufacturers, the respect of certain standards, in particular concerning workers’ rights and minimum wages. Today, Nike is aware that it has a significant influence in the supply

chain and, as reported in Nike's website (2021) "Our greatest responsibility as a global company is to play a role in bringing about positive, systemic change for workers within our supply chain and in the industry".

3.2.2. Analysis of the risks

As it has been demonstrated by the literature, a sustainable supply chain management will lead to a variety of financial and non-financial benefits (Wang and Sarkis, 2013). Nevertheless, other few studies focus their attention on the associated risks, in order to provide a systematic management of the supply chain sustainability issues (Hofmann et al., 2014; Hoejmose and Adrien-Kirby, 2012).

This is because the main risks in traditional supply chains are different from the risks related to sustainable supply chains. The formers are associated with supply delays depending on the suppliers, changes in product design, quality issues, damaged goods and capacity constraints. In particular, it may be distinguished in procurement risks when they are related to inventories and stock-outs; logistics and transportation risks when they are related to the delivery; relational risks associated to moral hazard, demand risks including demand elasticity, information asymmetry and inaccurate forecasts. They are mainly endogenous risks, because depends on the company's activities within the supply chain processes but there are some risks such as the demand related uncertainties which may be considered exogenous. However, as it has been noted in the Nike case-study the risks that the company incurs were related to social issues. In fact, even if Nike reached the cost-efficiency in its supply chain, this was directly in contrast with the social risks. Therefore, the increasing awareness of the customers and communities of the firms' impacts on natural and social environments, has led to the analysis of further risks which affect the company's reputation and its financial exposure, in addition to all the relationships undertaken with the members involved along the supply chain. The main risks associated with the environmental responsibility are the improvement of the ecosystem, the assessment of the air (greenhouse gases emission) and water quality (packaging waste), and the respect of the natural resources when pursuing productive activities (energy consumption). The social risks refer to the responsibility of the company towards employees (unfair wages and child labour), customers (product quality and safety), governments and communities (discrimination). All these factors may affect financial as well as the non-financial performance and, in particular, sales and stock price

through the spread of an either positive or negative reputation is strongly influenced. According to the academic article of Giannakis et al. (2015), “a firm’s corporate strategic objective is to select which risks to incorporate in its governance structure and operations and which to transfer to the external environment, in a way that could enhance its value proposition to its customers” (p. 457). Therefore, a company should interact with the different actors with the aim of exchanging values that will be then applied to its strategic choices. However, few articles have analysed how to adapt these values to the supply operations in practice. The academic article of Giannakis et al. (2015) applies the stages of the traditional risks management in the supply chain to the sustainability-related risks. The main steps for the risks management are:

- Risk identification: in this phase all the potential risks are identified using tools such as checklist, control tools and taxonomies.
- Risk assessment: all the risks identified are evaluated in accordance to their likelihood to occur and the assessment of their potential impacts on supply chain operations.
- Risk analysis: the examination of the risks is based on putting all of them together and organized in accordance to their importance. Then, all their potential causes and consequences are investigated. This is the most experimental phase where the cause and effect relationships should be identified. On the basis of simulations and sensitivity analysis, the risk management is led to the fourth step.
- Risk treatment: the treatment of a risk is the response of the company to a determined threat. The company may react in different ways according to the magnitude of the risk. It may decide to avoid the risk by eliminating a certain business process or, most likely, by changing the supplier or the technology which generates the risk. In the example of Nike, when the scandal of working abuse arose, it decided to interrupt the relationships with those manufacturers. Secondly, the firm may decide to apply a series of preventive measure that should mitigate the risks. Always dealing with the Nike example, the company sets up Codes of Conduct as a control system to guarantee the appropriate monitoring of the working conditions in its partners’ factories. Thirdly, the firm may decide to share the risks with other supply chain components. This will increase the dependency within supply chain operators and, in fact, this type of risk treatment

is more likely to occur when the relationships are solid and long-term. This is the case of peculiar production of goods such as ships manufactured by the Italian company Fincantieri. Its sustainable approach to the supply chain is almost entirely based on the long-lasting and fiduciary relationship with its partners, so much that if the global leader faces some risks, they will be also imparted to the partners that, in turn, will bring their contribution to avoid such a situation. In this example, the sharing of risks is the most effective way to mitigate them. Finally, the threat may be retained and accepted when the actual costs of eliminating that risk are higher than the cost to take on the damage. However, there are some cases that the retention cannot be applied. For example, Nike would not be allowed to retain the child labour because it would be socially unacceptable.

- Risk monitoring: once a risk has been mitigated, the company should keep monitoring the arise of other potential risks and investigate for continuous improvements of its positioning.

Whereas it has been confirmed that the tools for the traditional supply chain risks management may be applied to sustainable issues, it is worth to say that, in the risk assessment phase, while the causes of the sustainability-related issues may be easy to identify, it cannot be said the same for their consequences and responses. This is because of the difficulty of expressing the impacts in quantifiable terms, a recurrent problem that has already been identified in this research. In fact, sensitivity analysis or controlled experiments are more suitable for financial performance, while in a sustainability point of view, what should be evaluate is the company's reputation and the stakeholders value. On the other hand, companies should be aware of the fact that sustainable-related supply chain risks should be precursors of the traditional threats because, for example, a natural disaster due to a supply chain accident might be the cause for the demand decline.

Giannakis et al. (2015) finds out that, by interviewing 30 companies located both in France and in the United Kingdom, companies are aware that the sustainability-related issues have significant consequences on organization, they have occasional occurrence and they are difficult to sight. By comparing the three dimensions of social, environmental and financial, the companies seem to attach more weight to environmental and economic issues. This is because, according to the survey findings, the organization consider

environmental risks as endogenous and social more exogenous. From this distinction, the survey also highlights that the company assigns a higher importance to the endogenous themes because they are directly related with the company's (lack of) actions and thus there is a nexus with the corporate responsibility. Rather, when they are exogenous, the degree of responsibility is difficult to assign along the supply chain. By catching the positive insights of this study, it confirms that there is a growing awareness of the corporate social responsibility in the corporate cultures.

According to these findings, the main sustainability-related risks have been ranked. The organizations identified as the major threats the natural disaster, greenhouse gases emissions and child/forced labour. Moreover, in line with the above-mentioned results, companies are aware that, whereas environmental issues may be detected through the development of new technologies, child and forced labour remains difficult to catch out. The assessment of the risks is based on the Pareto model for establishing the cause-and-effect relationships, by which the 20% of the causes generate roughly the 80% of the effects. Furthermore, for the analysis of the risks, the organization studies the correlation among risks. In fact, if two risks have a positive correlation, the mitigation of both risks may be achieved in one time; on contrary, if they have a negative correlation, the mitigation of one risk may rise the effect of the other.

In conclusion, the supply chain is a fundamental part of the company's operations and Corporate Social Responsibility is gaining momentum in this context. Therefore, organizations should monitor sustainability-related risks in addition to typical risks because their activities may generate stakeholders' reactions that affect company overall business success. The proper treatment of supply chain risks related to sustainability is a macro-business process that changes in order to integrate CSR strategy with the corporate strategy, by considering the sustainability-related risks in the decision-making process and in the control systems, since integration of sustainability in the supply chain has been revealed as a mean to both respond to stakeholders' requirements and build competitive advantage.

3.2.3. Materiality matrix assessment

A useful tool that organizations may implement in order to respond to the major risks encountered is the materiality matrix. It may be used in the first stages of the risk

management that are the risk identification and assessment. According to the GRI G4 guidelines, “Materiality’ are “those topics that have a direct or indirect impact on an organization’s ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large”. Therefore, the materiality analysis is important to identify those issues that are more significant from both the organization and stakeholders point of view. The first phase includes the identification of a set of relevant sustainability issues. They are identified through an internal examination of the business processes and an external analysis through survey done to certain groups of stakeholders. So, the materiality matrix considers the environmental and social concerns under two lenses of analysis, looking at the impacts on the corporate potential growth (on the horizontal axis of the matrix) and stakeholders’ values (on the vertical axis of the matrix). The result will be a matrix that highlights which issues should be prioritized.

As it has been described in the analysis of the CSR strategies, a firm should focus on determined groups of stakeholders and, consequently, on determined groups of issues. For example, a company producing quilted jackets may be more interested in safeguarding the gooses in the procurement processes and this will be probably the main concerns of the stakeholders as well. In the case of a company producing medical devices, the main business and users concern is related to the product safety. In these examples, the main sustainability issues are the most relevant also because they are the ones in which companies of each relative industries are expected to bring their major contributions. In a materiality matrix perspective, both the animal safeguard and the product safety will be located in the north-east section of the graph, being the relevance considered as very-high.

On the basis of the materiality matrix results, the company will have a more complete overview of the responses to develop to contrast the main risks identified, even if today it is mostly used to understand what should be reported in the organizations’ sustainability reports.

3.2.4. Supply-chain sustainable innovation

In many occasions, the response to risks may lead to the development of sustainable innovations. Sustainable innovation can be defined as “the introduction of modified or novel practices into production processes, technologies, products techniques, and

organizational systems with the focus on lessening environmental damage” (Gupta et al., 2019, p.1). It is part of the sustainable supply-chain management which aims to enhance the flow of capital and the smooth communication among partners that, following a Triple Bottom Line approach will lead to the maximization of all the three dimensions, guaranteeing a win-win-win outcome. In the supply chain context, innovation encompasses sustainability and, in fact, innovation may be used to minimize the socio-environmental impact of the production activities. However, sustainable innovation is not an immediate path to follow: it requires careful evaluations, constant guidance policies during the innovative process and employment of funds. The latter, according to the study of Cecere et al. (2018), has been demonstrated to be the major barrier of sustainable innovation. Other main barriers to innovation are the lack of awareness about the benefits of innovation among the organizations involved in the processes by considering innovation as a cost and not as a potential source of revenues, and lack of skilled staff. On this respect, Gupta et al. (2019) conducted a study to identify the best strategy to tackle these barriers. The study was conducted in India since it is one of the major countries involved in the supply chain process for many multinational companies. The findings demonstrate that the technological barrier is the most tough to overcome because in an emerging country like India there is a severe deficit of the technological know-how necessary in order to be more sustainable, even because the R&D departments result to be almost absent. Another barrier to changes is the cultural barrier: many manufacturers have the perception that sustainability will compromise the quality of the products to compensate the cost reduction and the use of more eco-friendly materials. Moreover, employees may prefer to not change the production process for the fear of a work overload and of being inadequate for the skills required. Finally, the third main barrier to innovation is the economic constraint. The problem is not related to the money per-se but to the fact that firms prefer to invest that money elsewhere, such as in property and plants.

When people think about India they feel like, being a developing country, it is not surprising to meet these kinds of barriers. However, in the context of a globalised supply-chain, it should be taken into account that all the major corporations have production branches in the emerging countries like India and whereas the design process may be located in the US or in Europe, the manufacturing processes are mainly located in those Nations. Therefore, barriers to the development of sustainable production systems affect the supply chain of the major multinational organizations which, in turn, might have an

impact of billions of customers. In fact, suffice it to mention the example of Nike to understand that the level of responsibility of a relative small partner had a huge effect on the responsibility of Nike.

Moving to the strategies implemented to tackle these barriers, the main problem is the cultural constraint in sustainable development and the incentive-based strategy results to be the most effective strategy for dealing with it, as well as with all the other barriers. It concerns the promotion of the allocation of funds for sustainable initiatives. Through an incentive-based approach, employees will be encouraged to invest in technologies related to CSR and to develop an innovative thinking. The incentives will enhance new technological development and will tackle the employees' resistance to sustainable innovation, thus, enhancing also the corporate culture. For overcoming the problem of the low-quality product perception, the best strategy that a company may implement could be, for example, related to the "marketing and promotion". Promoting the benefit of sustainable products can be a useful way to stimulate the demand by making more aware both the employees and customers.

In the case of supply chain management, as well as in the review of the integration of corporate strategies with CSR strategies, the approaches adopted to deal with CSR are not a standalone, rather they should be integrated as a mix of strategies to overcome different barriers.

3.3. The people dimension of CSR

What has emerged from the analysis conducted so far is that employees play a moderating role, in particular in the context of CSR integration within organizations. On the other hand, a company that is attempting to become more sustainable may use CSR to engage more with its employees, as it has been examined as being the first CSR strategy to implement. So, CSR has a double function that may be used to foster employees' engagement and, at the same time, the increasing engagement will, in turn, fosters bottom-up CSR initiatives. From an internal perspective, CSR should be implemented as a relationship management strategy.

In this respect, Chen et al. (2018) examines the relationship between organization and employees' attitudes. They based the study on four scales:

- Control mutuality: the power to influence one another
- Trust: the confidence in one another
- Commitment: the willingness of the parties to maintain the relationship
- Satisfaction: the set of favourable impressions

The findings revealed that when the firm engages with CSR, all these four elements increase and, in particular, trust and commitment. In relation to trust, people will rely on company promises, they will feel involved in the corporate decisions and, most of all, people are sure about the accomplishment of the company of what it said. With regards to commitment, employees will perceive that the company is establishing a long-term relationship with them and they will value more the relationships with the company compared with other organization. The satisfaction will also increase; people will benefit the relationship and will be happy to interact with the company.

Corporate actions taken in favour of CSR, will increase the employees' perception of the employer's fairness that will result in positive behaviours that, at the same time, will feed the company's CSR. Therefore, the CSR may be seen by companies as a strategy for retention of employees that consequently will reduce the costs of people turnover and increase the workplace well-being. On the other hand, it can be said that the relational side with employees becomes a strategic element when dealing with CSR. For this reason, the recruitment process, the first stages of the relationship establishment with employees, is considered one of the most important processes that should change to integrate the CSR strategy within the organization and to align people behaviours to company's interest.

3.3.1. The "relational" process

Given the importance of the employees' role, another fundamental process that should change when the organization tries to change its organizational strategy and processes is the recruitment. Through the recruitment process, companies search and select the best candidates to fit the requirements for a certain job that include experience, skills and personality (Ahmad et al. 2002). Both the resource-based view and the socio-technical systems theory (the approach that recognizes the interaction between people and technology in workplaces) support the idea that paying the right level of attention to the recruitment process will help a company to achieve a competitive advantage. During the

process, the firm should also be capable to gather the intrinsic values and beliefs of the candidate to understand whether they are in line with the organization mission and vision because if there is a fit between employees' attitudes and organizational orientation, it will be translated in "quality management practices". Thus, what can be affirmed, in the context of corporate social responsibility, is that the Human Resource management is an integrating part of the control systems by attempting to create all the pre-requisites to align the corporate culture with the personal culture of the employees (Jamali et al., 2015).. However, it is easier for organizations to focus on "hard skills" which are the technical knowledge, and the focus on "soft behavioural skills" remains often marginal. Instead, when implementing a recruiting process, firms should consider that while the technical skills may be acquired in a relatively short-term period, soft skills will require more time, or worst, in some instances they cannot be developed at all. In fact, only if the right people are recruited the company may implement smooth communication, teamwork, cross-functional activities, training and empowerment: all aspects that, added to sound corporate and CSR strategies, may guarantee the efficiency of management practices. When, on contrary, the company focuses mostly on technical skills the result is that the management initiatives will be short-lived, with few impacts on the company's competitive advantage (Gong and Ho, 2018). For this reason, the literature requests for the alignment between corporate sustainability and Human Resource Management (HRM) that has well-developed capabilities and knowledge in relation to employees' engagement, organizational learning and culture change (Jamali et al., 2015).

In conclusion, the recruitment and selection process will be an integrating part of the management control systems to improve the quality of the future programs and initiatives. This process become particularly crucial when discussing about CSR programs because the "soft skills" play a dominant role with respect to the "hard skills". It is used as a preventive control system, to avoid that in the future there will be a mismatch between employees and organizational values, since prevention is better than a cure. Therefore, if the recruitment process may remain oriented towards "hard skills" for the most technical management positions, it should be re-organized when the company is seeking to implement a CSR strategy, because the main focus should be oriented towards the behavioural skills.

3.3.2. The role of the Chief Sustainability Officer

As it has been seen, the CSR changes the purposes of the company and it should change processes to impact on employees' perspective as well. To reinforce this change, a new layer of management has been added.

An emerging figure within organizations that implement CSR strategies is the one of the Chief Sustainability Officer (CSO). The figure employed is increasingly strategic in large companies because he/she is devoted to environmental and social issues within the company and towards the public with the perspective of respecting the laws in force and to maintain a good image in front of partners and consumers. The largest multinational companies have introduced this figure for at least fifteen years: the responsibilities focus, in particular, on organising corporate policies on sustainability and the fight against global warming, on the management of all international certifications (organic product, market fair trade and similar), the adoption of modern standards to calculate the social and ecological footprint, the management of corporate waste, the organization of recycling or reuse facilities, or even upcycling in some cases.

Paying more attention to the main activities carried out by this figure, those connected to the following areas can be identified:

- environmental management system (e.g. identification, evaluation and management of environmental aspects such as energy consumption, water, raw materials or emissions into the atmosphere, water discharges, waste production, all from a risk assessment and management perspective);
- product safety and solutions for disadvantaged categories (e.g. management of aspects related to product quality, design and safety, carrying out customer analyses);
- work-family balance for employees, protection of equal opportunities and the health and safety of workers (e.g. implementation of smart-working, implementation of climate analysis, management of aspects for the health and safety of workers from a risk assessment and management perspective);
- supplier management (e.g. definition and application of socio-environmental criteria for the choice of suppliers, verification of compliance with the code of ethics, verification of supplier qualification also with on-site audits);

- responses to ethical rating company criteria, internal communication and external reporting of sustainability policies (e.g. drafting sustainability reports, managing a web page and social media channels dedicated to sustainability, defining donation policies or responsible financial investment, definition of stakeholder engagement policies).

Finally, it should be noted that it is possible to believe that the Chief Sustainability Officer assumes a role that is sometimes very different depending on the organizational contexts in which he/she operates: in fact, not having specific standards for this position, there is a trend detected by some surveys to a strong "personalization" of the role in relation to personal inclinations and in line with the needs of the organization (Deloitte, 2021).

The tendency is to consider the Chief Sustainability Officer as an intermediary between the company and the public asking for more ethical behaviour in matters of sustainability and, thus, he/she deals with almost all the departments of an organization to co-ordinate all the activities related to the Corporate social responsibility. Generally, this is the role that everyone agrees on and that allows companies to even become leaders or standard-bearers of some ecological movements.

Chapter 4 - CSR AND ITS INFLUENCE ON ORGANIZATION'S CONTROL SYSTEMS

As it has been reported, CSR is playing a key role for the companies, especially for the management that is moving on for including it on the corporate strategy. However, this study wants to demonstrate that there is still narrow evidence of the change in the organization's control systems and that sustainability reporting is not always synonym of integrated CSR practices within an organization. This is because the prevalent focus has remained on external reporting and in fact, many procedures about how to formalize a sustainability report have been established over the years but reporting activities are not always combined with management control systems because, in some instances, it is used as a mean to curry favours with stakeholders.

This is not to discredit the importance of reporting process, rather this is to underline that the reporting process should be the outcome of a previous strategy formulation, implementation and monitoring. In fact, when a company develops a profit-oriented strategy, it starts by identifying its fundamental values, translating them in clear corporate objectives, develop a strategy which will define the actions that should be taken to achieve the set objectives and, finally, apply a set of management control systems to communicate which are the objectives, the strategy, monitor the results and, eventually, use those results to modify the original strategy. In addition, the management control systems will provide all the information that will be disclosed in the reports. Likewise, a sustainability report should be used for the dual purpose of gathering all the sustainability results downstream of an established decision-making process and performance monitoring to communicate them to stakeholders. The problem is that, in the context of CSR, the management control systems lag behind the reporting practices. For this reason, this research aims to provide an overall guideline about the most effective management control systems applied to CSR, supporting the theory with empirical findings.

In accordance with this purpose, this chapter will review the main literature about management control systems applied to CSR, identifying the lights and shadows of each MCS approach. At the end of this chapter, some considerations will be done about the best practices to adopt in relation to the different organizational features.

4.1. Management control systems definition

The broad meaning of management control systems, under a behavioural perspective, is referred as a set of formal and informal activities with the objective of guiding and steering the organization in its behaviours and operations in order to reach the pre-established goals. They include also a personal side related to the individuals' interests, and for this reason the literature also defines the MCS as the sum of personal and clan controls into the management accounting (MA) which is defined as practices such as product costing and budgeting to achieve determined goals (Chenhall, 2003). For a more behavioural definition of MCS Abernethy and Chua (1996), Flamholtz et al. (1985), Merchant and Van der Stede (2007) and Ouchi (1979) describe them as all the instruments adopted to ensure that employees act in the company's best interest. The literature has widely studied the formal control systems, that are all the written norms and policies that aim to direct the employees' behaviours, since it is easier to understand the link between performance and rewards. However, recent theories analysed that for emergent companies, like start-ups, the strict formalization of management control systems may limit innovation and, thus, the formal control are more effective in a mature organization.

In addition to the management characteristics and corporate dimensions, this chapter will investigate which are the most suitable control systems applied to CSR practices and how they will contribute in supporting the formulation and implementation of the strategy, as well as the enhancement of non-financial performance.

4.2. The Triple Bottom Line approach

One of the first proposal for the measurement of CSR results is the Triple Bottom Line (TBL) model, developed by the entrepreneur Elkington (1994). It is an accounting framework that has been developed in order to provide to firms an overall figure that presents and relates all the three performance dimensions: the social and environmental results as well as the financial ones. Its benefits are also based on dynamicity since by using it, a company should be able to identify the stakeholders' behaviour changes and adapt its business strategy to those changes, before that they affect the bottom-line. In this way, it is possible to analyse how much each company charges to society and environment for its activities. The approach has been widely accepted also outside the business management for its novelty and because it is commonly agreed that corporations should operate responsibly.

According to the theories, it is the most widespread tool to measure CSR performance and, thus, it is also considered the most important in shaping the accounting paradigms. This framework went beyond the common measures of Return on Investment (ROI) and Discounted Cash Flows to evaluate an investment and its financial return, rather it considers also environmental and social dimensions to provide firms the full cost of doing business (Investopedia, 2021), including their non-financial obligations. Its ultimate objective is to offer a model that companies can follow when they have to externalise their performance and therefore when they have to answer to all the stakeholders' demands with a comprehensive tool which is the annual report. It is also one of the first models that offers clear standards that allow firms to measure the social and environmental impacts in an objective way. From these indicators, it is possible to calculate a result that is similar to a financial profit/loss and it is valid for every type of customers, without biases. The followings are used as standard indicators to measure CSR issues:

- Equal opportunities
- Biodiversity
- Percentage of women senior executives
- Percentage of contribution to community project
- Safety at work

Many of these bits of information are already collected by the different firm's departments. For example, Human Resource departments will typically collect data about employee turnover, information by gender and ethnicity, employees' satisfaction; Marketing and Sales units will try to keep record on various measures of customer satisfaction; Procurement departments will track relationships with suppliers and raw materials employment; Public Relations will test perceptions of the firm within various external communities, mediating also the relationships with the Regulator.

Norman and MacDonald (2004) identified three reasons why every company should commit to measure CSR performance: firstly, in the long-run, CSR performance and profitability will converge, by underpinning the company's success; secondly, the achievement of a social and environmental positive impact should be measured to assess the degree of compliance of the company's obligations; thirdly, for reasons of transparency, a firm should fulfil the disclosure of information with all the stakeholders. These reasons have, in some cases, led companies to make some claims about the Triple Bottom Line approach like "TBL is an important milestone in our journey toward

sustainability” or “social and environmental issues should move to the top of executives’ agendas” (Norman and MacDonald, 2004, p. 245). These claims are part of their annual report, included to appease stakeholders but doing little for the practical measurement of the non-financial measures, just because it is a common business thought that the gratification of the stakeholders will enhance company’s reputation and, in turn, profitability. Rather, the right way to look at the social and environmental concerns, according to the TBL model, is to look at these dimensions as standalones bottom-lines. The tendency, though, is vague because, when the indicators are established, they become as blurry as the top management does not find them controversial. As far as the research investigated, only few companies use indicators to calculate a sustainable bottom-line. The problem, in fact, is based on the lack of methodology on the calculation and, in spite the large amount of studies about the TBL model, it still remains partially descriptive, as a mean to communicate that the company considers CSR in its activities. And even if where some calculations are made, the aggregation of so many indicators will be costly and time-employing for firms.

To better understand this concept, it is essential to have clear in mind what the bottom-line is: the financial bottom-line is the last line of the income statement, the one that contains the net income, being it positive or negative. It is obtained by subtracting all the cost incurred to the revenues generated during an established period of time. The CSR measures does not seem to fit this definition properly because it is difficult to identify the “goods” and “bads” in their calculation, and what the common unit of measure should be. For example, when we read in an annual report:

- “25% of the executive directors are women
- We cut the 10% of our CO2 emissions
- The 1% of the company’s profit has been donated to charity”

We all agree that these figures are good examples of CSR, but we do not know to what extent they are good which means that if these measures are not compared with each other, it is not possible to determine the degree of sustainable progress. In fact, the only type of comparability made by firms is between the same indicator from one year to another, within the same organization. However, the horizontal comparability among different measures is still difficult to apply. In the example above, it is not possible to say whether the percentage of women executive directors is better than the percentage representing the CO2 emission reduction. Therefore, the challenge is also to compare

good with good and bad with bad because, in this example, it is almost impossible to say which of the scenarios is the best one.

Moreover, the majority of numbers are often expressed in percentages and this makes it even more difficult to calculate a CSR bottom-line since it is not possible to sum various percentages. The main difficulty presented by the TBL is that the figures cannot be summed or subtracted as in an economic income statement but, at most, they are used to analyse their variations from one year to another.

What seems to be clear is that the TBL does not solve the problem of a common unit of measure. Whereas the methodology in the financial statements established to report assets, liabilities, revenues and expenses in the common measure of “currency”, a unique “currency” does not exist in the case of CSR outcomes. Some solutions proposed are to monetize all the measures or creating an index that allows to eliminate the problem of comparison by including, for instance, the revenues for economics factors, the management of waste for the environmental measures and the unemployment rate for the social dimension. However, a common measure adopted by all firms is still absent and this makes it difficult the comparison among different entities and, as a result, organizations will tend to give a higher weight in its calculations only the indicators in which it stands out, by making the non-financial performance less relevant for stakeholders. Thus, the usefulness of this approach remains within the single company, to evaluate whether its social and environmental performance have improved over time. To conclude the analysis of the triple-bottom-line approach, the argument proposed by Norman and MacDonald (2004) is reported and supported below:

“From a practical point of view, we will never be able to get broad agreement (analogous, say, to the level of agreement about accounting standards) for any such proposed common scale” (p. 251).

By acknowledging this assertion, it is possible to conclude that firms may react to this model in two ways: some organizations will increasingly bind themselves to corporate Code of Ethics and commit to the production of sustainability report in order to increase their reputation and open up new markets that would have been otherwise inexistent, because the realization of these document is relatively costless, in particular when they are vague and text-based, using a common jargon. On the other hand, the triple-bottom-line might be useful for firms that decide to invest in changing their strategy to improve their CSR performance and to integrate these goals within the corporate processes and

culture. A good example of the adoption of triple-bottom-line is Natura, the Brazilian leading company in the make-up and body-care production. It builds its entire business on the concept of TBL and they are also used as criteria for executives' compensation (The Green Giant, 2015, p.163):

- Economic: EBITDA
- Social: survey for employees about the working environment and their loyalty
- Environmental: carbon emissions in Brazil and in international operations.

In the latter case, the company expresses the real intention to concretely translate ideals of sustainability into tangible objectives included in the company's organizational and value proposition.

In conclusion, this section has ascertained the indisputable support of the Triple Bottom Line to the CSR development within a company. It has been reported all the main advantages brought by the TBL, in particular the possibility of taking into account the social and environmental impacts when considering new investments. On the other hand, the TBL may lead companies to assemble vague claims about their uses of the Triple Bottom Line and even when it is adopted for altruistic purposes, there are limitations in finding a common unit of measure between financial and non-financial approach.

However, the example of Natura & Co. demonstrates that the TBL has the potential for significantly contribute to the management accounting by adding the social and environmental layers.

4.3. Further developments

After the success of the Triple Bottom Line approach, in the recent years, many researches have examined the effectiveness of the informal control systems that, before the new century, remained unexplored. The cultural controls do not meet the limitations of the formal controls which, according to their nature, are more numeric and static. At the same time, they seem to be more effective in aligning people behaviours with company's interests, in particular in the context of CSR and this is probably due to its qualitative nature.

Nevertheless, it should be noted that a company cannot rely only on informal control systems when pretending the implementation of a strategy, rather, the controlling area of a firms should result in a mix of formal and informal controls.

After having discussed the pros and cons of the Triple Bottom Line model, it will be proposed a more comprehensive framework developed in the following years, specifically

in 2008, which offers a wide range of controls in addition to the result controls offered by the TBL approach, the MCS as a package by Malmi and Brown (2008). This analysis will open the discussion for the identification of the main “Sustainable Control Systems” (SCS) limitations, in particular the ones concerning their applicability and co-existence.

4.3.1. Control systems package

Malmi and Brown (2008) proposed a framework that gives an overview of all the MCS available to a company which are planning, cultural controls (clans, values and symbols), cybernetic controls (budgeting, financial performance measurement, non-financial performance measurement and hybrid measurement systems), reward and compensation, administrative controls (governance structure, organizational structure, policies and procedures).

Fig 2. Management control systems package

Cultural Controls						
Clans		Values			Symbols	
Planning		Cybernetic Controls				Reward and Compensation
Long range planning	Action planning	Budgets	Financial Measurement Systems	Non Financial Measurement Systems	Hybrid Measurement Systems	
Administrative Controls						
Governance Structure		Organisation Structure			Policies and Procedures	

Source: Management control systems as a package—Opportunities, challenges and research directions, Malmi and Brown (2008), p.291

This set of management control tools are defined as a “package” because today it is very likely to find almost all of them within a company; at the same time, it cannot be defined as a unique control system because their nature and time of implementation may be different as well as the people towards they are directed. The first one, planning, is a pillar of an organization strategic systems and can be defined as the document through which the company defines its objectives, analyses what needs to be done, whether the processes are feasible, the actions that will be essential to perform, the resources necessary to employ and finally the benefits that should derive from it. In a controlling

perspective, it also facilitates management in deciding what to do in dictating directives in order to achieve the set objectives. Therefore, whereas it is commonly intended as the decision-making process, it is also used to align the objectives within an organization by operating horizontally across different areas, is also identified as a control system. Moreover, it provides standards about the goals to be met, affecting people behaviours. Secondly, the package of the cybernetic controls links the standards to the actual performance, provide feedbacks and, in this way, orient the organization towards the goals and improvements to let potential and actual performance to converge. In particular, it comprises the budgeting process. The budgeting process ends with a provisional document which indicates the economic resources allocated by an organization to carry out one or more activities. Its elaboration takes place well in advance and involves a communication exchange between different company departments. So, even if the most common definition of budget is about the planning of available resources and predict revenues and expenses, in this model it is identified as a MCS because it also defines the acceptable level of behaviours and evaluate the outcomes resulting from those behaviours, holding also the employees accountable for some specific aftermaths.

The third, compensation and rewards, is the clear link between effort and goals achievement which serves the motivational function. In these last years, many forms of rewards have emerged like the management by objectives (MBO), and they have been proven to be the most effective control system to steer people behaviour as well as increasing their effort and focus on tasks. In some organization they are also used for retention purposes and to enhance cultural changes because economics incentives increase the likelihood that employees are committed to understand and embrace the corporate philosophy.

The fourth, administrative controls, are the control system with the major preventive nature since focuses on providing the necessary information about how activities should be performed (action controls). Organizational structure can incentivize certain relationships that uniformize the behaviours of the people that work in contact with each other and it is divided in governance structure, organizational structure and policies and procedures. The organizational structure may be intended as something static and that are not under managers influence. However, the design of the organization can be reviewed according to the needs of trigger specific actions although, accordingly with its

relatively fixed structured, it cannot be overturned. The governance structure focuses on organizational authority and provide the organizational structure to allow employees to put procedures in place and be accountable for them. Policies and procedures, the third sub-group of administrative controls, is the explicit definition of the processes to carry out and that, thus, most clearly may provide information to employees about how some activities should be performed.

Lastly, the cultural controls are those values and beliefs, either written or verbal, that indirectly influence the employees' behaviours (Malmi and Brown, 2008). The culture of a company is a key element in achieving its objectives. Corporate culture is the set of elements that influence all the corporate activities, since the culture affects the way people behave in the company, its main values, what is rewarded versus what is penalized or avoided. It influences the way decisions are made and the functions that have the greatest weight in the company. Examples are a formal or informal, hierarchical or lean culture, oriented towards procedure and flexibility, more oriented towards marketing and production, creativity over control, cooperation rather than internal competition. So, when a company has achieved a good level of cultural controls implementation, it will have the basis for the effective implementation of formal control systems. This type of control system acts in three main phases of the individual within the organization: when he/her is recruited because the company carefully hires people with certain personal values, when individuals enter in contact with other employees and in this phase, they partially adapt their values to the organization's ones, and when the values are explicit and people align to those norms.

As Malmi and Brown (2008) noted, "Cultural controls are pictured at the top to indicate that they are broad, yet subtle controls, they are assumed to be slow to change, thus, providing a contextual frame for other controls" (p. 295). The individuals that composed an organization are the link between strategy and management control systems. Therefore, it cannot be assumed that a strategy will be effective without a solid reliance on values, beliefs and norms because the latter will be the starting point to build the strategy, perform certain actions and monitor the outcomes to evaluate the goals achievement.

One of the first studies that contribute to demonstrate the existence of management control systems related to sustainability performance proposed as described by Malmi and Brown (2008), has been conducted by Crutzen et al. (2013) in the research

“Sustainability and management control. Exploring and theorizing control patterns in large European firms” in which a random sample of fourteen companies has been analysed. They were chosen among the world’s largest corporations according to Forbes ranking 2009 and filtered including only the ones encompassed in the Dow Jones Sustainability Index, the global index consisting of the top 10% of the largest 2.500 stocks in the S&P Global Broad Market Index based on their sustainability and environmental practices (Investopedia, 2021). Then, the population has been further restricted to consider only the European companies. The decision to take into account only multinational firms is instructed by the fact that it is necessary to analyse companies with both formal and informal control systems and with a clear organizational structure of the different management levels. The findings of the study have been collected through face-to-face interviews with the sustainability managers of each company and there has been a particular focus on management control systems. The data collected have been analysed to verify the presence of the control systems “package” identified in the Malmi and Brown (2008) that are planning, cybernetic controls, rewards and compensation, administrative controls. Since all these companies are subjected to the international and European standards about social and environmental performance, this standardization also implies that in all the 17 companies a minimum level of management controls related to CSR has been found. The main findings report that as regards planning, only seven out of seventeen companies have a formal action plan for long-term sustainability goals. Moreover, ten out of 17 adapt the business process management to CSR. This data leads to some considerations; even if all the seventeen companies care about CSR, the real intention to change the strategy and business processes, which in many cases entails higher costs, were limited to the 60% of the sample. The remaining 40% are those companies that did not integrate the CSR strategy with the corporate one, so the rationale for modifying the business processes were absent.

About the so-called cybernetic controls, budgets, financial, non-financial and hybrid management controls have been proved to be widely used for sustainability performance monitoring and in the majority of cases the control systems adopted were a combination of all these four. As regards the theme of compensation and rewards related to sustainability, they were still rare. In fact, only the 20% of the companies analysed used a rewarding system that directly link CSR performance to some bonuses and even in this few cases only the 50% extended the rewards to the middle management because in most

cases they are reserved for the top managers. The circumscribed reward system related to CSR for the top management is very limiting, considering that the operational aspects are mostly managed by the middle management. The reasons why this marginal application of the rewarding system as a mean to steer the employees' behaviours towards sustainability is firstly it is difficult to link rewards to specific non-financial performance for their diversified units of measure and, secondly, because the sustainability has in some ways a personal perspective. This is true if we think that even among different sustainability goals some employees may care more about environment and some others about local community.

With respect to the administrative controls, all the sample companies developed formal procedures incorporated in Codes of Conducts but the most widespread control system is the cultural control since it is the least expensive for the organizations and it is a form of preventive control system to promote a determined issue and orient employees' behaviour. In general, what emerges from the study is that, given a set of management controls, each company decides to focus on one or two of them, according to the sustainable goals that it is trying to achieve. When we refer to financial results, the majority of firms have in common some objectives such as the growth of sales and the generation of profits so, as a consequence, the management control systems are also more similar and comparable; but in the case of CSR, a much higher number of objectives may exist and therefore the comparability of the control systems and the identification of a common trait is difficult as well. Moreover, in this type of analysis there could be some biases due to the industry group. The management control systems in a company which is more "suitable" to embed social and environmental concerns in its strategy, for instance the pharmaceutical companies, may result more advanced of the control systems in a company belonging to an industry which is partially in contrast with social and environmental purposes, such as the material and utility sector. For this reason, there should be a different weight according to the different sectors.

Before moving on with the analysis, it is important to remember that one of the first reasons that encourage companies to undertake sustainable actions deals with legitimacy. Hence, in a large number of instances it is possible to observe how the CSR activities are limited to the mere acknowledgement of stakeholders' values and to some symbolic efforts. In these cases, the CSR does not influence the management control systems. In

fact, surprisingly, from the mentioned study results that there is a narrow evidence of firms outstanding in CSR (since they are included in the DJSI), adopting all the four formal management control systems identified by Malmi and Brown (2008) with a figure that jumps out about the lacking implementation of a rewarding system concerning CSR. Some possible explanations may be that the sustainability control systems are not seen as a mean to reach the established goals or even if the management is aware of their importance, they are not willing to allocate part of the firm's scarce resource to develop these procedures, especially when the outstanding reputation is guaranteed by a partial elaboration of a CSR strategy reported to external stakeholders. Another potential reason may be that sustainability has radically changed the companies' view of doing business in these last years and thus is still too early for some organization to be able to implement a solid sustainability control system because of some technical constraints.

Instead, on contrary of the financial performance, the companies seem to favour informal control systems and in this case the systems operate to involve and motivate the employees. This is due to the more "undetected" nature of the performance and, most importantly, it seems reasonable to begin with preventive systems to easily generate reactive controls later on.

Overall, what has been highlighted in this step is the general tendency adopted by some large corporations and has been detected that a company oriented towards more formal control systems is lacking in the development of cultural controls and vice-versa. Therefore, in this phase of the development of standardized procedures to manage sustainability performance, the two dimensions of control systems are not seen as complementary but rather as substitutes. However, since the control systems should co-exist in order to support each other, it can be affirmed that in the near future the structure of the management controls concerning CSR will change in favour of a more comprehensive fashion.

Independently on the prevailing control system within the firm, it is important to highlight that control systems enable organizations to implement and support the corporate- and also the CSR- strategy. The lacking co-existence of formal and informal control systems may also be attributable to the absence of a theoretical foundation that offers a comprehensive picture about how to apply the sustainable control systems. In fact, to date, few researches discuss the importance of control systems to promote

sustainability (Norris and O'Dwyer, 2004; Henri and Journault, 2010; Gond et al., 2012) and even in these narrow cases it has been taken in exam a single case study to understand their application. Moreover, despite the previous study conducted by Crutzen et al. (2013) suggests that companies prefer to implement cultural control systems when talking about CSR, the literature concerning this type of controls applied to sustainability is almost absent. To date, the most recognized contribution about cultural controls is the paper of Norris and O'Dwyer (2004).

4.3.2. The importance of cultural controls

Norris and O'Dwyer (2004) demonstrate how among top management there is a great prevalence of cultural controls and in particular the self-control in taking decisions about CSR policies.

Cultural controls can be defined as the control systems that shape the organizational and behavioural norms and that encourage employees to monitor and influence each other behaviours. Through cultural controls, employees understand what is expected from them and, moreover, they increase the likelihood of self-controls which are the natural force that pushes employees to do a good job, committed to the organization's goals. This force acts because people, in general, have a conscience which leads them to do what is right and find self-satisfaction when they see their organization succeeding. Furthermore, they argued how the cultural controls in general play a key role in mediating between the CSR strategy and the external communication of the strategy by managing the various groups of stakeholders. As it has been already observed, the difficulty of CSR strategy is about "to insert and calibrate rewards and sanctions for social performance in a way that encourages the desired degree of responsiveness with as few unwanted side effects as possible" (Ackerman and Bauer, 1976). The paper of Norris and O'Dwyer (2004) identifies three obstacles that an organization has to overcome to apply CSR strategy and well-respond to the stakeholders' requirement:

- 1) many businesses are organized as a decentralized structure and, even if the top management might formulate a good CSR strategy, the various business units might not be organized in a way that effectively respond to the CSR actions implementation because it is organized to pursue economic goals;

2) a company might have a poor social and environmental performance measurement system;

3) the organization may be unable to recognize and reward the CSR performance, despite doing it well in terms of financial performance.

On the basis of these three main obstacles, some researchers argue that the formal systems are the best ones also for the monitoring of social performance since they are more verifiable but for their difficulties in applicability, there is a prevalence of informal controls adoption. Even if informal control systems seem to be less controllable by the firm, they are a slow method to induce employees to acquire the company's values, beliefs and norms because the problem, on contrary to the financial performance, is that whereas the firm may care about certain CSR performance, employees may not, since it deals with the sphere of intrinsic values. For these reasons, the first control system to be analysed in accordance to CSR performance is the self-control, because if it is possible to understand the beliefs that underpin management decision making, it will become easier to recognize CSR performance and, consequently, to implement formal control systems as well. Self-control will circulate within an organization and, by interacting with the corporate structure, employees will enter in contact with each other and what was the personal values and beliefs of management will slowly become the new organizational culture.

Given that formal control systems are the most effective in explicitly measuring a behaviour and informal control systems are the most effective in convey the corporate philosophy, the interaction between them should be set in a way that informal control systems act to sustain the formal ones. As it is defined in the mentioned study, when the values and norms fortify the ethical behaviours consistently with the CSR strategy, the two macro types of control systems are congruent. This is not always the case because, for example, in the case-study company that the research investigated, the logistic manager brought the example of air freight. He reported that the company was trying to reduce the air freight because is damaging for the environment, even if it would be the quickest way of transport and may lead to some commercial advantages. However, when the manager has to take decisions, he prioritized the sea freight since the limitation of the environmental damages is more important despite it is in conflict with the result for which he is accountable. Therefore, the pressure for cultural controls in this example is

higher than any other type of management control even if, as the managers argue, the financial control systems would require the more frequent utilization of air freight.

Overall, what may be noted from this comparison is that when the measures are analysable, there is a prevalence of formal control systems whilst when the results are less easily measurable, the significance of informal controls, and in particular self and clan controls, increases. However, another important point highlighted by the article is that, if an employee fails to comprehend the intrinsic values of the company about its CSR responses, he/her will not survive within the organization, even if, in many cases, employees were rewarded in relation to the level of sales and profits. This is to underline that the cultural control might be the types of controls that indirectly put major pressure on employees.

This point opens another issue about social and environmental performance and the absence of solid guidelines about what is desirable in terms of sustainability performance, also because the ethical behaviour may be very different from one company to another. So, the concern is not about what is desirable, rather, about what is more desirable and how this information should be deployed through formal and informal control systems. For example, a company providing energy might decide to become more “green” by investing in renewable energy while a company in the food and beverage industry may decide to focus its CSR strategy on improving the food culture of its customers. For all the different ethical objectives that a company might focus on, there should be clear guidelines about criteria to evaluate the performance, and whether these CSR actions provoke a trade-off between social and financial outcomes, provide which one should prevail because, as reported in the example of air freight, when the control systems are oriented on promoting what is more “commercially advantageous”, the logistic manager of the company interviewed should choose to ship the goods by air freight and do not care about the environmental issue. However, since his decisions are mostly influenced by self-controls, he will care less about what is financial desirable. The trade-off arises because there are no criteria to evaluate this ethical decision and the social outcome remains unmeasured, as if it was inexistent.

In conclusion, “The absence of evidence of social outcomes which could facilitate formal reward structures for socially responsive decision making creates a tension between the

informal and formal control systems in terms of their influence on this form of decision making” (Norris and O’Dwyer, 2004, p. 190).

In their paper, Norris and O’Dwyer (2004) highlighted that cultural controls result efficient in the implementation of a CSR strategy. However, they are necessary but not sufficient. In fact, informal controls are powerful in enhancing non-financial performance, but only when they are “congruent” with the formal control systems. In fact, they demonstrate that when the organization shares values related to sustainability but the formal controls such as budgeting and performance measurement, consider only the financial aspects, the management will face a trade-off that, as supported by the case-study proposed by the authors, will lead to inconsistent results.

4.3.3. The empirical evidence of the discrepancy between formal and informal control systems

The study of Norris and O’Dwyer (2004) gives space to some other researches that embed their perspective. Durden (2008) demonstrated that publicly traded companies, with the obligation to publish financial reports, are the main companies that produce reports in terms of sustainability as well. In spite of that, little is made about MCS because accounting standards do not exist. Durden (2008) analysed a New Zealand company to demonstrate whether it integrates MCS to measure sustainability performance and to ultimately propose a framework that encompasses this kind of measures. The study is based on the stakeholders’ theory and on what actions managers should undertake to justify their economic activities and to operate in accordance with stakeholders’ values and expectations. To do that, it is essential to have a management control framework which ensures that the entire business is oriented towards the meeting of stakeholders’ interests. Overall, the study found that there was the awareness in the company that CSR performance should be measured and controlled but the company knew little about what kind of tools should be used to monitor those performance and how they are linked to stakeholders. Therefore, what was evident is the difficulty in measuring CSR performance and that every reference to CSR Management control systems was only anecdotal because what resulted to be most important was the external influence rather than the integration of the sustainability principles within the organization.

Furthermore, what emerged from the case study is that the company was attempting to adopt the Triple Bottom Line approach earlier discussed but that even if it was aware of the relevance of measuring the three dimensions, it did not have all the tools to measure the social and environmental performance and to link them to specific action plans as well as control systems. Most importantly, the company published a Triple Bottom Line report composed by the CEO statement and three main sections analysing financial, environmental and social performance. Not surprisingly, the report was mainly descriptive and anecdotal and reflected the company perspective rather than the stakeholders' perspective, although it identified the various stakeholders' groups at the beginning of its report. Indeed, as a manager of the New Zealand company affirmed, the firm did not have formal measurement of social and environmental outcomes but they were just trying to do what are seen as good things from the company point of view. By interviewing the main company's managers, the study also proved how the culture within the organization was completely far from a CSR perspective since most of them recognized profit and market shares as the driving indicators to evaluate the business trend performance and nobody of the interviewed mentioned social or environmental concerns as key indicator objects of periodic assessment. Therefore, it emerged that the Triple Bottom Line approach, the most recognised method to evaluate social and environmental issues, was just theoretical since it was not considered as a key factor for the present and future strategic position of the business. Moreover, with reference to Norris and O'Dwyer (2004), the company attempted to convey some CSR concerns but without success, since they did not correspond to what was communicated through formal control systems and, thus, they were incongruent.

Going in depth, the case-study underlined that the company relied on monthly report based on financial performance and in particular the turnover and gross margins of each business unit. However, it identified a set of KPI for its non-financial report which are reported below:

- sales, split into local and export;
- local and overseas aged debtors' balances;
- factory wages, including a separate heading for overtime;
- production measures of total cost per carton, waste costs and warehouse cost per carton;

- liquidity measures;
- stock levels broken into raw materials, packaging and finished goods; and
- foreign exchange cross rates for NZ versus Australia, the USA and the UK.

By looking at the indicators above, it is clear that they are not driven by CSR values and beliefs and they did not reflect the stakeholders' perspective since, from further interviews, emerged that some important KPI in managers' perspective are the productivity trends, waste levels as well as costs of raw materials. Therefore, this explains why the non-financial indicators are not seen from the point of view of stakeholders but rather from the point of view of the firm, that is profitability.

In conclusion, the example demonstrates that even if non-financial performance prevails in the form (reporting), it cannot be said the same of the substance (management control systems). Employees are aware of the relevance of Corporate Social Responsibility but it is not translated in a MCS structure because it is just perceived as a mean to improve reputation. By mentioning the conflict between formal and informal control systems argued by Norris and O'Dwyer (2004), it can be affirmed that, in terms of sustainability, there is a conflict between formal and informal controls because although the company tries to apply some formal control systems, they are completely in contrast with the organizational culture which is directed towards profitability. This inconsistency in the application of sustainable control systems may be attributable to two reasons: the first deals with management culture that remains tied to the financial perspective, the second deals with the lack of the necessary skills and expertise of the management in developing sustainable controls capable to combine financial and non-financial perspectives.

This is not an isolated case and, indeed, many firms that claim to implement a CSR action plan, often focus on specific projects or, worst, on reputation without really applying a strategy developed in relation with the stakeholders' expectations. At the same time, this is an analysis of a single company and thus it cannot be extended to all the companies with a good CSR reputation. Nevertheless, it calls for the necessity of distinguishing companies that really embed sustainability in their philosophy and translate it with its application on core business processes, from companies that mention CSR in their mission and vision just because "it's good for business".

4.4. Types of management control systems applied to CSR

In the previous section, it has been provided an overview of the main management control systems, following the structure proposed by Malmi and Brown (2008). Crutzen et al. (2013) demonstrated that it is difficult to find instances of companies that embed CSR in all the management control systems and indeed firms prioritize some control systems rather than others according to the CSR strategy they have developed. The “MCS package” recognises two main dimensions of controls- formal and informal (or cultural)- which have been investigated by few articles to identify which ones result more effective to implement a CSR strategy. The theory has revealed that informal control systems are the most effective and the least expensive although they will be not sufficient without the adequate alignment with formal controls. In fact, three main problems arise from the literature review:

- Formal and informal control systems are often seen as substitutes and not as complementary tools of control (Crutzen et al., 2013).
- When cultural controls are used for sustainability purposes, there may be a conflict between formal controls (oriented towards financial results) and formal controls (oriented towards sustainability) that will lead to inconsistent and scattered results (Norris and O’Dwyer, 2004).
- Companies are not capable to monitor non-financial results because it has not the skills to move formal controls from a financial to a non-financial perspective, whilst informal controls remain ambiguous (Durdan, 2008).

After having ascertain that the formal and informal control systems are both equally important when talking about sustainability, in the following paragraphs the discussion will proceed by defining the most effective types of MCS, being them formal and informal and bringing some examples about companies that apply an efficient MCS structure linked to the CSR strategy, in order to propose some solutions to the three problems related to management controls applied to sustainability. For each model, all the advantages and limitations will be highlighted.

4.4.1. Cost management controls: budgeting, variance analysis and life-cycle costing

Roth (2008) studied the main cost management tools used by companies to include the impacts of social and environmental concerns. The traditional ones are the environmental

budgeting and variance analysis. The budget is a document through which the company can convey its objectives and by building a triple column budget it will be possible to consider all the three dimensions of performance. For example, Roth (2008) proposed a framework to consider the benefits (that in the financial performance are the revenues) and the costs under a social and environmental point of view:

Fig 3. Sustainability budgeting benefits and costs

Exhibit 1

Sustainability Budgeting Benefits and Costs			
	<i>Economic Measures</i>	<i>Environmental Measures</i>	<i>Social Measures</i>
Benefits:	Revenues	Fuel conservation efforts	Desirable products
	Cash inflows	Water conservation efforts Emission reductions Designing products for remanufacturing Recycling efforts	Employment Charitable contributions Taxes paid
Costs:	Materials used Labor	Pollution Emissions	Depletion of unrenueable natural resources
	Other manufacturing costs Marketing costs Administrative costs Capital costs Cash outflows	Energy consumption Water consumption Solid waste	Unsafe products Accidents Landfill costs Health problems

Source: Using Cost Management for Sustainability Efforts, H. Roth, 2008, p. 13

The equal importance of revenues is represented by fuel and water conservation, recycling effort and the design of products for remanufacturing for the environment, whilst it is represented by employment, desirable products and charitable contributions for the social perspective. On the other hand, the costs may be interpreted as pollution, emissions, waste and energy and water consumption for environmental purposes; while the main social costs may be recognised in unsafe products, accident and health problems.

This framework allows company to capture the effects of their activities in all the three dimensions and by disclosing these activities the management will give importance to all

of them and, at the same time, deploy the relevance of society and environment throughout the organization and its employees.

Furthermore, the sustainability budgeting gives the possibility to use it as a benchmark to evaluate the actual performance and their variances from the predicted results. In fact, variance analysis is the second management cost tools diffuse around organizations and if a company has developed a sustainability budget, it will also have the possibility to calculate the variances according to the units of measure that it decides to adopt. However, an alternative to calculate the variances without developing a budget is to benchmark the social and environmental performance to the prior period and see how they differ. For example, the solid waste amount of the last year may be used as a standard to examine the variance of the current-year and determine whether the company is improving its “soft” performance.

Another management cost tool proposed by Roth (2008) is the life-cycle costing that should be applied when the company takes decisions about product design and production processes. In the life-cycle costing, all the costs incurred during a product life should be considered: material acquisition, manufacturing, logistics, consumption and disposal. When the company integrates CSR in its objective, it should consider also these types of costs, in particular in the development stage of the products.

4.4.2. Eco-controls

Henri and Journeault (2010) studied the management control systems applied to environmental performance talking about eco-controls. As it is defined in their study, eco-controls are a specific application of management control systems and they use financial and strategic control methods to influence environmental management and help companies to measure, control and disclose non-financial results (Henri and Journeault, 2010, p. 64).

The study attempts to evaluate the influence of performance measurement, budgeting and incentives as the main MCS that help companies to direct their resources towards the achievement of consistent environmental results. According to Henri and Journeault (2010), the control systems should act to:

- monitor compliance with environmental policies and regulation,
- motivate continuous improvement,

- provide data for internal decision-making,
- provide feedbacks and data for external reporting.

This research attains to reach the harmonization of the internal and external dimensions of environmental issues represented in the just-mentioned four points. On the internal side, the socio-environmental performances are emphasised by accounting for their economic impact; whereas on the external side, the environmental protection and respect has the greatest emphasis and is achieved through communication with stakeholders. To integrate these two dimensions, Henri and Journeault (2010), adapt the concept to the matrix developed by Ilinitich et al. (1998):

Fig 4. Corporate environmental performance matrix

	<u>Internal</u>	<u>External</u>
<u>Process</u>	Organizational Systems	Stakeholder Relations
<u>Outcome</u>	Regulatory Compliance	Environmental Impacts

Source: Measuring Corporate Environmental Performance, Ilinitich et al. (1998), p. 388

The relationship of these dimensions provides a framework for analysing the various views of environmental performance into four aspects:

- 1) environmental impact and corporate image (external/results) that is the development of specific performance indicators;
- 2) stakeholder relations (external/process) that is the frequent use of those indicators to monitor the meeting of stakeholders' expectations;
- 3) financial impact (internal/results) that is fixing specific goals in the budget for environmental expenses and income;

4) process and product improvements (internal/process) that is linking the performance indicators to rewards to improve processes.

Each of these four aspects is necessary but not sufficient for environmental performance because only collaborating they help a firm to be effective. The main improvements will be represented by:

- Reputation thanks to the level of over-compliance with the standards required by law;
- Stakeholders' relationships which is related to the legitimization of the company activities given by local community, government, customers etc.;
- Financial improvement such as the reduction of costs in raw materials and efficiency of processes that will automatically lead also to the improvement of the products through increased quality and innovation. Nevertheless, as highlighted in the study of CSR and corporate strategies integration, this is possible only when there is a positive correlation between environmental investment and financial performance. If this base exists, eco-controls will be useful to improve both dimensions of results.

Some examples of how the eco-controls might improve the economic performance are based on the nature of control systems, focused on the encouragement of desirable behaviours that, by integrating environmental aspects on the organizational routine, they may improve the procurement of materials, the efficiency in the production processes, the supply chain relationships and the mediation with the Regulator. Therefore, eco-controls will encourage the accomplishment of responsible behaviours through the sharing of new environmental values (informal controls) and will assess ecological advancements through, for example, GHG emission reduction in the procurement process (formal controls).

The framework provided by Henri and Journeault (2010) will give an overall picture of the strategic relationships that exist among the various management aspects that, in turn, will orient managers to integrate formal and informal control systems for the improvement of environmental performance that will also contribute in boosting financial results.

However, given that in the case of environmental performance the relationship with eco-controls is direct while it is not with the economic performance, this also means that a company cannot think to introduce eco-controls to increase profitability but rather it should have defined objectives and understand the need to improve environmentally first. Then, profits might increase but this will be just a consequence of a clear social and environmental action plan. In fact, if external disclosure is sufficient to enhance corporate reputation, the firm will not save costs that CSR operations might generate, at the expense of profitability that, under these conditions, will improve only in the short-run.

Moreover, MCS related to non-financial issues have the important role of improving communication between top management and employees, clarify which are the priorities for subordinates when taking decisions and facilitate the identification of cause-and-effect processes dealing with sustainability and, ultimately, foster innovation, research and development. Therefore, the introduction of eco-controls will generate a double-loop learning processes in the employees' mindset. In fact, whereas the single-loop learning asks employees to reduce the gap between expected and actual results, the double-loop learning is the process throughout an organization asks employees fundamental changes in their values and beliefs that will improve knowledge about CSR, by triggering a problem-solving approach to figure out CSR anomalies (Dooley, 1999).

To sum up, Henri and Journeault (2010) have verified that eco-controls can be composed by a mix of formal and informal tools. The former is the accountability of the environmental impact creation of a new product or process, the latter is the path throughout employees internalise the environmental values of the company. Eco-controls result to be a good combination of formal and informal controls that may lead to the improvement of both financial and non-financial performance. However, it should be taken into account that, whatever the control systems applied for sustainability, they have to be co-ordinated with the existing management control systems. For this reason, Gond et al. (2012) explores which are the best solutions under the point of view of the MCS and Sustainability control systems integration.

4.4.3. Levers of control

Gond et al. (2012) studied the intra-organizational impact of CSR by integrating it in the management control systems defined by Simons (1994) which support the corporate strategy and influence its development processes.

The four levers or “processed” that affect the course of actions and the outcomes of an organization are:

- 1) belief systems which reinforce the value of the organization and help employees to understand its direction so they are usually formal, expressed in the mission and vision of the company;
- 2) Boundary systems that limit the employees attempts for strategic opportunities and they are usually documented in Code of Conducts, directives, and internal regulations;
- 3) Diagnostic control systems compare actual performance with the targets after having identified the company’s KPI;
- 4) Interactive control systems allow the top-down and bottom-up communication to develop the best strategic plans, providing inputs for its formulation. In fact, according to Widener’s (2007), interactive controls may be used as a mean to interpret the external environment and improve the company’s positioning.

In general, in line with the identification of the formal and informal control systems, the interactive and diagnostic control systems give the configuration of the control systems framework, whilst belief and boundary systems have a function of support.

The integration of Sustainable Control Systems (SCS) with MCS should be technical which refers to the possibility of considering single CSR practices within the wider range of management control systems. This would be possible when the information systems are designed to facilitate and sustain the combination and coordination of management and sustainability control systems. The link between them has to be methodological by having, for example, common systems of gathering and elaborating information; secondly, the company should integrate the control systems from an organizational point of view, by sharing both the financial and non-financial results within the organization. For example, when an accountant become an expert in sustainability results analysis or when a sustainability manager considers CSR also under a financial point of view. On this respect, the control systems have to be seen as something that people do within the organization, and not as something that belongs to the organization itself. The organizational perspective is implemented by defining the role of people within the firm and by building a formal organizational structure that facilitates the interaction of employees, allowing

them to enhance certain skills through socialization. Finally, the control systems should be integrated under a cognitive point of view. In fact, control systems may be described as platforms that allow and facilitate the exchange of knowledge within an organization to promote the achievement of the objectives.

Overall, the different level of integration of the MCS with the SCS depends on multiple factors. In particular, the life stage of a company influences a lot its control systems. In fact, it is common that organizations in early stages will have some strong SCS because sustainability is embedded in their business models and thus the SCS also drives the decision-making process, even if they are not properly formalized. Or, again, a company in advanced stages of its life, facing some extraordinary organizational situations, may have tied control systems under interactive, technical and organizational points of view, but due to the uncertainties provoked by the organizational set up, they may remain dormant, which means that are not exploited in the decision-making process. In some other instances, when the firm is facing a development phase of its life, the dominant focus on sustainability may hinder growth. Therefore, a company should always be ready to examine the stage which it is going through and adapt the integration of the two control systems accordingly, aligning them to the business/CSR strategy as well. The empirically rare condition dealing with a company that reaches a situation in which CSR and business strategy decision-making perfectly overlap and address the control systems that should encompass sustainability, is the potential result to which every company should aim. It is up to the company deciding when and to which extent make sustainability the driver of decision-making processes, yet the company should be aware that the sustainability integration has to be reached through management controls if the company wants to gain a long-lasting market positioning since, as ascertain by Gond at al. (2012), integrating sustainability into the control systems is the necessary and sufficient condition to enhance sustainability strategy, because through the systems adoption, the management will be informed about the sustainable development of the organization.

Having these control systems investigated by Simons (1994) and having a theoretical foundation about how the CSR should be integrated in these four levers of controls, Beusch (2016) has tried to explain with empirical evidence how to integrate sustainability in these four levers of controls in practice.

The company of the case-study has outstanding results in sustainability as it has provided healthcare and financial supports for its employees since its foundation and already in the 1990s it started to include environmental and social performance in its reports, whilst, nowadays, it follows the GRI standards to externally report sustainability indicators. Moreover, it started the program of “Positive Impact” in 2004 in which it attempted to reduce the environmental impact of its operations. However, the company immediately found some problems in presenting concrete application of the CSR strategy that was developed. It felt the necessity to reinforce the top-down communication of values and beliefs, as well as the need for new bottom-up CSR initiatives, in particular in the product development department. In the following years, it achieves good results such as GHG emissions reduction and in 2007 it launched its first E-products.

As regards the four levers and their application to the SCS, starting with the informal controls, the belief systems, the case-study company initially finds it difficult to convey Sustainability concerns and objective to employees because of the complexity of all the activities and processes but the development of a strategy that was not just called “sustainability strategy” but rather “positive impact” and then become “corporate concerns”, enable the transmission and understanding of the company’s view in terms of sustainability. As regards the boundary systems, the main company’s tools are its Code of Conduct. In this Code, the firm reiterates its environmental commitment that push it to innovate its product in order to improve the environmental performance. Therefore, the Code has not evident impediment to employees’ behaviour but instead it is more ethical, being the avoidance of discrimination and harassment the only negative “restrictions” to the employees’ behaviour. Therefore, the Code of Conduct is said to take an enabling approach towards its employees; but it cannot be said the same for the suppliers, where the company is intransigent and applies a stricter Code of Conduct to follow certain standards in the raw materials procurement. Following with the diagnostic systems, the company monthly assesses each business unit in the production of environmental results through the development of a qualitative report and all are then reviewed during the Board of Directors meetings. The report mainly regards the CO₂ emissions and the suppliers ISO 50001 certification (i.e., energy management systems). In the context of employees’ well-being, the process of data mining is much less formalized and it is based on continuously obtaining feedbacks from them. Finally, as interactive systems, the company adopts a “go and see” approach in which the top management goes around the

different business unit of the company to examine the processes and if there are some problems. On the other hand, in the years, the middle management starts to discuss CSR issues with the top management, in line with the approach of “dialogue and discussion” chosen to develop sustainability overall.

A second part of the analysis emphasises where in the company’s structure the SCS starts to be incorporated with MCS. The first step is technical integration and, dealing with this aspect of sustainability controls, the company has developed the monthly report discussed above, where financial and non-financial performance are integrated in a comprehensive document. The integration is also emphasised by the product line in which the company carefully evaluate how much money are spent to add a new eco-friendly product to its portfolio and how the existing ones are performing in terms of sales. However, the main problem remains: it is difficult to associate costs and revenues to CSR initiatives. For example, when the company has to calculate the pay-back of a sustainable technology, it has to freeze all the other parameters and there is not possibility to compare the results with other companies because it depends on what a company considers and, as defined by an interviewed manager, by what a company brag about. In other words, a firm can verify that thanks to a new sustainable technology it has reduced overheads costs of 5% from one year to another but this data cannot be compared since it depends on what a company manufactures and, even within the same industry, on the type of CSR programs the firm decides to adhere to. And things become even more difficult when considering employee engagement. The Sweden organization tried to measure the employees’ well-being through surveys and its original intention was to add the survey responses into the mentioned monthly report; it realised, though, that these types of measures are more long-term than financial performance and this creates a timing mismatch within the report. The well-being that an employee might externalised in a survey response is generated in a longer time frame than a monthly basis.

Going ahead with the integration analysis, the second sphere to coordinate is the organizational. This can be translated by saying that in the case-study company, a financial analyst should be able to analyse both management and sustainability control systems: what is defined as “producing numbers with quality”. However, also in this step a problem arises. The monthly basis follow-up is based on percentages of gross margin and capital employed although the company defines it as “corporate concerns” that allude

to a non-financial dimension; so, as some employees respond, there is a lack of knowledge about how to increase the integration of both financial and sustainability concerns.

Finally, the cognitive concern results to be the most controversial. Managers have clear in mind the potential of CSR and even if they have also the financial side to take into account, they may co-exist. However, also in this case, the financial sphere asks for short-term results whilst sustainability has a longer time horizon, especially when the company wants to invest in high-quality technologies. Another challenge to the cognitive integration is represented by employees' incentives which are linked to financial performance and not to CSR and this might provoke a conflict between top and middle management perspectives. This results to be in line with the problem highlighted by Norris and O'Dwyer (2004), where they illustrated the potential trade-offs that management might face when formal control systems are related only to financial measures. The solution resulted to be the identification of the most impactful processes in the context of CSR and in those processes the CSR performance are prioritize, taking into consideration the long-term objectives before than the short-term profitability. This allows the company to keep being profitable and combining CSR in those aspects where the firm has the major pressure and impact.

Overall, in this case-study, it has been underlined that a real case of a company that coordinates the four types of Simon's (1994) levers to integrate the control systems of management and sustainability.

As regards, the types of integrations, the technical one results to be well-integrated within the company whilst the organizational integration is poor; however, the problem might be overcome with a higher level of training to improve the degree of knowledge in CSR issues and concerns. The most challenging questions resulted to be the cognitive integration where the hurdle of incentives has been addressed by prioritizing sustainability in those areas that have been identified as the most critical for the company in creating stakeholders value.

4.4.4. The balanced scorecard

All the limitations illustrated until now about control systems related to sustainability have required solutions but all the ones that had been proposed have not completely addressed all the problems. A modern approach to management control systems that

seems to incorporate the CSR concerns and valuations is the balanced scorecard (BSC). It is a methodological approach to assess the overall company's performance keeping them always up-to-date and, according to many studies, it has been identified as the best system to detect the relationship between goals and results of corporate strategy, profitability and sustainable development. It was established at the beginning of the 1990s when the scientists Kaplan and Norton conducted a research about how to measure non-financial performance in large corporations and the result was the balanced scorecard. The measures are called "balanced" because they assess the interests of different stakeholders which are taken into account when developing a value proposition. The balanced scorecard considers four performance dimensions:

- Financial: it is the most traditional form of measure which ultimately defines the success of a profit maximizing company. It evaluates if the value proposition of an organization is creating value for shareholders.
- Customer perspective: it underlines the competitive strategy that a company decides to follow in order to differentiate from competitors, attract new customers and retain them.
- Internal process perspective: it identified the processes regarding customers management, innovation and social relationships that an organization should undertake to be profitable.
- Learning and growth perspective: it defines which objective the organization has to pursue in order to be aligned to the established objectives in terms of people and systems.

At the centre of these four perspectives there is the mission of the company that answers to the question: Why does the company exist?

The objective of the balanced scorecard is to identify critical success indicators in each of these areas that the organization needs to focus on (Roth, 2008).

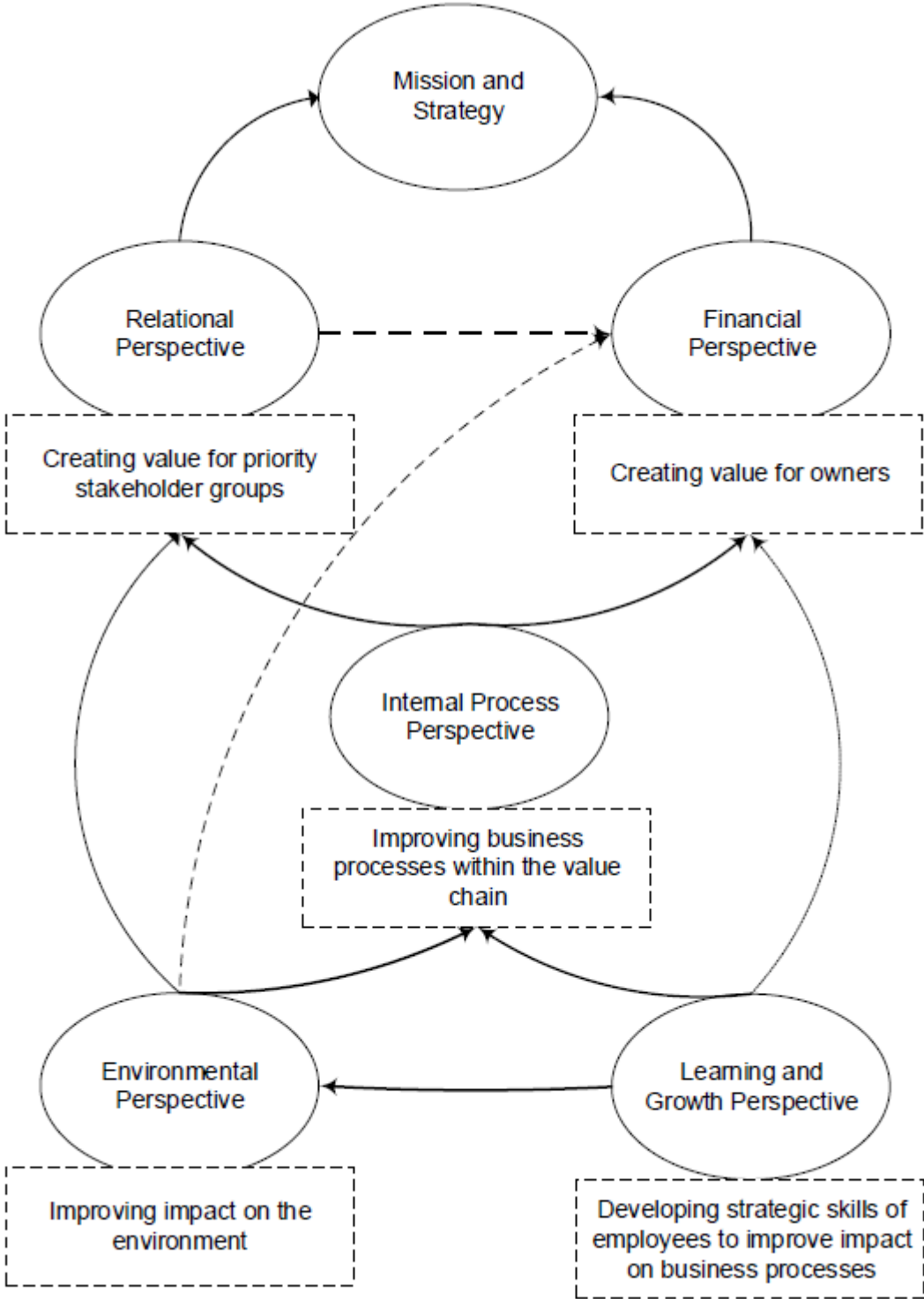
The success of the balanced scorecard stands in its possibility to include non-financial indicators when developing, communicating and implementing a strategy. There are different possibilities about how to integrate the non-financial performance in the BSC (Hoque, 2014). The first one, requires the integration of certain CSR measures to be horizontally integrated in the four dimensions of the balanced scorecard. The most

affected dimension will be the financial one, since if a company intends to take account for the social and environmental issues, it could rename this first perspective: according to various studies, it is proper to rename it “Triple Bottom Line Value Creation”, and so, add some measures related to social and environmental issues. In addition, at least one or two KPI should be added to each perspective. For example, a company may consider energy and disposal costs as well as costs avoidance concerning environment, and charitable contribution, revenue from socially well-positioned products, employees’ benefits concerning the society. As regards the customers perspective, it may include the number of green products, the item recalls, the community support, the customer perceptions. In the internal process perspective, the focus is on the pollution and consumption of natural resources during operations and the conditions of the employees, such as the workweek hours and the number of accidents. Finally, the learning and growth perspective gives a general overlook of the organization prospects: percentage of employees trained, management attention to environmental issues, inclusion of stock in green funds, workforce diversity, dollars spent on employee education, employees’ satisfaction.

The second method is to add a fifth social and environmental results’ dimension to the balanced scorecard architecture but this is possible only in certain industry conditions and with a top management that has the social and environmental objectives clear in mind.

The third approach is to develop an external balanced scorecard aligned and based on the original one. This third solution result to be the most effective one because the “sustainability BSC” will be internalised to the existing BSC allowing the interaction of the two models and integrating the financial and non-financial perspective. In 2019, a polish collective monograph analyses the third scenario and proposed a model to best integrate the balanced scorecard with environmental issues (Mints and Kamyshnykova, 2019). It would be valuable to develop the BSC because, first of all, it might be used as a learning tool that helps management to express the non-financial objective of a certain business-unit.

Fig 5. BCS architecture for CSR oriented companies



Source: Methodological approach for assessing corporate social responsibility on the basis of balanced scorecard, Bezpartochnyi (2019), p. 44

The scheme presented started by considering the environmental perspective and the learning and growth perspective at the base of the graph because they represent the acquisition of the knowledge by employees about environmental issues that will be then

translated in processes improvements. The integration of CSR issues in the perspectives of learning and growth will determine the allocation of the key performance indicators (KPI) along the balanced scorecard which, in turn, will create the preconditions for developing the strategic objectives of internal process perspective. In the traditional BSC scheme a direct causal-relationships among the different perspectives exists and this means that there is also a link between the lower and upper hierarchical levels of the BSC. Thus, the achievement of the strategic objectives of each perspective is ensured by activities aimed to embedding the strategic objectives of the perspective which comes immediately before, starting from the lower level. Therefore, if it is true that every perspective influences the one that comes after, this effect generates the indirect connection between environmental perspective and financial perspective. The link is typically represented by costs reduction and investment that guarantee a higher level of customers attraction and retention.

What explained so far, actively demonstrates that the “sustainability balanced scorecard” is useful for managers to fix the strategic objectives but in the majority of circumstances it is unlinked with performance indicators because there is no “traffic light” or score which gives them the exact information about the degree of achievement of the relevant objectives. Therefore, the balanced scorecard results to be more a planning tool rather than a control system.

In spite of the limitations, the balanced scorecard continues to be one of the main tools used by organizations. In fact, according to the 2GC Balanced scorecard usage survey, the 50% of the companies from all the world use this tool and the 65% of the companies are located in Europe. The usage, though, is heterogeneous: strategic management (71%), operational management (47%), reporting activities only (35%), calculate incentives (12%). In addition, the main influence that this tool has is about business actions (68%), but also a large percentage indicates that it is useful to influence team and individual rewards (50%).

However, from all the literature analysed so far, the balanced scorecard seems to be inappropriate for SMEs. In fact, SMEs are different from large corporations under three aspects: uncertainty, innovation and evolution. The main reason why balanced scorecard fails its implementation in SMEs is mainly based on benefits: “large organisations often gain more benefit from the effective communication of their strategy, while the SME gains

more from the description of strategic objectives with priorities and the drive for a more effective strategic management process” (Andersen et al. 2001, p. 40). Other obstacles are represented by limited human resources, capital resources, supporting software and, most of all, no formalisation of processes.

Rompho (2011) demonstrated how a Thailand company with 12 employees, incorporating in itself all the standards highlighted by the literature, failed to implement the balanced scorecard successfully. Indeed, the main standards are, as previously examine, the clarification of the mission, the top management commitment, involvement of employees, development and communication process and most importantly, availability of resources. The Thailand company encompassed all these standards. The major cause for the failure of the balanced scorecard implementation was the frequent strategy changes. Since the introduction of the BSC, the company starts to add or modify the performance measures. This is in contrast with the theory of Kaplan and Norton (1992) which sustains that the performance measures in the balanced scorecard perspective are stable and their changes occur with the launch of new initiatives. In reality, the company decided to change its distribution channel, from dealer to superstores, therefore new measures were added to the customer perspective “block”. Thus, the responses to market changes are more rapid with respect to large organizations and this is also due to the different circumstances in which they operate, being the conditions more stable for large corporations than for SMEs. These rapid reactions to market changes will also require continuous reactions for the balanced scorecard that in this way becomes ineffective.

From what was illustrated above, it may be noted that the balanced scorecard finds its best fit in large companies but this is just partially due to the large availability of human and capital resources; the main reason is the different timing in market responses. Small and medium enterprises should change their strategy frequently if they want to survive in the competitive market and affirm themselves. By doing so, the continuously changing performance measures, make the balanced scorecard not the most suitable tool for learning, planning and monitoring company’s outcomes, being them financial or non-financial.

To sum up, the balanced scorecard has been evaluated as one of the best practices in considering the social and environmental dimensions in the implementation of effective

control systems which would embed all the critical relationships established by the company to reach the long-term success. It considers four perspectives: the financial, customer, internal process and learning and growth perspectives. The “soft” and technical nature of these perspectives allow an easy integration of sustainability in the balanced scorecard, that, thanks to its adoption among companies, creates the potential for the implementation of effective management control systems applied to sustainability on a wide range of firms. On the other hand, it presents some limitations which are the “preventive” nature of the range of controls that can be implemented and its difficult applicability to small and medium enterprises which appear tough to overcome since its original framework developed in the 1990s was thought for large corporations.

4.4.5. Material flow cost accounting

As it has been reported so far, there is a significant number of tools that companies may use to incorporate environmental and social performance, starting from the Triple Bottom Line approach and arriving to the balanced scorecard, passing through the environmental budgeting.

However, as it has been noted, to implement a CSR strategy, it is necessary to modify the business processes, in particular the supply chain standards and the recruiting criteria. The formulation of a strategy focuses on the organization's objectives, whilst the realization of the strategy addresses the means to achieve these objectives. Thus, on one hand, the corporate strategy requires a good allocation of the scarce resources and the realization of a competitive advantage, on the other hand, in order to keep implementing the strategy in the long-run, the company should implement a monitoring activity focused on internal and external conditions to which the firm has to adapt.

Furthermore, by identifying the supply chain as one of the most influencing stages of the corporate operations, the management of resources along the supply chain has become a recurring issue that companies should deal with. In order to offer an accounting framework for a good resource management, the economic literature has developed the “material flow cost accounting” (MFCA), a system that interrelates with the MCS.

If a company decides to integrate the objective of improving the resources efficiency in its strategy, it may be deduced that it is partially considering also an environmental and social improvement when taking decisions about materials procurement and operations

and, in fact, in this context the financial and non-financial performance seem to be particularly integrated towards the same objectives, as it has been noted in the second chapter.

The ISO 14051 (2011) provides the definition of the MFCA as a “tool for quantifying the flows and stocks of materials in processes or production lines in both physical and monetary units” (ISO, 2011, p.15). It is based on two approaches, which are residual material cost accounting (RMCA) and flow cost accounting (FCA), the former determines the environmental cost that would be avoided if there are no residual materials and waste at the end of the pipeline; the latter focuses on the relationship between business activities and environmental impacts by highlighting where there is the potential for improvements in processes and products in an economic and environmental perspective. The two systems were then integrated in order to cover all the steps of the pipeline. Already in the 1990s, these two approaches were considered a good tool to take into account the environmental and cost-related burdens when talking about corporate resources. In this framework, it has been recognised four flows: material, energy, systems, and material loss flows; in each flow, the MFCA will help companies to identify inefficiencies and opportunity costs. The efficacy of this system has been confirmed by the introduction of the standard that provide for its implementation, after numerous case-study, especially in Japan, that refine its practice.

The reason why this system is resulted to be so common is that it answers to what companies require which are the quantification of the environmental impact due to business operations and the identification of potential costs reduction and efficiency improvement that, in turn, will result in an enhancement of corporate financial performance. Therefore, for its nature of measuring performance, it should be included in the management control systems of the organization.

By looking at the interrelation of MFCA with MCS, the choice of costs type plays a key role in the integration process, in which a company, following the cost accounting theories, should take into account the actual and average costs that it has to sustain, in addition to an activity of product costing and pricing to evaluate the economic-environmental results. The material flow identifies the variable as well as fixed costs related to resources even if in the short-run only variable costs are considered, while fixed costs are considered in long-term decision making. About the category of the costs, the MFCA identifies the

material costs, system costs, and waste management costs. Some studies have argued that also the energy costs should be included in the costs evaluation in order to better analyse the economic as well as environmental efficiency. Therefore, as regards the cost structure related to the material flow, it is important to determine both the variable and fixed costs and the costs categories associated to the resources. By evaluating the costs, an organization may adapt its planning and production processes to increase efficiency. However, future research is required in order to better clarify how to consider the external costs, such as the costs related to suppliers that are not directly sustained by the company. When all the external costs will be considered, the direction for the environmental and social performance measurement will follow the right path.

If it can be argued that the costs identification may be addressed, a more complex issue regards the allocation of the costs. Following the ISO standard, the cost allocation should be carried out by assigning costs to the main cost driver, identified at organization discretion. The main principle behind the allocation criteria is the causal relationship between the costs and the cost object that should be as systematic as possible to allow the definition of a cost structure. For those costs that a causal relationship does not exist, it should be taken extra-care in avoiding the double counting of costs and in considerations about allocation in order to best assign them to the right centres and reduce the overall flow costs.

Another issue is related to the integration of the MFCA to the existing information systems. In the majority of situations, the MFCA is calculated in separate computers and thus its measures are not embedded in the comprehensive cost structure. The integration of the MFCA in the information systems will increase the motivation in adopting the flow-based approach that otherwise will remain limited. To implement the MFCA in the information systems, the literature suggests that it is better to ingrate it in the environmental information systems and, with the increasing experience, develop a new IS. The application of this approach should be continuous in order to avoid the data redundancy over time and the danger of isolated evaluations.

The cost allocation and the implementation of cost assessments in the corporate information systems represent the basis for the implementation of the Material Flow Cost Accounting within the existing MCS for an ongoing monitoring of environmental and financial performance and their assessment for a subsequent decision-making process.

For an efficient results monitoring, the data should be consistent with the organization as a whole and not with the single department.

However, the fulcrum of the MFCA lays on the organizational learning. Organizational learning is a process that is developed in the course of action, or at the same time as the company activities are carried out, to transform actions into conscious acts aimed at pursuing corporate purposes and removing any dysfunctionality, replacing them with functional processes. The MFCA, when identifies an inefficiency in the material procurement and transformation processes, will be assessed in economic and environmental terms, since the waste has a monetary value and an environmental burden, and the meeting point that satisfy the environmental impact reduction as well as cost reduction has been found, by introducing a new learning process.

Based on the foregoing, the effectiveness of the MFCA is clear even if with some limitations. In fact, the literature has related the MFCA to the environmental impact but no further research has been done in order to include also social aspects. Moreover, according to this research conducted by Rieckhof (2014), some issues has been identified for further research and to examine in depth how to integrate the MFCA with other management control systems. The issues are the following:

- Cost allocation
- Integration of MFCA with information systems
- Improve tools of internal communication
- Create a learning organization.

Starting from the cost allocation and arriving to the learning organization, when the company arrives at the last step, it will reach a good level of integration of MFCA with MCS. In this way, the resource efficiency will be achieved and the company will be directed towards a sustainable development where environmental and economic assessments are based on the same perspective.

However, this is not always the case. In the material resource perspective, a resource waste is translated in damage on the environmental side, and in cost on the economic side. But when a company pursues a differentiation strategy, working towards the achievement of high-quality products, it may require a higher level of waste due to the selection of the best parts of the resources necessary for the realization of the products.

Or, again, there can be situation in which the MFCA cannot be applied because not all the companies deal with the procurement of materials. So, there are some situations in which the economic and environmental perspectives do not correspond and the company has to make a trade-off, even within the MFCA system. The suggestions for the future research is to modify the structure of the MFCA in a way that will allow to measure the higher pay-off between the waste of resources for high-quality products and the environmental burden. Moreover, the MFCA needs to be adapted also to those sectors that operates within the pipeline and that offer services rather than tangible products and that may want to evaluate the efficiency of the usage of resources different from the material of the procurement process and transformation.

4.5. Rewarding systems

The use of rewards and incentives means expanding the vision of assessment on all components, even the qualitative and intangible ones, such as development and the work environment, to have an overall vision of all the management and motivation levers of people. Development means everything that the company can offer in terms of growth and professional opportunities as well as support for the continuous improvement of performance, through for instance, development plans, international experiences, training, coaching etc. Thus, today the working environment is considered both the physical one - where the workplace is located, how pleasant it is, etc. - and the cultural one - the spirit, the communication, the leadership style, the continuity of employment, the reconciliation of work and private life - as well as the image of the company.

There are five variables of the rewarding system that an organization should consider in order to attract, motivate and retain employees. These elements are:

- Compensation: pay provided by an employer to an employee for the services provided, which includes both fixed and variable remuneration;
- Benefits: programs that an employer uses to supplement wages related to health, health care, safety for employees and their families;
- Work-life: set of policy practices and programs that serve to help employees achieve success both at home and at work;
- Recognition: recognizing or giving special attention to an employee's performance satisfies an intrinsic psychological need to appreciate individual's own effort and

can be of support for the business strategy through the reinforcement of certain behaviours that contribute to organizational success;

- **Development and career opportunities:** For development it is meant the set of learning experiences built to increase employee skills and abilities that allows him/her to perform better. Career opportunity implies the advancement plan of the employee's career goals, and could include promotion to an organizational position with greater responsibilities.

As many authors argue, if it is true that remuneration, accompanied by benefits, is the founding element of the rewarding system, it is equally true that the intangible elements are those that enrich it and make it truly distinctive.

Remuneration and benefits can be easily copied, the intangible elements are instead typical of every organizational reality, cannot be easily imitated, require a long time to be built or modified and can constitute a real competitive advantage in attracting, retaining and motivating people. People stay or leave the company mainly for the relationship with their boss, for the interest in the specific job, for the career opportunities, for the mood and the sense of belonging to the company community and for the satisfaction of their needs obtained through the company.

So, nowadays the compensation is not only considered in quantitative terms but also in qualitative terms. In fact, an increasingly large portion of the compensation is based on different variables for which the company assesses the quality of the work done and the respect of certain parameters, leaving aside the mere quantity of hours worked.

4.5.1. Monetary rewards

Going in depth in the analysis of the MCS, it is important to understand how the monetary rewards act in the modification of employees' perspective, motivation and engagement. They are the most incisive tools to align the people behaviour with the organization interests but they are also the most difficult to apply. The main difficulties are the decision about which results link the performance to, combine different incentives in a unique direction and how to measure results in order to increase employees' motivation and effort.

The rewards can be intrinsic or extrinsic. Intrinsic means insubstantial rewards, based on psychological attitudes, like appreciation and respect. Extrinsic are the material part of the incentives, that is the compensation and bonuses.

The extrinsic rewards system represents the set of remuneration systems adopted by the company, with the aim of attracting and retaining people by motivating them and guiding their behaviour towards the expected results and therefore make them aware about what the company expects from them. On the employee side, the expected outcome is the improvement of his/her financial conditions and it is demonstrated that the motivation as well as the effort are directly affected when compensation is connected to performance. The theories about monetary incentives discusses that there are two types of effect that rewards make on people, that are enhancement of motivation in improving current performance and the effort towards learning processes. The former generates immediate performance increasing whilst the latter generates delayed performance improvements. On one hand, the effects on the activities performed by employees affected by incentives are multiple and, in fact, three sides have been identified: the direction, the duration and the effort intensity. On the other hand, the incentives that improve the focus on learning are considered as a person's strategy development.

With respect to the three aspects of performance improvement, the direction refers to the activities on which the individual has decided to focus on. Therefore, the rewards should lead the employee to carry out the activities which are linked to the incentives, as long as the monetary benefits more than offset the effort. Duration refers to the amount of time that an individual dedicates to pursue certain activities. Monetary rewards, however, are based on the activity results and not on the duration of the task, and this is the reason why the majority of bonuses are on yearly basis. On the other hand, it is true that with monetary incentives individuals may take fewer time to conduct the activities. Finally, the monetary incentives may have an effect on intensity which, as described by Kanfer (1990), is the amount of cognitive resources that an employee devotes to certain tasks.

The second effect, the one on learning, is considered strategy development because a person, thank to monetary incentives, try to autonomously solve problems, plan and innovate the activities related to incentive that, in some circumstances, may also generate negative results in the short run because the benefits are in the long run.

4.5.2. The impact of rewards on CSR

As it has been noted so far, a company cannot focus on profit creation anymore, in particular when its sizes are large enough to influence a great portion of citizens. This means that, especially for multinational organizations, the CSR perspective must be taken into account. However, no few difficulties are encountered when considering CSR, starting from the strategy development and arriving to the performance measurement. The main issue is that a company cannot expect that the CSR targets are successfully met when they are voluntary while the financial ones are mandatory; indeed, “meaningful incorporation of environmental and social responsibility goals into organizational strategic plans requires a mechanism to measure and reward performance contributing to that objective” (Dutta, 2009).

When talking about large corporations which count thousands of employees, it is difficult to find a common direction because each person has his own priorities, interests and values. Many famous studies suggest that that most effective way to influence employees’ CSR perspective is the use of informal control systems but this research aims to explore the level of development of the compensation systems when talking about CSR since it is the most valuable way to actually assess CSR performance as important as financial ones. As it has been highlighted, monetary incentives are an easy concept: make clear to an organization’s employees which are the high-valued issues and where the company wants individuals to focus their effort on. The incentive structure, in order to embed CSR outcomes, should not only be included for the Corporate Responsibility teams, but for everyone, from the CEO on down because, as Williams (2015) reported in her book “Green Giants”, “the absence of incentives around sustainability or corporate responsibility has been a major barrier to change” (p. 162). In particular, it is difficult to spread the idea of CSR investment to middle management because measures used to evaluate the goodness of investments, such as ROI and residual income, are not able to capture the payback of such investments, which are not only quantitative but, in most cases, also qualitative. This is absolutely legitimate by the fact that middle-management is evaluated on its ability to meet financial targets in the departments that they manage. Another side effect of this rejection, is the decline of the bottom-up sustainability ideas and sustainability plans remain just ideal.

Lothe et al. (1999) discussed the role of the compensation system in companies that have added a sustainability strategy to the existing business strategy. In an entity where the owners (the principals) delegates decision-making powers to the managers (the agent), the compensation is a mean to monitor that the agents act in the organization's best interest. However, the performance-based rewards are often related to imperfect measures of their effort. In the case of profit generation, a manager is exposed to many risks, since the profitability of a company does not depend only on its capabilities but also on external factors such as economic trends and market demand. Likewise, financial results, CSR results, and in particular environmental results, depend on the events beyond managers' control. The difference is that the profit-oriented performances are easier to identify and thus to reward, whereas environmental activities are often more difficult to be perceived. However, as it has been noted when analysing the correlation between financial performance and CSR strategies according to Henri and Journeault (2010), if CSR objectives are consistent with financial results, for example when reducing raw material waste enhance corporate profitability, the problem of tasks identification is absent because it will be sufficient the reward of one activity to simultaneously achieve the other and the management control systems in place work well also for the environmental and social performance measurement.

The most common types of monetary incentives are bonuses and commissions based on sales and profit. However, they are based on the performance of the current year or less, limiting the long-term perspective of long-term profit creation (e.g. increasing profitability in the short-term by sacrificing R&D investment that would benefit the long-term profitability). For these limitations, new rewards are spreading out. The most common are stock-options, restricted stocks and stock appreciation rights. These incentives are based on longer periods than one year and link the employees to their direct contribution in increasing the company's long-term value. However, the limitation of these systems is that they are usually reserved for top management.

For those firms that face a conflict between corporate and CSR objectives achievement in the short-run but that in the long-run are oriented toward the same direction, the literature suggests a major use of the above-mentioned long-term incentives because employees will see the financial benefits of the rewards in the long-run, in congruence

with the meeting of business and CSR objectives, considering that the main problem of environmental and social performance is the delay between actions and outcomes.

Another problem associated with the balance of corporate and CSR incentives is that when the company requires efforts on multiple tasks, managers tend to concentrate on one task at the expense of others without significant compensation penalties. It is enough to think of examples where managers ignore some target measures and still receive, for instance, the 60% of the maximum bonus. This means that managers may even partially ignore CSR performance since they will still receive a large percentage of their potential bonus. Browning-Ferris Industries, an American waste management firm dissolved in 1999, reduced this conflict by implementing an environmental multiplier that forces managers to focus on all company objectives and performance targets rather than ignoring some of them. The total bonus was given by the multiplication of the profit-based bonus and the environmental multiplier. So, if the manager totally ignores the environmental performance the bonus resulted of the calculation would be zero.

On contrary, when a firm has conflicting financial and sustainability objectives, it should reduce the focus on one of them to alleviate the conflict. When the firm introduces a CSR strategy in addition to the already existing business strategy, it may fail to recognize that there is no correlation between profit generation and CSR goals. As defined by Lothe et al. (1999), this is an example of the multi-task model situation. For example, devoting effort to manufacture the product with less pollution might be in contrast with its production at lower costs. The best efficient way to solve this issue is the change of compensation schemes by changing the related incentives and correlate specific measures to each effort required, which also implies the need of specific KPIs in addition to financial monitoring. However, if a company does not have the necessary KPIs, the best solution, as proposed by Holmstrom and Milgrom (1991), would be to pay a fixed wage. In this way, the effort that was previously entirely directed toward for-profit performance, will now automatically move on the “hard to measure” activities. Obviously, this is a second-best solution; the most efficient incentive structure would be the one with perfect performance-based rewards but at the same time a fixed-wage can make the employees more focused on CSR activities with respect to an incentive structure composed only by profit-oriented rewards.

From this theoretical overview of the incentive structure which embeds CSR performance, many questions arise. These questions include the empirical analysis of the CSR strategies and the exploration of companies that adopt any form of compensation related to CSR and that identify the link between “hard and soft performance” in the rewarding systems.

4.6. Wrapping up

To sum up everything stated so far, the social and environmental issues must be taken into account by the company, but it might be agreed that it is not sufficient to “do something right” in order to be sustainable. The CSR strategy should be integrated within the corporate strategy by innovating the business processes and, most importantly, it is not sufficient to make external descriptive and text-based reporting because in the majority of cases, based on the literature reviewed so far, this actively demonstrates that the company is pursuing the enhancement of its reputation and brand image rather than radical changing some business process or its value proposition in order to become more sustainable and this is particularly true in the consumer sector, where the firms has to directly face with the customers’ opinion. In fact, as reported by Riccaboni and Leone (2010), in their analysis of the multinational company P&G, it emerges that the two sustainability strategies adopted by the firm were used as an “excuse” for growth and efficiency, being the former related to net sales and to operations cost savings. In these cases, there is a difference between what the company communicates outside and what the internal information, indicators and control systems reflect within the organization. As a result, the sustainability is seen as a mean rather than as an outcome: The conception of sustainability as an “excuse” to grow and improve the external relationships is strongly related to an instrumental view of sustainability (Riccaboni and Leone, 2010).

Regarding the control systems, sustainability management controls are viewed to provide support to organisations in considering the wider environmental and social impacts of their activities and in measuring and managing the interaction between business, society and environment (Crutzen, 2013). However, the external demands for corporate responsibility requires external renewal that represent a great challenge, in particular for established companies. What emerge from the literature review, is the lack of theoretical foundations for the application of control systems related to CSR: the majority of the studies explore how the MCS support the implementation of a sustainability strategy, even if few researches analyse how they may help in the formulation of the strategy. About

the content of the literature, many papers ascertain that companies mainly use formal controls to mediate the strategy and processes, even if the researches call for the development of theories about informal controls, which, in the sustainability context, seem to be the most efficient. A large contribution on this type of controls have been brought by Norris and O'Dywer even if in the following years the literature has not developed further researches. Nevertheless, it is necessary the combination of formal and informal controls to reach significant results in terms of CSR.

Furthermore, despite the huge importance represented by social concerns, the theories have focused on environmental controls and, in fact, at the date of this study, it cannot be identified a paper that is solely dedicated to social issues for their nature which is more judgemental.

With respect to the size of the companies of the empirical evidence, the studies focus on large private companies because, as it has been noted in the example of the balanced scorecard, many control systems result to be unsuitable for SMEs. The companies examined are often manufacturing firms because it is easier to understand the processes of production than in a service company. Moreover, the main focus has been detected for the chemicals and energy companies, the ones that have a significant effect on environmental changes.

The strategy, sustainability and management control systems are multi-dimensional aspects that should be interrelated to support the company in the achievement of its goals. However, it has not been identified any multidisciplinary research that relates these three concepts and even when the theory has acknowledged that the design of MCS is essential in supporting the CSR strategy, few papers empirically examined how the sustainability MCS are used and how they should differ according to the strategy content. In addition, the papers that bring some practical example of MCS directed towards sustainability are biased by one-case research design.

In relation to all these open points that the literature should address, this study aims to explore which are the main management control systems adopted by companies that pursue a CSR strategy by empirically reviewing a sample of companies that, according with the non-profit organization Ceres, resulted to be very oriented towards sustainable development.

Chapter 5 – EMPIRICAL RESEARCH

To make the literature review more consistent, it has been selected a sample of outstanding companies in terms of sustainable performance. They are leaders in social and environmental performance since they have developed a CSR culture perfectly integrated with the corporate strategy. In the literature overview, it has been analysed how a company may focus on different groups of stakeholders according to the CSR strategy that it has decided to adopt. In relation to the CSR strategy, this will have a higher impact on certain business processes (procurement, operations, distribution) and people (operations managers, logistics managers, controllers). Finally, based on the strategy and its application, a company may decide to orient its control systems towards result controls or people controls, although the best solution would be the matching of both of them. This research aims to investigate which are the best solutions for the application of the MCS to sustainability by analysing the practices of the best performing companies not only in CSR but also in the integration of CSR within the business operations. At the end of the analysis, the empirical research will provide an overview of the best MCS to implement according to the CSR strategy and company's size and industry. The sample is composed by the following companies:

Tab 1. Sample company information

Company Name	Industry	Country	Market listing	Number of employees
Unilever	Household & Personal Products	Europe, The Netherlands	Yes	155.000
Patagonia	Retail	USA, California	No	2.000
Nestlé	Consumer Staple Products	Europe, Switzerland	Yes	352.000
Alcoa Corporation	Materials	USA, Pennsylvania	Yes	14.000
Danone	Consumer Staple Products	Europe, France	Yes	102.500
Intel	Technology	USA, California	Yes	110.500

BNP	Banking	Europe, France	Yes	202.500
Iberdrola	Utility	Europe, Spain	Yes	34.500
Novo Nordisk	Pharmaceutical	Europe, Demark	Yes	43.500

Source: Bloomberg.com, Fortune.com

5.1. Methodology

The selection phase has been divided in two parts: firstly, it has been identified two of the most significant lists of sustainable companies which are the Dow Jones Sustainability Index and the ranking of “Most sustainable companies of 2020” by Forbes. Secondly, within these rankings the companies have been selected to be mentioned as the best performing companies in the Ceres and Sustainalytics reports in terms of management control systems applied to CSR. Ceres and Sustainalytics are two organizations that assess the level of sustainability of the companies and, on contrary of many organizations that evaluate the firms’ disclosure, they make assessment on the basis of the organizational structure and their way to include sustainability within the core business activities. The inclusion of three out of nine companies belonging to the consumer sector (Unilever, Nestlé, Danone) is due to the fact that these companies, by directly interacting with customers, share the largest amount of information on their websites.

The only exception is represented by Patagonia which is not included in Forbes and the DJSI lists for its smaller dimensions with respect to the other companies considered. For the same reason, Patagonia is neither included in the Ceres and Sustainalytics reports since they examine only listed companies. However, it has been recognized as one of the most sustainable companies in the world by organizations such as Corporate Knights and Globescan. It has been included because, as reported by Williams (2015), it is an exemplary case of sustainability settled in the leadership and culture of the company which, as it will be examined, reflects in a solid cultural controls structure. So, whereas in the other companies included in the sample the informal controls are supportive for the formal controls, in the case of Patagonia, the cultural controls are the fulcrum of the management control systems. For its peculiarity, it has been worth it to provide an additional facet to the analysis by including it in the sample.

Then, the analysis and the comparison are made of three dimensions: strategy, processes and MCS. The strategy is categorized based on the three types identified in the literature review:

- CSR strategy focused on internal stakeholders
- CSR strategy focused on external stakeholders interested in environmental issues
- CSR strategy focused on external stakeholders interested in social issues

The processes will be identified based on the processes that are subjected to the major changes to be adapted to CSR objectives and the empirical analysis will be confirmed that in the majority of companies the main processes that are subjected to changes are, most of all, the ones related to the supply chain and, in most specific cases, the hiring and selection processes, as reported in the literature review. Finally, the MCS are analysed on the basis of:

- Motivating people to adopt those behaviours that are expected by the company to be sustainable
- Monitoring the results related to sustainability
- Use those results for taking decisions

In the field of MCS the so-called “administrative controls” are considered as well, which are the changes in the governance structure to take CSR into account at governance level.

At the end of each company analysis, a framework of an effective combination of strategy, processes and management control systems will be provided and compared with the other companies included in the sample.

5.2. Unilever

Unilever is one of the leading companies in the Food and Refreshment industry, Home Care and Beauty and personal care. The company's portfolio includes over 400 brands including Dove, Sunsilk, Knorr, Algida, Magnum, Lipton, Mentadent, Svelto and Coccolino, and it has the potential of reaching 2.5 billion consumers with its products. In 2017, "Sustainable Living Brands" accounted for 70% of the company's growth and continue to grow 46% faster than the company's other brands. Today, its market capitalization is valued at 146.79 billion, with a growth of 50% in twelve years. Twelve years ago, Paul Polman became the Chief Executive Officer of Unilever and only one year after he

formalized the “Sustainable Living Plan”. The ultimate objective of this strategy is to see Unilever as part of the solution to some of the main social issues such as food security, poverty and environmental degradation. In other words, the new CEO of the company understood that Unilever has the potential to reach about one third of the global population and that he may leverage his position to increase the Unilever’s positive social impact.

The strategy is based on an agenda of responsible business across a range of issues (Unilever, 2021) with the common objective of educate consumers to act responsibly in terms of food and water consumption given its powerful force of behavioural change. The principles that guide the communication with consumers are the following:

- Trust: the company is committed to build trust through the transparent communication which is both direct and indirect through other key stakeholders.
- Responsibility: the company has the responsibility to communicate with stakeholders that its product are safe and high-quality products but, at the same time, provide for the risks associated with their use.
- Transparency: Unilever promote the transparency in communicating what is in its products, all the ingredient and health and nutrition properties.
- Openness: Unilever established a network of communication channels that allow customers to enter in contact with it

Some examples of communication and marketing campaigns promoted by Unilever are the Dove’s campaign to encourage women to eliminate the current stereotypes of beauty; or the comfort one Rinse’s campaign that promote the save of water when washing clothes.

Other parts of the sustainable living plan are the limitation of animal testing and the use of different approach for products assessment, preparation of the society for natural disasters (with hygiene and business expertise), product donations and financial assistance.

As regards the stakeholders’ engagement, Unilever has opened a periodically discussion with stakeholders since the introduction of its strategy. With the Forum it has developed, Unilever opens the debate with the main representatives of the distribution, production, associative, institutional, academic and media, and intends to create solid collaborations

to create new business models in all over the world and inspire more responsible consumption behaviours.

Another aspect is the employees' well-being. Unilever promotes a physical and mental positive work-place environment because it realizes that when people feel confident in their working environment, they are also more productive. It is not just an aspect of the plan but it is at the heart of the strategy; the company looks after the health, diet, sleep and energy of its employees, recognizes the mental challenges such as pressures and stress and seek to address all these problems to make people more attached at their work-place.

Therefore, it can be said that, according to the three main CSR strategies observed in the literature review, Unilever adopt a mix of all the three strategies, taking into consideration the environment, the society and employees. Nevertheless, the focus is on the society and its education to act responsibly. There are not specific processes that changes because the sustainable living plan is part of the mission and vision of the company, in perfect co-ordination of the corporate strategy, but it is possible to note that Unilever is very oriented towards the end customer, so the main process on which it allocates its resources is in the marketing communication, downwards the value chain. In fact, marketing is one of the main means used to achieve results aligned to the sustainable living plan. At the same time there are also some changes in the procurement process since a number of food products include ingredients that comes from farm animals and the farm animal welfare is one of the main KPI of Unilever. Today, Unilever purchases 100% of products from sustainable source and has developed solid relationships with farmers for the provision of free-cage eggs.

Moreover, it also requires a significant effort by management in avoiding some behaviours that would be easier for the achievement of certain operative results, such as the animal testing that would be even cheaper to adopt for product assessment but that is against the Unilever philosophy. So, the Sustainable Living Plan affects a wide range of operations along the value chain, from the product design, to its development, production, control and distribution. To apply these changes, the company needs to build a solid network of values that all the employees shares in a vision of "act responsibly". In fact, whilst on one hand the company creates a friendly environment for its employees, on the other hand it establishes a range of values and standards that each employee is expected

to follow, Unilever Code of Business Principles. Every worker at Unilever is expected to be a “brand ambassador” by undertaking actions with integrity, the main Unilever’s value. The employees are not only expected to embrace the values including respect, responsibility and pioneering, rather they are also called to actively contributing in detecting potential concerns that may undermine the business integrity. In fact, the cultural system created by the company aims also to detect and respond with sanctions to inappropriate behaviours throughout the mutual supervision of employees. Indeed, the three fundamental principles of Unilever integrity are based on:

- Establishment of an integral and confident working environment for employees as well as establishment of transparent and fiduciary relationships with suppliers and business partners to uniform the values along the value chain and better engage with all the involved stakeholders.
- Detection of problems by creating the conditions to encourage employees to speak up in case of behaviours non-compliant with the Unilever’s Codes and Standards
- Punishment tools such as sanctions to prevent unwanted behaviours.

Applying these principles to the formal and informal control systems analysis done in the literature review, it can be said that Unilever adopts a strong informal system intended to align people’s culture with the organizational one through a set of “clan controls”. However, it is not enough to exercise a strong pressure on employees to spur sustainable behaviours, most of all considering its dimensions and international perspective. It is for this reason that Unilever applies also formal control systems.

In fact, Unilever has a Corporate Responsibility Committee whose main function is to detect any external development that may affect the company’s position and responsible conduct as a multinational player. The information about emerging sustainability trends and potential risks discussed by the Committee are reported by two sustainable bodies: the Unilever Sustainable living plan council (USLP Council) and Unilever Sustainable Living Plan Steering Team. All the three parties are chaired by the Chief Marketing and Communication Officer and this confirm that the most important business process for the implementation of the CSR strategy is based on marketing and communication, as previously stated.

Furthermore, the CR Committee has developed a framework over the years to embed the sustainable issues in the Unilever strategic planning process and use them as inputs for boosting growth. This structure seeks to quantify the main value drivers for the company: more growth, lower costs, less risk, more trust; it should help the business unit managers to adopt a comprehensive and uniform framework to evaluate their progress on social and environmental issues.

Finally, one of the main functions fulfilled by the Committee is to constantly monitor the reputation of Unilever by regularly briefing external insights with surveys and annual summit to analyse with independent source of information where the company is performing well and where there are opportunities of improvement. Overall, the major stakeholders acknowledge that the powerful impact of Unilever in challenging social and environmental concerns in a global scale is due to its outstanding ability to integrate sustainability in its core business model.

In addition to the framework proposed by the CR Committee, the USLP Council has developed an Index adopted for the incentives plan and bonuses for the executive directors: the Sustainability Progress Index (SPI). As stated in the Unilever Remuneration Report (2019), “with the introduction of the Sustainability Progress Index as a 25% performance metric in our MCIP in 2017, we have further strengthened the linkage between our remuneration policy and Unilever’s identity, values, mission and contribution made to society”. The index has been introduced in 2018 and it takes into account a number of qualitative and quantitative indicators-such as climate changes and supply chain ethics- and that account for the extent to which directors adhere to the Unilever Sustainable Living Plan and address the main risks identified. The main KPIs, divided by category, are the following:

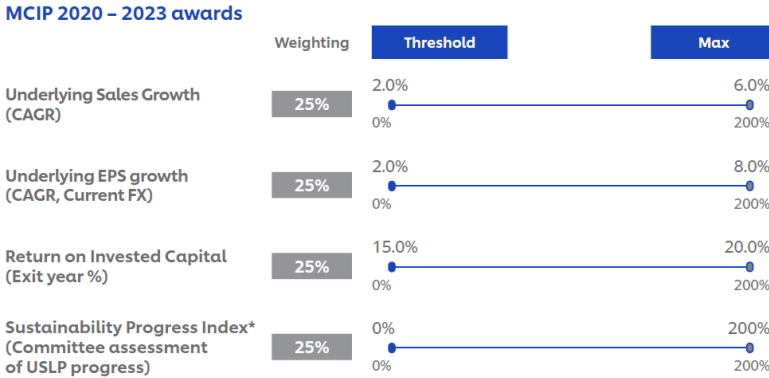
Fig 6. Sustainable Living Plan’s KPIs

1)	Health & Wellbeing	Dove: Help young people build up positive body confidence and self-esteem through educational programmes.
2)	Environmental Impact	CO ₂ : Reduce emissions from energy from factories per tonne of production.
3)	Enhancing Livelihoods	Responsible Sourcing Policy (RSP): Source our procurement spend from suppliers meeting the mandatory requirements of the RSP. Accident Rate: Reduce the total recordable frequency rate (TRFR) for accidents in factories and offices.
4)	Transformational Change	Sustainable Palm Oil: Purchase crude palm oil from physically certified sustainable sources by 2019.
5)	Ratings & Rankings	Achieve top ratings in a range of leading sustainability rankings and indices.

Source: Directors' Remuneration Report, Unilever, 2019, p. 65

As it may be noted, they are long-term objectives and for this reason they are evaluated every four years. The incentive plan package for Directors is divided in four parts:

Fig 7. Reward weights



Source: Directors' Remuneration Report, Unilever, 2019, p. 65

So, the sustainable issues account for the 25% of the director bonuses, equally weighted as the sales growth, earning per share (EPS), return on invested capital (ROIC). Moreover, the directors have the obligation to invest part of their bonuses in Unilever shares to attach them even more to the company's growth.

This is a relatively new framework and it is only applied to the CEO, CFO and non-executive officers. For its emergent development and implementation, it would be expected that Unilever extends the package also to lower levels of management, maybe by reviewing the percentage weights.

To summarize everything analysed so far regarding Unilever, it is one of the best companies in applying practical solutions to the main social and environmental issues. Its CSR strategy, the Sustainable Living Plan, has been developed twelve years ago by the CEO Paul Polman and today it assures to the company a significant portion of sales growth thanks to its 40 sustainable brands. The strategy is perfectly integrated with the core business activities and affects all the processes along the value chain, with a particular emphasis on customer relationships. By producing Retail items, its focus is on social concerns which, in turn, affect also the environmental welfare (for example in the case of

water consumption reduction effort). The sustainable living plan embeds all the company values that every employee should accept and internalize to undertake an active role within the organization. So, based on the literature review, the informal control systems related to the self-control and clan control are very strong and rooted in the company routine activities. As regards the formal control systems, Unilever is a multinational organization and the informal controls are not enough to deliver its positive impact. Indeed, it established three bodies with the role of imparting directives to management, provide them means of monitoring and evaluate the results and progresses. Moreover, the CR Committee has also the assignment of interacting with the external environment to capture and elaborate the main social and environmental trends and risks. In addition to these structured formal boards and their mandates, it has developed a compensation plan for executives which consider also the progresses made for the achievement of the USLP targets to which has been attached the same importance as the other financial indicators. This is an outstanding achievement for the company but, at the same time, it demonstrates how the monetary rewards, even if they are considered as the best control system to align people behaviours to the organization perspective, are still in a development phase for many companies which favours other forms of performance oversights.

5.3. Patagonia

The second company analysed is Patagonia. It is an outdoor clothing company established in the 1970s. It reinvented the logics of the outdoor products by introducing new materials and stronger colours for mountain clothing. It has been a growing company since the 1970s thanks to its business model that overturns the paradigm of producing clothes and embeds the company social and environmental footprint. It works because the company's environmental efforts are effective and real, and the brand has the reputation necessary to prove its authenticity. In the early 1990s, Patagonia began using organic cotton which attracts buyers like Nike and Gap. It triplicated the profits between 2014 and 2018 and many newspapers sustained that its success was due to its environmental and anti-consumer policies. For example, Patagonia published an advertising in 2011 on the New York Times which discouraged the purchase of its own product, the Pile Fleece Jacket, because it generated significant environmental costs and

it disclosed those costs. It seemed a suicide campaign but thanks to Patagonia's responsible customers, the strategy worked since it doubled its online sales in two years.

Today, the company follows the same strategy. In fact, by entering in their website and in the dedicated section of sustainability, the first page is dedicated to show customers which are the hidden costs of fashion industry and how high they are. Its campaign focuses on global warming and indeed it shows the contribution of the fashion industry. The company stresses out that the problem is related to the so-called "fast fashion", the new form of clothing strategy concentrated on pushing people change their clothes always more frequently. However, Patagonia does not view at this strategy as something profitable but as something that increase the level of waste and pollution. In fact, as it is reported in its website, the clothing industry contributes to the 10% of the pollution driving the climate crisis.

By condemning low prices, overconsumption and culture of convenience as the main causes of pollution and human rights abuse in the fashion industry, Patagonia has developed a solid and long-lasting Corporate Responsibility strategy already present at the beginning of the business inception. The main action taken are based on the use of recycled items, which in 2020 account for the 64% of the materials and save 3000 metric tons of CO₂. Moreover, all the cottons used are organic because chemicals are not used in their growing process which implies a reduction of water consumption and 45% of CO₂ compared to normal cottons. The company has adopted this approach over the years because it is part of its mission and not because is demanded by customers. In fact, Patagonia aims to build the best product at the least amount of harm. To do that, the company sets four main environmental goals to be reached within 2025:

- Change of supply chain processes to become 100% carbon-neutral
- Clothing products produced by 100% recycled, reclaimed or renewable materials.
- Adoption of reusable and compostable packaging
- 100% of fibres will be Regenerative Organic Certified (ROC) by 2030.

In addition to the main environmental concerns, the company cares also about its employees. In fact, the apparel sector is among the lowest paid and poor working conditions. Patagonia operates among 10 countries in the world and many of its products have been certified by Fair Trade that guarantees environmental, labour and

developmental standards. The company pays a premium to each product which is certified and the factory involved in the fair trade can decide how to spend that amount of money. To highlight the culture of the workers, in the majority of circumstances, they are spent to fund community projects, health-care or child-care programs. In the website are reported all the products related to the fair-trade program so customers may consciously purchase products which respect the human rights for sure. At the same time, the fair-trade program is widespread also across the supply chain by holding partners accountable for the highest standards of business, quality, society and environment that have been directly created by Patagonia because such rigorous standards do not exist in the market. For each standard, it has been developed a team that has veto power over the existing and new supply chain partners that allow for the total and constant screening of suppliers.

So, by reminding to the three CSR strategies identified in the literature review, it can be said that Patagonia adopts a mix of strategies, focusing simultaneously on internal stakeholders and both external environmental and social stakeholders. However, as highlighted by the main points of the corporate strategy, there is a strong environmental footprint pursued by the company which is confirmed by two important programs: Patagonia's self-imposed tax, 1% for the Planet, that supports non-profit environmental organizations fighting for air, land and water around the world, and the connection with activists and a dedicated program- Patagonia Action Works- which supports the meeting of Patagonia employees with the main environmental activists. The results are consistent since the company dispatches more than 89 million dollars to local communities and environmental protection.

As regards the processes subjected to the major changes, the procurement of materials and marketing and communication result to be the most affected. In fact, the use of organic cottons requires a higher effort for the producers in treating cottons in a different way; at the same time, benefit of the less dependency from the main pesticides multinationals and can guarantee safer working conditions. The farmers should meet strict requirements to be part of Patagonia supply chain and they should follow a path towards organic production that may last several years before obtaining the certificates to be a Patagonia partner that, in this way, changes also the relationship between Patagonia and its suppliers which is even more long-lasting than other business relations.

In addition, the company also has a peculiar way of communicating with customers. Indeed, the communication with external parties is not only oriented to inform but also to educate: Patagonia attempts to steer customers behaviour towards responsible consumption, as it does for its employees.

As regards the control systems adopted, it can be identified two main systems which are very different from the traditional formal and informal control systems analysed so far. In fact, the most important systems are cultural control systems. In its mission statement “we’re in business to save our home planet” (Patagonia, 2021), Patagonia is suggesting that the environment should be in the sphere of values of all the people related to the company since the reason for doing business is to improve the quality of the planet. It seems weird to be able to reach such an ambitious goal putting the main lever on cultural controls but Patagonia creates a pyramid structure that goes from the base to the top. In fact, it has a dedicated director of Campaigns and Advocacy who curates all the existing and emerging CSR initiatives and he delegates the power to every business unit. In fact, if in the previous case-study it has been analysed a dedicated committee that audit the main CSR programs, in this case the approach is completely different, by extending environmental and social concerns to be part of the lower levels of management. To bring an example, in the distribution sites in Italy, which account about 40 employees, three of them have hybrid roles defined as “environment and marketing manager” or “environmental community organiser”. This is a great percentage considering that they belong only to the business unit of Italy. Moreover, the role like the “community organiser” highlights the fact that the connection between the local community, the environmental activists and the company is very strong, not only at the top levels of management but also at the lowest hierarchical levels. So, it can be said that the company adopts a bottom-up approach related to CSR strategic goals because the initiatives can start from the lower management and, in any case they involve all the employees: this helps the company to shape the desired organisational culture. The interest for the environment becomes an essential requisite to be part of the Patagonia workforce and indeed, as reported by a Patagonia employee, it favours people that have hobbies like mountain activities. Therefore, it can be concluded that the cultural control already starts from the recruitment and selection process and strengthen when people are part of the organization. In fact, the company promotes certain behaviours with a large amount of initiatives such as encouraging employees to use the bike to go to work. The incentives

are not related to any compensation program, rather the control is carried out by publicly praising these behaviours at global level. So, regarding people controls it can be said that in the Patagonia example they are not used to support the formal control systems, rather they are the main control system to perfectly integrate the environmental concerns in the core business activities; this may be addressed to the fact that, by looking at Patagonia value proposition, it fulfils a role that is an hybrid between a production company and an environmental activist, so it is clear that the profitability is a secondary concern which employees are expected to understand and interiorise.

In conclusion, Patagonia is a peculiar case of management control systems applied to CSR strategy. It does not only develop a CSR strategy but the social and environmental challenges are part of its reason to exist. The control systems focus on cultural controls and it starts from the selection process because it believes that it is better to attract and retain people who already have environmental and social concerns in their intrinsic values. Moreover, the organisation is set in a way that employees will become part of a group of people who actively take actions against the major environmental challenges such as climate changes, pollution, water consumption, being those activities part of its working and life mindset. To this type of control, it should be added the rare decision to establish low and middle management role that form the link between financial dimension. Overall, it may be argued that Patagonia demonstrates an exemplary case of the superiority of people controls in achieving sustainable results and in involving people to give their active contribution. The most trivial part of formal controls, inversely of the the majority of instances, support the informal controls to achieve an organizational culture integrated within all the business.

5.4. Alcoa Corporation

The third company included in the sample is Alcoa. Alcoa is the third largest producer of aluminium, operating in 44 countries around the world. The Ceres reports highlight that the Materials and Utility industry is one of the most advanced in the application of MCS to sustainability and Alcoa, the US leader producer of bauxite and aluminium is one of them. In fact, it used to link the executive cash compensation to CSR performance already in 2014.

At the heart of its operational excellence there are ethical values such as safety at work and environmental protection. This is because the company is aware that the material industry suffers the society pressure since the risks related to operations are higher with respect to other sectors; so, in order to be a legitimized leader, the company encompasses ethical behaviours in its business activities. The values are supported by a strict Code of Conduct in which determines what is expected by all employees. Some rules of the Code of Conduct include the policy against bullying and harassment, international trade policy and supplier standards. In fact, the Code of Conduct, as it has been noted by the previous case-company, does not only affect the internal stakeholders but also all the partners involved in the supply chain because the size of the company is large enough to influence also the external environment. Moreover, the policy trainings are available to employees, suppliers and all people who are interested in order to spread out as much as possible the concept of operating with integrity. The main numbers used to measure the internal stakeholder strategy success are the percentage of applicants, hires, promotions and retained employees. In a sector which has required the predominant presence of men for the toughness of activities over the years, Alcoa is fulfilling programs that aim to achieve a balance between women and men in the materials industry.

The CSR strategy adopted by Alcoa has a double face. On one hand it is related to environment which has become a “must-have” component of the sustainability strategies and report; on the other hand, a great focus is on the safety of employees, being the nature of operations more exposed to dangers. In fact, one of the main goals which the company tries to accomplish is the limitation of life-threatening or life-altering injuries and illnesses.

Furthermore, the company is aware of the fact that whereas the aluminium improves the energy efficiency of buildings, trucks, airplanes, food and beverage packaging, its production requires and intensive exploitation of energy and resources. For this reason, the company includes GHG emissions reduction and water consumption efficiency in its long-term goals agenda. The main processes that change to make aluminium production more sustainable are operations and in particular smelting. Indeed, aluminium is an efficient material used in hundreds of industries but it needs to be smelted and this process requires intensive energy use and provokes greenhouse gases emissions. Therefore, the company invests a high amount of money to innovate and find technologies

that reduces GHG emissions. In 2019, Alcoa invented a technology that eliminated all direct GHG emissions from the aluminium smelting process. The other process mainly affected by sustainable initiatives is recycling; if the production of aluminium is energy consuming, it has the benefit of infinity times of recycling. In fact, “according to the International Aluminium Institute’s analysis, approximately 75 percent of all primary aluminium ever produced is still in productive use due to its strength, product life and recyclability. So, producing primary aluminium from recycled content consumes about 5 percent of the energy required to make virgin aluminium” (Alcoa, 2020). Therefore, it can be said that the recycling process partially balance the high levels of energy consumption for the aluminium production, because the scarce efficiency upwards the value chain is offset by the outstanding efficiency at the end of the product life-cycle. Thus, sustainability plays a key role in the main manufacturing operations such as casting, which is the actual production of different products which composed the Alcoa’s items portfolio and rolling which is the production of specific rolls used to produce food and beverage containers.

From the structure of the Alcoa’s sustainability report, some insights may be deducted. As opposed to the CSR strategies of Unilever and Patagonia which embed sustainability in their reasons to exist, Alcoa has developed a CSR strategy which is responsive rather than preventive. In fact, many actions undertaken to improve its sustainable impact are developed to increase its level of acceptance in the 44 countries in which it operates. For example, as stated in Alcoa’s Sustainability Report (2020), “In December 2019, the European Union launched its Green Deal to reach net-zero greenhouse gas emissions by 2050. Included in the roadmap is a proposed carbon border adjustment mechanism with a particular risk of a carbon border tax in Europe”. Based on this new regulation, Alcoa has planned to develop new initiatives to reach a better carbon market efficiency. As it may be noted by this example, the company adopts a reactive approach to regulation and the initiatives arise from the need of compliance and international legitimization. Therefore, it can be concluded that, in spite of the outstanding CSR performance of Alcoa, its goals are mostly concerned to profitability. In fact, this is confirmed by its three-long-term objectives described as follow:

- Create sustainable value for the communities where we operate, with the aim to maintain our license to operate and grow our business.
- Enhance the value of our products through differentiation to improve our profitability.

- Minimize our negative environmental impacts and improve our health and safety performance to protect environmental and employee well-being and reduce our long-term risk exposure

By analysing these three goals, it can be said that the formers directly refer to economic growth and profitability, whilst the latter refers to the risk exposure related to its operations and industry that, as it has been suggested by Ceres reports, suffer a higher society pressure. However, this is not to say that Alcoa has not a credible CSR strategy since it is well integrated in the core business operations and, in addition, it is supported by management control systems. This is to say that the CSR strategy has been developed for a different purpose which is mostly related to the compliance with international regulations and whereas in the cases of Unilever and Patagonia there is a sustainability mindset thanks to a consolidated leadership directed towards CSR, in Alcoa there is still the predominance of the economic dimension. In fact, not surprisingly, the CSR strategy results in a mix of focus on employees and external stakeholders interested to environment, the areas where regulation is most developed.

Moving on to the analysis of the management control systems applied to sustainability, the formal control systems are oriented towards the just-mentioned “compliance goals”. In fact, Alcoa established a director dedicated to Ethics and compliance, the Chief Ethics, Compliance and Privacy Officer. She ensures that the Alcoa’s ethical values are aligned to regulation and, thus, is a figure who allows the communication between what is externally required and what the organization actually does. In addition to the executive director, Alcoa sets up the Safety Sustainability and Public Issues Committee whose main responsibilities are to provide insights and guidance about the main Corporate responsibility issues such as environment, work health and safety and society; provide directives to management about the new sustainable programs and initiatives and its oversight; communicates with external stakeholders, identify their concerns and bring them to the board attention to have a constant monitoring of the main sustainable developments. Finally, it also oversees and audit all the risks that may undermine the company’s reputation and impart guidelines about how to avoid those risks.

By comparing the formal control systems with Unilever, it can be said that, whereas Unilever Corporate Responsibility committee is oriented towards the alignment of Board perspective with management behaviours, Alcoa committee focuses more on capturing

external trends of sustainability and developing initiatives on the basis of those external trends and requirements from regulators. Therefore, Unilever and Alcoa develop their formal control systems based on different stakeholders: Unilever mainly focuses on customers and their well-being, Alcoa focuses on governments and regulators. This leads to a different level of management integration with control systems related to CSR and, in fact, Unilever has a stronger structure of mandate and communication with lower management, whilst Alcoa has a stronger structure of communication with outside players.

As regards the compensation system, Alcoa was recognized by Ceres report in 2014 to be one of the best performers to link sustainable objectives to executive compensation. In fact, it links the 20% of executive compensation to the achievement of this kind of goals. Today, this link has raised to 30% of executive compensation. The main objectives are “safety, gender representation in the workforce, and reductions in GHG emissions due to process improvements” (Alcoa, 2020) which are consistent with the CSR strategy identified, focused on employees and environmental protection. For this reason, Alcoa requires that the Compensation and Benefits Committee would be composed by people with certain skills and attributes also related to sustainability to provide significant insights to relate the best company practices to executive compensation. The compensation system is set to align pay to firm performance and retain talent. Moreover, it is entirely based on performance for executives and it is a mix of cash and equity compensation link stock options. So, considering that the 100% of the compensation is variable and the 30% is link to non-financial targets, this is a huge percentage.

In conclusion, Alcoa has been included in the sample for its outstanding performance in linking executive compensation. It demonstrates to have a CSR strategy oriented towards the prevention of risks related to its reputation which, in turn, fosters the change in some of the core business processes with significant results in the context of GHG emissions reduction and safety at work. For these reasons, it is the aluminium leader company dealing with sustainability. As regards the control systems applied to sustainability, it shows to have a mix of formal and informal controls where the former prevails on the latter. In fact, it encompasses all the best practices recognised by the Ceres reports: formal board mandates, board expertise, executive compensation, with a particular relevance of the executive compensation. The cultural controls are weaker than formal controls and

they focus both on employees and on external partners with a large amount of policies that aim to align the employee behaviours with company values. Nevertheless, the action controls are essential for Alcoa since the working environment in which people operates is more risky than other context and strict code of conduct are necessary to guarantee the safety at work, one of the main company target. The formal structure of control that Alcoa has developed over the years ensures a constant monitoring of the external stakeholder requirements and a prompt company response which lead it to be an innovative producer which combine sustainable activities with profitability and so obtaining the legitimization of its practice worldwide.

5.5. Nestlé

The fourth case-study company is a leader in the food and beverage industry operating in 187 countries with more than 2000 brands which means that it is almost able to reach the entire global population. Its slogan “good food, good life” gives the first insight about its mission related to the nutrition, health and well-being of customers. This is an example of CSR strategy and sustainability control systems and it is not surprising to look at these figures in companies with such great sizes because when organization reach this level of power and international influence, their mission cannot be only related to profitability since they are expected to do something more, given their importance. As it has been analysed for Unilever which is a consumer goods producer as well, the company that directly produces for the society should concentrate their strategy in order to make a positive impact on customers behaviours. In fact, the company slogan suggests its intention to affect people nutrition choices in order to improve the quality of their lives.

Some of the most relevant initiatives focus on children; for example, the company is aware that food is unevenly distributed over the world, being 38 million children under 5 years old obese or overweight and 47 million children not getting enough food in 2019. In both cases the nutrient ingredients lead to problems that Nestlé is seeking to address by simplifying the ingredients of foods, reducing artificial colours and using less saturated fat ingredients which, in turn, will enhance people health conditions. On the other hand, the company is seeking to make its products more affordable, especially in the weakest countries. Nestlé develops an ad hoc program, Nestlé for Healthier Kids, which aims to help parents to raise their children with the most nutritious food ingredients, while providing useful tips for nutrition education and healthy recipes through food packaging.

As seen from this example, all the resources are turned to enhance the quality of food that can have significant impact of people lives and, in fact, all the major objectives of the company are oriented to pursue the food quality and safety, availability of nutrition for as much populations as possible, adoption of innovative techniques that enhance the production of plant-based food and in addition, combine these objectives with the environmental protection through sustainable packaging. As in the Unilever case-study, profitability cannot discern from CSR strategy but they should be combined: one of the company goals is to increase sales of organic products which will slowly change the customer tastes towards more healthy consumption.

Another aspect of the strategy related to commitments towards society is about the alleviation of poverty and enhancement of rural development. This is possible thanks to Nestlé efforts to improve the livelihood of agricultural workers involved in its supply chain by applying Code of Conduct not only on treatment of product but also on treatment of workers which should be in line with the one of Nestlé Code of Conduct, mainly based on respect of human rights, empowerment of youth employment and improvement of gender equality.

If on one side Nestlé is committed to improve the quality of people nutrition, on the other it is committed in improving its environmental impact. Nestlé international program aims to make 100% of the company's packaging recyclable or reusable by 2025. According to the Nestlé Sustainable Packaging Commitment report, the 96% of the packaging used by the company for products is recyclable: 100% recyclability for corrugated cardboard and glass, 98% for paper, 87% for aluminium, 90% for rigid plastic and 80% for flexible plastic (Nestlé, 2020).

The analysis of Nestlé CSR strategy leads to some consideration about the type it has adopted; first of all, according to the three main strategies identified in the literature review, it can be said that Nestlé has a CSR strategy focused on external stakeholders and, in particular, stakeholders interested to social and environmental issues. This is not because it does not care about internal stakeholders but rather it should be taken into account that Nestlé is a company with more than 150 years of history and it has developed a solid system of people empowerment within its organization that is now seeking to export outside to its suppliers as well. So, nowadays, its strategy mostly focuses on the emerging challenges related to nutrition and environmental degradation, the issues

where Nestlé can bring its major contribution thanks to the influence on billions of customers.

As regards the main processes affected along the value chain, Nestlé provides for the identification of five main processes which are agriculture, suppliers, internal operations, business distribution channels and customers. For the issues related to the changes in nutrition tastes and habits, the processes affected are the ones downward the value chain which are distribution channels and customers since the means to achieve these goals is marketing. When talking about its effort towards communities the main processes affected are the agriculture and suppliers who are asked to respect both people and animal rights. Nevertheless, it should be noted that the respect of the human rights is the only issue material for all the five business processes. Finally, whereas the social issues affect the value chain partially upwards and downwards, the environmental concerns affect all the stages of production and distribution. Indeed, environmental protection is an issue that Nestlé perfectly integrate along all the supply chain, from land management in the procurement processes, resource efficiency and GHG emission reduction in product transformation processes, use of sustainable packaging in the product distribution and, finally, to the education of customers to properly dispose waste. The matrix used to identify which processes are affected by the material issues is used by the executive board to make considerations about the future challenges and by the Risk Management team to evaluate all the potential consequences related to CSR strategy priorities and their effects on business success and to communicate with stakeholders about which are the main actions undertaken to achieve the sustainable goals. The most recent analysis shows that all the issues have a positive and significant relationship with corporate success. Some of them, are also considered essential for boosting sales- like healthy and nutritious products- and some others have positive impacts on cost structure such as the issues related to the supply chain management. Despite this analysis, as reported by the company, it still faces insurmountable limitations in determining which is the percentage of influence of the CSR issues on economic aspects.

Despite the economic difficulties in calculating CSR issues influence, Nestlé includes some KPIs in the determination of the annual group performance. The group performance is the base to calculate the variable compensation of executive directors, which is the main part forming its annual salary. It reflects the group long-term strategy achievement and it is

mostly composed by 40% profitability and 60% organic growth, which directly affect the director compensations. Other quantitative and qualitative measures are added, like products with Nutrition, Health & Wellness benefits, market shares, capital expenditure and strength of Nestlé values and culture. All these indicators are monitored to allow that the compensations are aligned with the long-term business strategy. So, the company rewards its employees on the basis of the long-term success and stakeholder value creation. In fact, organic product sales, even if related to profitability, are considered a good measure that the company uses as meeting point between financial and non-financial results. In addition to this hybrid measures, other qualitative measures are added and they directly reflect Nestlé's social mission to improve global nutrition, health and well-being. These measures are included in the long-term incentives since they are considered performance indicators that represent the long-term sustainability strategic objectives and their achievement will require a period of multiple years. However, for the current year 2021, the company decided to introduce a substantial change: KPIs related to Environmental, Social and Governance (ESG) will be included in the short-term bonus framework of Executive directors. This leads to the conclusion that sustainability is going towards the direction of not being considered only a long-term goal, rather it follows a more dynamic path and there is the emerging necessity of including specific targets, such as sales of more nutritious products, in the annual business plan and align the targets to the director compensations.

As regards the other aspects of formal controls that may be met within an organization, Nestlé, as all the major multinational companies, has a structured governance which include sustainability with the apposite Committee. Nestlé's Nomination and Sustainability Committee (which includes the board chairman) oversees the company's long-term sustainability strategy, monitors performance based on selected indicators, deals with the annual sustainability disclosure and assesses which are the material issues for stakeholders. The Committee periodically discusses the relationship between non-financial and financial performance and how the former affects the latter. Moreover, the Committee also analyses how the corporate strategy is oriented towards the creation of "shared value" for stakeholders: in this circumstance, it is possible to evince that non-financial performance are also used in the decision-making process. all the activities of the Committee are then delegated to other management bodies like Nestlé in Society

board (chaired by the CEO), the Operations Sustainability Council and the R&D Council for Sustainability and Nutrition.

In addition to the governance structure, Nestlé can also advance of a careful selection of the top management levels which takes into account their skills and attributes with respect to sustainability.

For example, the Chairman of the board, Paul Bulcke, is a Co-Chairman of the 2030 Water Resources Group, which has the mission of helping countries achieve water security, in line with the United Nations Sustainable Development Goals. Ann Veneman, who is a member of the Nomination and Sustainability Committee, was formerly the Executive Director of United Nations Children's Fund (UNICEF). His role was directly related to Nestlé mission, which is to support child nutrition. Pablo Isla, who has been nominated for election to the board in 2018, was named the Best Performing CEO in the World, for his outstanding ability to conciliate financial and ESG performance in the fashion industry with the retail company Inditex.

On the basis of what has been examined so far, it can be stated that Nestlé has adopted some of the best management control systems applied to sustainability. They resulted to be effective and lead to consistent result in terms of CSR progress. However, something more could be done to find proper non-financial standalone indicators and not only hybrid indicator such as the organic sales, that remain strictly connected to profitability.

As regards people controls, they are mainly related to the so-called clan controls that are those systems which boost sustainable behaviours aligned to the business sustainability strategy. In fact, Nestlé has built an environment in which people feel personally committed to the company's purpose and where the team-working is a strategic tool used to enhance sustainable initiatives. Moreover, it underpins collaboration also with the outside partners. In fact, the organizational framework facilitates the dialogue with the communities in which Nestlé is integrated to stimulate curiosity in its employees which will be reflected in a better understands of stakeholder needs and habits as well as its social impact. Overall, people controls are intended an interactive system of mutual improvement of personal and working sphere which result to be less strict with respect to more traditional Code of Conducts but more effective in aligning people and corporate values, as it has been noted in the Patagonia case-study.

5.6. BNP

So far, the sample has included industrial and consumer companies. However, there is the emerging tendency of engaging with CSR also in the financial sector and, in particular, in the banking sector. Generally, banks can engage with CSR by becoming more compliant in building customer relationships based on trust and transparency. So, it can be said that the major bank contributions are to CSR related to social issues. Moreover, to effectively engage with CSR it is not necessary to make exemplary donations but rather, it results to be more effective the building of local and targeted approaches focused on the needs of customers to provide a trustworthy and sound economy.

Even if it may seem that the banking sector will have a relatively low impact, it should be considered that banks have the power to allocate investments and the inclusion of sustainable objectives in their investment strategies can make a great difference in the market growth as well as in underpinning the sustainable progress. BNP extends the key elements of sustainable investments to all its range of money allocation. In particular, its investments should include the aggregation of the ESG factors and responsible business conduct. It has been one of the first financial companies in taking this decision of full-business integration with CSR. BNP is continuously enhancing its engagement with CSR which it has also resulted to be less risky than other types of investment and help to achieve market stability. This theme is still unresearched, so BNP is also an active investor in diligent companies and, through its voting right, the Sustainability Centre imparts guidelines about ESG issues and long-term sustainable objective inclusion. Ultimately, this resulted to be a win-win-win strategy because investments are also very profitable and this creates an advantage for clients, BNP and all the outside community and economy which can benefit of the progress generated by these investments. BNP has identified three critical aspects of sustainability which are included in its long-term objectives: energy consumption reduction, environmental sustainability and equality and inclusive growth. They are a mix of social and environmental objectives that BNP can enhance by investing in companies and initiatives that are part of the solutions to these global concerns. So, the French bank systematically allocates capital on companies with a sustainable footprint, encouraging the development of new strategies and leading them to successful solutions. On contrary, BNP will divest from those companies that appear

too risky, not aligned to the sustainable changes and that not contribute to the market social and environmental improvement.

So, it can be said that BNP adopts a CSR strategy oriented towards both the social and environmental concerns, which are both included in its long-terms objectives and perfectly integrated in its daily decision-making process. However, it is not a production firm and all the major processes affected by its CSR strategy are related to relationships. It concerns with relationships with customers, with investees and with employees. Its major contribution to society is achieved through employees who represent the major investment in terms of trainings and governance structure to shape their values and, in turn, behaviours. Therefore, BNP represent a good example of integration corporate and CSR strategy integration, in which human and monetary capital are both oriented towards a sustainability approach.

As it has been seen so far, one of the most adopted formal control systems is a Corporate Responsibility Committee that gives guidelines about the non-financial result targets and oversees the outcomes. This is an effective way to build the organizational framework, although the main influence remains on the top management levels, whilst the middle and lower management keep taking decision financially oriented. In the case of BNP, and in general of the banking sector, the framework should be organised differently. In fact, it should be considered that even the lower portfolio manager should take into account the ESG factors when developing a new investment strategy and, thus, this means that BNP builds an underlying control system capable to make people aware of the importance of ESG factors, allow them to internalize these values and combine sustainable values with technical skills because the risk evaluation is different as well. This outstanding achievement has been possible through a careful selection process which carefully evaluate values and interests of the management and, most of all, through a frequent review of the governance structure and its components.

The main formal controls identified are supported by the Committee responsible for overseeing the application of the ESG integration guidelines and responsible for approving each investment team's proposed integration methodology. As it has been said, relationships are at the basis of BNP business strategy; in fact, its controls go beyond the internal business structure and influence the decision-making of its investees through an ad hoc commission, the Sustainability Centre which is accountable for delivering BNP

values and make investee decisions consistent with BNP perspective. Without this Centre, the bank may lose credibility due to a misalignment of purposes between the investors and the investees.

In addition, BNP pay a great attention to the intrinsic values of its management which, in other words, contribute to the achievement of long-term goals through self-control system and executives expertise. For example, “Jean-Laurent Bonnafé, CEO and Director, regularly publishes articles about sustainable finance and the transition to sustainable energy” (Ceres, 2018). Moreover, “at the 2017 One Planet Summit, he took part in the discussion about the topic “risks and opportunities related to climate change” and agreed a partnership between BNP Paribas and United Nations Environment in 2017 to drive sustainable finance in developing countries. Jean Lemierre, Chairman of the board, was formerly the President of the European Bank for Reconstruction and Development (EBRD), an international financial institution promoting sustainable growth and green energy. Jane Fields Wicker-Miurin, Chair of the Corporate Social Responsibility committee, is the co-founder and a partner of Leaders’ Quest, an international social enterprise that works with leaders in business, government and civil society to create a more equitable and sustainable world” (Ceres, 2018).

These examples demonstrate that the top management interest in CSR goes beyond their role and compliance with corporate principles, rather they are part of their intrinsic values and contribute to the organisational culture.

The compensation system is less evident in BNP. The variable portion of the manager salaries is related to the compliance with the Code of Conduct that includes the ESG assessment factors that should be considered in investing decisions. For the top 5000 managers, it is planned a compensation for the advancement on the achievement UN sustainable Development goals which count for the 20% of the total variable compensation. In addition to the SDGs, the monetary rewards are structured to boost the effort towards the three previously mentioned sustainable objectives. The exemplary compensation is the CEO’s one, which includes the achievement of twelve different social and environmental goals.

In conclusion, BNP emphasises people controls because they favour the development of new bottom-line sustainable initiatives and, as a result, it increases the possibility to be

more integrated with the same values across all the management levels. Moreover, there is a set of “administrative controls”, as in all the large companies analysed so far; the result measure selected is the UN SDGs which significantly help companies to understand what are the relevant issues in which they can make an impact and to which extent they can improve the current social and environmental conditions. The majority of measures, such as GHG emission reduction and water consumption, are expressed in percentages and this make it difficult to compare or aggregate them to have an overall measurement of the CSR company improvement.

5.7. Iberdrola

The sixth company of the sample is an energy company. As it has been understood so far, firms of certain sector, such as energy and utilities, are subjected to higher pressure from stakeholders because their environmental impact may be significant. Iberdrola represent one of the best examples of responses to stakeholders’ expectation and integration of sustainability principles in the mission. Indeed, it is not only one of the largest energy producers of the world but it is also the leader in wind power.

As it might be expected, Iberdrola sustainability strategy focuses on environmental interests, with the main objective of reducing its emission intensity to 50 gCO₂/kWh globally by 2030. However, the effort is extended to a commitment that goes beyond Iberdrola’s power that is being carbon neutral globally by 2050, with an estimated investment of 150 billion in ten years for renewing the business model and becoming even more sustainable. The energy transition towards 2030 is based on the business model of circular economy which is based on a cultural change in the way of interpreting production and consumption. “This new economic model is presented as a resource use system where the best waste is the one that is not produced and, those that are inevitable, are considered resources that can be reused and recycled” (Iberdrola, 2021). So, it can be said that three of Iberdrola main values are the use of renewable resources, the optimization of their use and the maximisation of waste recycling. Moreover, the company is committed to influence and gradually change the consumption behaviours of its customers through the development of responsible consumption programs. This strategy is reinforced by the Sustainable Mobility Plan. This program, in line with the commitment of environmental preservation, has the objective of influencing “the transition to sustainable mobility and electrification of transport”. Similarly to Patagonia which

incentivize the use of bikes to go to work, Iberdrola makes large investments and provides for its employees electric cars. This initiative is combined with other forms of transport emissions reduction such as car-sharing and Electric charging points in workplaces. In addition, the Sustainable Mobility Plan involves not only employees but also car manufacturers such as SEAT and Volkswagen Group in the production and distribution of electric vehicles. In this way, the company creates positive impacts for its stakeholders as well as for players of different industries.

As regards the processes mainly influenced by the sustainable strategy, there are no specific processes since the sustainable strategy has not been integrated with the corporate one, rather the sustainability strategy is the overall strategy of the company itself. It goes from the procurement to the disposal of materials, from the relationship with suppliers to the relationship with customers passing through employees. Sustainability is, thus, integrated in every business process and for this reason, Iberdrola represents the best example of sustainability strategy and process integration.

The strategy is solid and oriented towards sustainability as well as the reporting but has it has been noted in this research it is not always synonym of good management control systems to embed sustainability in daily activities.

As reported by the company, it has incorporated the SDGs as part of its strategy and corporate governance. So, once again, they result to be the most adopted and accepted sustainable performance indicators. According to all the previous examples, a company will focus on the SDGs which result more relevant for its long-term goals. Indeed, Iberdrola puts the spotlight principally on SDG 7 (affordable and clean energy) and SDG 13 (climate action). So, it can be said that as regards the result controls, it uses the SDGs as the basis for its assessment.

Moreover, Iberdrola is an example of the application of the life-cycle management approach analysed in the literature review. It is used as a tool for the transition towards circular economy and, thus, Iberdrola considers the impact of its energy production and infrastructure from its “cradle to grave”. It calculates the environmental impact of its infrastructure, aiming to the improvement of the design of the facilities and the continuous research of materials with lower environmental footprint. In particular, the life-cycle management approach is applied to the photovoltaic solar panels and the use

of different electric vehicles technologies. Indeed, it can be said that this approach is mainly used for the new technologies that Iberdrola is intended to implement.

As regards the other control systems, it defines culture as a pillar for driving climate changes. In this context, Iberdrola has a set of company's values and Social Responsibility Policies which determine the conduct that the company expect from its employees and working teams, as a form of action controls. In fact, when a company pursues such a strong commitment with sustainable goals, employees are expected to embrace those values which support the goals. The policies and procedures result to be the most direct method to communicate the company's expectations to employees, whilst more stringent procedures intervene in the higher management levels.

With respect to the formal control systems, in the case of Iberdrola as in almost all the other companies analysed so far, the administrative controls related to the development of a dedicated Committee for the CSR plays a central role in the implementation of the CSR strategy. The Sustainable Development Committee has no executive powers because it has been created for informational and consulting purposes. Its main tasks are the conduct of a periodic review of the Governance and Sustainability System, with special emphasis on the environmental, social and corporate governance, the monitoring of the stakeholders' relationships, report to the board the general conduct related to CSR, provide guidelines for the draft of the non-financial information, oversight the effectiveness and the compliance with the main SDGs identified, advising the board about the latest CSR trends. So, it can be said that the role of this Committee is not crucial as a company decision-maker, rather it is crucial in shaping the board of directors' opinions for decision-making. Moreover, its role focuses not only in the consulting of the board but also in mediating the board and stakeholders to achieve the best communication through reporting.

Another important control system are the monetary incentives. As it may be noted, all the companies reported in the sample adopted has a monetary component in linking the CSR performance to monetary rewarding because it has been identified as the best tool in aligning the CSR objectives with employees' behaviours but it is the least used.

Annual and multi-annual compensation is linked to performance that include sustainability as well as economic indicators. However, on contrary of what may be

expected, the main performance indicator which influence the CEO and Chairman compensations are related to social as well as environmental issues. This may be attributable to the fact that, while the environmental performance may be achieved through the SDGs indicators as result controls and the Sustainable Development Committee as action controls, the social dimension is more difficult to observe and, since the company focuses on an environmental strategy, there is the risk that the social perspective would be placed behind the environmental one. So, to overcome the problem the compensation committee has put a high emphasis on social objectives linked to the CEO and Chairman remuneration plans. The non-financial objective may be summarized in three main points:

- Increase of women presence in high management positions
- Presence on international indices such as Dow Jones Sustainability Index and FTSE4 Good World's Most Ethical Company
- Exceed the number of working hours dedicated to learning for employees with respect to competitors.

As it may be noted, whereas the second objective is related to a wide sphere of sustainability which includes social and environmental concerns, the first and the third ones are mostly connected with social issues.

Finally, to sum up everything stated so far about Iberdrola, it can be said that it is the best instance of sustainable company included in this sample. This is because the CSR strategy has not been integrated with the corporate strategy, rather there is a unique strategy that is capable to reach significant financial and non-financial objectives. For this reason, there are no specific processes that change because of sustainable objectives but the processes have been created to incorporate sustainability and, as a result, sustainability is present in the company's mission and values which, in turn, is present in every company's activity. The management control systems result effective as well, because both formal and informal systems are strong and present in every level of management. Indeed, whereas at the higher levels of management there are more formal control systems such as rewarding, at the lower levels there are not only the "classic" Code of Conduct but also some other cultural incentives like the use of electric vehicles that result more effective in directing employees towards embracing the company's value, even if they result more expensive.

Overall, Iberdrola may be considered the company with the best sustainability strategy incorporation. However, this analysis is partially biased by the industry in which the company operates. It is clear that, for example, Alcoa, the aluminium producer, has a more negative impact with respect of Iberdrola which produces wind energy. At the same time, though, even if Iberdrola has higher possibility of integration of the sustainability strategy, by comparing the control systems, it results that both have a good level of MCS applied to CSR and for this reason, even if there is a bias related to the industry in the analysis of the strategy, this is not present when comparing the management control systems and, thus, the comparison remains relevant for the ends of this research. It can be said that Iberdrola has a good mix of management control systems because it puts the same emphasis both on formal and informal controls. In fact, in many cases the cultural controls are referred to the mere publication of Code of Conducts; in this case, Iberdrola invests to make the people and company values alignment more concrete by, for instance, investing in the provision of electric cars for its managers.

5.8. Intel

Intel is one of the leader in the production of microprocessor. Based in California, Intel produced computer components for the major world computer systems manufacturers such as HP, Lenovo and Dell. Over the last few years, Intel has made a transition from a PC-centric company to a data-centric, which implies the revolution of the use of data, throughout the exploitation of efficient database management systems and rapid software development.

Intel has not only a significant technological impact, rather there is also a significant energy impact in the production of technological components and data transmission. Its strategy is summarized in four priorities:

- Accelerating growth: this may be translated with the tackling of new opportunities to accelerate both the company's growth as well as the world growth by improving communication.
- Improving the execution: technological products need to be of a good quality and, most of all, when related to data management they should be reliable. Therefore, Intel is oriented towards the persecution of the best practices to offer reliable products.

- Capital allocation: capital allocation has identified three priorities that are investment in R&D which, for technological companies, represent one of the main capital expenditures, investing in external companies to support partnerships which would enhance the data-centric opportunities
- Evolving people culture: being a data-centric nowadays means being key players in people communication. For this reason, Intel needs to deal with people that aims to improve people lives as well as technological advancement.

Intel has been included in the sample not only for its management control systems but also because it represents a sustainability issue which is relatively new: cyber security. The risks connected to the data management has become so important that cyber security is a theme that many companies include in their sustainability risks assessment. Indeed, Intel may be considered one of the world players in protecting data which, when they are undermined, may be a social risk.

In addition to these financial objectives, there are also some non-financial objectives, Intel pursues some sustainable objectives included in its 2030 agenda. One of the first initiatives is related responsible supply-chain by introducing methods of assessment of the risks for people who works in the minerals caves in Congo and the surrounding regions. Intel develops an ad hoc policy to avoid the procurement of minerals in those areas where there are conflicts due to minerals and collaborates with the international organizations such as ONU to elaborate new guidelines for avoiding the exploitation of those caves which feed the conflicts. So, it can be said that Intel is aware of the risks incurred in the supply-chain and seek for the provision of materials that have been safety managed.

Another pillar of its sustainability strategy is inclusion. Inclusion is tackled in two ways, both internally and externally. Internally, by increasing the number of women in leadership positions. Externally, by striving to realize a sustainability global index which represent the level of inclusion and, in this way, to track the progress on this issue. Moreover, Intel invests more than one billion dollars in 2020 to collaborate with woman-owned supplier companies. As regards the positive impacts that Intel is trying to create for its customers, it is mining new technologies, such as the so-called Responsibility-Sensitive Safety (RSS), to collaborate car manufacturers and realize technologies that would reduce the car accidents. Therefore, Intel exploits its

Finally, Intel considers also its environmental impact, by setting objectives like the achievement of the net positive water use and the realization of a carbon neutral computer by 2030.

Therefore, Intel builds a sustainability strategy that mainly focuses on society since it can make a significant impact through the exploitation of technology. There is also an environmental component that, as it has been noted in the previous examples, it cannot be ignored but the technology, as reported by the company, impacts, most of all, on people lives.

As regards the business process changes, Intel adapts the supply-chain management to its social objectives, for example in the procurement of raw materials and in the choices of suppliers. Furthermore, downward the value chain the company makes several investments to directly connect with its suppliers and improve their lives. The environmental concerns mainly affect the production process, by seeking, for instance, to reduce the carbon emissions. So, Intel has a CSR strategy which focuses on social stakeholders but includes also environmental components. This mix of strategies affects all the main processes along the value chain, with a particular emphasis on the procurement processes.

As regards the main management control systems, Intel does not adopt many formal controls systems, rather they are more preventive in the sense that Intel invests a lot in the selection and hiring process, by ascertaining that employees' values are aligned with the company. In addition, "Intel provides training to help employees consider sustainability in business decision-making" (Ceres, 2014). Therefore, its control systems are more informal and preventive, rather than formal and reactive. For example, on contrary of the other examples, Intel does not have a dedicated Committee for CSR but all the issues of decision-making and accountability are managed by the board of directors. This is not worse than the other cases, since it requires a higher level of expertise and skills in sustainability issues directly for directors.

The most formal Intel's control system related to sustainability is compensation. Since 2008, the company has included criteria of corporate responsibility in the Annual performance bonus. In particular, it is linked to certain goals of inclusion and environmental performance, perfectly in line with the main objectives of the CSR strategy.

Overall, the Intel's management control systems applied to sustainability are weaker with respect to the other companies analysed, being mainly informal with the only exception of the monetary incentives. On the other hand, they result sufficient to achieve substantial results since Intel is one of the best examples of sustainability, collaborating with the United Nations in the settlement of new guidelines to drive changes and to promote human rights. This means that the preventive actions such as the hiring process is particularly effective in selecting the people suitable for the company's goals. The scarce presence of the formal control systems may be attributable, once again, to the industry in which Intel operates. The technological advancement for challenging climate changes and enhancing human safety is a key a driver for these purposes. So, it can be said that the technological investments compensate the lower investment in formal control systems applied to sustainability because in this way Intel increase its social and environmental footprint outside the company. Or, even more probably, Intel is not a company that directly communicates with ends users and since this information are taken by public sources, the company may not need to publish all the details about its management control systems, rather they might be partially reserved.

5.9. Danone

The eighth company selected is Danone. This is the third company belonging to the food and beverage industry and this is because they are the companies with the major impact on customers; so, on one hand they are subjected to pressures by society to operate responsibly, on the other hand, they are in a position to affect the behaviour of thousands of people to act responsibly.

As Unilever and Nestle, Danone is a leading company in the production of nutritious food, with more than 50% of products containing milk. Through its products, Danone achieves 120 markets all over the world, with its main market based in Europe. Since 1972 it has committed with the "shared value model creation" because it is convinced that by increasing value for stakeholders, it will increase value for its shareholders.

Danone aligns its business strategy to the SDG goals. Its focus is on inclusive growth: through its ambitious targets in the nutritious products, it aims to increase the nutritional quality of its products in order to enhance the health of people and planet. Danone has a strong commitment towards its stakeholders by investing a lot in the understanding of

their needs and interests in terms of nutrition. In fact, it commits to understand continuously understand the local nutrition practices and public health context, partnering with public institution to address the public health challenges. In line with Nestle, it also contributes to the promotion of responsible nutrition practices, with programs to educate children to a healthy food culture and with an appropriate product labelling. In addition, Danone founded in 2006 Grameen-Danone, a partnership between Danone Group and a micro credit bank- Grameen- “which aims to fight poverty and malnutrition in Bangladesh and to create positive social impact throughout its value cycle” (Danone, 2021).

These are the main practices related to Danone’s social concerns, but there are also some environmental challenges that it tries to address. In fact, it set the ambitious objective of becoming carbon neutral within 2050 which implies the need to help partners to adopt sustainable farming practices. In particular, Danone works to tackle issues such as climate changes, loss of biodiversity, animal welfare and water scarcity. It also adopts a stewardship position to support locally-adapted solutions to water quality, quantity and access, both in its operations and its value chain.

As regards the internal stakeholders, it promotes gender equality as the main concern in working environment and in 2019 the percentage of Danone’s female managers has increased of 51%. On contrary of other companies included in the sample which focus on external stakeholders, Danone involves employees in programs that allow them to share their views and, in this way, it empowers employees to share the company’s values. In particular, Danone select 26 volunteers every year to share the viewpoints of Danone’s 100.000 employees with the Board of Directors. This initiative is used as a means to understand employees’ needs and formulate a strategy which reflects those needs. Moreover, it allows to catalyse faster decision-making based on internal stakeholders’ expectations. The significance of employee inclusiveness grows even more in 2019, when Danone developed a program to grant to each eligible employee one share in the company, “which gives them the right to vote at the Annual Shareholders’ Meeting. It is combined with an annual dividend-based incentive scheme which, for the first year, delivered a pay-out of 40 times the dividend” (Danone, 2020).

Overall, it can be said that Danone has a strong commitment towards its employees that becomes even more concrete with the share granting. Danone adopts a bottom-up

approach in the decision-making process applied to sustainability which has the double advantage of aligning employees to company's values and improving the decision-making approach. In addition to the internal stakeholders focus, Danone invests in the creation of responsible nutrition practices, with a prevalence of social concerns in the sustainability strategy. However, whereas in the other companies of the sample there is a net prevalence of external stakeholder focus, in this case there is a balance between the two dimensions. This is strictly connected with management control systems and, in fact, the share granting is part of both the sustainability strategy to meet the employees needs and the compensation systems applied to CSR.

As in the other examples of the food and beverage industry, the social and environmental concerns influence the value chain on two fronts: the social concern, oriented towards the education of a healthy nutrition, affect the process of communication with customers, developing even more responsible marketing practices, in particular to enhance an effective communication with children. Furthermore, as reported in the Danone Annual Report 2019, the design process changes as well, because it started to consider different solutions, in order to promote healthy eating and drinking habits. In terms of environmental concern, the most influenced processes are the ones upward the supply chain, by incentivizing the adoption of responsible practices of suppliers, through the development of solid partnerships.

In addition to the social and environmental concerns, Danone invests a lot in the relationships with employees to align their values to the company's beliefs. Although in many companies there is the tendency to modify the hiring process in order to consider the social and environmental values of the talents, Danone adopts a different policy, by creating a working environment in which people feel to belong to a group in which they can deliver a significant contribution. This approach not only affect the relationship with employees but it also changes the decision-making process, since the Directors are led to involve employees in this process.

Danone not only adopts an effective sustainability strategy, mixing the internal and external stakeholders focus and obtaining a perfect balance between the two dimensions, it also adopts a system of formal controls which helps to obtain relevant results in terms of CSR performance. As in other companies of the sample, Danone has developed a dedicated Committee- the Board Social Responsibility Committee- which oversees the

company and all its non-financial performance, and assess the social impact of Danone's investments. Since 2016, Danone decided to discuss the sustainability topics at board level, to underline the importance of these issues: they have recently reviewed the packaging policy, committing with the use of sustainable materials and creating a second life for all plastics. So, the board of Directors directly oversees the progresses in terms of sustainability, in spite of the role played by the Board Social Responsibility Committee. In this way, all the financial and non-financial decisions can be taken together, achieving the economics results through the ongoing progress of sustainable development. The importance given to CSR within the Board of Directors is confirmed by its members experience; for example, the finance expert Jean-Michel Severino is a former member of United Nations working group on sustainable development.

In terms of compensation applied to sustainability, whereas in all the other examples when there are some monetary incentives related to sustainability, they are reserved for the executive directors, in Danone there is a form of incentives for all the employees. As it has been described, Danone grants a share for each eligible employee and this is the most effective form to attach people to the company in which they are most likely to operate in the company's interest. In addition, the variable compensation of directors is variable as well but for confidentiality reasons the objectives are not public. What is sure, as reported by Ceres report- System rule- is that "Annual variable compensation and long-term compensation of top executives has a social/ societal component, which is linked to Danone's commitments" (Ceres, 2018).

To sum up everything stated so far about Danone, it has a mixed CSR strategy, formed by external and internal stakeholders focus, which is also reflected in the management control systems applied to sustainability. It adopts the UN SDGS as result controls in order to monitor the non-financial performance. As formal control systems, it has developed a CSR Committee which directly collaborate with the Board of Directors to make sustainable choices. However, a key role is played by people controls, by which the company leverages the self-controls and increases the bottom-up communication by involving employees in the decision-making process: a MCS that help to raise the sense of belonging to the organization and to align people to the company's culture. People controls are further emphasised by a rewarding system that involve a wide range of

employees and that lead them to consider the social impact in their decisions and activities.

5.10. Novo Nordisk

Novo Nordisk is one of the leaders in the production of diabetes pharmaceuticals. It operates in 78 countries and a pillar of its vision is sustainability. The main points of the CSR strategy are:

- Accessibility and affordability of diabetes medicines for all the communities, including also the ones with lower wealth and developing specific programmes for increase the access to insulin. This objective is pursued by implementing a preferential pricing policy which provides diabetes care and funding to poor nations thanks to the World Diabetes Foundation.
- Reaching of zero environmental impact though the use of renewable electricity (Novo Nordisk used 100% renewable energy in 2020), the design of eco-friendly products and solve the problem of the end-of-life medicines and the share of sustainable values with partners, in particular by working with suppliers to achieve the responsible procurement of raw materials.
- Prevention of chronic diseases by partnering with the University of Toronto in order to find new prevention methods. The prevention of chronic diseases is not only part of the sustainability strategy, rather it is an obligation that Novo Nordisk has towards people and their health.
- Development of high standards for suppliers adapting their business for the use of 100% renewable power within 2030, going beyond its own business.

As it may be noted, the CSR strategy includes both society and environment, although the essential part of the strategy is the one focused on social issues and, in particular, healthcare. The main processes that change are the ones upward the value chain, through the influence on suppliers and the establishment of partnership to improve the quality of the products offered.

As regards the management control systems, Novo Nordisk is an example that embeds various solutions investigated in the literature review. First of all, to integrate sustainability in the economic results it uses the triple-bottom-line approach as an imperative for an effective integration. Indeed, since 2004 Novo Nordisk discloses the

financial and non-financial information in an integrated report which is used as a mean to monitor the progresses and communicate with stakeholders. As in many other cases, the personal and professional experiences of the senior executives are important to define the direction of a company. in Novo Nordisk as in other companies included in the sample this is relevant: the former CEO Mads Øvlisen is one of the most admired business men in Denmark and after his retirement he won prizes for his management style of trustworthiness, making Novo Nordisk a synonymous of CSR. Moreover, he is a professor of corporate social responsibility at Copenhagen Business School and in 2006 he was appointed one of two European business managers to join United Nation's Global Compact Committee.

This is the most striking example about the impact of the personality of the top management: whereas the executives undertake a moderate position when taking economic decisions, in the softer sphere of CSR the leadership plays a key role in defining the company's orientation. In many cases, the strong leader personalities are supported by some specific Committees or management functions that help to emphasise the importance of the decision-making process in sustainability. Already in 2002, Novo Nordisk expanded the executive management team to the department of Stakeholders Relations which in 2004 started to deal with occupational health service and people reputation and relations. Nowadays, this area counts for about 200 employees who monitor the triple bottom line strategy and performance. in addition to these "administrative controls", Novo Nordisk implement a solid control systems structure to ensure corporate controls and decentralised decision-making; it is based on three cornerstones, all based on a result control perspective (Morsing and Oswald, 2009):

- Facilitation
- Sustainability reporting
- Balanced scorecard

Starting from the facilitation, the facilitators are high professionals with prior managerial roles in Novo Nordisk who travel in pairs to visit the business units around the world every three years. Their main tasks are the audit and facilitation of the main business unit activities, the assessment of the compliance with the requirements and the identification of the best practice to facilitate the communication and the share of the practices around the different business units to encourage the achievement of good performance levels.

The process of facilitation starts with the development of a set of tasks to support the business units in the integration of CSR with daily activities, the second step is the meeting of the facilitator with the business unit to help them understanding where they can improve and which action plan should be implemented. At the end of the facilitation process, each business unit will have CSR integrated in the main activities which will be periodically monitored by facilitators. This Management control system applied to CSR follows a strict top-down approach with the CSR requirements decided at central level and applied to all the business units.

The second management control systems, the Novo Nordisk sustainability reporting, is not intended as the mere communication with external stakeholders, rather it has been introduced to ensure that sustainability and corporate responsibility thinking becomes part of everyday business practices. Novo Nordisk has been one of the first companies to develop a report which comprises the requirements of United Nations and Global Reporting Initiatives so it serves the double function of responding to stakeholders' expectations and integrating the sustainability mindset within the organization.

However, to assess each business unit, Novo Nordisk does not use the sustainability report, rather it relies on the balanced scorecard. As it has been analysed in the literature review, the balanced scorecard is one of the most used tools to integrate sustainability within an organization. Whereas in the Novo Nordisk central management there is a solid sustainability thinking, the balanced scorecard is used to spread this thinking around the business units, setting managers personal targets which are reviewed every two years. The objectives included in the balanced scorecard are customer and society, finance, business processes and people and organisation. These areas include indicators such as access to health, use of animal testing and implementation of new eco-friendly technologies.

Overall, these three systems are embedded in the formal controls framework, oriented towards the monitoring and assessment of non-financial performance. these controls, are supported by a less perceptible form of control systems which is the informal controls: the organizational culture. Even if it cannot be measured as the formal controls, it comprises all the values that help employees to understand which are the acceptable behaviours and which are not. In addition to the Codes of Conduct and directives, Novo Nordisk promotes initiatives such as the "take action" one, which encourage employees

to “take actions” in their daily work-life to improve the social footprint of Novo Nordisk. A number of ideas emerged from this initiative, and this is just an example to demonstrate that whereas the formal controls have a top-down approach, the cultural controls compensate it by having a bottom-up perspective, creating a good balance between the two dimensions. As it has been examined in the literature review, the formal and informal controls should be settled in a way that makes them complementary, by supporting each other. Novo Nordisk represents one of the best performing companies included in this sample because it has been capable to set this type of balance of the controls directed to non-financial performance.

5.11. Discussion

Tab 2. Management Control Systems of companies included in the sample

	Strategy	Processes along the value chain	Management control systems
Unilever	Focus on external stakeholders interested in social issues	Downward: communication and marketing Upward: procurement	Self and clan controls, administrative controls, monetary incentives
Patagonia	Focus on external stakeholders interested in environmental issues	Downward: communication and marketing Upward: procurement	Cultural controls
Alcoa Corporation	Focus on internal stakeholders and external stakeholders interested in environmental issues	Transformation processes (smelting) and material disposal (recycling)	Administrative controls, cultural controls and monetary incentives
BNP	Focus on external stakeholders interested in both environmental and social issues	Relationship with investors, employees and investees	Administrative controls, board expertise, cultural controls, result controls
Iberdrola	Focus on external stakeholders interested in environmental issues	Procurement and disposal of materials, operations, relationships with suppliers. CSR	Result controls, life-cycle management, monetary incentives, people control

		integrated in almost all business processes	
Intel	Focus on external stakeholders interested in social issues	Procurement and transformation processes	Cultural controls and monetary incentives
Nestlé	Focus on external stakeholders interested in both environmental and social issues	Agriculture, suppliers, internal operations, business distribution channels and customers	Monetary rewards, administrative controls, management expertise
Danone	Focus on internal stakeholders and external stakeholders interested in social issues	Relationship and communication with customers and design of products, relationship with employees	Monetary incentives (at high and low management level), administrative controls, people controls (self-control)
Novo Nordisk	Focus on external stakeholders interested in social issues	Relationship with suppliers and society	Result controls (TBL, facilitation, sustainability reporting, balanced scorecard), board expertise

Source: companies' annual, sustainability and remuneration reports

This empirical sample analyses some of the best performing combination of CSR strategies combined with process changes and management control systems. The companies selected are multinational companies, all operating in different countries including Europe, USA and Asia. Based on the number of employees, it can be said that they may be distinguished in two sub-groups, the one with more than 100.000 employees which are Unilever, Nestlé, Danone, BNP and Intel, and the one with less than 100.000 employees which includes Patagonia, Alcoa, Iberdrola and Novo Nordisk. There are some features that associate the companies in these groups. In the first group the size of the companies requires to implement a strategy which follows a significant path oriented towards the social issues that affect the environment in which the company operates. In the second group the CSR strategy focuses more on environmental issues. Overall, the 67% of the companies favour a CSR strategy focused on social concerns, with Nestlé that has developed a strategy with a strong impact both on social and environmental issues.

The remaining 33% focus on environment, with two companies- Alcoa and Danone-which give a particular emphasis to the internal aspect of the employees' well-being. As previously mentioned, the prevalence of CSR strategies focused on social concerns is given by the fact that being multinational firms, requires the communication to stakeholders that their social concerns are also the company's concerns and in this sense, it is possible to see the presence of a CSR strategy that ultimately favours the economic strategy as well, by currying favour with customers. Based on the industry in which companies operates, the sample is characterised by a prevalence of the consumer products manufacturer (Unilever, Nestlé and Danone). This is not surprising, for the reason that they have a huge influence on millions of people and, thus, they are expected to be examples of Corporate Social Responsibility. In fact, for those sectors that operate in the middle of the value chain, such as Alcoa and Intel, the absence of a direct contact with the end users make the communication of the CSR strategy less incisive. In line with this concept, other companies such as Novo Nordisk and Iberdrola which are not consumer goods, adopt a more "introspective" strategy as well.

Regarding the processes, it can be said that, according to the strategy implemented, when it is directed towards social concerns, the companies invest on communication with customers that means downward the value chain; Unilever, Nestlé and Danone make changes on this process, also because they can affect the behaviours of billions of customers with their products. When it is directed towards environmental concerns the companies invest in the procurement processes and in building relationships with suppliers. Furthermore, what it is important to note is that although a great part of the processes that change are in terms of operations, the relevant change occurs in the relationships with suppliers, employees and customers. So, the CSR does not only change the concept of producing and consuming, but it also changes the relational approach of the organization, as reported in the literature review. This is due to the fact that it is not possible to pretend to have an external positive impact without involving a larger number of actors, even the ones that operates outside the companies. For this reason, the best practices adopted are the settlement of strict production standards for suppliers in order to protect the environment and the development of programs for educating customers to responsible consumption.

The central discussion is about the management control systems applied to sustainability which is the fulcrum of this research since it has been ascertained that to implement a successful CSR strategy, it should be coupled with an efficient system of management controls. The companies selected have been chosen to be some of the best performing companies to implement a mix of formal and informal controls. The companies adopt formal control systems such as result controls, administrative controls and monetary incentives, that are supported by cultural controls which result in a combination of self-controls and clan controls. This alignment of formal and informal controls has been verified in the 89% of the sample (Unilever, Alcoa, BNP, Intel, Nestle', Danone, Novo Nordisk, Iberdrola). The remaining 11% composed by Patagonia is the only example of an effective system entirely based on people controls. This is an exemplary instance of actions taken to influence people behaviours without the need to change the compensation structure or the governance structure and this is due to different reasons: first of all, whereas in the other companies the CSR strategy has been integrated to the existing corporate mission and action plan, in the case of Patagonia the environmental concern is born with the company establishment. Secondly, control systems are well integrated because of a different company's size; the other companies included in the sample count thousands of employees, whilst Patagonia has "only" two thousands employees which allow for a direct influence on the behaviours. This lead to an important consideration: cultural control systems are more effective when the company has a centralized organizational structure.

However, also Patagonia includes some figures in its management structure that facilitate the alignment of people behaviours with corporate interests. In fact, the so-called administrative controls have resulted to be the point in common with almost all the companies included in the sample. This change in the governance structure is due to a CSR performance oversight function and due to a diplomatic function of intermediation between society and the firm. Moreover, even if in Novo Nordisk there are not specific governance figures for sustainability, it is compensated by the board expertise in sustainability issues.

The most used result measures applied to sustainability are the 17 SDGs objectives and, for this reason, it can be ascertained that their introduction has significantly change the way of monitoring the CSR results of many companies. The informal controls intended as

the cultural controls are presented in two ways which are self-controls, by developing companies' values and make those values the personal ones of each employees and clan controls by creating some relationships which induce employees to the mutual monitoring. As the "administrative controls", a form of people controls related to CSR is present in all the companies, which means that, as reported in the literature review, it is the most adopted control system to deal with sustainability.

Overall, the sample has sought to overcome every type of bias, by including companies of different size, industry and country. In particular, the industry significantly affects the completeness of information in the companies' public documents. As a matter of fact, it has been verified that companies operating downward the value chain has a better level of contents available to the public. However, the sample analyses the strategies and the control systems, adopting an optic which is not influenced by the quality of communication.

CONCLUSIONS

This research stemmed from the necessity to provide an overview - both theoretical and empirical - of the management control systems applied to CSR. To provide a comprehensive and exhaustive framework it has been necessary to go over the main concepts of CSR strategies and business processes which help to understand which are the most suitable MCS for sustainability purposes.

Every company which intends to implement a CSR strategy should start answering the question “who are the key stakeholders?” and, on the basis of this answer, develop a strategy that prioritizes the key stakeholders. With respect to this perspective, the academic article of the Harvard Business School conducted by Rangan (2012) proposed the following divisions:

- 1) CSR strategy focused on internal stakeholders;
- 2) CSR strategy focused on external stakeholders with environmental expectations;
- 3) CSR strategy focused on external stakeholders with social expectations.

The first one is the most limited in terms of actions range and for this reason is often combined with another CSR strategy focused on external stakeholders, by guaranteeing a good level of human capital. In fact, the empirical research suggests that the most observable CSR strategy is composed by both internal and external focus, the latter with a major concern either social or environmental. Moreover, whereas the CSR strategy with external focus involves the higher management levels, the internal focus will enhance the participation of business unit managers and, thus, the bottom-up initiatives. However, as outlined, the most important aspect is that the CSR strategy is combined with the corporate strategy.

In order to be aligned with the corporate strategy, the CSR strategy will impact on certain business processes, on the basis of the strategy adopted. The strategy focused on internal stakeholders will provoke the minor changes whilst the other two strategies might generate significant changes, even on the production procedures.

In any case, what is important to ascertain is that when talking about CSR initiatives, the required improvements and activity changes can come from the bottom of the

organization. The main processes subjected to change, according to the literature review are the supply chain processes that lead to different risk evaluations, considering also the environmental and social risks in addition to the economics ones. Furthermore, CSR will mainly affect the “relational” processes making employees more loyal and affiliated with the company, by increasing trust and commitment that, in turn, will also decrease the cost of labour.

The central part of the research focuses on investigating which are the major problems that characterize the MCS applied to sustainability.

The most accepted control tool has been identified over the years as the Triple Bottom Line approach, highlighting how the measurement of the three dimensions - economic, social and environmental - can guarantee the long-term success of the company by identifying some variables and opportunities that would otherwise remain untapped. On the other hand, this tool presents some problems in terms of measures comparability because a common unit of measure for social, environmental and economic results does not exist, and it is difficult to identify which results are better and which are worse than others. Nevertheless, its contribution to non-financial controls is indisputable and today it is still one of the best measurement systems in terms of sustainability as demonstrated by the outstanding example of Natura & Co.

After the 1990s the research has developed other forms of measurement for the CSR thanks to its increasing importance. The framework that has been studied is the one proposed by the professors Malmi and Brown (2008) in which they present a comprehensive package of formal and informal controls. In particular, by analysing this package, applied to some real cases examples, it emerges that many companies look at the sustainable control systems by considering either the application of formal or informal controls, whilst the simultaneous application is still rare.

Overall, the development of MCS frameworks for sustainable purposes occurred after the introduction of the TBL triggers some issues:

- 1) Formal and informal controls are often seen as substitutes

2) given the prevalence of informal controls applied to sustainability, there may be an incongruence between formal controls (oriented towards financial goals) and informal controls (oriented towards non-financial goals)

3) management may not own the necessary skills and experience to be capable of monitoring non-financial performance.

To tackle these problems, it has been reviewed some of the main solutions to develop sustainable control systems which include both formal and informal controls and that integrate with the economic perspective:

- The first solution proposed by H. Roth (2008) deals with the integration of sustainability in the management accounting tools such as budgeting and the variance analysis as well as the life-cycle costing.
- The model proposed about eco-controls offers a framework that finds a combination of controls that will enhance both sustainable and economic performance through the analysis of the relation of internal and external environments which allow the adaptation of the company to external requirements and through the introduction of a double-loop learning process.
- The third solution identifies the most effective sustainable control systems and presents the aspects of integration with traditional MCS. The integration should be technical with the support of efficient information systems; organizational by preparing people to elaborate both financial and non-financial data; cognitive by facilitating the exchange of knowledge within the organization.
- The fourth solution is one of the most famous MCS: the balanced scorecard. It is a consolidated control system which includes different perspectives: financial, customers, internal processes, learning and growth. When a company pursues financial objectives and is intended to integrate a sustainable dimension to its daily activities, the balanced scorecard has proved to be a good solution because it is structured to be open to non-financial performance and to include different types of controls. In particular it has been studied the three scenarios to include sustainability within the balanced scorecard by adding the TBL to the financial perspective; by adding a fifth perspective of sustainability entirely dedicated to CSR; or, the most effective, by creating a parallel balanced scorecard aligned with

the original one. However, as the other MCS, the balanced scorecard presents an important limitation that is its scarce applicability to SMEs. Moreover, it is widely used by firms although it appears more adequate for planning purposes rather than controlling purposes in the context of sustainability. This does not mean that it is not suitable for monitoring non-financial performance but it is more oriented towards preventive forms of control.

- The fifth solution is the Material Flow Cost Accounting (MFCA). It is one of the best tools which allows the alignment between financial and non-financial objectives because the better usage of resources will guarantee an environmental improvement and a cost saving. The advantages that the MFCA has introduced are related to the cost identification based on the actual costs and opportunity costs which will increase the efficiency. For example, companies will be able to consider the energy costs under multiple points of view that will lead them to the research of the most effective and the least impactful energy forms. However, despite the high level of applicability of this system, it resulted to be limited to some types of organizations, the ones that pursue a low-cost strategy, whilst its applicability appears more controversial for companies with a differentiation strategy. Moreover, it resulted to be suitable for the companies that operate upward the value chain but for its potential advantages it should be adapted to all the companies' needs along the value chain.

Overall, the literature review has proposed different combinations of MCS over the years. They have different features and some result to be more suitable for specific sectors and sizes. From the review conducted, it emerges that there is a form of control that is very effective for all the types of organizations and that is effective in influencing behaviours. They are the monetary rewards. It is a good control system which touches all the aspect to embed sustainability within the company. The link of employees' compensation to CSR performance will allow the firm to monitor the results, avoid the unwanted behaviours and shape people values. So, it embeds at least an aspect of all the types of MCS but for its complexity it is still slightly diffused among firms.

From the management control systems analysis, it has been underlined the main lights and shadows of each MCS. This contrast between advantages and limitations has allowed this study to point out some patterns of the MCS for which it can be deduced that

according to their features, some of them seem to be more suitable for certain types of companies, depending on the business size, industry and positioning along the value chain, whereas some other firms result to have a limited range of controlling tools available.

On the basis of this research, it has been ascertained that the first SCS analysed, the sustainability budget, provides interesting guidelines to consider all the costs and benefits related to the sustainable dimension. However, this change in the revenue and costs evaluation should also require a change in the culture of the people working in the accounting and finance departments. So, it may be combined with some forms of cultural controls. In other cases, for example, a good solution would be the introduction of a Chief Sustainability Officer who may boost a new perspective of CSR costs and benefits. However, as it has been noted in the empirical analysis of the companies' sample, this role is often limited to companies with significant sizes. Thus, it can be deduced that the sustainability budget would be difficult to introduce in SMEs due to culture limitations. Other limitations related to SMEs have been observed in the balanced scorecard. In fact, as examined in the research, the SMEs have different features from large corporations and, in particular, their rapid reactions to market changes make the balanced scorecard ineffective to plan and monitor their strategic objectives. Thus, this imply that the high dynamicity of SMEs represents a limitation for the balanced scorecard and opens a point for the future research to look for different management control systems adapted to SMEs' requirements.

Similarly to the sustainability budget, the life-cycle costing and the MFCA are tools that help organizations to identify all the environmental and social burdens of producing goods. The research highlights that the former requires to consider all the sustainable costs of producing goods and, thus, this implies that it is more effective when a company is vertically integrated. The latter focuses on the procurement of resources and, so, it is more suitable for the companies upward the value chain. Thus, it may be deduced that not only these MCS require a good level of sustainability cost monitoring which is usually observed in large corporations, rather they are more indicated for either companies vertically integrated or upward positioned. Therefore, these implications open another issue related to the applicability of the SCS that is the research for specific controlling systems thought for companies positioned downward the value chain.

In addition, the eco-controls and the levers of controls which are a set of both formal and informal systems and the rewarding systems resulted to be effective methods for steering people behaviours and include a sustainability perspective within the management structure. However, their complexity requires to be applied to companies that have formalized business processes and a structured organizational framework, features that usually are not present in small realities. Furthermore, the eco-controls as well as the Material Flow Cost Accounting are control systems that favour the assessment of the environmental burdens and, although other forms that account for both social and environmental issues have been proposed, it has not been found any solution dedicated to the social concerns only.

These theoretical considerations have been supported by an empirical observation of a sample of the best performing companies in the application of the SCS.

The companies included in the sample to analyse the sustainable control systems have been selected among the companies of the Dow Jones Sustainability Index and the Forbes ranking of the 100 most sustainable firms. The selection criteria used have been the reports developed by the non-profit organizations Ceres and Sustainabilitytics which developed ad hoc researches based on the best performing companies in terms of sustainable control systems. So, the firms included in these reports have been selected. The only exception is represented by Patagonia, which has a different size with respect to other companies and for this reason it is not included in the most famous indexes and rankings. However, it has been decided to examine its structure to offer a wider range of management control systems applied to sustainability and make some considerations about how corporate dimension influences the application of management control systems, since it bases its control structure exclusively on cultural controls.

In general, all the companies analysed embed informal controls to align people behaviours to the expected CSR objectives. In addition, all the companies have also formal controls which in the majority of cases are administrative controls related to the governance structure or compensation systems. In particular, the rewards resulted to be effective for those companies that base a high percentage of the salary on the achievement of CSR results. However, what can be ascertained is that the compensation linked to the sustainable results is still reserved to the top management, with the only exception of Danone. Therefore, it can be affirmed that on top levels of management there is a

prevalence of formal controls, whilst for other levels the CSR objectives achievement relies almost entirely on cultural controls.

An exception about the applicability of sustainable controls is represented by Patagonia that implements a solid control system based exclusively on cultural controls capable to bring significant results in terms of CSR commitment. These observations can lead to a further conclusion: informal controls are suitable for every type of company and, in particular, small firms with limited resources may attempt to develop a MCS structure entirely based on informal controls that, thanks to the limited size of the organization, can lead to the same outcomes that multinationals can achieve only with the implementation of both formal and informal controls. So, even if the theory suggests that the two dimensions of controls should co-exist, this cannot always be applicable for smaller companies.

As regards the belonging to different industries, it is the main bias. In fact, it is not possible to compare different companies without the bias of the industry because it is uncontroversial that, for instance, Iberdrola - the wind energy firm - will automatically be evaluated better than Alcoa, the aluminium producer.

Therefore, the analysis on different management control systems applied to sustainability within firms of different sizes and industries has led this research to make some important considerations with the exhortation for future studies to deepen specific issues about “sustainable control systems”:

- This study proves that the research made in the 21st century have provided significant contributions to management for moving towards a sustainable perspective. However, the research focuses more on large corporations and on environmental aspects. To date, the theory about SCS seems to provide the cultural controls as the most applicable MCS for SMEs to deals with sustainability. This aspect has been confirmed by the empirical evidence where the smallest company considered – Patagonia - favours a controlling structure almost entirely based on people controls. However, formal tools should be found by future research to provide ad hoc solutions for SMEs which, particularly in Europe, represent a booster for the economy.

- The theory of the last and current centuries has focused on the environmental aspects. The empirical evidence has highlighted that some of the most important companies in the world - Unilever, BNP, Nestlé, Danone, Intel, Novo Nordisk - are moving towards CSR strategies which mainly consider the social aspects. For these reasons, the future research might endeavour to find dedicated MCS for social concerns that are increasingly gaining ground.
- Some types of control systems have revealed to be applicable to companies operating in certain stages along the value chain. Future research should provide a framework that can be applicable for companies operating in any stage of the chain, producing either goods or services.
- The future research should find a weight to compare companies of different industries without the bias of what they produce and in which stage of the value chain. For example, it could be attributed a higher weight to those management control systems implemented by firms that operate in pollutant sectors and a lower weight to those companies that have an advantage because they operate in “green” sectors.

This set of observations may provide significant insights for both theoretical and empirical future research, with the exhortation to focus on some relatively new aspects of MCS applied to CSR, and may favour the development of effective responses to the management requirement in terms of sustainable management systems.

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