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The Volkswagen Group case

Supervisor

Ch. Professor Chiara Saccon

Graduand

Esmeralda Poda

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Introduction

This research arises from the curiosity of the student, through the pages of two of the revealing books of 2014: *"The Big Pivot: Radically practical Strategies for a Hotter, Scarcer, and More Open World"* by Andrew S. Winston (2014) and *"Responsible Leadership: Lessons from the Front Line of Sustainability and Ethics"* by Mark Moody-Stuart (2014). Papers, books and articles by scientists in charge report everydays fresh news on natural disasters and the urge to react towards these.
Scientists claim the urge of action from states, as long as the level of greenhouse ases will cause an increase of between 2-5°C in global mean temperatures between 2030 and 2060. Consequences of this climate change will influence the water cycle, increasing the riskk of droughts and floods. There is not just climate change per se at stake. In reality, climate change is linked to financial impacts, as long as the catastrophic consequences have yes an environmental impact, but causes also huge economic losses brought by destruction.
Sustainability is key in addressing the climate change. Sustainable development, which was first defined in 1987 by the Brutland Commission, as the *development that meets the needs of the present without compromising the ability of future generations to meet their own needs*. It is not a mere philantropic issue. As a matter of fact there is a growing body providing evidence that sustainability iniatives lead to profits and new business opportunities. Indeed some academics have found that an n investment of $1 at the beginning of 1993 in a weighted portfolio of sustainable companies would have risen to $22.60 by the end of 2010, compared to $15.40 for the portfolio of companies that were engaged on low-sustainability business profiles (Eccles et al., 2015).
The matter is that everybody is affected by this climate change and the initiatives of a sustainable society. Nevertheless, corporations, which are big organizations of resources such as people, financial capital, assets, play a crucial role in the international economic scene, but also they cause considerable impacts also as environmental footprints are concerned, through emissions of polluting gasses and other material. Consequently, they have a determinant power in addressing problems related to the climate change. In the context of doing business, have emerged new aspects, the so called ESG –Environmental, Social and Governance features. As the explained acronym suggests, companies in the 21st century face not only a financing dimension, when they operate. They are responsible for the attitude toward these new factors, the social side, the environmental and the governance part. This is strictly correlated to

investors and stakeholders, as companies are highly interested in collecting finance from the former. However, investors on the other side have become more accurate in their choices of decision-making in the capital markets. Sources of information deliver data on ESG features, providing guidance in this manner to the choices of shareholders and stakeholders.
At this regard, companies have started to publish sustainability reports, that disclose information related to their policies face to these new features.
Sustainability reports have been issued since the 1990s, by companies, for example as Shell (Moody-Stuart, 2014).
In this document, will review the most important milestones in the litterature of reporting, because we need some literature to pave the basis of our research. Moreover, we are interested in determining the landmarks of financial accounting and the way it is today, in order to discover which were the dynamics that made it mandatory.
Thus, we wish to detect how sustainability reporting developed, as a continuation of financial reporting. Initially, the aim of the disclosure of financial information was to provide guidance on the perfomance of the firm, to internal management and external parties. We would like to explore which is the nature of such sustainability reporting.
Furthermore, we seek if this kind of reporting really has impact on investors, as the first aims at serving in some sense the public interest at large. Besides, reporting, we aim at analysing a case study. The objective is to discover if sustainability strategies have material impact on financial perfomance of such a company, and if the company has at heart its public, by truly engaging with effective strategies and initiatives that enclose social, environmental and governance aspects.
Finally, we would like to observe if regulation in reporting, ensures an incentive to good behavior by the managers, by the prepares of the report and by the external independent auditor bodies and in particular, if they are truly committed to ethical behaviour.

CHAPTER 1

FROM FINANCIAL ACCOUNTING TO SUSTAINABILITY ACCOOUNTING

1.1 Introduction

It is really important that some events can transform in milestones in the developing of some subject of interest. This is verified through the contribute of scholars who codify all the knowledge, mainly for two reasons. First, it can service the public for appropriate purposes, second it can be used as a basis to further development and research. We are concerned with the field of accounting.

The double-entry bookkeeping system (Sangster et al., 2014) was divulged thanks to the Franciscan friar Luca Pacioli. He codified accounting methods in use among northern-Italian merchants, including double-entry bookkeeping, trial balances, balance sheets in debits and credits, journals and ledgers in the chapter on business in the treatise *Summa de arithmetica, geometria, proportioni et proportionalita* (Venice, 1494). This was the result after 30 years experience with merchants and craftsmen. At those times, the balance sheet picture served for the owner of the company only.

Of course, the recording of business and government activities information had its origins long before the Venetians starting from the barter epoque.

The basics have survived though the centuries, defying geo-political, economic and legislative changes, arisen meanwhile.

The first footprints of economic globalization reaches back to the era of great colonial empires (Schwarzenberger, 1966), with the Hudson's bay Company, the British East India Company and the Dutch East India Company beginning from the 17th century, where national economies have intensed their economies.

The two industrial revolutions marked definitely the modern way of working, extending from the agricultural –based economies, merchantry and craftsmanship to the organization of the work in factory. In particular, the development of corporations in the 19th century in commercial and manufacturing fields enhanced the practice of accounting, adapting to a larger public who demanded information. Things were now more complex. More workers, more goods, more services, more capital were needed on one hand. On the other hand, more salaries,

more taxes, more payments to the suppliers were involved. The first associations for the professional role of the Accountant were created. Whilst in the United Kingdom, the ICAEW – Institute of Chartered Accountants in England and Wales was created in 1880 by the Royal Charter, in the United States of America the AAPA –American Association of Public Accountants was established in 1887. This was the century of the proliferation of the most important commercial codes which encompassed chapters in accounting law.
After an era characterised by liberalism driven by the credo of welfare-accumulation and mutual benefits flowing from free trade, a protectionist tendency followed between the First World War and the Second World War. In between of the two, the severe crash of 1929 which had terrific consequences, is still imprinted in the memories of financial markets and sounds like a menace to miscompliance with due prudence. After this failure in the capital market, government intervention was called in the accounting regulation.
The process of globalization (Herdegen, 2013), which was intensive from the 1980s, as we will document later, was propelled by democracy –based governments together and the transformation of many economies with central planning into market systems. The phenomenon of globalization which includes the free movement of people, of services, of goods and the high mobility of money and other forms of capital across countries, has contributed to the demand for transparency and comparability of financial reports across countries.
These evolutions of the international economic environment have contributed to the adoption of uniform accounting standards, to drive the public to a better decision-making.
Although the practice of financial accounting is rooted in the thirteenth and fourteenth centuries, the process of regulation of accounting information is traced to the the last two hundred years, in the wave of industrialization in the UK, the US, following the particularities of each setting that influence the development of accounting regulation.
Those historical glances are guidelines for detecting landmarks in the field of Accountancy until nowadays.

1.2 Users of accounting information

The objective of accounting is to provide information to decision makers who engage in different types of economic decisions.

It is defined as the language through which financial information about a business entity is communicated to users such as shareholders and managers to perform better financial decisions (Elliott and Elliott, 2011). Information on the economic activities include information disclosed in the financial statements as well as information explained in the footnotes to the financial statements.

This financial information is addressed to both public, meaning debt and equity markets and private sources, in the sense of non-market financing sources. The main role of accounting information in many economies has been the usefulness of information to other stakeholders and for objectives other than capital market decision-making such as stewardship and debt contracting.

Stakeholders are delivered accounting information in the form of financial statements. Other audience interested in these reports are: regulators that assess filing with regulations, standard-setting bodies that observe the use of accounting principles, customers and suppliers that are interested in the financial health and background. In addition, current and potential employees evaluate the possibility to go to work in those companies. On the other hand, NGOs, the voice of civil society, evaluate a company's position on environmental and social issues.

These information is critical for those who are directly involved within the organization and those that are outside it. On one hand, managers, shareholders and employees analyze the profitability of the organization and the degree to which it is able to remunerate them with salaries or payment in form of dividends or buyback stocks.

Nevertheless, the organization's financial information is very important as it is useful to investors and creditors to decree the certainty to have have back their loans with the interest payments. In particular, business collect financing mainly through equity or debt.

Finally, customers and tax authority are interested in such information for different purposes: respectively to value the supply reliability in long term contracts and to levy the tax liability of the organization.

The information delivered is submitted to qualitative tests, before being reported.

As a matter of fact, it must enclose all these characteristics: *relevance, objectivity, time-scale, verifiability, reliability, completeness* and *fair representation.* Furthermore, for data to be considered *relevant* they must be *objective* and *consistent* (Elliott and Elliott, 2011). These qualities confer usefulness for decision making, indeed they provide guidance to the decision-makers, both to the ones who manage the business and to those, outside, that perform assessments over future net cash inflows before investment decisions.

Ultimately, relevance together with materiality are important in that they convey transparency. Both the former features indicate what influences or makes a difference to a decision maker, but the two terms can be distinguished. When the preparers of the report decide not to disclose certain information, it means that investors have no need for that kind of information (it is not relevant) or because the amounts involved are too small to make a difference (they are not material).

In the current economic environment, larger classes of external capital providers – stockowners and bondholders who are not part of the firm's management but have a vital interest in its results, play an important role.

In the globalized world, where the free movement of people, of services and goods across borders occur, has arisen the need for a comparability of financial reports across countries. So, the corporations, now more than ever need to deliver transparency.

States[1] have their political and financial systems, their own culture, their own language, their own legislation including their own law in accounting. In particular the latter is different across countries reflecting implications with the fiscal system, ownership structure, capital structure and capital market development.

As these dimensions evolve, accountancy should be able to stick to these changes in the economies and the markets with a dynamic approach.

1.3 Regulation of accounting information and the public interest

Some theories consider accounting information a public good or a social good (Olson, 1965). Thus, since it is regarded as a public good, no costs are incurred neither by internal users nor by external ones (Kothari et al., 2010). The free-use of accounting information could imply decrease in demand, based on the thesis that information is obtained without increases in costs. Thus, organizations would incentives to disclose less information, denying to the market the appropriate amount of information. Accounting regulation is

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[1] Three elements define a State: territory, population and most importantly government. A State is created under international law, if a government can exercise its power in the territory under the principle of effectiveness and independence.

[2] The whole Sarbanes-Oaxley Act, available at: www.sec.gov/about/laws/soa2002.pdf

important in light of disclosure since it provides a minimum requirement for information to be disclosed, not available otherwise without case of regulation.

1.4 Principles of accounting regulation in Continental Europe

Starting from the end of the 18th century in France, the Revolution shaped remarkably the History. The motto "*Liberté, Egalité, Fraternité"* synthetized the ideals of the revolution in the political, social and economic fields. The achievements in law and in the political dimension were unprecedented at all levels.
As far as economy was concerned, the private proverty was the pillar of the economic activity in France. Although, little importance was given to the discipline of accounting (Nioche and Pesquex, 1997), the balance sheet was chosen as the form for bookkeeping. Later on, the Industrial Revolution influenced entrepreneurs, who started to work together creating partnerships, that concentrated financial resources in order to foster the industrialization process. Few were the corporations, which were fincanced through incorporation as joint-stock enterprises and they were owned by the State directly or indirectly. Legislation on this field culminated in 1807 with the Napoleon's Commercial Code, which formalized the right to create corporations, under the State's permit and enacted limited liability for the shareholders. Finally, the financial accounting requirements, inspired by the active role of the State in the business environment took form in the 1856 Companies Act, which mandated that organizations disclosed their accounting information.
The role of the French State reaffirmed itself in the publication of the *Plan Comptable General*, PCG –General Chart of Accounts of 1947, requiring companies to disclose financial information for better decision-making of the government, focusing on debt opposingly to profits (Nioche and Pesquex, 1997).
In the early 1900s, when state-owned companies became public, the degree of direct influence by the State diminished. The new link created between the publicly held companies and the financial institutions was impounded in the character of financial information. Indeed, private contracts assured the capability of the corporation to perform in a manner to honour the agreements and to grant solvency and liquidity.

Likewise, in Germany the control of the business environment was held by the financial institutions, that were also the sources of financing for companies (Leuz and Wustemann, 2004).
The protection of investor has been crucial since the times of the reign of Frederic II, which commissioned the ALR –*Allgemeines Landrecht für die Preußischen Staaten*, the civil code of Prussia promulgated in 1794. This code established that business enterprises recorded their transactions in order to provide evidence for creditor protection in case of proceedings (Eirle, 2005).
The other two important commercial codifications which contained measures on investor protection and accounting principles were the General German Commercial Code (ADHGB) in 1861 and the German Commercial Code (HGB) in 1897, still considered the basis of financial accounting framework in Germany.
Important is the enactement of Public Company Law of 1884, which narrowed the distribution of capital, after considerable investor funds were lost when several corporations collapsed in the later 1800s (Eirle, 2005). Finally, following the economic crisis in Germany, in the beginning of 1900s, the Stock Corporation Emergency Decree of 1931 and the Stock Corporation Law of 1937 were enacted to extend adjustments in the accounting reporting framework and to reaffirm the creditor protection, given that financial institutions and the state played a substantial role in financing.

1.4.1 Principles of accounting regulation in the Anglo-American countries

The economy in the eighteenth and in the nineteenth centuries in the UK shifted from the agricultural-based type towards commercial and machine-based manufacturing business. The Industrial Revolution marked the century with the creation of bigger enterprises, which came with separate ownership and control.
This brought repercussions in the accounting system as well, as long as the owners were concerned with more complex activities other than the daily routine accounting reporting of the company.
The Stock Companies Act in 1844 required corporations set up by registrations to start keeping “books of account”, in order to deliver shareholders during annual meetings, balance sheets

which had to be filed in the Registrar of joint stock companies first, then submitted to external audit report (Nobes and Parker, 2008). In the Limited Liability Act in 1855 was extended the scope of the 1844 Act, providing some protection to shareholders of a corporation in the sense that they could be held liable, in cases of disruption, only for their personal investment in the business. The following year, through the Joint Stock Companies Act in 1856, accounting information and auditing would have been left to a voluntary approach rather than to a mandatory one. Thanks to the Company Law Amendment in 1895 and then the Companies Act of 1948, the investor's interests and a financial stability were safeguarded. The Acts reestablished explicitly that business enterprises should have submitted their consolidated financial statements to auditory bodies. Furthermore, the acts promoted the true and fair values concepts of financial information, to safeguard financial stability and to restore the confidence of investors in the capital markets. The UK Companies Act has influenced the requirements in the accounting regulation that was developed in the US.

The industrialization process with the development of the new form of economic organizations, the corporations, shaped the US economy in the 19th century (Lamoreux, 1985). These corporations were created by wealthy entrepreuneur trusts who had huge consolidated power in the steel, oil and railroad industries. These entrepreneurs conquered significant sectors and regions and established new forums of financial power that provided the financing requirements of corporations. The increased economic consolidated power translated to consequent political influence power. This exacerbated situation (Moran, 2010) was addressed by the Sherman Act (1890) aimed at resizing the corporates' power and preserve fair competition in the market, giving origin to the primitive form of regulation.

The stock market crash of 1929 decreed the start of the Great Depression period, during which, production collapsed and unemployment rate soared. As a response to this economic recession, Roosevelt promulgated the New Deal, a *deal* that encompassed a series of economic and social reforms. Furthermore, legislation established regulatory institutional bodies (Moran, 1991) which addressed securities regulation to ensure trust between the State and the business entities. At this purpose, the Securities Act of 1933 required the registration of any transaction that was performed on securities since the confidence of capital market investors needed to be rebuilt and their participation in the market incentived.

Moreover, the 1934 Securities Exchange Act established the SEC, the Security Exchange Commission, implemented to trading in the secondary market, and mandated that companies reported periodically complete and accurate accounting information after that auditory entities

had verified those information independently. Organizations would have incurred penalties for non-compliance.

1.5 Crisis are promotors of regulations

Financial scandals (Clikeman, 2009) have the merits to make financial insitutions meditate over what happened and find the reasons on what happened, and create new controlling bodies and standards setting bodies.
The call for more transparency and reliability of the information delivered is made.
In addition, a central role is attributed to the investors in these legislative regulations, since they may be seen as the weak part of the business environment.
As we know, the Great Depression led to the creation of the Securities and Exchange Commission (SEC) in 1934 through the Securities Exchange Act. As a consequence, all publicly-traded companies had to file periodic reports with the Commission to be certified by members of the accounting profession. However, the SEC delivered the task to produce detailed accounting rules to the then Accounting Principles Board (APB).
In the 1973 the Financial Accounting Stability Board was established in concomitance with the accounting scandal at Equity Funding Corporation of America (EFCA).
After Enron imploded and as Arthur Andersen (finanical auditing firm) and World.com collapsed, the Sarbanes-Oxley Act (2002) was delivered. This Congress Act safeguards the investor, as he may be perceived in a disadvantaged position of
asymmetric information compared to the managers of the corporations, through the establishment of the Public Company Accounting Oversight Board (Title 1 –Sarbanes-Oxley Act)[2]. In addition, Auditor independence (Title II), Corporate Responsibility (Title III) and Enhanced Financial Disclosures (Title IV) are claimed among the different titles of the Act.
After the recent global crisis 2007-2008, regulators formally established (Classens et al., 2014) the Financial Stability Board, which coordinates both the work of national (mostly G-20 countries) financial authorities responsible for financial stability and the standard setting bodies at an international level. Among the reforms that the FSB has adopted, are the Basel III capital

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[2] The whole Sarbanes-Oaxley Act, available at: www.sec.gov/about/laws/soa2002.pdf

requirements for capital for prudency[3] matters, the Agreement on the Liquidity Coverage Ratio (LCR) and the Agreement on similar treatment of both U.S. Generally Accepted Accounting Principles (GAAP) and International Reporting Standards (IFRS).
Countries all over the world interact now among them in economic relations, which are based on normative basis achieved after the Bretton-Wood Conference, namely the GATT, the General Agreements in Tariffs and Trade in 1947 and the WTO, the World Trade Organization in 1994. The WTO together with the IMF, the International Monetary Fund and the World Bank are the pillars of the international economic law.
With the uprising process of globalization, there is the need to pursue uniformation and alignment of accounting standards among States.

1.5.1 Earnings management phenomenon

Among the practices that occur in the boardrooms of the management is the practice of "earnings management" defined by Healey and Wahlen[4], and refers to the conduct that people inside the firm manipulate and distort information for their own interest, exploiting the lack of completely detailed accounting standards. In particular, the data that are manipulated by managers are earnings to distort information about the performance of the company.
The system of "earnings management" contrasts with the *faithful representation* delivered by the IASB, and it is condemned accordingly. This practice was reduced thanks to the

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[3] The Basel III capital requirements, including a countercyclical capital buffer and a surcharge for globally systemically important financial institutions (G-SIFIs), both of which represent a first international attempt to institute a macroprudential tool. The rules are: a 4.5 percent basic and a 2.5 percent conservation buffer requirement for all banks; a 2.5 percent countercyclical buffer in the boom phase of the financial cycle; and for some banks (designated as systemic), an up to 2.5 percent systemic surcharge. Altogether, the highest minimum requirement in the form of common equity (Tier 1) would be 12 percent. In addition to this would be 1.5 percent alternative Tier 1 equity and 2 percent Tier 2 (hybrid) forms of capital. These ratios all apply to risk-weighted assets. Additionally, a simple leverage requirement, ratio of (common) equity to total assets, has been adopted. Besides raising the level of requirements, at least as important, Basel III requires better forms of capital, especially more core equity, rather than the hybrid forms of equity that were much used before the crisis. See Basel Committee on Banking Supervision, BCBS, 2011.

[4] Healy P.M. and Wahlen J.M. (1999). *A Review of the Earning Management Literature and its Implications for Standard Setting*. Accounting Horizons, 13 (4), 365-83.

harmonization and adoption of accounting standards (Barth et al., 2010). This practice can be related to the scandal that affected Enron.
(Leuz and Oberholzer-Gee, 2006) demonstrates that the earnings management practice is much more diffused in countries that are not bank-oriented.

1.6 Regulation of accounting information and the public interest

Some theories consider accounting information a public good or a social good (Olson, 1965). Thus, since it is regarded as a public good, no costs are incurred neither by internal users nor by external ones (Kothari et al., 2010). The free-use of accounting information could imply decrease in demand, based on the thesis that information is obtained without increases in costs. Thus, organizations would incentives to disclose less information, denying to the market the appropriate amount of information. Accounting regulation is important in light of disclosure since it provides a minimum requirement for information to be disclosed, not available otherwise without case of regulation.
The theory of public interest considers accounting regulation as necessary to obtain for the society as a whole certain benefits, that if delegated to the market could not be achieved (Pigou, 1932). Regulation permits the achievement of public interest through the correction of market inefficiencies and enacts the equal distribution of information available and power between parties (Posner, 1974). Without regulation, the market would continue to be inefficient and unable to improve the welfare of the collectivity.

1.6.1 The contribution of globalization

Given the international feature of the companies worldwide, it is important to devote some attention to the phenomenon of globalization in relation to the international financial accounting framework.

Milanovic (2003) illustrates that the worldwide propensity towards globalization, is not perceived as a benign and purposeless force conveying to the convergence of world incomes and institutions. The globalization of financial, capital and goods markets together with the global deregulation of institutions, started in the 1980s, were rationally conceived for the intent to abate poverty and inequalities in developing countries.
From an economic and financial perspective, globalization, would contribute to a lower cost of capital, to a better allocation of resources and to converging incomes worldwide. In particular, low wages and a higher hurdle rate would invite foreign direct investments in developing countries, leading to an increment in their domestic growth rate. The competitive advantage gained in these countries allows them to specialize and to exploit it in free trade. Furthermore, the transfer of institutions, governance and technologies results more more convenient than the creation of new ones.
The reality, despite these positive purposes, is a bit different. As a matter of fact, the "Lucas Paradox" phenomenon demonstrates the trend that capital flows either form rich to rich countries or from poor to poor countries, rather than from rich to poor countries (Lucas, 1990). Another fact, worth noting, is the case of the 2007-2008 financial crisis, that showed that developed countries can suffer hard credit crunch and sovereign debt crises.

1.6.2 The arguments for regulation

Accounting regulation aims at increasing the level of transparency and reliability of financial information within an organization.
Regulation is associated with the a set of accounting standards, that are issued by standard-setting bodies which offer guidance during the production of financial reports, of content and formats of information that is disclosed to users, either public or non-public. The nature of the entity can be governmental or an organizational.
The functions of the regulatory body include production, coordination, promotion, clarification and reexamination of accounting rules to provide a uniform conceptualization.
On one hand there are some authors who address the regulatory mechanism, which is necessary in the process of improving inefficiences that arise in the market.

On the contrary, the authors that confute the need for accounting regulation, base their arguments on the self-regulating market information.

Regulation of the accounting systems is associated with external users of accounting information. On the contrary, internal users, namely the managers of the firm do not require regulation, as accounting information can be tailored to the functions of financial information. If a society is able to self-regulate, including the autonomy of several professions, this would be a privilege (Schroeder et al., 2001). The UK and the USA are examples in this regard. On the contrary, European and industrialised countries required the establishment of an organized accounting profession after having regulated financial accounting in the public sector. A possible reason for this, is the interventionist role of the state (Foreman-Peck, 1995) in order to advance industrialization process in later developed countries. In these countries the financial systems were more oriented toward banking-system financing. On the other hand, in those countries that relied on direct financing through capital markets, the accounting system, neither was able to self-regulate nor had the motivation for accounting principles to legitimize self-regulation (Gershenkron, 1962).

The efficient market hypothesis, the economic income ideal and the informational paradigm were the three revolutionary theories that activated even further the concept of the public interest, in concomitance of the establishment of the frameworks of FASB and IASC in 1970s. Nevertheless, a clarification regarding the mandates of the two frameworks is necessary to be noted: the FASB is centered in the public interest of the US, whilst the IASC is designed for achieving harmonization in the interest of accounting practices of multinational corporations and investors.

Mandate's scope aside, the public interest focus, lingers firmly in the 2010 IASB Conceptual Framework and the IFRS Foundation's Constitution.

Fama[5] developed the efficient market hypothesis together with the random-walk stock market model. He asserted that the stock price was modeled by a random-walk process and at any point in time, the actual price delivered a good estimate of intrinsic values and the investor should concern on portfolio analysis.

According to the efficient market hypothesis, the stock price fully reflects all public and private information. The implication is that the investor already benefits from the stock price information and does not require further protection and regulation in the accounting standard

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5 Fama, E.F., *The Behaviour of Stock Market Prices*, Journal of Business, (1965), 38, 34-105.

setting framework (Wyatt, 1983), as long as he is dealing with a fair gamble (Grossman and Stiglitz, 1980).

It is assumed that accounting standard setters view capital markets as semi-strongly efficient. This degree of efficiency implies that all public information is impounded in the stock price, yet sources of private information lead to profit possibilities. Investors can protect themselves by diversifying their portfolios. In addition, full disclosure of accounting information is necessary to protect investors (Bromwich, 1992), focusing on the content of information rather than the form or the way it is presented.

Lev, guided by the inequity in capital markets that he defined as "the existence of systematic and significant information asymmetries across investors[6]" analysed the public interest criterion that drives accounting regulators. His concern was about consequences over the society in the form of high transaction costs, thin markets, low liquidity and decreased gains from trade.

The IASB transfers the burden to address the problem to national regulators.

1.6.3 Arguments against accounting regulation

Buchanan[7] suggests that the principal argument against accounting regulation relies on the thesis that financial information is considered as an economic good, for which the demand and supply in the market determine the optimal information.

In the case of accounting information, the demand side is formed by the main users of the financial statements, whereas the management represents the suppy side. Consequently, Sunder[8] concludes that the optimal information will result at the level where the demand and the supply curves cross.

The variety of main users of accounting information depend on the specific economic environment. As a matter of fact, users of financial information in which financing is collected

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[6] Lev, B. (1988), Toward a Theory of Equitable and Efficient Accounting Policy, The Accounting Review, 63 (1): 1-22.

[7] Buchanan J. (1968). *The Demand and Supply of Public Goods.* Chicago, IL: Rand McNally & Co.

[6] Sunder S. (2002). *Regulatory Competition Among Accounting Standards Within and Across International Boundaries.* Journal of Accounting and Public Policy 21 (3), 219-34.

in public markets will require different kind of information with respect to users in environments in which financing is raised through non-market providers.
The main difference between the market-based system and non-market based system (Leuz, 2010) lies on the fact that in the latter, close relationships through the stipulation of contracts are formed between firm insiders and banks or other financial intermediaries. The attention on the accounting information contributes to the protection of such contracts, reducing the requests for dividends by firm outsiders (Leuz and Wustemann, 2004).
As a consequence, contracting parties are both well informed thanks to the close and private communication between them, without need for regulation.
The risk that arises with the growth of capital markets is that investors face a reduced level of transparency that is caused by information asymmetry, which is conjugated in adverse selection, moral hazard and governance (Ball et al., 2003).
The market is essential to offer choice and to encourage the efficient allocation of resources. So, markets are beneficial, but to make them work properly, markets need certain regulatory frameworks.
Maybe Adam Smith in its Wealth of Nations, would probably accepted the need for regulation to prevent irregularities, and for markets to operate fairly for all participants, transparency in pricing is needed. The market objective is to benefit the largest share of participants.
Ultimately, regulations of the market would be unnecessary if parties knew and trusted each other.

Adverse selection

Information asymmetry arises when firms cannot communicate to potential investors their worth in terms of investment, thus they remain out of the market. This is the case for adverse selection in accounting system, where investors as outsiders of the firm have less information with respect to managers, insiders of the firm.
Consequently, investors are reluctant to invest because of the limited amount of information they are given (Kothari et al., 2010).
Grossman[9], observed that in order to face this aftermath of limited information, companies deliver to the market credible and reliable information, even not the good one, in order to appear as much transparent as possible. As the objective of the firm, is value maximization

[9] Grossman, S. (1981). *An introduction to the Theory of Rational Expectations under Asymmetric Information.* Review of Economic Studies 48 (4), 541-59.

(Damodaran, 2011), and to pursue this objective managers are thus induced to provide voluntarily information to the market. Otherwise, the risk of of punishment and reputational risks on managers put firms under a negative light in tha market (Bushman and Landsman, 2010).

Moral hazard

Exacerbation of the asymmetric information turns into moral hazard, causing one party to have more information than the other one. The party holding less information faces more risk, on the contrary, the party with more information acts more cautiously.
Jensen and Meckling[10] formulated the principal-agent relationship, in which the agents are the managers, who hold more information about their own intentions and activities within the firm, than the principals represented by the shareholders. As a matter of fact, management could purse actions for their own benefits, rather than for the firm's maximization objective, due to the unequal amount of information between the two parties (Kothari et al., 2010). The solution to this problem coulf be given by incentives designed for managers in order to convince them to act on the behalf of shareholders, increasing the wealth of the firm. This is achieved through the alignment of shareholders' goals and managers' goal, which meet at the maximization value of the firm (Watts and Zimmerman, 1986).
If the contract cannot compel the managers to act in a proper manner and in pursuance of the shareholders' behalf, monitoring governance becomes vital. As a matter of fact Fama and Jensen[11] (1983) indicated governance solutions that aimed at contracting issues.
Governance monitoring is performed through independent external auditing bodies which control, verify, and analyze the accounting information.

This section underlined the motivations which were against accounting regulation.
Briefly, accounting information is viewed as an economic good, and forced of demand and supply operating in the market will determine the optimal desired information. Firms will voluntarily deliver financial information without the need for regulation, in order to reduce consequences which translated reputational concerns about managers and firms.

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[10] Jensen M and Meckling W. (1976). *Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure*. Journal of Financial Economics, October: 305-60.

[11] Fama E.F. and Jensen M.C. (1983). *Ownership and Control.* Journal of Law and Economics 26 (2), 301-325.

These motivations relied on the hypothesis of market efficiency (Fama, 1970), in the sense that public information is fully representative of the knowledge in the markets.
However, observing the reality, and referring to stock price volatility and at the extreme, the financial crisis, it follows that the markets are not always efficient, leading to arguments for regulation to correct inefficiencies.

1.6.4 Arguments in favour of regulation: solving market inefficiencies

Based on the thesis that accounting information is a social good, then regulation is essential, since it protects society from bad consequences thay may happen.
As stated earlier, markets are inefficient. The market regulation produces advantages for investors, as they can feel protected from threats of asymmetric information, which stems from inadequate access to information and imbalances in power distribution. At this regard, accounting regulation seeks the promotion of equal level of information and power to both parties, impeding parties to engage in selfish–driven pursuance of benefits. In this way, both parties are conscious that they enjoy an equal distribution of information.
At any case, adverse selection and moral hazard originated by asymmetric information, are reducted through external and independent auditors (Jensen and Meckling, 1976).
Consequently, a fair financial reporting is issued, thanks to the monitoring and verifications that are performed. On the contrary, in an unfair environment, parties are tempted to deliver the minimum level of information to the market, in the hope to gain competitive advantages from information asymmetry.
The literature agrees on the claimed objective of accounting regulation, aimed at seeking reliability and transparency of financial information. Thus, a regulatory process is called for to improve inefficiencies in the market. Furthermore, for comparability matters of accounting information of different organizations, uniformation is desirable, and misleading information is reduced in disclosed reports.

1.7 The role of State and government on regulation

The theory developed by Bernstein[12], is centered on the objective of the standard setting and regulatory bodies is that of promoting the protection of the public interest, most often as a consequence of failures. However, This theory differs from the public interest theory at the extent that it is stated that the regulatory parties are not that natural and are the regulated parties the ones in charge at monitoring and supervising the regulation pocess. Stigler[13] on the contrary, affirmed that regulatory agencies pursue the public interest, however they are more inclined to act on the behalf of the organization which is owned by subjects with voting and economic power, instead of including the whole public.
The role of the state and government has been considerable in the process of the establishment of financial accounting regulation in European countries. In particular this was the case for France and Germany, as described earlier. However, in these countries a dual system has developed after the influence of harmonization practice in the EU and presence of Anglo-Saxon countries in the capital markets. On one hand, accounting regulation that regards the listed companies on the public market, and on the other hand, the one of the enterprises.
As for France, the legislation on the accounting system has been promoted by a variety of different sources ranging from supranational entities to national and semipublic ones. Thus they include the EU directives transposed into national laws, the Code, the PCG or the national accounting plan and semipublic sources such as the national accounting council and the accounting regulation committee.
Equivalently, in Germany, the accounting system has been established by EU directives and codified national law on commercial and tax matters. Nevertheless, where the German stock exchange and trade unions do not influence considerably the accounting framework, the accounting practice and profession are of major importance. German institutes are particular in the sense that produce recommendations on practices and allow for consultation during the process of the bill of law. Consequently, the German accounting system shows a lack of standards, that was filled with the establishment in 1998 of the recognized private entity the Accounting Standards Committee of Germany (ASCG), which formulated standards for

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[12] Bernstein M. (1955). *Regulating Business by Independent Commission*. Princeton, NJ: Princeton University Press.

[13] Stigler, G. (1971), *The Theory of Economic Regulation*, Bell Journal of Economics and Management Science (Spring), 2-21.

consolidated accounting reporting. Those accounting rules are accepted after the enactement by the Minister of Justice.

As far as the Anglo-American countries, the regulation of the accounting system started in the early 1920s, driven by the necessity to compare financial information of companies in the market.

Authorities agreed up to the point that a framework for a uniform set of accounting standards generally accepted and implemented was necessary.

The SEC entrusted the Financial Accounting Standards Board (FASB) in 1973, with the objective to promote for the public interest the US GAAP –Generally Accepted Accounting Principles, the framework for accounting standards.

In the same year, in UK the IASC –International Accounting Standards Committee was established for the creation of uniform set of international accounting standards. These would first grant quality delivered information by companies, second, would permit the comparability of financial statements at transnational level and third, would be used also in developing countries, which lacked principles of accounting system (Camfferman and Zeff, 2007).

This private standard-setting body developed IAS –International Accounting Standards which had no authorative power in a regulatory process for reporting consolidated financial statements (Tamm-Hallstrom, 2004).

However, this limit was soon resolved by the European Union. As a matter of fact, the IASC was reorganized as IASB –International Accounting Standards Body in 2001 and it adopted IFRS –International Financial Reporting Standards wich became compulsory for publicly traded companies in the European Union and also for listed corporations on the UK stock exchange (Botzem and Quack, 2006).

The lack of authority of IASB, was resolved when the IFRS –International Financial Reporting Standards were adopted and were implemented in the European Union.

It is worth noting that the private nature of standard-setting bodies was a feature that both European companies and US companies shared.

In any case, those regulatory bodies are not relegated with the authority necessary to enact mandatory use of of standards in some countries. At this regard a distinction separates rule-makers, which set standards, from enforcers. The latter category includes national institutions such as governments but also stock exchange authorities, which determine the ratification of standards principles or parts of them (Djelic and Sahlin-Andersson, 2006). In the worst case, these standards are neglected, and the regulatory power remains at the discretion of the national institutions.

The formulation of accounting standards comes with the process of agenda setting, which highlights accounting complexities that necessitate standardization. During this stage of determination of accounting standards, the stakeholders have the right to accept to a certain degree the solution provided by the standard-setting bodies (Sutton, 1984) or further have a say in relation to the standards, from which they will be affected (Zeff, 2002). As a matter of fact, ethical conduct and transparency are called for in the sense that standard-setters should not act in abusive manner, given the power of authority which entrusts them (Richardson-Eberlain, 2011).

1.8 IFRS –International Financial Reporting Standards and the harmonization process

Current financial reporting faces some degree of *complexity*[14], viewed as the difficulty of investors on the understanding the economic substance of a transaction and the financial position and perfomance of a company. Annual reports show an increased length and detailing. FASB and IASB aim at developing a single global set of accounting standards that will match both principles and rules.
Based on the assumption that markets are semi-strong form efficient, standard setting bodies and regulators endorsed the full disclosure principle to promote regulation within the market. The materiality principle is connected to the full disclosure principle, in a manner that it influences financial statements. In detail, such materiality principle is considered by both the FASB and the IASB to have a significant influence on the financial information as long as it is able to drive the decision making of investors and potential ones.
The literature suggests that the market value of financial information approach rather than a transaction approach tends to be followed to seek a better valuation approach.
The financial accounting information has two fundamental roles, aimed at reducing two market inefficiencies caused by information asymmetry (Scott, 1997). Asymmetric information leads to the phenomenon of principal-agent conflict of interests, where the principal is represented by

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14 Final Report of the Advisory Committee on Improvements to Financial Reporting to the United States Securities and Exchange Commission, 2008, p. 18.

shareholders and the agents are the managers. Then, adverse selection, stemming from the discrepancy of information, and the consequent measure of managerial performance, which might take the form of moral hazard are mitigated by accounting regulation.
The international financial reporting framework is designed to achieve the good functioning of international capital markets, adopting a unified set of financial accounting standards. The worldwide process of harmonization of the financial accounting standards is conduced in pursuance of the public interest at a global level.
The adoption of IFRS was strongly enhanced by both the standard-setting bodies, the FASB and the IASB. The IASB ended the design of the framework related to the objectives and content of financial statements in 2010. This body centers the attention on the changes in assets and liabilities and on the generation of income, rather than on the valuation of assets. IFRS are promulgated by the IASB in developed countries, but the adoption of such standards is extended also to countries which do not have a developed accounting framework.
The phenomenon of convergence of accounting standards worldwide implies that accounting standards are adopted by more countries, even in a uniform fashion over time.
Even if this process of harmonization is occurring, it must be stated that countries are characterized by different legal institutions, which persists currently. In particular, as accounting system is associated to the social, economic, financial, political and cultural aspects, which differ across countries.
In the past, convergence of accounting standards resulted from the imposition of their legal and consequently accounting system by dominant countries during the era of colonialism.
With the decrease of such influence toward dominated countries, the accounting systems evolved differently among them. Indeed, until countries do not engage in bilateral or multilateral interrelationships, there is no incentive to foster convergence of accounting standards.
The propensity of Member States to transfer national sovereignty to a supranational body gave birth to the European Union in 1993, established by the Maastricht Treaty. It stands at an unsurpassed level of economic and political integration, eased by high degree of industrialization and the strong similitude concerning social, cultural, and economic values.
European countries, then forming the EEC, the European Economic Community, expressed the need to develop a harmonized framework for financial reports, to provide minimum legal requirement for discloure of accounting information and to safeguard members and third parties involved.

Yet, the substantial differences in the financial reporting (Soderstrom and Jialin Sun, 2007) needed to be fixed. At this purpose the Fourth, the Seventh and the Eighth Directives enacted respectively in 1978, in 1983 and in 1984 aimed at providing a harmonized framework in order to guarantee comparability cross-borders. They first specified the formats and measurements rules of both balance sheet and the income statement and the qualifications of persons in charge for the statutory audits of the accounting information.

The group of countries which formed the Accountants' International Study Group (AISG), which included UK, Canada and the USA was established for the purpose to develop a uniform set of standards. Unfortunately, they discovered that divergences were more than expected. The solution came with the International Accounting Standards Committee (IASC) in 1973, whose aim was to draft International Accounting Standards (IAS). The IASB[15] –International Accounting Standards Board (resulted by the reorganization of the IASC in 2001), aimed at serving the public interest by *"developing, in the public interest, a single set of high quality, understandable and enforceable global accounting standards"* in order to bring transparency, accountability and efficiency in the financial markets. At the beginning, the IASB focused on large listed companies, only lately it has turnes also to private, small and medium-sized companies and developing economies.

The following year in 2002, two events marked the global financial markets and Europe in particular: the adoption of the unique accounting currency, the *euro*, and the ratification of the IFRS –International Financial Reporting Standards by the EU with the IAS regulation. Listed companies in European Union had to be framed under the IFRS starting from the 2005 fiscal year.

The success of the IASB attributed it the importance of standard-setter body at a global level. The IFRS are extensively adopted by the countries all over the world, also emerging countries as China, Malaysia and India, thanks to the pressure of the World Bank Group. However, USA and Japan, which are fundamental players in the capital markets have not taken a position yet with respect to the adoption of IFRS.

Whilst the SEC in the USA proposed a plan to adopt IFRS, Japan instead, did not take a definite decision, although it allows companies to comply their reports in accordance with the IFRS. The considerable use of a unified set of accounting standards across countries suggests that the benefits of global convergence to IFRS have outweighed costs.

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[15] IASB new mission statement available at http://www.ifrs.org/Alerts/Conference/Pages/IASB-Chairman-presents-new-mission-statement-April-2015.aspx

Moreover, countries that adopt IFRS, in spite of GAAP, find the former of much higher quality in the preparation of reporting financial statements.
Although the IFRS adoption has been very succesful among countries, perfect comparability of financial reports remains difficult to achieve (Chand and Patel, 2008), due to the country-specific influence on standards.
In Europe coexisted accounting traditions: on one side the Anglo-Saxon and on the side the other countries. So, it was important to achieve a convergence in the accounting framework. Data should also include market values, because this way companies can be fairly valued (Francis and Schipper, 1999). Values are said to be relevant if the information of the accounting data is linked to the market prices.

1.8.1 Advantages and disadvantages of adoption of IFRS

The adoption of a uniform set of accounting standards and principles across different countries is given by the degree of comparability of financial statements, dropping further costs related to the information processing for comprehension and analysis. This allows for a better resource allocation worldwide.
Another advantage is efficient and quick communication among parties and the several transactions that take place between the organizations in the world. Thus, coordination and cooperation are achieved and improved given the immediate and transparent reading of the financial statements. When we talk about communication, we refer to the multinational corporations (look at the book of law) in the global trade environment, where the financial accounting information becomes accurate, precise and less costly. Also monitoring is improved, as the internal controls are improved in efficiency and the regulation processes are made better off. As long as the regulatory processes become more and more international, the adoption of a unique standard framework increases the coordination and efficiency.
Difference between Anglo-Saxon countries and the Continental European one (Nobes and Parker, 2010). In the Anglo-Saxon countries, the private sector has played an important role in the development of the standard-setting model and this lack of a supranational authority that characterize the Anglo-Sacon group of countries may explain the reason why the standard-setting arrangements are much stronger in these countries rather than in Continental-European

group of countries, which relied upon Commercial Code, so did not create such standard-setting framework. In these countries role played by the national laws, do not need another authority as they already have one.

The adoption of IFRS is associated to the legal system, corporate governance quality, role of auditors and financial system. The more a country is complying with IFRS, less deviations in the analysts' forecast will occur. Legal and regulatory environment of a country are also important.

It is useful to distinguish between common law countries and civil law countries: the latter are more oriented toward the private property. Also shareholder protection is important. The higher the investor protection within a country, the higher the level of compliance with IFRS. The higher the enforcement, the higher the probability that the legislation protecting shareholders is respected, (Daske et al., 2007) confirm that the stricter the enforcement regimes of a country, the higher is the increase in liquidity and equity valuations, consequent to the mandatory adoption of IFRS.

Corporate governance quality can positively influence the investor protection. Extended protection for shareholder besides legislation, to lower the risk of expropriation by insiders. (Durnev and Kim, 2005) showed that companies showing better governance mechanisms are given higher values on stock markets, in the case when legal investor protection is weak. It could be that efficient corporate governance practices could be a good substitute for poor legal environments. IFRS adoption increases the accounting quality, one would expect a positive relation also between IFRS compliance and corporate governance. Companies that show a stronger compliance with IFRS are those that feature higher quality corporate governance mechanisms. Unfortunately, there are no empirical proofs at this regard.

There is a positive relationship between the quality of the accounting information and the size of the audit firm, it is easier to fight against violations to the GAAP, the practice of earnings management or the creative accounting.

IFRS promulgated by the four largest international professional services networks, Deloitte, PwC, EY and KPMG. The larger the audit firms that audits a company, the higher the IFRS compliance.

Bank-oriented system, mainly translated into form of debt and loans by the banks, and the market-oriented financial system, equity which is raised in the market.

In the first case, there is a high accounting quality demanded by many shareholders, concerning the need to incorporate the economic income into the accounting earning in a certain time. (Ball et al., 2003) these countries are more likely to solve the information asymmetry problem

through a close communicaton with the management and thus the demand for high-quality accounting data is lower than in countries having a bank-oriented tradition.

Since accounting information that IFRS require is of higher quality with respect to the national GAAP, one would expect the market-oriented countries are more likely to adopt IFRS stanadards than the bank-oriented countries. However not clear demonstration of this.

In any case, there is not a unique way of performing accounting appropriately, since it depends on the economic objectives that countries are pursuing.

Thus, the debate about the divergence on global acceptance of IFRS and the amount of compliance to these standards that would be optimal, is still open.

Globalization acted as a driver for harmonization in the accounting conceptual framework. As a matter of fact, demand and supply of companies for equity in international capital markets increased exponentially, leading to a more efficient allocation of resources, to a diversification of risk, to further market liquidity and to a lower cost of capital for investors. These factors altogether fostered economic growth. The need for comparability of financial statements in growing corporations encourages convergence of accounting standards.

Primarily, the most important advantage that raises from a uniform framework of accounting standards across countries worldwide is the comparability of financial information, that are recorded in a similar fashion, without the need to incur additional costs to understand and interpret them. The comparability aspect is recognized useful by the SEC, which aims at shifting from the US GAAP to the adoption of IFRS.

Another advantage is represented by an ameliorated and more effective communication among parties during transactions and connections with parties in the global environment.

Moreover, global accounting standards facilitate contractual agreements, allowing parties to interpret and forecast outcomes in capital markets, through the use of common accounting standards.

In addition, multinational corporations take benefit from global standards, in the sense that they can coordinate more effectively and in a convenient way the preparation of consolidated reports.

Finally, convergence of standards contribute to a standard regulatory perspective at a global level, reducing incentives for companies to forum-shopping, in search of a more favourable regulamentory environment in order to pursue their activities.

The FASB provides guidance during the decision-making process of standard-setting bodies, but it is not included in the US Accounting Standards Codification. Differently, the IFRS issued by the IASB is used and adopted also by preparers and auditors, when performing their work.

Authors addressed some aspects of the IASB and found some pitfalls.
Firstly, Burlaud and Colasse[16] sustain that the ultimate aim of IASB is “higly political in character since it amounts to making a choice as to the governance of the company”. In addition, “it may be therefore seem surprising that such a declaration should emanate from a group of technical experts with no political legitimacy”. Even Even some risks are borne by investors in the beginning to discover necessary information, the authors conclude that, the IASB Conceptual Framework makes investors better off at large, since the information circulates.
Secondly, IFRS is not pursuing the public interest (Van Mourik, 2010), as they are adopted by several different institutional environments to provide financial information to investors, meaning that a value in economic terms is reached, but not in social terms, which is neglected.
Thirdly, the conceptual frameworks presents high ambiguity, that arises because the objective of such standards and principles is to provide consistency, but the definition remains abstract, practical use in operative terms is missing.
Finally, although the financial standards may be generally useful, they are not totally comprehensive, given that entities are characterized by a large quantity of elements (Macve, 1981). In addition, the concepts of income and value lack a clear definition, causing a further inconsistent measure for profit and asset.

To date, nearly all of the jurisdictions (130 out of 140) are publicly committed to the support of a single set of high qaulity accounting standards. Countries that are out of the initiative are Albania, Belize, Bermuda, Cayman Islands, Egypt, Macao, Paraguay, Suriname, Switzerland and Vietnam.[17]

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[16] Burlaud A. and Colasse B. (2011). *International Accounting Standardization: Is Politics Back?*. Accounting in Europe, 8 (1), 23-47.

[17] Analysis of the IFRS jurisdiction profiles available at: http://www.ifrs.org/use-around-the-world/pages/analysis-of-the-ifrs-jurisdictional-profiles.aspx.

1.8.2 Adoption of IFRSs in the world: mandatory or voluntary approach

Actually global accounting standards and principles began to be adopted significantly only from the 2000s, because they were regarded as in conflict with the national GAAP as some authors argued.
In Europe, accounting traditions have coexisted, namely the Continental European one and the Anglo-Saxon one. This contributed to develop a convergent accounting system, that culminated with the European initiatives to make member states to adopt IFRS standards. Companies adopted IFRS as long as the benefits obtained by such conformity outweighed costs.
Furthermore, an important role to financing providers is conferred by the IFRS, explaining the reason that encouraged Anglo-Saxon countries to feel familiar with these global standards and consequently to move towards them.
Nevertheless, UK companies were not willing to adhere to the IFRS, given the similarity between UK GAAP and IFRS, and the less potential benefits in comparison to the European countries.
The Continental European countries were driven to shift to the compliance with the IFRS, as long as they put emphasis on the reliability of their financial information, that would attract foreign investors and financing costs would have been abated accordingly. In Europe, large listed firms, listed also in the US Stock Exchange had more incentives to adopt and prepare those financial reports following IFRS because they were internationally operating and they needed to raise funds (Cuijpers and Bujiink, 2005).
This is an evidence that markets have a lot of influence on the decision of a company to switch to the adoption of IFRS. In Europe, the European Commission[18] confirmed that starting from 2005 all organizations had to prepare their financial statements in accordance to the IFRS. This confirmed the legitimacy of the IFRS and the importance of IASB a standard-setting body worldwide.
Interestingly, the balance of power between IASB on one hand, and SEC and FASB, in the USA on the other handm was shaken. Although, IFRS use by US companies is not allowed yet, the SEC alleged in 2008 that foreign companies preparing their financial reports in compliance with the IFRS are not required to reconcile their accounting figures in US GAAP terms.

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[18] Commission of the European Communities. (2000). *Communication from the Commission to the Council and the European Parliament. EU Financial Reporting Strategy: The Way Forward.* Brussels: Commission of the European Communities.

The IASB developed framework is oriented to *"to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity*[19]*"*.
This statement resembles the accounting perspective of Anglo-Saxons countries, but in contrast with the Continental European point of view. According to this group of countries, financial statements need to be useful to several stakeholders, from shareholders to employees, to customers and to the government. Therefore, benefits obtained from the IFRS adoption are enjoyed by countries and economies that have a different perspective of accounting framework from the Anglo-Saxon one.
There are basically two main classes of countries that are more willing to comply with IFRS (Hope et al., 2006). The first class is formed by weak investor-protection mechanisms and thus the IFRS reduces the expropriation risk by majority shareholders. The second class, representing those that are willing to enter capital markets are helped the adoption of IFRS that facilitate and promote the access to financial markets and attract new investors.
IFRS is a very detailed and solid accounting framework, only the US GAAP is more detailed than it.
IFRS are more market oriented than the domestic GAAP, thus data should be more relevant once IFRS are adopted. This is confirmed by (Barth et al., 2012) and also by studies in China and Romania.
Different empirical studies confirm different things, in different States.
Remind that the European Union has adopted IFRS to make European stock exchanges more attractive to the extra-European investors. The adoption of IFRS fixed as objective the reduction of information processing costs faced by foreign investors, making it more feasible to analyze foreign financial statements.
IFRSs have ifluenced capital markets, foreign investments and the cost of capital.

Capital markets

Consider information asymmetry, analysts' forecasts and market liquidity.
Information asymmetry is associated with market inefficiency. Markets are efficent when they the prices show the available information at any time. IFRS reduces this information asymmetry in the capital markets, since IFRS are more investor-oriented than the domestic GAAP, once

[19] IASB (2008). *Discussion Paper Preliminary Views on an Improved Conceptual Framework for Financial Reporting: The Reporting Entity. (May).* London: International Accounting Standards Board.

they substitute the national standards, they require a higher level of financial information. In any case, it is up to the country to coadiuvate the increase or the decrease of the information asymmetry, after IFRS implementation.

IFRS addresses also to the analysts, as long as the adoption of global standards reduces information asymmetry and deliver a more efficient and timely accounting information, helping them to forecast future performances on earnings.

Last, as long as information is equally distributed and there no power imbalances, the invesments are now larger toward the listed companies. Once again, investors are safeguarded, and have confidence in the stock market as liquidity is soared now. The liquidity issue is one of the most important motivations for EU member states to comply with the IFRS.

Foreign investments

Portfolio theory states that if the investor diversifies the proportions of the capital in different assets or different environments, he reduces risks. Thus in an international environment, risk is reduced. However impedments that can stop an investor to enter foreign markets is linked to the costs he would incur (Beneish and Yohn, 2008) namely: information processing costs, costs resulting from the uncertainty about the quality of financial reporting and about the distribution of future cash flows. In this regard IFRS benefits the investor in reducing the information to be processed and reducing thus the cost related to it. Consequently, the market to foreign countries is opened.

Cost of capital

The cost of capital, referred also to as the *hurdle rate* (Damodaran, 2011) formula encloses both the cost of equity and the cost of debt net of the taxes. This expresses the rate at which capital is raised.

In the case of IFRS adoption, the cost of capital would be decreased for companies. This would represent the main criterion that guides the willingness of the firm whether or not to adopt global accounting standards.

There are divergent theories in relation to the argument for the decrease of the cost of capital. On one hand, some authors as Daske et al.[20] and Li[21] sustain the decrease in the cost of capital

[20] Daske H., Hail L., Leuz C. (2013). and Verdi R. *Adopting a Label: Heterogeneity in the Economic Consequences around IAS/IFRS Adoptions.* Journal of Accounting Research 51, 495-547.

[21] Li S. (2010). *Does Mandatory Adoption of International Financial Reporting Standards in the European Union Reduce the Cost of Equity Capital?.* The Accounting Review, 85 (2), 607-36.

in the companies that comply with IFRS, on the other hand, Cuijpers and Buijink[22] confute this thesis on which since there is a lack of evidence.
In conclusion, some proofs relate to the cost of debt only, and IFRS users pay lower loan rates with respect to those who do not use the standards.

The adoption of IFRS is mandatory or voluntary on the basis that countries are willing to participate to the convergence of the global accounting standards. The balance of benefits and costs associated to the compliance to IFRS standards does not influence the choice to adhere to the harmonization process, although sometimes mandatory adoption is preferred. As a matter of fact, for listed companies that are part of the same large group of organizations, a mandatory compliance of the global accounting standards is strongly advocated, to adopt global standards. Thus corporations have to provide financial information that will be comparable in order to be useful to investors. To this regard, the institutions of a country have a decisive role by enforcing such standards. When the convergence of global standards occurs at a country level, the institutions of that country enact acceptance mechanisms, otherwise corporations may decide to transfer to other countries to make possible the compliance with the IFRS standards.
However, if a single set of global standards was adopted voluntarily by the country, a global competition in the standards fields would rise. Advantages in this perspective are associated to the several competing accounting theories, such as the asset-liability or the revenue-expense approach provided by the literature that would cause variation among financial reports. It is wiser to permit to each organization to decide which of these theories apply to their activities instead of than launching a process of mixing these conceptualization in order to consolidate them.
The competition in accounting standards frameworks is beneficial since innovation is encouraged and political pressure is lessened.
One disadvantage of having a single accounting framework reduces comparability among financial statements and increases the costs associated to the standard-setting process.
Although the adoption of IFRS promoted by the IASB has proved successful, maybe total convergence of accounting standards will be difficult to reach. This can explained by the fact

[22] Cuijpers R. and Buijink W. (2005). *Voluntary Adoption of Non-Local GAAP in the European Union: A Study of Determinants and Consequences*. European Accounting Review, 14 (3), 487-524.

that convergence of this framework benefits more companies which operate internationally, so compliance with IFRS is beneficial to a small proportion of total companies in the market.
The USA in the long run is willing to shift to IFRS, as the SEC declared.
Even if the role of the IASB has been considerable in the achievement of a harmonized framework in the accounting system worldwide, some controversies arise.
One company is said to comply with IFRS standards, when it fully[23] respects all the requirements. Partial adoption is not considered valid in this perpective.
There are cases in which it is difficult to obtain full compliance with the IFRS, and this should not always be claimed as self-interest behaviors. Some precise rules impede the full compliance with IFRS.
There is a phenomenon that transposes into national law the IFRS creating in such a way IFRS-equivalents, which are copies developed at local version. In countries like Australia, New Zealand and Korea the changes are not visible, on the contrary, in other countries, like China, Philippines and Singapore, the differences are huge among the two types of accounting standards.
Only IFRS are high-quality standards, and any deviation from that, undermines their reputation. At this regard, the IASB should prevent the proliferation of such copies.
Although the succesful diffusion of the IFRS, some criticisms are addressed
Firstly, technical criticisms make reference to the excessive importance that IFRS attribute to the fair value, contributing a significant role in 2007 financial crises.
Secondly, the political criticisms refer to the lack of legitimacy by the IASB. In particular, since members are not elected democratically by voting, the authority of the IASB is biased (Burlaud and Colasse, 2011). Nonetheless, the democratic election argument fails in this case, since the IFRS are approved and ratified by the democratic entity, the European Commission (Gélard and Pigé, 2011).
On one hand, Anglo-Saxon countries advocate that regulation of accounting systems should be led by expert professionals, focusing on the fact that such financial information encloses high-quality content. On the other hand, Continental European countries highlight that financial information should encompass the interests of shareholders, the employees, the stakeholders and the State.

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[23] IASC (1989). *Framework for the Preparation and Presentation of Financial Statements*. London: International Accounting Standards Committee.

The IASB was pushed by political pressures to redefine some financial instruments in 2008, considering this event unique and not repeatable.
The IASB will be able to reaffirm itself as the international standard-setting body, independent from any political influence.

1.9 The pursuit of public interest in accounting and professional accounting

Public interest and the common good are used interchangeably to express the increased benefits for the collectivity. Nonetheless, some dimensions cause them to be different (Douglass, 1980). Douglass defined the common good as a series of objectives served by the government to foster well-being, which translated in peace,
order, prosperity and justice for its own well-being, and that of the society at large.
The common good[24] is characterized by three features: it includes everyone, it is objectively beneficial and its benefits are shared.
As far as the public interest is concerned (Douglass, 1980: 107), due to the pursuit of private advantage contribution by Hobbes and democratic views, it was seen as an aggregation of private interests, in particular *material well-being about property* and *property rights*.
In the light of these two different illustrations, the public interest does not satisfy the characteristics of the common good, in that the former does not include everyone, it may be regarded as subjectively beneficial and consequently, its benefits might not be shared.

	Everybody involved	Objective/Subjective Benefits	Shared benefits
Common good	✓	Objective	✓
Public interest	✗	Subjective	✗

Table 1.1

Source: Rielaboration from Douglass B. (1980). *The Common Good and the Public Interest.* Political Theory 8 (1), 103-17.

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24 "They were moral goods in the Aristotelian sense: they contributed to the development and perfection of distinctively human qualities. They enabled men to live well, to experience the fullness of human life, as opposed to merely existing.", Douglass B. (1980). *The Common Good and the Public Interest.* Political Theory 8 (1), p. 105.

In table 1.1 differences concern respectively the involvement of the whole community, the fact that it is either objectively or subjectively beneficial and finally, shared benefits are considered. The public interest conduces naturally to social responsibility, which is the embedded in the ethical obligation of an entity to operate taking into consideration the health of the society. In this case, the image of social responsibility is spoused to the role of the professional accountants, accounting standard setters and regulatory bodies, which should exercise with deontological and moral judgements in the activities they carry out.

Duska et al[25]. addressed the issue of Ethics[26] in the accounting field. At this regard, financial reporting, produced in compliance with accounting standards and independent verification, serves the public interest fostering the efficient allocation of resources and facilitating the efficient functioning of capital and other markets.

This is explicitly written in the AICPA –American Insitute of Certified Public Accountants – Professional Code of Conduct, Section 53, Art II.01 that *"collective wellbeing of the community of people and institutions the profession serves"* (Duska et al., 2011). This statement encompasses both the common good and the public interest concepts. The first part *collective wellbeing* may be referred to the common good, while the second part *community of people and institutions the profession serves* is intended as the public interest.

Auditors and standard setting bodies and regulators, including IASB and IFRS[27] which explicitly cite the public interest issue. This claim is enhanced recently in the working paper[28] in which it is claimed that IFRS (2015) are created to bring *transparency, accountability and efficency to financial markets around the world*. This matters at to the public at large, because IFRS contributes to promote trust, economic growth and long-term financial stability. This publication focuses in 3 areas:

- The audience of IFRS that is composed primarily by present and potential investors, lenders and other creditors. Nevertheless, the regulatory community

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[25] Duska R., Shay Duska B. and Ragatz J, 2011, *Accounting Ethics*, 2nd edition. John Wiley & Sons.

[26] " To preserve the integrity of his reports, the accountant must insist upon absolute independence of judgment and action. The necessity of preserving this position of independence indicates certain standards of conduct. If the confidence of the public in the integrity of accountants' reports is shaken, their value is gone." (Arthur Andersen in a 1932 Lecture on Business Ethics.) See Duska R., Shay Duska B. and Ragatz J, 2011, *Accounting Ethics*, 2nd edition. John Wiley & Sons, p.1.

[27] *IFRS Foundation Constitution*, 2010, IASB. at http://www.ifrs.org/About-us/IFRS-Foundation/Oversight/Constitution/Constitution-Review/2008-2010-Constitution-Review-part-two/Documents/IFRSFoundationConstforweb2010.pdf

[28] *Working in the Public Interest: The IFRS Foundation and the IASB*, 2015 available at http://www.ifrs.org/About-us/Documents/Working-in-the-Public-Interest.pdf.

is considered having interest in the financial reporting.

- The characteristics of IFRS aim to transmit the economic reality in a faithful and neutral way, rather than shape it.
- Independence of the IASB and the three-tier structure, governance and funding. Moreover, how the supervision of the organization lies with capital market authorities through the Monitoring Board.

This publication gives insights about the stipulative and operational definition of the public interest in international financial accounting, reporting and regulation giving credibility to the claim of the public interest focus.

Also the ICAEW report[29] has been alledging that the concept of public interest has been abstract and they rather provide a framework which allows for variation in circumstances and public interes meaning. The document considers in addition, the accounting profession and their commitment to public interest responsibilities.

Dellaportas and Davenport[30] (2008) examined the public interest concept in accounting addressing these questions: who exactly the public is, what the interests of the public are and what meant serving the public interest. They concluded that the public interest and the requirement to serve the public, acquires one meaning for members from the accounting profession and another one for members of the public. The verdict (Dellaportas and Davenport, 2008: 1089) is that *"the concept of the public interest in accounting appears to be disjointed and without clear or precise meaning and understanding"*.

The IASB promotes a unified set of accounting standards to facilitate the comparability of financial accounting reports on the assumption that the balance between social benefits and costs is positive.

Auditing

Quality auditing coadiuvates to the integrity of capital markets. Listed companies have to put to scrutiny their financial reports to an audit frm that evaluates the financial statements. Auditor's revision based on professional standards reviews the financial statements that have to comply with accounting standards.

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[29] Bromell T., Hodgkinson R., *Acting in the Public Interest: A Framework for Analysis*, ICAEW 2012

[30] Dellaporta S., Davenport L., *Reflections on the public interest in accounting,* Critical Perspectives on Accounting 19 (2008), 1080-1098.

Auditing firms that examine listed companies are registered with the PCAOB –Public Company Accounting Oversight Board in the USA, which provides for standards. On the other hand, the American Institute of Certified Public Accountants (AICPA) Auditing Standards delivers auditing standards for private companies. Shareholders and investors are assured by the independent auditors' reports that have the last word on the reliability of the financial statements and footnotes.
The four global auditing firms are Deloitte, Ernst&Young, KPMG and PricewaterhouseCoopers.
In case of economic disruption or simply a drop of the stock price can bring to lawsuit from shareholders to the audit firms.
The liability reform protects audit firms from the financial exposure after the lwasuit from a shareholder.

1.10 From Financial Accounting to Sustainability Accounting

As we have seen previously, the harmonization and implementation of the international accounting standards have has been successful in the last two decades. We have introduced also, the public interest theory, when we were referring to the aim of the accounting information. We took into account also some basics of corporate governance issues.
The financial information contained in annual reports have delivered shareholders and other stakeholders clues on the company's operations and strategies pursued during the precedent fiscal year.
Based on the principles of financial accounting framework these studies, given also the global environment, in which multinational enterprises conduct business, we will go thouroughly once more to the concept of social responsibility. Social responsibility is not limited to the accounting information auditors or professionals, rather it is extended to the enterprises which operate in multiple countries, mostly developing countries. Thus, the need to adress the most elementary needs and rights are evoked. Starting from human rights at large, including the basic rights to nutrition, to health and to education, to environmental concerns and finally corporate governance issues, we refer to them as the ESG –Environmental, Social and Governance features. These are defined also as the triple bottom line. As a matter of fact, in the last two

decades, a growing number of companies, from different sectors and geographies were willing to communicate to the public their strategies and initiatives involving ESG features.
Scientists, scholars, businesses themselves, claim the urge that the planet has limited resources. Thus, the multinational enterprises should engage into operations that address those issues. In particular, the urge of the climate change has arisen awareness on the matter gas emissions, and also in the scarceness of natural resources that supply the industries.
As it has become a salient issue, we will develop some aspects of sustainability accounting. Our aim is to provide the reader of the achievements that have been reached until now in the field of sustainability accounting. However, we will investigate
the state of reporting that is present nowadays in the global scenario, and the aspects that organizations fix as objectives to reach.
To cope with the environmental problem, many multinational such as Coca-Cola, Adidas, Puma, Diageo have claimed that they have engaged already in a sustainable way of doing business (Winston, 2014). It is reported that Adidas has reduced the quantity of water amounting to the Mediterranean Sea necessary to dye clothing to shift to drydye process, inducing to a cut in energy consumption and more importantly to use no water. In addition this technique has proven more efficient also in terms of profitability long-term-oriented.
"Innovation is driven by constraints and necessity" – claims Winston[31]. Thus, if industries undergo new methods of producing energy to support their production, they will also be able to sustain results and profits in the long-term.
One problem that could arise could be the initial cost of the renewable energy that is incurred. However, this may decay as thesis, as long as the consequent earnings would outweigh the initial investment incurred, which is considered a sunk cost.
Thus sustainability at large is conceived as going hand in hand with profitability.
Resilient enterprises which are nowdays main players in the global economic scenario are those firms, such as Unilever and Nestlé are growing, maintaining their environmental impacts low, with great results (Winston, 2014). They are able so survive, and not only, but thrive because they have acquired the know-hows and the experience to adapt to changes in time, evolving accordingly. In particular, they have the capabilities to address the three aspects –social,

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[31] Winston A.S. (2014) *The Big Pivot: Radically practical Strategies for a Hotter, Scarcer, and More Open World,* Boston (Massachusettes): Harvard Business Review Press.

environmental and governance aspects which are fundamental and address everybody. These concepts are associated to the economic purpose of profitability.
We are interested to see how these new ESG –features are treated in the field of sustainability accounting, and furthermore how regulation at a global level has advanced in the field of sustainability framework, which follows as corollary of the accounting system.
Financial information alone do not produce a complete picture of the corporate performance. Sustainability accounting is a corollary of financial accounting, and is relatively a new entry in the reporting scene, because it has arisen from the years 1960s. We can detect some important trends in the development of this subject. In particular, as for financial accounting was crucial the theory of public interest, the concept of corporate social responsibility is associated to sustaianbility accounting. The theory of corporate social responsibility grew in importance in the following years, after terrific disasters such as the 1984 Union Carbide gas leak in India and the 1990 Exxon Valdez oil spill in Alaska.[32] Then, in the early 1990s, CSR initiatives were disclosed voluntarily by companies in corporate reportinf forms, which contained environmental footprint of their manufacturing operations and donations. In 1995, Royal Dutch Shell, a global oil and gas company incorporated in UK with headquarters in the Netherlands, was criticized for alleging human rights in its operations in Nigeria (Moody-Stuart, 2014).[33] Investors and the public as a whole had lost confidence and faith in the company. To rebuild such trust, Shell started to prepare CSR report since 1998, leading by example to the other companies, that followed suit.
The European Union defined Corporate Social Responsibility in 2002 as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with thir stakeholders on a voluntary basis".[34]
With this wording, the EU emphasised the concept of corporate social responsibility as a dimension for inquiry, political interest and eventually regulation.
A sustainability report or corporate social responsibility report aims at demonstrating that the company is committed first to the their emoployees, social matters and community at large,

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[32] Maguire M., "The future of Corporate Social Responsibility Reporting," The Fredercik S. Pardee Center for the Study of the Longer-Range Future, Boston University, January 30, 2011, available at http://www.bu.edu/pardee/files/2011/01/PardeeIIB-019-Jan-2011.pdf.
[33] Stuart-Moody M. (2014) *Responsible Leadership: Lessons from the Front Line of Sustainability and Ethics*, Sheffield: Greenleaf Publishing. Shell executives showed that accusations against them for the execution of Ken Saro-Wiwa and other activists, were invalid, since the company had supported the activism campaign of secession of Ogoni's territory in Nigeria.
[34] European Commission, "Communication from the Commission Concerning Corporate Social Responsibility: A business contribution to Sustainable Development," COM(2002)347-final, July 2, 2002, available at http://europa.eu/legislation_summaries/employment_

second to the environment, third to build relationships with external parties in order to communicate long-term risk and to grow reputation, shareholder and brand value.[35]

CHAPTER 2

INSIGHTS ON SUSTAINABILITY AND SUSTAINABILITY ACCOUNTING

2.1 Preamble: definition of sustainability

Had we tried to give a definition of *sustainability* by ourselves, we would start from the etymology[36] of the word. *Sustain*[37] means "to cause or allow something to continue for a period of time.

A more specific definition appeared in 1987:

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

-from the World Commission on Environment and Development's (the Brutland Commission) report[38] Our Common Future (Oxford: Oxford University Press, 1987).

Scientists hurry the urge of action to the States in the 700 pages document *Stern Review*[39] *on the Economics of Climate Change (2009)*. The report specifically analyses that levels on greenhouse gases will cause an increase of between 2-5°C in global mean temperatures between 2030 and 2060. This will have consequences: the water cycle, reinforcing existing patterns of water scarcity and augmenting the risk of droughts and floods. As a direct consequence of the warming, rises the danger of large-scale changes in the climate system.

These scientific evidences and the growing quantitative assessment of risks pave the way clearly to economists and policy-makers to engage in a response.

Leaders from G-20 countries have started to take action against those threats.

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[36] The paradigm of the latin verb *sustĭnĕo*[36] *(sustĭnĕo, sustĭnes, sustinui, sustentum, sustĭnēre)* is composed of two parts: *sub-* (up from below) and *tĕnēre* (to hold), see latin dictionary, Il Castiglioni Mariotti (1966), Torin: Loescher.

[37] See http://dictionary.cambridge.org/it/dizionario/inglese/sustain

[38] See http://www.un-documents.net/our-common-future.pdf

[39] See http://www.webarchive.nationalarchives.gov.uk/20100407172811/http://www.hm-treasury.gov.uk/stern_review_report.htm

We all remember the Kyoto Protocol in 1997, where the countries engaged in achieving the reduction of carbon dioxide of 5% by 2020 and lately, the United Nations Climate Conference in Copenaghen[40] in 2009

The point is to flow capital to an economy with less carbon emissions because otherwise the climate change due to the global warming will have catastrophic impacts on everybody, but also in the financial implications of organizations, which would have to pay the damages.

If firms need some motivation to decide to go sustainable, this could be a reasonable point. To deal with the depletability of natural resources, firms should develop innovations that will provide new ways of saving energy. However, these innovations contribute to financial impacts by increasing sales, acn consequently more revenues. Sustainability is strongly linked to profit, it is argued (Winston, 2014). So, firms have lots of incentives to implement these sustainable measures.

Sustainability accounting is strongly linked with transparency, since the public needs a clear understanding on the activities of the corporation.

Furthermore, reporting on social, environmental and governance features is important for evaluating which companies are more profitable in a specific industry.

Customers have raised their standards as far as consumption is concerned. They have become more sensitive face to these issue with respect both to the final company which delivers the goods but also to the lean-production and supply chain (Moody-Stuart, 2014). So, going sustainable is convenient, not only, it is profitable.

Then, we have to mention the fact the companies are grouped in different ares: arlines, extractive, apparel, garment. So we need specific indicators of profitability of the specific industry. Thus, it could be difficult to compare companies among them, in these new terms.

As long as firms are under the scrutiny of almost everybody and communication is instantenous since stakeholders are interested with the integrity of the corporate performance and behavior. The business integrity is crucial, not only for ethical purposes, but because it makes economic sense and create competitive advantage (Eccles et al., 2010). Transparency, ethics and sustainability are linked profitability and competitiveness. Companies that will pursue such paths will obtain payoffs and will thrive on the long-run. Stakeholders are interested with the integrity of the corporate performance and behavior.

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[40] See 2009 Investor Statement on the Urgent Need for a Global Agreement on Climate Change at http://www.unepfi.org/fileadmin/documents/need_agreement.pdf

The concepts of integrity, corporate social responsibility, the attention on the human rights, moral attitude and social commitment are key terms which are propelled by Moody-Stuart[41], a leader in the extractive mining industry and an engaged activist in the meetings of UN Global Compact and other associations. His words then confer a high degree of credibility face to those issues, given his expertise in the field of business and involvement in environmental, social and governance matters.

2.2 Cyclicality of energy in the business history

The use of fossil fuels, beneficial in terms of economics development, was on the other side having adverse climatic effect. However, fossil fuels resources are finite. Until now, oil and gas have provided the world with economic, reliable and convenient form of energy, that has underpinned the growth of the world's economies. Assessments from the IPCC – Intergovernmental Panel on Climate Change in 1990 which assessed the impact on the climate that carbon dioxide generated by the burning of fossil fuels. The second assessment was in 1995.
Until now we have had the internal combustion engine.
Every epoque is determined by use of certain sources of energy (Moody-Stuart, 2014). Changes in energy supply and use of it take place in cycles from thirty to a hundred years, driven by technology and convenience.
Starting from the 19th century, the steam and the coal were the dominant sources of energy. The 20th century started with wood and coal, then oil. In this century motor transportation developed fuelled by gasoline and diesel. Then, heavier parts of the oil barrel, fuel oil, began to be used to power trains and ships. Industrial revolution determine cycles of energy and foster innovation. After the Second World War, oil companies began to sell lighter fuel oil for domestic use in central heating and for use in power stations. In the 1960s, in Europe and in the USA, large accumulations of natural gas had been found. This caused competition between gas and oil.
Renewable energy is the objective for a new industrialization for sustainability.

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[41] Stuart-Moody M. (2014) *Responsible Leadership: Lessons from the Front Line of Sustainability and Ethics*, Sheffield: Greenleaf Publishing.

We cannot blame the era of the energy of oil and natural gas, because it has served multiple years. It is part of cyclicality in the use of innovative transportation energy.
The IEA –International Energy Agency claims that there are barriers to the introduction of renewable energy. Upfront costs for the implementation are high, while the running costs are low. Cost reduction is necessary to let technologies move more rapidly down the experience[42] curve, however the USA and Canada are resistent to this[43].

2.3 Evidence of economic benefits of sustainability

There is a growing body of evidence suggesting that sustainability initiatives lead to profits and business opportunities. Survey on companies were conducted, in order to discover how these companies relate to sustainability and until what point executives believe that it affects their company's bottom line. It was found that companies engage to sustainability because they believe it has a material financial impact, given also the increase in price for raw-materials and new regulations.
Nevertheless, few were the companies that provided financial incentives after sustainability performance.
In a report from the UN Global Compact it was agreed that business should engage in golas based on global priority, nevertheless, only a part said that companies are on the way to address global sustainability challenges.[44]
Academic studies, data on resource efficiency and business strategy lead to the agreed result that sustainability programs are yes highly linked with good financial performance, but they also create it.
According to the examination of academic studies by Deutsche Bank, companies reporting high ratings for environmental, social and governance (ESG)[45] factors bear a lower cost of capital, including debt and equity and outperform the market in the medium and in the long-run.

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[42] G8 Renewable energy Task Force Report, 2001
[43] Leaked Report shows G8 Task Force Report Lays Global Blueprint for Renewable Energy but the US and Canada are Blocking G8 Summit Conclusions, 15 July 2001
[44] The UN Global Compact–Accenture CEO Study on Sustainability 2013: Architects of a Better World, Accenture and United Nations Global Compact, 2013, available at: unglobalcompact.org.

[45] Fulton, M., Kahn, B.M. and Sharples C. (2012). *Sustainable Investing: Establishing Long- Term Value and*

Similarly, the CDP (Carbon Disclosure Project) discovered that companies registered in its Carbon Disclosure Leadership Index and Carbon Performance Leadership, where they disclose information about greenhouse-gas emissions, are associated to higher stock-market returns.[46] As a matter of fact, figures suggest that companies registered in the indexes delivered high performance in the FTSE Global 500 between 2005 and 2012.

Other academics contributed to the theory that sustainability strategies are linked to high financial performance. Their research found out that an investment of $1 at the beginning of 1993 in a weighted portfolio of sustainable companies would have risen to $22.60 by the end of 2010, compared to $15.40 for the portfolio of companies that were engaged on low-sustainability business profiles. [47] Furthermore, high-level sustainbility companies performed better in terms of return on assets and return on equity. Eventually, the authors sustain that the development of a corporate culture of sustainability may drive to a competitive advantage for the firm in the long run.

The concern of responsible investment has arisen through investors. As evidence for this, is the growth up to 486% of social responsible investment between 1995 and 2012 in the United States.[48] This responsible investment is facilitated by data providers as Bloombers, MSCI, and Thomson Reuters that deliver ESG data related to sustainability performance. Investors seek to outperform the market by investing in highly sustainable companies.

2.3.1 The argument for comparative advantage

The noteworth contribution in management literature of Porter[49] (1985) that argued that the competitive strategy enclosing cost leadership, differentiation and focus fuelled competitive

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Performance, DB Climate Change Advisors, Deutsche Bank Group. Available at: https://institutional.deutscheawm.com/content/_media/Sustainable_Investing_2012.pdf.

[46] CDP, S&P 500 companies leading on climate change action have doubled in number, 2013 available at: https://www.cdp.net/en-US/News/CDP%20News%20Article%20Pages/SP-500-companies-leading-on-climate-change-action-doubled.aspx

[47] Eccles R.G., Ioannou I., and Serafeim G. (2015). *The impact of a corporate behavior and performance*. Harvard Business School working paper, HBS Working Knowledge, N° 12-035.
Available at: hbs.edu.

[48] Report on Sustainable and Responsible Investing Trends in the United States, US SIF Foundation, Forum for Sustainable and Responsible Investment, (2012). Available at: ussif.org.

[49] Porter M., (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.

advantage, which had to survive the long and slow process of *erosion* by competitors moves or industry evolution.

Pursuing a sustainable strategy which commits the firm to a series of particular operations, which results in a sustainable advantage, leads the firm in a particular position relative to its competitors. Sustainable advantages according to Ghemawat[50] (1986) can be achieved by *"the size in the targeted market, superior access to resources or customers, and restrictions on competitors' option"*.

Eventually, Kramer and Porter[51] brought to a further level the connection between the competitive advantage and sustainable strategy tied into CSR. The authors identified two functions for CSR.

First, *the responsive CSR*, viewed as a function of risk management involved a double position of CSR. On one hand this corporate social responsibility was sticking to the evolving social concerns of stakeholders, and adjusting current detrimental effects caused by businesses. Should the firm result irregular with regard to basic pollution controls, it would suffer both in financial terms –regulatory fines and lawsuits- and in reputation –assault of media and class action by stakeholders. This is referred to as *managing the downside.*

Second, *stategic CSR* is associated to value creation and encloses both inside-out and outside-in interdependencies. Whilst *inside-out* interconnections include the the business operations that encroache the society, the *outside-in* ones refer to the external influence that social conditions induce on the corporation. We have just described the *upside* facet of sustainable strategy.

Another approach –natural-resource-based view is pointed by Hart[52] (1995) who draws a link between sustainable development and sustained competitive advantage which "*will be rooted in capabilities that facilitate environmentally sustainable economic activity".* He introduces a conceptual framework comprising three interrelated capabilities[53], namely, pollution prevention, product stewardship, and sustainable development. Each of them is associated with key resources, continuos improvement, stakeholder integration and shared vision, respectively.

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[50] Ghemawat, P. (1986). *Sustainable Advantage.* Harvard Business Review, v.64, pp 53-58.

[51] Eccles, R.G. and Krzus M.P. (2010). *One Report. Integrated Reportinf for a Sustainable Strategy.* New Jersey: John Wilet & Sons.

[52] Hart, S.L. (1995). *A Natural-Resource-Based View of the Firm.* Academy of Management Review , v. 20, 986-104.

[53] Pollution prevention is treatied with minimizing emissions, effluents, and waste. Product Stewardship entails integrating the "voice of environment", that is external stakeholder perspectives into product design and development processes. Product Stewardship is faced with minimizing life-cycle cost of products. Sustainable development is handled though minimizing environmental burden of firm growth and development. See Hart, S.L. (1995). *A Natural-Resource-Based View of the Firm.* Academy of Management Review, v. 20, 986-104.

Consequently, the competitive advantages each capability are linked to, result in lower costs, preemption of competitors and future positioning, accordingly.
The reader might question now, whether going green[54] effectively increases the market value of the business. The sample from S&P 500 firms using data drawn from the Investos Responsbility Research Center's Corporate Environmental Profile and Compustat. Operating performance, ROS is significantly benefited in the following year, and two years before financial performance (ROE) is affected.
Second, "strategic CSR" is associated to value creation. This encompasses both inside-out and outside-in interdependences.

2.4 From financial to nonfinancial information

Nonfinancial[55] information is relevant and material information, different from financial statements, useful for investment decision making. It regards both regulated and voluntary disclosure by companies. KPIs (key performance indicators) can be used alternatively as they consider evaluation of the quality, sustainability, and variability of a company's cash flows and earnings. Nonfinancial information can be distinguished into three classes:

1) Intangible[56] assets, which are resouces which produce outcomes (stock variables) and include intellectual assets, intellectual capital and intangibles.
2) KPIs that are revenues (flow variables)
3) ESG metrics can either be an intangible asset or KPI.

As in the case of financial information, comparability of data was important, implying certain harmonized accounting standards, such as the IFRSs. In the case of non financial information, there is still the need to compare financial statements.

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[54] Hart S.L., Ahuja G. (1996). *Does it pay to be green? An empirical examination of the relationship between emission reduction and firm performance*. Business strategy and the Environment, vol.5, pp 30-37.

[55] Organization for Economic Cooperation and Development. Intellectual Assets and Value Creation: Implications for Corporate Reporting , December 2006, p. 11.

While in the case of financial information filed with accounting standards, a certain degree of comparability is possible across companies over time, in the case of nonfinancial information, this results somewhat difficult.
To reach comparability of companies, we should to work on specific KPIs, as long as each industry is characterized by different items and indicators, and while an information is relevant for on company, it may be not for the other company.
Intangible assets are the cause of the difference between a company's market value ans its accounting book value and those assets do not appear in the balance sheet. They refer to nonphysical assets that create value. As a matter of fact, human capital contributes to quality and to price, intellectual capital leads to noew products, brand is good for market share and profit margins, and customer loyalty has benefits in lowering sales and marketing costs[57].
Frameworks by the OECD –Organization for Economic Cooperation and Development were created, however the initiatives are voluntary, exceptions made for Austria[58], where it is mandatory.
KPIs are metrics which measure product quality, employee turnover, new product development success rates, customer retention (Eccles et al., 2010). These mesures are used by management to implement and monitor the implementation of their strategies.
Narrative reporting is that section that provides support to financial information presented in the income statement, balance sheed, and notes. The contextual information encloses the company's startegy, plans for implementation, a competitive analysis of the indutry and the general economic environment. This section gives insights to the financial results.
Environmental, social, and governance (ESG) metrics measure a company's performance in each of the domains concerned. There exists some relationship between ESG performance and a company's financial performance. Indeed, roductivity is improved and operating costs are lowered, if implementation in these areas are performed. ESG reports have been increasingly used in the last period of time. This last statement suggests that companies are understanding the importance of expose their commitment to such matters to the public.

Materiality under a new light

In the case of nonfinancial information, it is more difficult to specify which data should be considered for comparability of statements, where sustainability accounting is concerned. It is

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57 Lev, Baruch. "*Sharpening the Intangibles Edge*," Harvard Business Review ,v. 82, is. 6, 2004, pp. 109–116.
58 Organization for Economic Cooperation and Development. Intellectual Assets and Value Creation: Implications for Corporate Reporting, December 2006, p. 16.

not easy to ascertain the materiality issue both in financial information and nonfinancial information, some companies use the standards delivered from Accountability. A material issue is an issue that will influence the decisions, actions or performance of an organisation or its stakeholders.

However, some suggestions come from Academics of Harvard University (Lydenberg et al., 2014).

They suggested to divide the market into different industries, based on the classification of the industries index, and they added that the industries have individual classification of data, which they had to report, based on the uniqueness of operations and activities that characterized the firm part of the industry.

Materiality[59] covers topics and indicators that *reflect the organization's significant economic, environmental, and social impacts* or that *would substantively influence the assessments and decisioins of stakeholders*. Thus, materiality is considered a threshold at which information or indicators are compared to, and considering a relative priority are reported consequently. Materiality works as threshold in financial reporting for influencing the economic decisions of the investor that looks at the organization's financial statements. In sustainability reporting, this comes at a wider range of impacts and stakeholders, as sustainability topics that have a massive financial impact on the organization. In addition, it is evaluated the impact of economic, environmental, and social features in the present without compromising the needs of future generations[60].

Internal and external factors are used to determine materiality such as the stated mission and strategy of the organization, the influence on business ecosystem expectations from civil society and stakeholders and finally the commitments to international agreement standards.

2.5 Effects of sustainability reporting on mandatory approach countries

The reports on financial and nonfinancial information display to the public the organization's overall performance. Furthermore, it shows the target and commitments to which the firms are

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[59] Global Reporting Initiative. G4 Sustainability Reporting Guidelines, 2013.

[60] World Commission on Environment and Development. "*Our Common Future*". Oxford: Oxford University Press, 1987.

engaged and allows the shareholders and the general stakeholder to have a view on it and provide feedback.

Although developments that different frameworks have achieved, there still exists some open question relating to which is the perception of stakeholders face to the sustainability strategies and consequent performance (Ionnau and Serafim, 2014).

Sustainability reports has a considerable impact on those countries, where sustainability is mandatory, highlighting social responsibility of companies within society. Those sorporations adopt also ethical codes and efficient corporate governance. As a consequence, managerial governance becomes more credible.

These positive effects are enhanced in countries with regulatory mechanism and independent assurance. Ionnau and Serafim (2014) claim that sustainability reporting contributes to increasing transparency on social and environmental practices by companies and offers a way to reexamine the corporate governance structure. Moreover, the report can serve as an internal scheme for incentives for executives who are directly linked to stakeholders, to establish long-term objectives, to build confidence and cooperation. This allows the business to engage in sustainable models that bring both positive social and financial results.

Eventually, preparing a sustainability reports may convey to new opportunities, such as operational efficieny or energy consumption reduction, or on the extreme, risks, such as human rights violations or corruption activities that, otherwise would have been difficult to detect. One of the discoveries, during the preparation of such report is the financial impact of the negative externalities that the firm is subject to regulatory action and in the worst case to the shutdown of the activity.

Thus, sustainability reporting serves both to the internal management and investors, in the sense that it promotes transparency and enables both parties to consider sustainability practices and their effects on long-term economic value.

2.6 Sustainability Reporting Frameworks

Recently, the UN Conference on Sustainable Development (UNCSD)[61] also indicated as Rio+20, which took place in Rio de Janeiro in 2012, renovated the political commitment for

[61] See Rio+20 United Nations Conference on Sustainable Development available at http://www.unep.org/rio20/About/tabid/101530/Default.aspx

sustainable development and made the point of progress up to that date. The Conference addressed the topic of Green Economy in relation to sustainable development and pushed for an institutional framework for sustainable development. The need for nonfinancial reporting has increased, as there is an increase of intangible assets of the corporation in its balance sheet. Now, information regarding environmental, social and governance matters are to be included in the balance sheet, as part of the performance of the organization.

2.6.1 Insights on GRI – The Global Regulation Initiative

The GRI is an independent globally recognised organization. The goal of the GRI is to design a reporting framework able to deliver the stakeholder with relevant information on economic, environmental and social performance of the organization considered.The sustainability reporting guidelines provided by GRI started to develop in the late 1990s. The United Nations Environment Programme (UNEP) supported the nonprofit organizations, Ceres –Coalition for Environmentally Responsible Economies, and the Tellus Institute to create this global framework which was formed by Robert K. Massie and Allen White.
Organizations interested in sustainability reporting can adopt Guidelines GRI 4.[62]
Indicator Protocols (definitions and compilation guidance), *Sector Supplements* (guidance in sector-specific Performance indicators) and *Technical Protocols* (guidance on issues in reporting) guide the user from the *how to report* to *what to report*. These Guidelines include principles, guidance and disclosure necessary for the sustainability reports. The report is centered in a CEO statement and specific information is delivered around economic, environmental, and social performance. Furthermore, other matters such as the description of relevant policies and management systems, stakeholder relationships, managemenr performance, operational performance, product performance and a sustainability overview, are included. Guidelines are produced through a multistakeholder process that encompasses business, civil society, labor, accounting firms, investors, academics, governments. Nevertheless, a concern is the lack of involvement from the investment community, since investors must allocate time and resources to the stakeholder engagement process and it is not clear that there is an immediate benefit to their asset-owning clients.

[62] Global Reporting Initiative. G4 Sustainability Reporting Guidelines, 2013.

Another challenge is related to the fact that the financial relevance of the information prepared according to its guidelines must be clear. Thus, the need for the companies to show linkage between ESG performance and business strategy is evoked.

2.6.2 The UNGC –UN Global Compact

The figure below proposes the scheme of the 10 principles of the UNGC. The creation of this body has been concluded thanks also to the contribution of Moody-Stuart, who suggested the 10th principle, aimed at the eradication of bribery and corruption.
A question arises about the effective work that is promoted in the States. Moody-Stuart (2014) demonstrates that, the UN Global Compact Local Networks are the laboratory, that follows operations in a daily basis in the countries.
When it comes to the enforcement of these principles, this could be a little critical, since the verbal mode is expressed with the conditional, meaning that they do not dictate compulsory rules on signatory States.
UN Global Compact makes a difference, in that 8000 business participants with 50 million people. A greater achievement would be reached to also the supply chain.
Also, important is the United Nations Framework Convention on Climate Change (UNFCCC) which works the CDM –Clean Development Mechanism.

Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
Principle 2: make sure that they are not complicit in human rights abuses.

Labour

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
Principle 4: the elimination of all forms of forced and compulsory labour;
Principle 5: the effective abolition of child labour; and
Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;
Principle 8: undertake initiatives to promote greater environmental responsibility; and
Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Table 2.1 Principles of UN Global Compact

Source: UN Global Compact

2.6.3 Legitimate authority of the organizations that issue standards for sustainability reporting

Voluntary adoption of some principles is left to the States. This implies not a light commitment at all. States are required to provide a commitment letter in the beginning and have to provide some evidence of the results that they are achieving delivering a document, CoP – communication on progress letter (Moody-Stuart, 2014). In this Letter, the State must specify all the precise actions that it is pursuing toward ameliorations and achievements regard the reduction of pollution for example, the emission of carbon dioxide. As countries do not comply with some standards, they are delisted from the chart of the countries that are engaged to this initiative.

This has threatening consequences for companies, especially on brand reputation. The fact that they must commit to reporting publicly on their progress implies that that are exposed to the scrutiny of the public, from shareholders to consumers, to NGOs, to the media and to their own employees. The power of disenchantement or wrath of the public is massive. Before going exposed, these reports are verified by independent third parties. In case of innacurate information heavy consequences are borne by the firm.

Firms tend to implement such standards after *moral suasion* (Herdegen, 2013), meaning that they are willing to follow the standards, as other companies in the industry do. Otherwise, reputational consequence ruin the image of the company.

Important organizations are also the EITI and ICC for criminal courts, of which USA is not part, because the United States are not willing to have their nationals judged under a host Court.

The EITI –Extractive Industries Transparency Initiative aims at reducing bribery attempts, by reducing improper payments and the misuse of funds in the resources industry. This organization was launched at the Johannesburg World Summit on Sustainable Development in 2002 and involves cooperation between governments, companies and civil society organizations. The objective for oil and mining companies was making public their payments to governments.

Furthemore, the IMF also has a fundamental role, runs its sharp eye to the transactions. Remind that, financial reporting on one hand is regulated whilst the sustainability reporting is not yet established, but still provides at a voluntary basis.

2.7 Arguments for regulation

Regulation is necessary to adopt new standards. And the place for such regulation is the nation state. So, it is national legislation that generally has to provide for enforcement of the implementation of such standards. It is useful to have international legislation to ensure that international companies working in these countries to apply international standards. But implementation must go through regulation at national level.

Voluntary initiatives and standards are becoming quasi-mandatory for global companies, like the protocols and treaties such as the UN Montreal Protocol on Substances that Deplete the Ozone Layer (1989) or the Mine Ban Treaty (1997). They are efforts made at national level, however they must be enforced nationally.

Standards are becoming mandatory themselves. Standards such as the Voluntary Principles on Security and Human Rights, or standards developed in order to prevent degradation of forests for agriculture, or practices developed by the International Council on Mining and Metals get picked up and incorporated into the Performance Standards on the World Bank Group. Furthermore, the Equator Principles which is the multi-stakeholder initiative adopted by the banks and finance almost all private sector projects, companies seeking project finance must adhere to these standards. Through pressure exertion on a company by those of its shareholders who are signatories to the PRI, international companies are pushed by a series of agreements into compliance.

Consumers, on the other hand pressure on organizations to ensure that goods sold meet certain standards in their production, it is possible to build environmental and labour standards into international trade agreements. For this purpose, the International Institute for Sustainable Development has been pioneer in this field leading to the development of investments agreements that support more sustainable developments.
Initiatives such as the Marine Stewardship Council and the Forest Stewardship Council have had a major impact on their respective sectors. They harness the power of consumer choice in relatively high income markets. Consumers look for the logo when making their choice for fish or wood and paper-based products. The coalitions include companies active in these sectors and set challenging but achievable standards. Fisheries and forests have benefitted on a significant scale. So have companies. Examples are Unilever that has benefitted in its fish business, but succes has been achieved also across other industries.
Also Anglo-American's former paper subsidiary Mondi has certified more than a million hectares of productive forest in Russia under the Forest Stewardship Council scheme, protecting areas which under the Soviet Union were in danger of degradation, although Soviet regulations that should have prevented it.
Such intiatives demonstrate to governments that such step towards sustainability are possible and do not harm business. Then, it is up to the government to apply such approaches[63].

2.7.1 Arguments for regulation: externalities.

Firms'activities are causing externalities on society, as dioxide caron emissions, water pollution, ecosystem depletion.
Regulations address the release of these externalities, taxes are enforced to internalize their cost, and subsidies that promote alternative technologies, such as pricing carbon through the cap-and-trade system. Thus, financial costs will be designed, and also financial benefits that come through lowering them, and investing.
Externalities of the past will translate into new assets and liabilities.

The European Trading Scheme

To address externalities the European Union has developed the EU ETS –European Union Emissions Trading Scheme, which comes after complex negotiations in 2005. It has been slow

63 www.voluntaryprinciples.org/ what-are-the-voluntary-principles

to develop, but has provided valuable working experience. This is the cornerstone of the European Union's policy addressed to fight climate change and is aimed at reducing industrial greenhouse gas emissions in a cost-effective manner. This (biggest) international system for trading greenhouse gas emissions allowances deals with more that 11,000 power stations and industries in 31 countries, and airlines as well.[64]

A "cap and trade" principle works in such a manner that a limit is fixes on the total amount of some greenhouse gases that can be produced by factories during their activities. This cap decreases over time in order to cut emissions. Within the cap, corporations trade emissions, meaning that they receive or buy emission allowances, which must be surrendered every year otherwise huge fines are imposed. When the company exhausts its emissions, it can keep further allowances to cover future needs of to sell them to other companies.

Beside the EU ETS system, other emission-saving projects around the world issue international credits. The fact that the total number of allowances is limited, pronounces the financial value. In particular, by allowing firms to buy international ctedits, the EU ETS plays an important role in driving investments in clean technologies and low-carbon solutions, especially in eveloping countries.

With carbon-pricing, the EU ETS has established the climate change concern in the financial departments of all companies across Europe.

By paying a high price on caron, clean investment and low-carbon-technologies are promoted. The EU ETS estimates that emissions will be lower by 21% in 2020 with respect to 2005, and by 2030, they would be 43% lower.

The European Federation of Financial Analysts Societies established a high-level framework based on the pillars of ESG features and the impact of these in the long-term[65] corporate performance.

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[64] The EU Emissions Trading System (EU ETS). Available at: http://ec.europa.eu/clima/policies/ets/index_en.htm.

[65] European Federation of Financial Analysts Societies. *Key Performance Indicators for Environmental, Social & Governance Issues: A Guideline for the Integration of ESG into Financial Analysis and Corporate Valuation*, version 1.2, 2009

2.7.2 Regulation from a three cornered approach: the contribution of Moody-Stuart

As the business is concerned, although it may provide for internal changes, the consumers decide to use fossil fuels. Business delivers what consumers want in principal. They can suggest ways of decreasing caron dioxide to the consumers. Although the UK retailer Mark & Spencer (M&S) launched the programme, offering renewable energy or sustainable products or educating and infomating them, it is up to the consumer to choose, because of the cost convenience or image. Individual commitments are possibile but there is need for regulation to achieve universal use.

As far as the consumers are concerned, they have considerable power because they can destroy an organization or a government. (Moody-Stuart, 2014). They are aware of climate change, however they do not want to forego costs.

Finally, governments pay attention toward consumers, but they can exhort businesses through taxation and regulation. It takes some costs to study the effects of the business products. If regulation is implemented, it causes costs to business, buti s invisible to consumers. However, through taxation, business may be criticized for cutting employment. A consequent loss on international competitiveness arises.

Moody-Stuart (2014) suggested this three cornered approach that involved, businesses, consumers and governments.

First, it is essential to deliver mobility and energy alternatives to the customer is mainatained and the cost is not noticeably increases. Thus, thi would translate to significant investments in public transport, urban public transport and work on low-caron vehicles.

Second, market needs a regulation. The market is the place where the technologies compete and are either optimised or discarded, opening the field for creativity in competing businesses and for consumer choice. Then, use price signals in the market and internalise costs through taxation. Variable sales tac on energy should be implemented, reducing it when the market drives energy prices high and increasing it when market energy prices fall. The result is a more stable consumer energy price.

Moody-Stuart suggests the need for establishment of *eco-hedonim,* which means taking pleasure from both comfort and operating perfomances as well as eco-efficiency.

The creativity of the market is necessary to find solution, to provide choice and to guide the allocation of resources. Frameworks in the market should be technology-blind. It is up to the

market to establish which technology will survive: the solar photovoltaics, wind, nuclear, hydrogen, geothermic, carbon sequestartion, hybrid vehicle technology or tidal power.
In conclusion, consumers, shareholders, campaigners and government can push for regulation. Important to this extent are the UNEP –United Nations Environment Programme and a bunch of pension funds to develop the PRI –Principles for Responsible Investment.
It is the belief of major funds that with long-term investment horizions, if companies pay proper attention to environmental, social and governance factors their economic performance will be improved over the medium term and risks will be reduced. (Moody-Stuart, 2014).
To enable this, they encourage companies to reports publicly on their performance like the Commission on Progress or by using the Global Reporting Initiative. Furthermore, signatories to the PRI take into account their investment strategy. They seek to understand whether companies are integrating the Principles into their day-to-day operations.

2.8 Two different approches of regulation: mandatory and voluntary

France and Sweden are the countries in which the CSR –Corporate Social Responsibility report is mandatory.
Nevertheless the attempts by the European Sustainable Investment Forum (Eurosif) and the Social Investment Forum (SIF) to suggest to the European Union and the SEC to make mandatory ESG reports.
Enterprises publish “Corporate Social Responsibility” or “Sustainability reports” in a voluntary basis together with the yearly Financial Report or separately. Believing also that the report is a summary of the performance of the firm in accounting and economics terms, we would need also to incorporate the Sustainability Report in the Financial Report, since the strategies are also addressed to increase the value of ESG features.
As far the mandatory approach is concerned, there are few States who have passed the law at national level for mandatory disclosure of these sustainability information. See the States like UK, Japan, Sweden, Malaysia. Others are achieving some grade of this mandatoriety, like the European Parliament produced Directive[66] in 2014/95/EU of the European Parliament and of the Council that amends Directive 2013/34/EU as regards disclosure of non-financial and

[66] To see the whole Directive go to http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0095

diversity information by certain large undertakings and groups. This Directive adresses the compliance of registered enterprises with more than 500 employees. Member States now, shall transpose[67] it into national level by December 2016, and thus, to provide themselves for controlling of the firms that are disclosing information from the financial year starting on 1 January 2017. So from supranational organism to implement regulatory laws to national level. A question arises on whether the corporations should be left to voluntarily will to disclose these sustainability reports.
However, it is important to report sustainability accounting information. Because this way the public can record the achievements in the bets the companies are relying on, such as in the decrease of the greenhouse gases, or the reduction in carbon dioxide, but also the water wasting, for example.

2.9 The assurance after the publication of the sustainability report

We examined the auditing process for financial information. In the case of sustainability reports, these latter are put to the scrutiny of the auditing firms, which provide assurance on the reported nonfinancial performance. Some companies adhere to independent audit firms for assurance, although it is not mandatory.
Also NGOs give some certifications in that sense, a promotional feature to the business, like Unilever, Seafood and Forest. This translates into a consumer confidence toward these brands, thus they could bring to positive consequence in revenues.
Mandatory disclosure and assurance is an important public policy that raises issues about the liabilities to the organizations that provide the assurance. Assurance enhances the credibility and the quality of the reported information. The question is whether investors and stakeholders are willing to pay for obtaining such high-quality information, although all stakeholders benefit from them. Higher standards are call for. In addition, control and assessment in the company of the strategies and operations concluded need to be verified before getting disclosed.
Nonfinancial information is important as the financial information. Assurance on nonfinancial information is voluntary. Firms can use the AA1000[68] Assurance Standard, a free international

[67] Article 4 of the Directive in 2014/95/EU of the European Parliament and of the Council

[68] Introduction to the revised AA1000 Assurance Standard and the AA1000 AccountAbility Principles Standard 2008

standard that provides the requirements for conducting sustainability. The international audit firms conduct assurance on nonfinancial information, using the International Standard on Assurance Engagement 3000.

Nonfinancial information assurance lacks standards that would be equivalent to IFRS or U.S. GAAP for financial information.

The Climate Disclosure Standards Board (CDSB) created in 2007 during the Annual Meeting of the World Economic Forum to address global warming and the risks associated. The Board coadiuvates to the development of a framework for diclosures, recognized globally, about climate change-related risks and opportunities, such as carbon emissions. This is related to carbon pricing.

Other climate-related and environmental metrics could follow the lead of the carbon schemes.

2.10 The triple bottom line under the veil

Corporations are big organizations of people. They contribute to the developing of countries economically and also protect the basic human rights of the community in which they work in. It is almost always the case that the communities we refer to, are those in developing countries, in where the organization transfers or build a business unit and conducts operations.

Companies are aware of the need to achieve consensus agreement with the communities with whom they interact and whose lives they affect.

It basically mantains also employees from the original country, but it can also hire people from the community of the States. It is the case of developing[69] countries, so defined by the UN. We agree that a corporation which operates in a developing country, it should contribute to the economic and social development and environmental impact on the host country. Local Networks can contribute to the development of peace in the country, to the benefit of both business and society at large. Major companies can also give advice in case of unjustice in the host government countries (Moody-Stuart, 2014). Achieving any progress depends on trust, which can be developed by establishing human and friendly contact. Here the social aspect, including human rights is addressed.

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[69] World Economic Situation and Prospects, Country classification. Data sources, country classifications and aggregation methodology (2012) available at http://www.un.org/en/development/desa/policy/wesp/wesp_current/2012country_class.pdf

The environment aspect is associated to the finite amount of resources that are in the planet, to pollution, to carbon emissions.
The corporate governance part is also very important. It relates to the capability of the CEO, of the Board of Directors, but substantially to all the levels in the business. It refers to the capability of doing well, of being a good manager, a good employee.
We wonder if these corporations can be held liable for crimes or for some damages of which they are responsible of.
Corruption is considered the biggest market failure of all. Companies operating in developing countries provide employment and growing local business and introduce them to supply chain, besides the non-contribution to the bribery, by not paying certain amounts of money to corrupted politicians. They also help building the capacity of local entrepreuners operate as dealers and stockists. So, people learn the basics of business such as stock and cash cointrol and basic book-keeping. This provides them with the capacity to start up a business on their own.
The business environment is like a natural environment in that its wealth depends on ecology. For a business ecosystem to be healthy it needs businesses of all sorts and sizes to be able to find their niche and thrive. As a matter of fact, businesses are interconnected and depend on each other as in an *ecosystem of business*[70] (Moore, 1993).

2.10.1 The development of the CSR –Corporate Social Responsibility argument

The term corporate social responsibility, providing descriptive and legal basis on this concept, is used interchangeably with other competing, still complementary images such as *corporate citizenship, sustainability, corporate accountability, corporate governance* and *corporate social entrepreneurship*. The roots for social responsibility were initiated by Barnard in the late 1930s. Spector (2008) attributes the development of social responsibility after the Second World War, in the early period of the Cold War. Defendants of CSR at that time judged necessary the parallelism between the business interests and the protection of the capitalistic market system against the communist system in the Soviet Union.

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[70] Moore, James (1993). *Predators and Prey: A new ecology of competition*. Harvard Business Review. 71(3) (May-June): 75.

Nevertheless, its development is a product of the past half century. The literature of CSR has particularly succeeded from the 1960s in the US, then in Europe. Corporate social responsibility extends to the role of the corporations which dominated the international economic scenario from the 1950s. Bowen (1953) in the book *Social Responsibilities of the Businessman* addressed the responsibilities and consciuousness of the businessmen, which went beyond the profit-and-loss statements but rather covered actions and objectives and values of society.

During the decade of 1960s CSR[71] definition was formalized. Davis (1960) noted that social responsibility encompasses actions and decisions of the management of the business go further the economic objective of the firm. Moreover he promoted the *self-interest justification for CSR*, socially oriented business strategies are connected directly to economic profits in the long-run. His view succeeded in the 1970s and 1980s. He added that social responsibilities of large corporations businessmen were associated with large social power. A narrower view was offered by Milton Friedman, who stated that social responsibility of the firms was limited to increase its profits in its article for the New York Times Magazine in 1970.

McGuire[72] (1963) asserted that the responsibilities of the corporation were extended beyond those economic and legal ones.

Ackerman[73] (1975) bestows to the concept of corporate social responsibility a managerial rather than philantropic connotation, since environmental and social matters such as air pollution stemmed from business manufacturing operations and management decision course as capital investment allocation.

In 1971 was established the CED –Committee for Economic Development composed by businespeople and educators. Its publication *Social, Responsibilities of Business Corporations*, it adressed CSR at the extent that that the businnes plays an important role as institution, which offers goods, services and assumes further responsibilities.

Steiner (*Business and society*, 1971) emphasized his position for which the corporation plays a fundamental economic role as instution and it bears the responsibility to help society toward its goals.

All these authors agree on the perspective of social interest and the enlightened self-interest of business in the long-run.

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71 Carroll, A. B. *"Corporate Social Responsibility: Evolution of a Definitional Construct"*, Business & Society , v. 38, is. 3, 1999: 268–295.

72 McGuire, J. (1963). Business and Society. New York: McGraw-Hill.

73 Ackerman, Robert W. The Social Challenge to Business . Cambridge, MA: Harvard University Press, 1975, p. 1.

Sustainability

It is more used than corporate social responsibility. This term originated in the first half of the 20th century, addressing population growth on one side and the demand on resources on the other, which were limited. The term *sustainable society* emerged in the World Council of Churches of 1974 conference on Science and Technology of Human Development. In 1983, the United Nations created the World Commission on the Environment and Development, (WCED), led by Norway's Gro Harlem Brundtland, with the publication of Our Common Future. It was optimistic that limits need not limit economic growth, since technology and social organization can be both managed and improved to make a way for a new era of economic growth. A consensus for the definition of sustainable development has been achieved but not for sustainability.

Nowadays, sustainability and CSR are used interchangeably, because in the beginning there was not a concern of the limit of resources of the soul.

2.11 The point of having one comprehensive report –more transparency

Enterprises publish "Corporate Social Responsibility" or "Sustainability reports" in a voluntary basis together with the yearly Financial Report or separately. Believing also that the report is a summary of the performance of the firm in accounting and economics terms, we would need also to incorporate the Sustainability Report in the Financial Report, since the strategies are also addressed to increase the value of ESG features. Organizations address a whole range of issues: from the awareness of climate change, the definite amount of natural resources available, the respect for human capital, the attention in the corporate governance, and the focus on a long-term perspective rather than short-term. All these aspects are heading to one direction, the creation of a sustainable society. An integrated report is the result of pursuing a strategy that encompasses all the aspects cited here above. It is the integrated Report of financial information and of non-financial information, including ESG –Environmental, Social and Governance features on the other side.

The integration of the financial accounting system with the sustainability accounting brings to the integrated report. Differently from the sustainability report which is separate from the fiscal

year financial report, the integrated report discloses both financial and nonfinancial information as a whole, describing the business strategy and performance[74].

The evolution of the business wold has demanded new reporting requirements through laws, regulations, standards, guidelines and stock exchange listing requirements. The IIRC – International Integrated Reporting Committee[75] noted that the increased information is provided through longer and more complex management commentaries, increased reporting on governance and remuneration and standalone sustainability reporting.

This document is considered as a way communicating between companies, investors, analyists, standard-setting bodies and regulators and also by NGOs –nongovernmental organizations, which represent the civil society.

Thanks to instantaneous access to Internet, every stakeholder interested can enter these combined reports. Organizations now are under the microscope, as ever before.

Companies should adopt one integrated report to disclose to stahekolders. Firstly, it is important in that it takes sustainabaility seriously, when the company has created a sustainable strategy, by repsonding to the risks and opportunities created by the need to ensure a sustainable society. Secondly, one whole report conveys the message to all stakeholders of improved corporate disclosure and transparency.

An empiral study was conducted on a sample of 750 companies covering the years 2008-2010. The results indicated that *institutional factor* (Frías-Aceituno et al., 2013) is very important in the development of integrated reports, which express the interrelationships between the strategy, the governance, the performance and the the future prospective, linked by the context in which they operate.

It is shown that civil law countries, characterized by high order and indices of law, contribute to the publication of integrated reports, benefiting a broad range od stakeholders in the process of decision making.

In the light of these findings transparency can be enhanced thanks to national law and protection mechanisms and managers should operate on appropriate disclosure practices in the context of their own legal environment in order to make the best decisions.

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[74] Eccles R.G., and Krzus M., 2010, *One Report: Integrated Reporting for a Sustainable Strategy, 2010*, NewYork: John Wiley and Sons, Inc.

[75] The International Integrated Reporting Committee, 2011, *Towards Integrated Reporting. Communicating Value in the 21st Century*. Integrated Reporting. p.4.

Eventually, the argument for a one report lies in the idea that positive financial and social impact are highly correlated and reinforce one one-other in a mutual basis. This turns highly beneficial to stakeholders.

CHAPTER 3

A BUSINESS CASE. VOLKSWAGEN AG

3.1 The Volkswagen Group

This chapter is devoted to a case study. We thought that after having examined the role of the financial information in accounting reporting first, and the the nature of nonfinancial information in sustainability reporting, the reader might want to deal with a practical example of the balance sheet, income statement of the annual report and aspects of sustainability report are presented for the time being. Thus, we decided to examine consolidated statements related to the fiscal year 2014 for a company group which operates in the automotive industry.
Volkswagen AG[76], the German multinational group, based in Wolfsburg, Lower Saxony, Germany, operates 118 production locations in 20 European countries and eleven countries in the Americas, Asia and Africa. The employees are more than 590,000.
Volkswagen AG is the parent company of Volkswagen Group. The latter owns brands such as Volkswagen, Audi, SEAT, ŠKODA, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania and MAN. These are legally independent companies, made exception for Volkswagen Passenger Cars and Volkswagen Commercial Vehicles.
The company offers also Financial Services.
The market for vehicles comprises 31 countries worldwide.
The group's strategy statement reads as follows:
"Our pursuit of innovation and perfection and our responsible approach will help to make us the world's leading automaker by 2018 –both economically and ecologically."[77]

Prof. Dr. Martin Winterkorn,
Chairman of the Board of Management of Volkswagen Aktiengesellschaft

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[76] See http://www.investopedia.com/terms/a/ag-aktiengesellschaft.asp
AG stands for Aktiengesellschaft, the German definition for public limited company, whose shares are offered to the public and traded on a public stock exchange. The shareholders' liability is limited to their amount of investment, for this reason their do not respond for the company's debts and in case of insolvency their personal assets are protected.
[77] Strategy statement of Volkswagen Aktiengesellschaft, 2014 available at: http://annualreport2014.volkswagenag.com/strategy.html

The Chairman Martin Winterkorn adds in the Letter to Shareholders[78] that the group aims at qualitative and sustainable growth which is pursued with *strength, reliability* and *long-term success* even in less favorable times.
The Supervisory Board of Volkswagen AG is directly involved in decisions of crucial importance and discusses regularly about strategic matters with the Board of Management. This latter communicates in a promptly and comprehensive way the financial position, enclosing risk situation and risk management, to the Supervisory Board. This close interrelationship between the Supervisory Board and the Board of Management is proved by the considerable meetings and the an attendance ratio of 97.5% for the controlling Board in financial year 2014[79].
Furthermore, the Supervisory Board has entrusted four committees, consisting of representatives from both the shareholders' group and the employees' one, in order to foster a close connection between the different parties affected by the company's policies. In particular, among these committees, the Audit[80] Committee is focused on consolidated financial statements, on risk management, which includes also the internal control system, and on the compliance perfomance by the company. Eventually, this committee addresses financial reporting issues which are examined by the external auditors.

3.2 Audit of the annual and consolidated financial statements

The annual financial statements of Volkswagen, the consolidated financial statements of the Volkswagen Group with the combined management report for fiscal year, were audited by the nominated independent PricewaterhouseCoopers Aktiengesellschaft-Wirtschaftprüfungsgesellschaft. Furthermore, risk management and internal control system were examined by the auditors, who concluded that the Board of Management had complied with the measures requires by section 91(2) of the AktG to certify promptly any threat of risk in the company[81].
Ultimately, also the Report by Volkswagen AG on Relationships with Affiliated Companies in

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[78] Letter to Shareholders, 2014 available at: http://annualreport2014.volkswagenag.com/strategy/letter-to-our-shareholders.html
[79] Report of the Supervisory Board, 2014 (in accordance with section 171(2) of the AktG) available at: http://annualreport2014.volkswagenag.com/strategy/report-of-the-supervisory-board.html
[80] Committes Activities, 2014 available at: http://annualreport2014.volkswagenag.com/strategy/report-of-the-supervisory-board/committee-activities.html
[81] Audit of the annual and consolidated financial statements, 2014 available at: http://annualreport2014.volkswagenag.com/strategy/report-of-the-supervisory-board/audit.html

Accordance with Section 312 of the AktG for the financial year 2014, was submitted to the external audit, which declared in the unqualified report that, according to their statutory audit, the factual disclosures in the report were correct, and as a consequence certified them.
The auditors ensured in addition that, the consolidated financial statements and the combined management report were prepared in accordance with the IFRSs, as demanded by the EU, in compliance with the German Commercial Code (HGB –Handelsgesetzbuch), pursuing § (Article) 315a Abs, (paragraph) 1 and with § 317, and German generally accepted standards for the audit of financial statements adopted by the IDW –Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany)[82].
In conclusion, the consolidated financial statements delivered a true and fair value of the operations, financial position and net assets in the company.

3.3 Corporate governance

As for the corporate governance dimension, the Board of Management and the Supervisory Board of Volkswagen AG act in conformity with the German Corporate Governance Code as provided by section 161 of the AktG –Aktiengesetzschaft (the German Stock Corporation Act)[83], which discloses recommendations for good and responsible governance. The adoption of such measures conveys transparent and conscious administration, that increases the value of the company sustainably.
As a matter of fact they contribute to build trust from customers and investors, extending the information to national and international stakeholders[84].

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[82] Auditors' Report, Hanover, February 18, 2015 available at: http://annualreport2014.volkswagenag.com/notes/auditors-report.html
[83] Declaration of conformity, available at: http://annualreport2014.volkswagenag.com/group-management-report/corporate-governance-report/declaration-of-conformity.html.
[84] Corporate Governance Report, available at: http://annualreport2014.volkswagenag.com/group-management-report/corporate-governance-report.html

3.4 Looking at profits

Sales generated €202.5 billion in 2014, increasing up to 2.8% from 2013. In particular the market outside Germany contributed for the 62.3%[85] of the total sales.

Cost of sales and the resulting gross profit on sales, were higher in fiscal year 2014 than 2013, leading to an operating profit of up to 8.8%.

Finally, after income taxes were deducted, profit after tax amounted to €11.1 billion, greater by 21% with respect to the previous year.

Income Statement

€ million	Note	2014	2013*
Sales revenue	1	**202,458**	**197,007**
Cost of sales	2	−165,934	−161,407
Gross profit		**36,524**	**35,600**
Distribution expenses	3	−20,292	−19,655
Administrative expenses	4	−6,841	−6,888
Other operating income	5	10,298	9,956
Other operating expenses	6	−6,992	−7,343
Operating profit		**12,697**	**11,671**
Share of profits and losses of equity-accounted investments	7	3,988	3,588
Finance costs	8	−2,658	−2,366
Other financial result	9	767	−465
Financial result		**2,097**	**757**
Profit before tax		**14,794**	**12,428**
Income tax income/expense	10	−3,726	−3,283
Current		−3,632	−3,733
Deferred		−94	449
Profit after tax		**11,068**	**9,145**
of which attributable to			
Noncontrolling interests		84	52
Volkswagen AG hybrid capital investors		138	27
Volkswagen AG shareholders		10,847	9,066
Basic earnings per ordinary share in €	11	**21.84**	**18.61**
Diluted earnings per ordinary share in €	11	**21.84**	**18.61**
Basic earnings per preferred share in €	11	**21.90**	**18.67**
Diluted earnings per preferred share in €	11	**21.90**	**18.67**

* Earnings per share adjusted to reflect application of IAS 33.26.

Fig3.1 Net Income for the year 2014

Source: Annual Report 2014, Volkswagen AG

85 Net income for the year, 2014, available at: http://annualreport2014.volkswagenag.com/group-management-report/volkswagen-ag/net-income-for-the-year.html

Looking for return ratios[86], the return of sales before tax and the return on investment (ROI) in the Automotive Division increased in 2014 by 15.9% and and 2.8% respectively.
In 2014, the Volkswagen Group generated value added[87] equal to 8.1% with respect to the previous year.

3.5 Net Assets

Total assets at €351.2 billion of the Group at fiscal year 2014 increased by 8.3% with respect to the previous year, while the equity on the other hand remained quite constant at €90.2 billion and the equity ratio decreased slightly.
Volkswagen AG has prepared its consolidated financial statements for fiscal year 2014 with the International Financial Reporting Standards (IFRSs) in accordance with Regulation N° 1606/2002 of the European Parliament and of the Council.

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86 Volkswagen Aktiengesellschaft, Annual Report 2014, available at: http://www.volkswagenag.com/content/vwcorp/content/en/misc/pdf-dummies.bin.html/downloadfilelist/downloadfile/downloadfile_30/file/Y_2014_e.pdf

87 Valued added statement, 2014 available at: http://annualreport2014.volkswagenag.com/group-management-report/value-added-statement.html

CONSOLIDATED BALANCE SHEET BY DIVISION AS OF DECEMBER 31

€ million	VOLKSWAGEN GROUP		AUTOMOTIVE[1]		FINANCIAL SERVICES	
	2014	2013	2014	2013	2014	2013
Assets						
Noncurrent assets	**220,106**	**202,141**	**128,231**	**122,438**	**91,875**	**79,704**
Intangible assets	59,935	59,243	59,697	59,007	237	236
Property, plant and equipment	46,169	42,389	44,080	40,632	2,089	1,757
Lease assets	27,585	22,259	2,815	2,642	24,770	19,617
Financial services receivables	57,877	51,198	–	–602	57,877	51,800
Investments, equity-accounted investments and other equity investments, other receivables and financial assets	28,541	27,053	21,639	20,759	6,902	6,294
Current assets	**131,102**	**122,192**	**69,180**	**68,320**	**61,923**	**53,872**
Inventories	31,466	28,653	28,269	25,580	3,197	3,073
Financial services receivables	44,398	38,386	–464	–844	44,862	39,229
Other receivables and financial assets	25,254	23,483	15,677	16,458	9,577	7,025
Marketable securities	10,861	8,492	9,197	6,675	1,664	1,817
Cash, cash equivalents and time deposits	19,123	23,178	16,499	20,450	2,624	2,728
Total assets	**351,209**	**324,333**	**197,411**	**190,758**	**153,798**	**133,576**
Equity and Liabilities						
Equity	**90,189**	**90,037**	**72,815**	**75,984**	**17,374**	**14,053**
Equity attributable to Volkswagen AG shareholders	84,950	85,730	67,828	72,100	17,122	13,630
Equity attributable to Volkswagen AG hybrid capital investors	5,041	2,004	5,041	2,004	–	–
Equity attributable to Volkswagen AG shareholders and hybrid capital investors	89,991	87,733	72,870	74,103	17,122	13,630
Noncontrolling interests[2]	198	2,304	–55	1,881	253	423
Noncurrent liabilities	**130,314**	**115,672**	**66,438**	**65,290**	**63,876**	**50,382**
Financial liabilities	68,416	61,517	10,643	15,913	57,773	45,604
Provisions for pensions	29,806	21,774	29,361	21,481	445	293
Other liabilities	32,092	32,380	26,434	27,896	5,658	4,484
Current liabilities	130,706	118,625	58,158	49,484	72,547	69,141
Put options and compensation rights granted to noncontrolling interest shareholders	3,703	3,638	3,703	3,638	–	–
Financial liabilities	65,564	59,987	–847	–3,981	66,411	63,968
Trade payables	19,530	18,024	17,838	16,582	1,692	1,441
Other liabilities	41,909	36,976	37,465	33,245	4,444	3,731
Total equity and liabilities	**351,209**	**324,333**	**197,411**	**190,758**	**153,798**	**133,576**

1 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions, primarily intragroup loans.

2 On completion of the offer for the acquisition of all outstanding Scania shares, noncontrolling interests in Scania's equity were derecognized from Group equity as a capital transaction involving a change in ownership interest; a liability was recognized under the "Put options and compensation rights granted to noncontrolling interest shareholders" item in current liabilities for the remaining shares that are subject to the squeeze-out.

Fig. 3.2

Consolidated Balance Sheet for the year 2014

Source: Annual Report 2014, Volkswagen AG

Total assets at €351.2 billion of the Group at fiscal year 2014 increased by 8.3% with respect to the previous year, while the equity on the other hand remained quite constant at €90.2 billion and the equity ratio decreased slightly.
Volkswagen AG has prepared its consolidated financial statements for fiscal year 2014 with the International Financial Reporting Standards (IFRSs) in accordance with Regulation N° 1606/2002 of the European Parliament and of the Council.

3.6 Sustainability Report 2014

As shareholders and investors demand for transparency, the Volkswagen AG has delivered its Sustainability Report[88], in line with the GRI G4 principles for fiscal year 2014 in a separate document from the Annual Report.
In order to manage its sustainability performance, the Group uses performance indicators, both aligned to the Global Reporting Initiative (GRI) and the ESG (Environmental, Social and Governance indicator framework of the European Federation of Financial Analysts Societies (EFFAS).
Below follows the principles and procedures to which the company is committed to in time.

[88] Volkswagen AG, Sustainability Report 2014 available at: http://www.volkswagenag.com/content/vwcorp/info_center/en/publications/2015/04/group-sustainability-report-2014.bin.html/binarystorageitem/file/Volkswagen_Sustainability_Report_2014.pdf

› SUSTAINABILITY IN THE VOLKSWAGEN GROUP: PRINCIPLES, STANDARDS AND PROCEDURES

	Introduced	Coverage 2014
Sustainability in general		
Model of Sustainability	2002	Group
Volkswagen Group requirements regarding sustainability in its relationships with business partners	2006	Group
Commitment to United Nations Global Compact	2002	Group
Business		
Code of Conduct	2010	Group
Anti-Corruption Guide	2012	Group
People		
Charter on Labour Relations	2009	Group
Charter on Temporary Work	2012	Group
Declaration on Social Rights and Industrial Relations at Volkswagen (Social Charter)	2002, updated 2012	Group
Occupational Safety Policy	2004	Group
"Stimmungsbarometer" (employee opinion survey)	2008	Group
Environment		
Environmental Policy	1995	Group
Environmental Principles Product	2008	Group
Environmental Principles Production	2007	Group
Mission Statement on Biodiversity	2008	Group
CEO Water Mandate	2013	Group

Fig. 3.3 Sustainability in Volkswagen

Source: Sustainability Report 2014, Volkswagen AG

The company claimed a reduction in environmental impact from the production activities of 19.3% in 2014, quite a significant amount if compared to the 12.5% in 2013. Key aspects that it addresses are sustainability, environmenral protection and social responsibility, which are drive straight to value. Digitization brings opportunities in the automative industry addresses the needs of the changing world, as it is thought to reduce the impact on the environment. The company's approach to sustainability is meant as conducting business on a conscious long-term basis rather that short-term and is reflected in the triple heading –Economy, People and Environment.

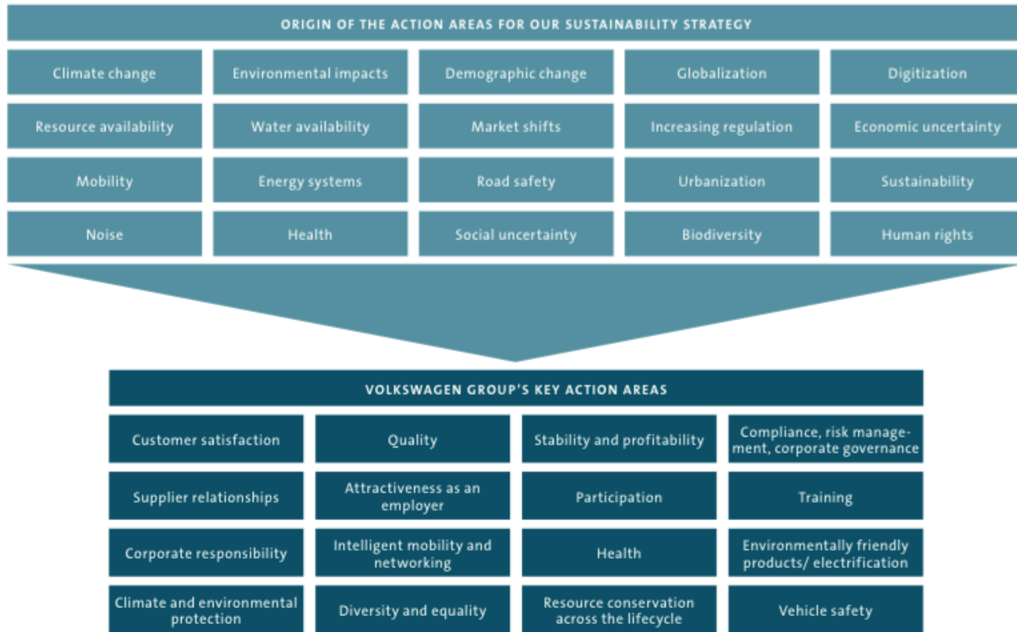

Fig. 3.4 Action areas for sustainable strategy

Source: Sustainability Report 2014, Volkswagen AG

The company detected 16 areas, on which there is a dual exertion of influence, either by these toward the companies or viceversa.

Below in Fig. 4 is represented the procedure which encounters the materiality analysis of the information. Different departments working on the sustainability strategy adhere to frameworks such as the GRI, the Global Compact and OECD.

Fig. 3.5 Action areas for sustainable strategy

Source: Sustainability Report 2014, Volkswagen AG

The fields of interest of the sustainable strategy considered by the Group focus on the three dimensions Economy, People and Environment, that are in the same footing.

Fig. 3.6 Action areas for sustainable strategy inflected to Economy, People and Environment
Source: Sustainability Report 2014, Volkswagen AG

Action Areas	Corresponding GRI aspects
Economy	
Stability and profitability	Economic Performance
Quality	Customer Health and Safety
Vehicle safety	Customer Health and Safety
Customer satisfaction	Product and Service Labeling, Customer Privacy
Supplier relationships	Procurement Practices, Supplier Environmental Assessment, Supplier Assessment for Labor Practices, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Supplier Human Rights Assessment, Supplier Assessment for Impacts on Society
Compliance, risk management, corporate governance	Supplier Assessment for Labor Practices, Grievance Mechanisms (Labor Practices, Environmental, Human Rights and Impacts on Society), Investment, Non-discrimination, Freedom of Association and Collective Bargaining, Child Labor, Forced or Compulsory Labor, Assessment, Anti-corruption, Anti-competitive Behavior, Compliance (Product Responsibility, Society, Environment), Marketing Communications, Public Policy, Security Practices
People	
Attractiveness as an employer	Employment, Market Presence
Training	Training and Education
Participation	Employment, Equal Remuneration for Women and Men, Market Presence, Labor/Management Relations
Health	Occupational Health and Safety
Diversity and equality	Diversity and Equal Opportunity, Non-discrimination
Corporate responsibility	Indirect Economic Impacts, Local Communities, Indigenous Rights
Environment	
Resource conservation across the lifecycle	Materials, Energy, Water, Emissions, Effluents and Waste, Products and Services, Overall
Environmentally friendly products/ electrification	Energy, Emissions, Products and Services, Overall
Climate and environmental protection	Energy, Water, Biodiversity, Emissions, Effluents and Waste, Transport, Overall
Intelligent mobility and networking	Products and Services, Customer Privacy

Fig. 3.8 Key Action areas for sustainable strategy and the GRI aspects considered

Source: Sustainability Report 2014, Volkswagen AG

3.6.1 Economy dimension

As indicated previously, during the analysis of the consolidated financial statements, the Volkswagen Group covers the passenger car market worldwide from Western Europe (which remains its main market) and Central-Eastern Europe to the Americas, to the Asia-Pacific, selling more than 10 million vehicles in 2014. The Germanautomotive manufacturer was considered according to Forbes' 2013 Global 2000[89] to generate the highest revenues, profits

[89] Forbes, Autos, 2013. VW is Already the World's Leading Automaker available at: http://www.forbes.com/sites/joannmuller/2013/04/18/vw-is-already-the-worlds-leading-automaker/

and assets. The Group's market values was second only to Toyota's. In year 2015 instead, Volkswagen beated Toyota, becoming the world's top automotive industry[90].

3.6.2 People dimension: social engagement at global level

The Volkswagen Group is committed to more than 200 projects which promote social development, education, volunteering, the arts and the culture, education, structural development at regional level and nature conservation.
The Group addresses aspects related to gender equality in retribution schemes.
Some among the promoted initiatives are the Plant-for-the-Planet, the Partnering with the Xinjiang Medical University and Hospital, and the Help for Flood Victims in the Balkans. The first project, recognized also by the UNESCO Commission, aims at reducing the levels of the carbon dioxide in the atmosphere by planting trees, performed by school student. The second one provides a platform to support exchange with Chinese medical students. Finally, the Group devolved an amount of €100,000 to German Red Cross which helped for reconstruction parts of Bosnia-Herzegovina, Serbia and Croatia in May 2014, after the disastrous floods.

3.6.3 Environmental challenge – reduction on greenhouse gas emissions

The goal to achieve by 2018 is half-achieved, as the figures about production cuts in environmental impacts show. In particular, the following are the results in 2014, whereas in brackets, are those of the previous year.

- Specific energy consumption -18.5% (-12.5%)
- Specific CO_2 emissions -23.2% (-19.5%)
- Specific water consumptions -6.9% (-4.6%)
- Specific VOC emissions -26.1% (-12.3%)
- Specific waste for disposal -21.7% (-13.8%)

[90] CNN, 2015 More over Toyota! Wolkswagen winning the global sales race avaiable at: http://money.cnn.com/2015/07/28/investing/volkswagen-toyota-biggest-carmaker/index.html

The Group aims at reducing CO_2 emissions of the passenger car by 120 grams per kilometer by 2015[91]. The company has already succeeded to cut CO_2 emissions emissions by 25 grams of CO_2 per kilometer to 126 grams/km.
It is worth stating that, CO_2 emissions for the new European[92] passenger car are submitted to law regulation: the emissions were not permitted to surpass the legal level of 130 grams of CO_2 per kilometer. The Volkswagen Group sustains it offers a remarkable number of engine-transmission combinations, polluting by less than 130 grams of CO_2 per kilometer, and some models reaching less than 115 grams of CO_2 per kilometer.
As for achievements related the environment[93] dimension, the reduction in CO_2 emissions from group production operations register in fiscal year 2014 a decrease of 23.2%, a reduction in energy consumption of 18.5% and a reduction in waste of 21.7%. These are considered remarkable results if compared to the previous year 2013 ones which were respectively 19.5%, 12.5% and 13.8%.
Taking a global perspective, the CO_2 emissions in 2014 resulted at 168g/km in the USA, 126g/km in the EU 28 and 163g/km in China.
To protect the environment, and further reduce the carbon dioxide emissions, the development of electric autos is crucial in the long-term strategy of Volkswagen Group, especially in the Chinese market.
The Group is committed to the World Business Council for Sustainable Development (WBCSD) which targets the realization of the “2 degrees” at the United Nations COP 21 climate conference in Paris at the end of 2015.
Finally, some models of the group emit 95g CO_2/km.

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[91] Research and Development Activities available at: http://annualreport2014.volkswagenag.com/group-management-report/sustainable-value-enhancement/research-and-development.html.
[92] EU Action, Climate Action, Reducing CO_2 emissions from passenger cars available at: http://ec.europa.eu/clima/policies/transport/vehicles/cars/index_en.htm. Cars are responsible for around 12% of total EU emissions of carbon dioxide CO_2, the main greenhouse gas. EU legislation sets mandatory emission reduction targets for new cars, to develop the EU’s strategy to improve the fuel economy. Moreover, the European Commission published in the Official Journal of the European Union, L315, in November 2014, that the emissions from the Volkswagen Group were already below the rate it mandated.
[93] Volkswagen AG, Sustainability Report 2014 available at: http://www.volkswagenag.com/content/vwcorp/info_center/en/publications/2015/04/group-sustainability-report-2014.bin.html/binarystorageitem/file/Volkswagen_Sustainability_Report_2014.pdf

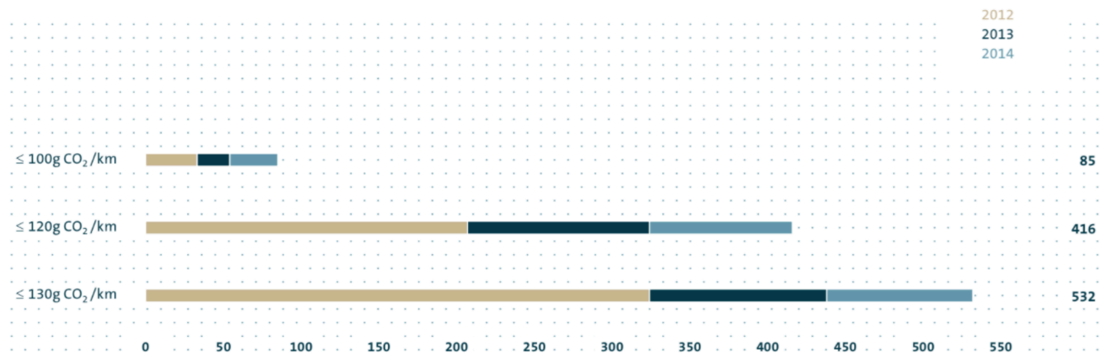

Fig. 3.9 CO_2 emissions

Source: Sustainability Report 2014, Volkswagen AG

As far as nitrogen oxides, NO_x and sulfur oxides, SO_2, emissions are concerned figures in Fig. 9 suggest they declined from 2010 to 2014 period. This is explained as due to changes in ownership of a power generation plant.

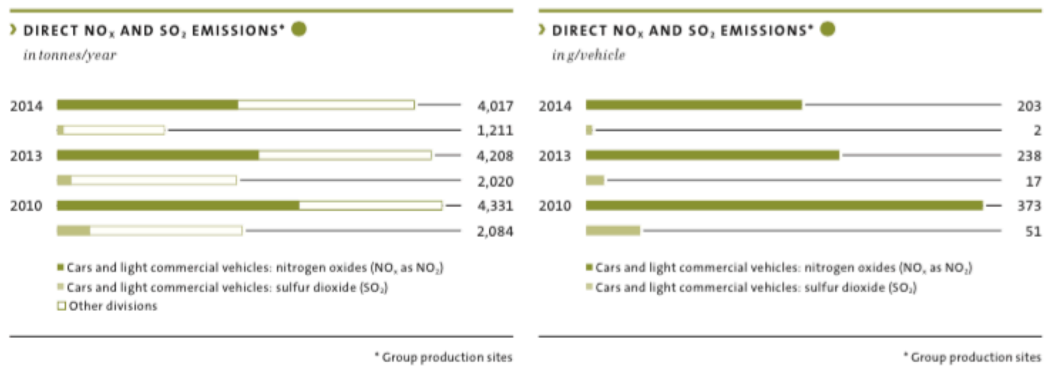

Fig. 3.10 NO_x and SO_2 emissions

Source: Sustainability Report 2014, Volkswagen AG

3.7 Corporate Social Responsibility

The Volkswagen Group claims that it pursues corporate social responsibility approach addressing sustainability[94] as to a set of ecomomic, social and environmental goals in order to create enduring value.

These objectives are coordinated and managed by the Group Board of Management, the supreme sustainability board. The Group CSR & Sustainability steering group, which is supported by the CSR & Sustainability office, informs the supreme sustainability board on decisions on strategic sustainability goals, that are monitored and assessed on a regular basis. CSR project teams focus on issues across business areas, including reporting, stakeholder management and sustainability extended to supplier relationships.

In addition, a Code of Conduct, adopted by the Group, encloses ethical principles applied to all employees.

As far as stakeholders' are concerned, the satisfaction of expectations are the ultimate objective of the Group, which encourages an active communication with the former, through workshops, public debates, evaluations and projects.

The company is involved at international level, with the World Business Council for Sustainable Development (WBCSD), CSR Europe and from 2002 it is committed to the UN Global Compact, that recognised it the "Global Compact Advanced Level" in 2014.

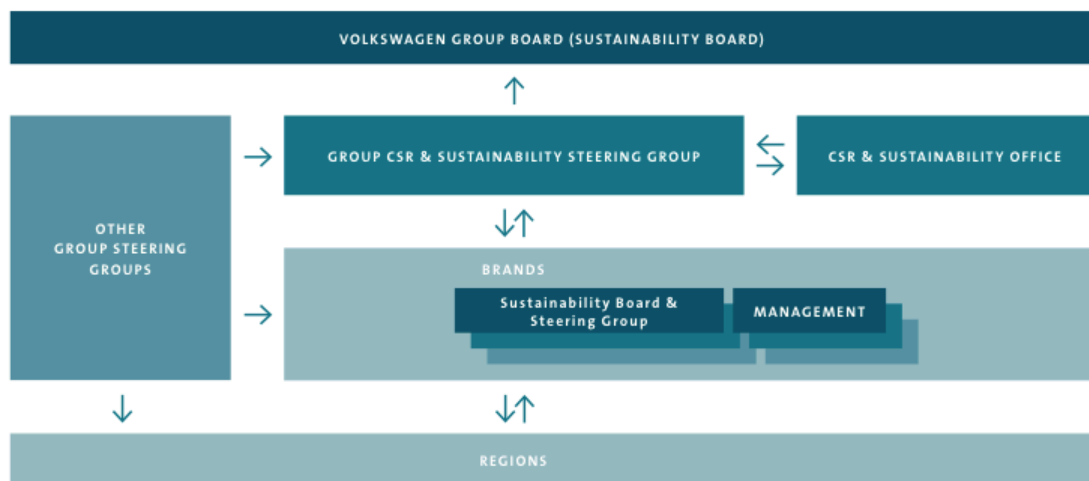

Fig. 3.11 The Composition of the sustainability organization

[94] Corporate Social Responsibility and Sustainability, 2014 available at: http://annualreport2014.volkswagenag.com/group-management-report/sustainable-value-enhancement/csr-and-sustainability.html.

Source: Sustainability Report 2014, Volkswagen AG

3.8 Independent Audit Report

The sustainability report, prepared by the Board of Managing Directors, was audited by PricewaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, which performed a limited assurance engagement on the the examination of the materiality analysis according to the GRI 4. The auditors claim they conducted with independence and other ethical requirements of the Code of Ethics for Professional Accountants of the IESBA[95] (International Ethics Standards Board for Accountants) Codex. In conclusion, the nothing had come to attention to perform verifications, as the performance indicators were in line with the criteria of "Stakeholder Inclusiveness", "Sustainability Context", "Materiality", "Completeness", "Comparability", "Accuracy", "Clarity", "Timeliness" and"Reliability", accordingly to the GRI's Sustainability Reporting Guidelines Vol.4. Nevertheless, some recommendations were made including the materiality principle that permits a stronger analysis, on a more structured presentation and further standardization for data collections.

3.9 The veil on the emissions has been pierced

On September 18th 2015 the Environmental Protection Agency (EPA)[96] issued a notice of violation against Volkswagen, claiming that over 482,000 vehicles sold in the USA contained sophisticated software algorithms in their diesel engines that were programmed in such a manner that they could sense when submitted to test, they circumvented EPA emissions standards for air pollutants. Such defeat devices reduced the effectiveness of the emission control system under normal driving conditions, delivering disguiding results.

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[95] Volkswagen AG, Sustainability Report 2014 available at: http://www.volkswagenag.com/content/vwcorp/info_center/en/publications/2015/04/group-sustainability-report-2014.bin.html/binarystorageitem/file/Volkswagen_Sustainability_Report_2014.pdf

[96] EPA, California Notify Volkswagen of Clean Air Act Violations/ Carmaker allegedly used software that circumvents emissions testing for certain air pollutants, 09/18/2015 available at: http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/dfc8e33b5ab162b985257ec40057813b!opendocument

Indeed, actual emissions produced nitrogen oxides NO_x up to 40 times the standard of 31 milligrams per kilometer allowed by the pollution standards set by EPA, although they responded well in laboratory conditions. The affected diesel models included:

· Jetta (MY 2009 – 2015)

· Jetta Sportwagen (MY 2009-2014)

· Beetle (MY 2012 – 2015)

· Beetle Convertible (MY 2012-2015)

· Audi A3 (MY 2010 – 2015)

· Golf (MY 2010 – 2015)

· Golf Sportwagen (MY 2015)

· Passat (MY 2012-2015)

Both EPA and CARB (California Air Resources Board) started investigations on the German Group, alleging violations on provisions of the Clean Air Act, since the emissions contribute to important health consequences and to increase of ground-level ozone as well. These two organizations detected the devise after an independent research at West Virginia University in May 2014 at the Center for Alternative Fuels, Engines & Emissions (CAFFE) in collaboration with the NGO International Council on Clean Transportation. At these concerns by the American regulators, the company referred to as "technical issues" and "unexpected" real-world conditions.

Volkswagen may respond for civil penalties under this discovery. The EPA is entrusted to fine a company up to $37,500 for each vehicle breaching standards. The cars in the US were recalled at a remarkable cost.

After this announcement the Group [97] has admitted that the cars involved with the device were about 11 million, implying that emissions of nitrogen oxides were higher than expected from lab tests. The chief executive Martin Winterkorn affirmed that the company had "broken the trust of their customers and the public". An internal inquiry followed suit in the company and at national level, too.

After the allegations from the American Agency, other countries like UK, Italy, France and South Korea and Canada are on the wave to start investigations, with possible recalls of the vehicles.

The financial impact until now has been remarkable, as confirmed also in the in stock market, where the stock price went down by about 30% soon after scandal, affecting the other

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[97] Volkswagen: The scandal explained available at: http://www.bbc.com/news/business-34324772

automotive manufacturers decrease in stock prices. It is not clear if other carmakers are affected. At this regard, the California's Air Resources Board is testing Ford, BMW, Renault-Nissan and other carmakers. In any case, it is up to the regulatory and government investigations to examine and determine possible breaches.

3.10 The European Commission and its authority power

The SMMT (Society of Motor Manufacturers and Traders)[98] added that the EU system was a completely different from thr US one, as European tests are performed at the standards required by EU law, and then approved by a government-appointed independent agency. Nevertheless, the industry is aware that the current test process has to be updated and seeks the agreement from the European Commission to issue new emission tests that encloses new technologies and delivers a proper assessment of on-road conditions.

As a matter of fact, environmental campaigners such as the non-governmental Transport & Environment had lately reported that 90% of diesel vehicles did not comply with emission limits when tested on the road. Moreover, vehicle analysts at the financial research firm Berntein agree that EU standards are not as strict as the US ones, suggesting modifications in the test procedures rather than suing legally.

Several studies have demonstrated the discrepancy between the laboratory emission levels and the actual on-road emissions of NO_x.

Scientists with the European Commission's Joint Research Centre (JRC) in Ispra, Italy affirmed in 2011 that diesel vehicles tested on road surpassed standards up to 14 times. On the contrary, petrol cars emitted NO_x in the norm[99]. The following year, the JCR examined the emissions of NO_x of the Euro 6 diesel-fuelled passenger car, which was in compliance with the new standards in 2014, only to find that yes, it had ameliorated, but emissions still exceeded standards by 260%[100].

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[98] Volkswagen: The scandal explained available at: http://www.bbc.com/news/business-34324772.

[99] Weiss, M., Bonnel, P., Hummel, R., Provenza, A. & Manfredi, U., *On-road emissions of light-duty vehicles in Europe*, Environmental Science and Technology (2011) 45, 8575–8581.

[100] Weiss, M., Bonnel P., Kühlwein J., Provenza A., Lambrecht U., Alessandrini S., Carriero M., Colombo R., Forni F., Lanappe G., Le Lijour, P., Manfredi U., Montigny F., Sculati M., *Will Euro 6 reduce the NOx emissions of new diesel cars? –Insights from on-road tests with Portable Emissions Measurements Systems (PEMS),* Atmospheric Environmnet (2012) 62, 657-665.

Nevertheless, even before the scandal emissions the European Commission has planned to adopt measures such as "Real Driving Emissions" by 2017, mandating that all passenger vehicles will be submitted to on-road emissions tests, to grant a clear assessment on actual NO_x emissions[101].

Vehicles fuelled by diesel are considered to cause less carbon emissions than the petrol-powered ones, contributing to the mitigation of global warming. Analysts believe that influenced by the Volkswagen misbehavior might cause higher pollution limits. Furthermore, it will be difficult to reconcile the dichotomy diesel-air pollution reduction.

However, the European Commission's Joint Research Centre had reported in 2013 that emissions test might be misled by the presence of defeat devices, which manipulate the real values of emissions, even though the technology had been illegal in Europe since 2007.[102] This suggests that, since regulators failed to address this issue,

this conveys some clues on the fact that the European motor industry acts as a lobby, which invests considerably on diesel. As figures show, 53% of new car sales in the EU are fuelled from diesel. In the light of the fact that, the European Commission already was aware of rigged emissions, which were documented by its center of research, JCR, and the impossibility to enforce the ban on defeat devices, environmental groups and members of the European Parliament have argued that the reforms, like the Real Driving Emissions, have been postponed by the powerful diesel lobby. As a matter of fact, Greenpeace stated that, diesel manufacturers has given a considerable amount in lobbying Brussels in 2014, with the employment of 184 lobbyists.

It is evident then, that the German government and the European Commission were informed about the use of defeat device. On one hand the European Commission claims that its power is limited, and the job of detecting for defeat softwares is passed through to the national

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[91] Real Driving Emissions 2015, Update on current EU regulations –Latest test run results –PEMS technology review –Data evaluation tools –PEMS testing structures –Engine oprimization strategies available at: http://www.real-driving-emissions.eu.

[92] Oliver C., Brundsen J., Vasagar J., Pickard J., , EU warned on devices at centre of VW scandal two years ago, Financial Times, 2015, available at: http://www.ft.com/cms/s/0/d0d7ba40-6394-11e5-9846-de406ccb37f2.html#axzz3ntB9O8fY.

authorities. On the other hand, the German government argues that there was not yet an agreed prevention practice for illegal devices.
A Swedish parliamentarian, Fjellner confirmed that the commission has the duty to assess control frameworks that function at national levels. In contrast, a reply from the European Commission worded that the investigation on compliance of companies with EU law is up to the state authorities, and that the role of the commission was to easen the communication of information between authorities of member states.

3.11 The governance failure of the Volkswagen Group

Martin Winterkorn, the Chief Executive Officer resigned on September, 23th, claiming that he was stunned after the misconduct that accrued in the Volkswagen Group.[103] He accepted the irregularities that were found in diesel engines, although he argues to be unaware of the wrongdoing, leaving the way to new executives to overcome the crisis and to win back the trust. The Volkswagen Group will have to bear a huge amount of expenses to recover from the crisis that hit it. The Group has to present a technical solution to the partners, clients and the public. It is vital to conquer again the faith of clients, suppliers and public by working hard.
Germany and its industries represents reliability and good reputation.
This business case showes that many parties are involved: the Volkswagen group, the market, the stock exchange, the regulators, the governments, the environmental
agencies, the consumers, the stakeholders, the assurance companies for accounting.

[103] Dissemination of an Ad hoc announcement according to § 15 WpHG: Statement by Prof. Dr. Winterkorn available at:
http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2015/09/VW_ad_hoc_Erklaerung.html.

Conclusions

The double-entry bookkeeping system was firstly codified in 1494 by the Franciscan friar Luca Pacioli. At that time, the information on the balance sheet, served only the owner of the company. Of course, the recording of business operations had its origin since the barter epoque. During the 17th century the first forms of economic globalization were originated in the era of the great colonial empires (Schwarzenberger, 1966). Then the industrial revolutions shifted business from the agricultural-based economy to the factories, and then to the big corporations in the 19th century. The new huge corporations had considerable influence on the economic scene, geographical regions and political power. In particular, the rise of the corporation developed new forums for collecting finance. The companies had now to deliver more accounting information to shareholders, which had invested their part in the business and consequently were interested in the performance of the activities, which were disclosed in the balance sheet. Thus, we saw the development of the new accounting professions and the codification of Accounting law in the 19th century. In particular, we saw the development of two paths in regulation of Accounting: one one hand the Continental European countries, and on the other hand the Anglo-American countries. Both group of countries developed codes enclosing accounting standards and started to recognize the Accounting profession.

We detected that the role of the government was crucial in regulating markets, as a matter of fact, starting from the 1929, after the hard economic crisis, the SEC was established and disclosure of transactions on activities was mandated. This served as way to rebuild the confidence of investors toward the capital markets.

Some theories argued about accounting information as a public good serving the public interest. Thus, we examined theories about regulation of markets and in here, constrasting theories arose. On one hand, scholars argued that the market functioned as good, for which, the optimal information was determined by the intersection of the demand and the supply curves. However, markets are not perfect, thus regulation is called to correct market ineffieciences rising mainly for the presence of asymmetric information, which generates moral hazard and adverse selection.

Then, we claimed the argument of the development of a unified set of accounting standards in the world, in order to permit comparability of financial information. The IFRSs were developed by the IASB, and today they are applied worldwide in the countries, since they have some advantages in conveying a more efficient way of preparing reports and delivering information.

In particular, the development of IFRS is perceived as pursuing the public interest worldwide. Finally, we addressed the public interest also applied to the profession of accounting in the ethical conduct.

In the second chapter, we addressed the subject of sustainability and reporting on sustainability. Arguments in favor of both pursuing sustainability strategies and sustainability reporting convey to a positive relationship with financial performance, but also in matters such as environmental, social and governance matters. This effect is enhanced in those countries, which mandate sustainability reporting.

Finally, an argument for an integrated report, which includes both the annual report and the sustainability report, claimed.

As an extension of the public interest theory in financial accounting, developed in the first chapter, we developed the argument of corporate social responsibility, which originated in the early 1930s, but gained momentum in the 1970s. As a matter of fact, companies, that are organizations that gather human capital, financial capital and other resources, are responsible for their business activities, but also for the externalities that they cause to the society.

In the third chapter, we analyzed a business case. We examined the Volkswagen AG Group. In particular, we observed key materials, such as the balance sheet, the income statement, and the audit report by the external independent auditing firm, from the annual report related to the fiscal year 2014.

Furthermore, we inspected its sustainability report, for year 2014, and found that the company reports that it pursues sustainability strategies, namely the economic, the social and the environmental processes.

The company is a leader in the automotive industry. As a matter of fact financial information reflected this statement. The company had claimed to pursue sustainability strategies and to have engaged in to responsible social governance performance. Nevertheless, the scandal on the emissions did not confirm this.

In particular, this failure in corporate governance raises some concerns on the role of supranational organizations, such as the European Commission ad the European Union. Furthermore, the legitimate authority of the organizations that issue standard principles on ESG-features is discussed.

We saw that after financial crisis, new regulatory norms were established at national and supranational level, to correct the inefficiency of the markets, and to address the new challenges that are in the current international economic environment.

Nevertheless, in case of such scandals, like the one that hit the Volkswagen Group, is not linked merely to the financial impact that the the company will bear. It is not only on the loss of confidence of investors toward the reputation of the company or of whole industry.
It is about social consequences, and in particular it is about the life's threat of current generations and the forthcoming ones.

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