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The link between non-financial information and SDGs: evidence from multinational luxury companies

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INTRODUCTION

In 2015, world leaders agreed upon the adoption of the United Nations Sustainable Development Goals (SDGs): these are a set of 17 Global Goals to be realized in 2030, which have been endorsed by governments, the civil society, and the private sector. SDGs are based on five pillars: the people, planet, prosperity, peace, and partnership. In contrast with their predecessors, the Millennium Development Goals (MGDs), SDGs cover a wider range of aspects linked to sustainable development (Biermann et al., 2016), and their multidisciplinary character allows to tackle sustainable development issues from multiple perspectives (Van Tulder, 2018). Moreover, they have been endorsed by the private sector and, in particular, Multinational Enterprises (MNEs) are said to have a relevant role in the achievement of the Goals (Kolk et al., 2017).

Through corporate reporting, companies intend to reduce information asymmetry with their stakeholders (Demartini and Trucco, 2017): due to the growing interest of the latter in the companies' actions beyond financial performance, enterprises started to report, also, non-financial information (NFI). Because of the global resonance of the SDGs, companies were quick to respond, by incorporating SDGs into their Non-Financial Reports (Bebbington and Unerman 2017). In this perspective, SDG reporting can have a twofold impact: on the one hand, it communicates to stakeholders how an organization is addressing the SDGs (Rosati and Faria, 2019); on the other hand, reporting on the SDGs can support sustainability reporting itself, due to the Goals' potential to provide a globally accepted tool for sustainable development (Bebbington et al., 2017).

Therefore, this thesis aims at uncovering business engagement with the SDGs, focusing on the way companies communicate their non-financial information (NFI) to stakeholders. In particular, it focused on the luxury industry, due to the importance of the latter in driving consumer demand and its transformative power on other industries (Bendell and Kleanthous, 2007). The originality of this can be traced in the fact that it investigates how luxury Groups are currently dealing with SDGs and provides suggestions to companies on how to properly address the SDGs in their Non-Financial Reports (NFRs).

This research started with a systematic literature review (SRL) of the SDGs. Through a keyword search, the SRL aimed at identifying sub-themes with respect to the SDGs. What emerges is that the latter are closely interlinked, either through synergies or trade-offs (Pradhan et al., 2017). It follows that policymakers should consider these linkages when addressing SDGs targets (Weitz et al., 2018). Moreover, the literature stresses the importance of the private sector for the achievement of the SDGs (Van Tulder, 2018).

Starting with these assumptions, chapter 2 shifted the focus on how businesses can communicate their sustainability information to stakeholders, and how this process, namely non-financial reporting (NFR), has evolved over time. With the adoption of the 17 SDGs, international bodies and consultancy companies have issued several guidelines to help organizations including the SDGs in their NFRs.

A literature gap was found concerning SDG reporting in the luxury industry: on the one hand, the latter has been accused of lagging behind in terms of sustainability efforts in the past (Kapferer, 2010). On the other hand, as mentioned above, the luxury sector is seen as an industry that can drive change and become a role model for sustainability. Nonetheless, to the best of our knowledge, there is no official SDG guideline that companies are mandate to follow for SDG reporting.

This led to the following research questions:

RQ 1: What is the process of preparation and disclosure of an NFR in luxury companies?

RQ 2: To what extent are luxury companies engaging with the SDGs in the preparation of the NFI?

RQ 3: To what extent are the SDG-related information included in the NFRs of multinational luxury companies verifiable?

In order to overcome the weaknesses of a single research method (Jick et al., 1979), a triangulation approach was adopted to answer the abovementioned research questions. The first phase concerned the analysis of the Non-Financial Reports of 10 multinational luxury companies, published from 2015 to 2020; instead, the second phase dealt with interviewing a luxury Group, to gain insights into the preparation of their NFRs. The results suggest that, although the companies analyzed tend to follow the same reporting standards for their NFRs, SDG reporting is still a heterogeneous practice among different organizations. Furthermore, most of these NFRs are externally assured by one of the Big Four, and not always is the whole report audited. In turn, this raises questions about the actual comparability and credibility of SDG-related information across companies.

CHAPTER 1. FROM MILLENNIUM DEVELOPMENT GOALS TO SUSTAINABLE DEVELOPMENT GOALS: A SYSTEMATIC LITERATURE REVIEW

On September 25th, 2015, the General Assembly of the United Nations adopted a Resolution for the post-2015 development agenda: it was titled *"Transforming our world: the 2030 Agenda for Sustainable Development" and* comprised 17 Sustainable Development Goals (SDGs) and 169 targets, aimed at balancing the economic, social and environmental dimensions, the three pillars of sustainable development (United Nations, 2015). However, SDGs can be regarded as the outcome of decades of cooperation aimed at delivering more sustainable development.

This first chapter consists of a literature review on the sustainable development strategies adopted with the Millennium Development Goals and with Agenda 2030, and their impact on the private sector.

It starts with the transition from the Millennium Development Goals to the Sustainable Development Goals, highlighting the flaws of the former and the topics that the latter commit to tackle. In addition to that, a thorough description of the Agenda 2030 is presented, aimed at underlining the tasks and targets expected from the SDGs implementation for the next decade. The chapter then focuses on interdependencies among Goals and targets, by analyzing their network of interlinkages. This literature review also takes into consideration the research and commentaries on the involvement of the private sector.

1.1 Methodology

The first step of this dissertation is to analyze the literature concerning SDGs so far, to deepen the understanding of the latter, in particular concerning the private sector. The path taken has been a logical selection of peer-review articles taken from Google Scholar and Ebsco Host databases, with the identification of keywords to be used to identify the most pertinent articles, that were included either in the title or in the Abstract: in this regard, the keywords employed have been "SDGs and MSDGs", "SDGs interactions" and close synonyms, "SDGs index", "SDGs and the private sector", as well as their combinations. Plus, reports coming from the United Nations (UN) and the World Health Organization (WHO) have been employed to get a better grip on the generic context. The period considered has been of publications from 2013-2021. Moreover, cross-referencing was adopted to make sure to cover as many literature papers as possible.

After having identified the resulting articles and review, a first screening was carried out, where duplicates and papers that were too specific regarding a particular country or region have been eliminated. Initially, an analysis of the general background regarding MDGs and SDGs has been presented through the utilization of "generic" articles, namely those that are deemed to be useful to get an edge on the main topics presented in the dissertation.

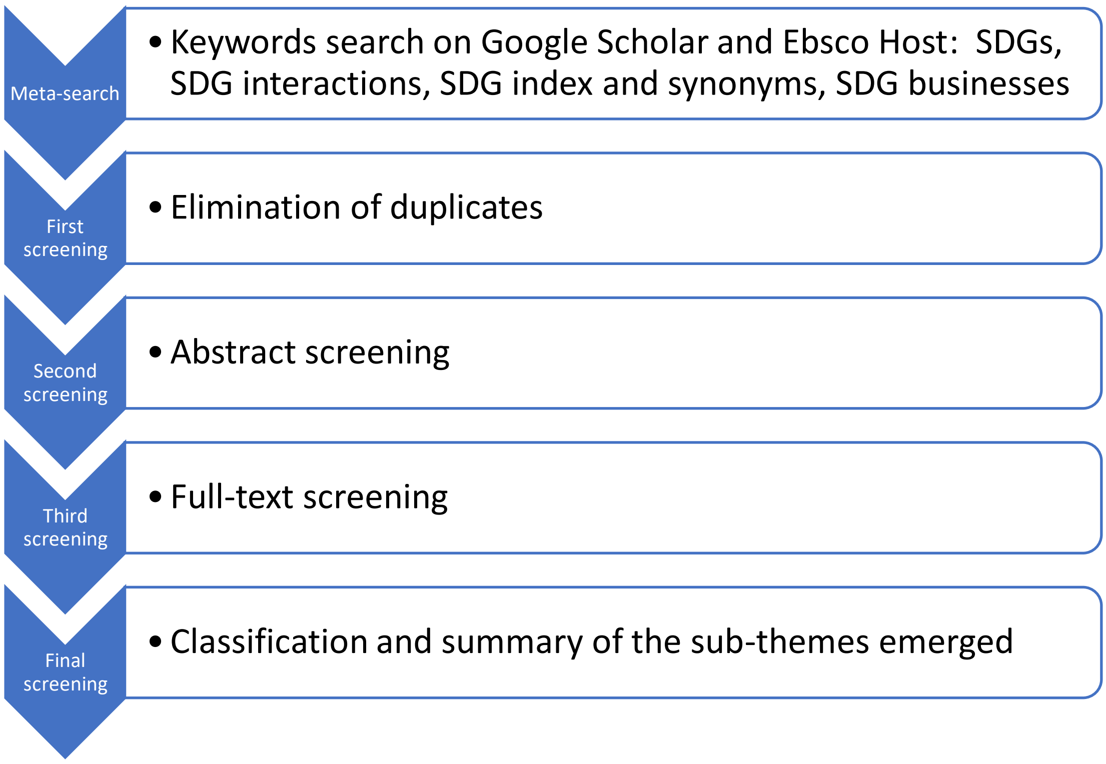
Following the general context, a second screening has been performed to focus better on the SDG interactions, their synergies and trade-offs, as well as policy suggestions. Finally, a rather narrow subset of papers has been selected by skimming those essays that focused on the private sector, suggestions for integrating the SDGs into businesses, and the reaction of the latter following the introduction of the SDGs.
Lastly, the material collected has been categorized by using a thematic approach.
In particular, the research questions will be:

RQ1: What are the SDGs and how have they been developed?

RQ2: To what extent are SDGs intertwined and why is it important?

RQ3: In what way are SDGs evolving in the private sector?

Figure 1: ***Steps of the systematic literature review.***



1.2 Development and Sustainable development: basic definitions

The first step to understand the Sustainable Development Goals is to acknowledge what "sustainable development" is, and why international organizations, governments, companies, and civil society are choosing to engage with it. The most common definition adopted by the 1987 Brutland report "Our Common Future", presented in the World Commission on Environment and Development, is the following:

"Sustainable development can be defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:
- the concept of 'needs' the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs."

(Brutand report, 1987: 43)

It is clear from the definition that there is a need for humankind to manage economic growth without hampering the possibility for future generations to enjoy the world's resources to the same degree that current and past generations were granted. To this end, world leaders agreed in 2000 to codify the need for sustainable development and the eradication of poverty in eight goals, to be achieved in fifteen years.

1.3 From MDGs to SDGs: the shift to a new paradigm

2015 marked a pivotal year for sustainable development, since it was set as the endpoint for the Millennium Development Goals (MDGs), which had been the overarching development framework for the previous decade. The MDGs were initially endorsed by the OECD in its 1996 strategy paper for the new millennium and were later developed by the United Nations (Bebbington and Unerman, 2018). Back in 2000, during the Millennium Summit, the Heads of State agreed on 8 targets to tackle poverty in its many dimensions:

Figure 2: ***The Millennium Development Goals.***

Millennium Development Goals	
Goal 1.	Eradicate extreme poverty and hunger
Goal 2.	Achieve universal primary education
Goal 3.	Promote gender equality and empower women
Goal 4.	Reduce child mortality
Goal 5.	Improve maternal health
Goal 6.	Combating HIV/AIDS, malaria and other diseases
Goal 7.	Ensure environmental sustainability
Goal 8.	Develop a global partnership for development

Source: United Nations (2001): 56-58

Fig. 2, displaying the eight Goals, shows that the latter were largely human-development oriented, focusing on harnessing poverty, hunger, education, and health (Butler et al., 2015). They were the "world's first explicit development partnership framework between developed and developing countries" (McArthur, 2014: 20) and according to Schmidt-Traub et al. (2017), the MDG experience prove that "global goals can serve as a management tool and report card that focus attention on complex sustainable development outcomes and accelerate progress towards these outcomes" (ibidem: 547). However, according to McCloskey (2015), the lack of critical analysis on the causes of poverty disparities between the global North and the South was one of the major causes of their failure. Indeed, notwithstanding their achievements, a few MDGs have fallen short of their targets.

1.3.1 The achievements of the MDGs

Scholars generally agree on the fact that 15 years of the Millennium Development Goals galvanized public opinion, changed the way the world looks at gender equality and ending poverty, and stimulated the debate on development (Patole, 2017); Schmidt-Traub et al. (2017) acknowledge that the MDGs helped to spur advances on many fronts for developing countries, addressing the challenges of illiteracy, health, hunger, and extreme poverty. To assess the results of the 15-years commitment, the United Nations released in detail the effects of the MDGs in its 2015 MDGs review, assessing the results for each Goal:

GOAL 1: "*Eradicating extreme poverty and hunger*". Remarkable progress has been made in halving the number of people living with less than $1.25 per day, from 1.9 billion in 1990 to 836 million in 2015 and reducing the percentage of undernourished people in developing countries from 23 percent to 13 percent in a two-decade span. ((United Nations, 2015: 4)

GOAL 2: "*Achieve universal primary education*". In the field of education, the report acknowledges a 12 percent increase in primary school enrolment rate, from 83 percent in 2000 to 91 percent in 2015, and the literacy gap between women and men has narrowed. (ibidem: 4)

GOAL 3: "*Promote gender equality and empower women*". In most of the countries that adhered to the MDGs, the presence of women in parliamentary representation has doubled according to 20-year data. Moreover, developing countries have almost eliminated the gender disparity gap in primary, secondary, and tertiary education. (ibidem: 5)

GOAL 4: “*Reduce child mortality*”. Between 1990 and 2015, the global mortality of children under the age of five has declined from 90 to 43 deaths per 1,000 births, and the distribution of measles vaccination has prevented almost 16 million deaths. (Ibidem:5)
GOAL 5: “*Improve maternal health*”. There has been a worldwide increase in the use of contraceptives among women aged 15-49, from 55 percent in 1990 to 64 percent in 2015; in addition to that, maternity mortality has fallen by 45 percent worldwide. (ibidem: 6)
GOAL 6: “*Combat HIV/AIDS, malaria and other diseases*”. Among the achievements to combat diseases, approximately 37 million people were saved from tuberculosis through prevention, diagnosis, and treatment; HIV infections dropped by 40 percent between 2000 and 2013, and around 14 million people received antiretroviral therapy by 2014, against the 800,000 in 2003. (ibidem: 6)
GOAL 7: “*Ensure environmental sustainability*”. By 2015, ozone-damaging substances have been almost eliminated and 147 countries have reached the drinking water target. (ibidem: 7)
GOAL 8: “*Develop a global partnership for development*”. Between 2000 and 2014, development aid to developing countries has risen by 66 percent; 79 percent of imports from third world countries to developed ones were not subject to duties, and internet penetration worldwide has reached 43 percent in 2015, from 6 percent in 2000. (ibidem: 7)

1.3.2 The shortfalls

Fehling et al. (2013) identify a framework to look at the missed achievements of the MDGs, by fragmenting the unmet challenges into four main categories:

(1) Development process
(2) Structure
(3) Content

(4) Implementation and enforcement

Starting from (1) development process, The Millennium Development Goals were developed through a UN process without a substantial interaction outside the UN and governmental sphere: that is to say, the private sector was not involved in the achievement of the MDGs (Pederson, 2018); also, Van Tulder (2018) claims that also societal stakeholders were not included in the consultation process. Moreover, the MDGs were created by First World countries (Europe, the United States and Japan) for least developed countries, working in synergy with the World Bank (WB), the International Monetary Fund (IMF) and the Organization for Economic Cooperation and Development (OECD). Therefore, the approach adopted has been a top-down one, designed by industrialized countries for least developed countries. This left developing countries in the background while making decisions on issues that were much crucial to the latter's future development and determined a lack of national ownership for the goals (Fehling et al., 2013).

Secondly, Fehling et al. (2013) observe that the MDGs structure (2) presents overambitious or unrealistic goals about least developed countries, while it lacks vision when it comes to basic human needs. In particular, the very approach consisting of picking a few goals to achieve is criticized, since it is likely to leave behind some crucial challenges such as considering the indirect cost of overcoming political corruption or delivering goods to the target recipients. Moreover, the interconnectedness between goals is missing, thus attributing separate importance to, for instance, maternal health and child health, instead of seeing the two targets as dependent on each other. Finally, MDGs accountability is absent in the structure, and this represents a further weakness in the MDGs framework.

Also, (3) although most goals regard health issues, they are quite narrowed down to three general categories: maternal health, child health and specific diseases. Therefore, several challenges have not been taken into consideration, from mental health to guaranteeing efficient health systems. The MDG content does not properly address the issue of filling the inequality gap within and between countries, as well as leaving behind the poorest of the poor. Most importantly, the WB poverty line indicator is seen as a broad and somewhat arbitrary measure to be able to display positive progress over the years. Van Tulder (2018) observes that MDGs oversimplified the concept of development, which was seen as the satisfaction of basic needs rather than the process towards sustainable and inclusive growth.

Rather than being completely eradicated, gender inequalities are only set to decrease (MDG 3); environmental issues are largely absent, as they are reduced to only one Goal, and scholars argue that subgoals should have been set in order to keep the focus on achieving the targets, instead of deciding for 15-years (Fehling et al., 2013).

Lastly, (4) the implementation and enforcement of the MDGs have been characterized by little or no policy guidelines on how to reach the Goals, especially for low-income countries, and doubts have been raised even on how data about the baseline and progress have been collected: indeed, Fehling et al. (2013) found that scholars criticize the fact that data on education are collected at the beginning of the academic year, thus not considering dropouts, while in many cases poorer countries lack the tools necessary for the monitoring of epidemiological trends and different countries employ different methods for data collection that makes it difficult to compare them across States. In short, the authors are concerned about the actual measurability of the MDGs' achievements. Hulme (2013) adds that the Goals failed to facilitate the participation of developing countries in the implementation process.

1.3.3 Lessons learned: the way forward

Although the MDGs framework has attracted many critiques over the years, among their advantages there has been a call for global unity, where world leaders reunited and discussed to fight global poverty and, to some extent, environmental issues and inequalities; on top of that, MDGs had a long-lasting impact as of shaping a new way for world leaders to come together to find a common ground on which to foster a more equalitarian development (Erna, 2015). To put it as Patole (2017: 2), "the MDGs served as the first unified, global attempt to put sustainable development at the forefront of the world's political agendas" and made it clear that having only a small number of goals is necessary for policy coherence and focus (Griggs, 2014).

Although mobilizing the civil society and, to some extent, even the private sector, the MDGs were focused mainly on the reduction of poverty: a more diverse, inclusive approach was needed post-2015 to advance a broader range of crucial sustainable development themes simultaneously (Van Tulder, 2018). According to Weitz et al (2014: 37), while MDGs "aimed at *lift* people out of poverty SDGs aim to *keep* them out of poverty by ensuring that development is both socially and environmentally sustainable". Indeed, the lesson to be learned by the MDGs is that the goals were sectoral, thus lacking considerations on how the achievement of one goal would affect another sector or deteriorate scarce resources and their ecosystems. Therefore, in order for development to be sustainable, an integrated approach should be adopted for ensuring that achieving one Goal will not undermine the attainment of another (Weitz et al., 2018).

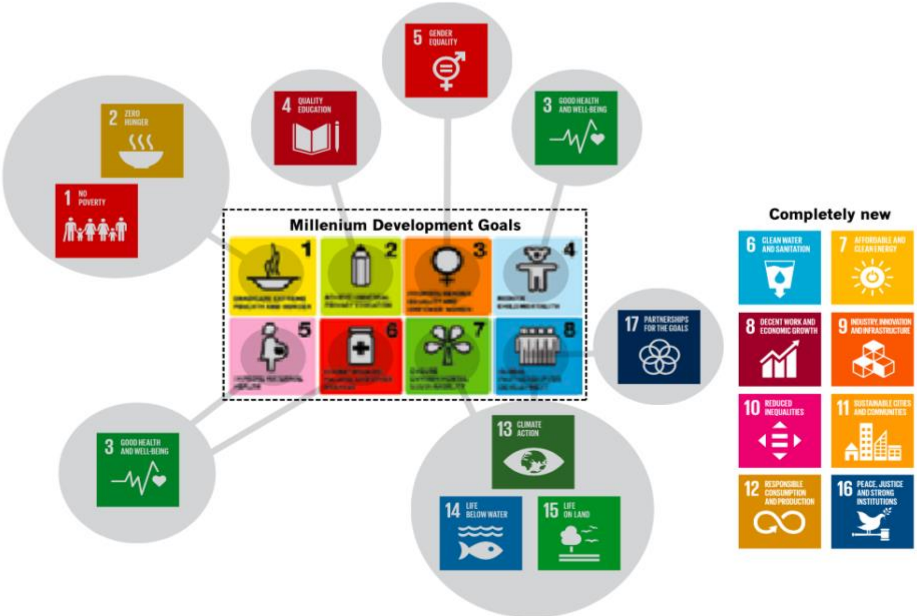
Stafford-Smith et al. (2017) argue that links across sectors and actors through multi-stakeholder partnerships are needed to succeed where the MDGs have fallen short: alignment and integration between national targets, strategies, and plans for implementation are essential to guarantee a successful outcome.

1.4 Agenda 2030

Developed at the UN's Rio+20 Conference in 2012 (Griggs et al., 2014), Agenda 2030 has been endorsed by all the 193 Member States of the United Nations, and it builds on the Millennium Development Goals. However, not only is it aimed at ending poverty in all its forms, but also focuses on a broader range of issues: ensuring peaceful societies, good governance, sustainable production and consumption patterns, and the sustainable management of natural resources. The Conference led to the creation of 17 Sustainable Development Goals (SDGs) and 169 intermediate targets (approximately, 5 to 12 targets for each Goal) to be reached in 15 years. As a result, the SDGs "have the potential to become the guiding vision for governmental, corporate and civil society action for a shared and lasting prosperity" (Hajer et al., 2015: 1657), with the aim of fostering a sustainable development (Hak et al., 2016).

Indeed, unlike MDGs, SDGs call for *sustainable* development rather than development itself, and the former is articulated in the three dimensions of social, economic and environmental development (Kim, 2016): this means that the achievement of a target, as well as human well-being, should not undermine the social and environmental capital that supports the global life system in all its forms (Stafford-Smith et al., 2017).

Figure 3: ***Millennium Development Goals and Sustainable Development Goals compared.***



Source: Van Tulder (2018): 21

From Fig. 3 it is possible to observe how the SDGs framework substantially enlarges the very scope of MDGs, not only by recapping the initial purposes of the latter, but also improving them by shifting the attention to broader issues regarding some topics and narrowing the focus when more specificity was needed. In this perspective, on the one hand, MDG 5 (Maternal health) and MDG 6 (Fighting infectious diseases) are coupled in SDG 3 (Good Health and Well-being), which encompasses both the previous MDGs and beyond. On the other hand, environmental issues are tackled by three SDGs (13, 14, and 15), becoming more specific than simply concerning environmental sustainability at large.

Moreover, in the Agenda 2030 five main dimensions, also called the "5 Ps", have been identified as bullet points to build an effective, 15-years achievement plan (UN, 2015):

People: ensure dignity and equality.

Planet: protect the planet from degradation so that it can support present and future generations.

Prosperity: take action to foster economic, social, and technological progress without harnessing nature.

Peace: societies must be peaceful, just, and inclusive.

Partnership: all countries, stakeholders and people must be included in achieving the Agenda 2030, in a joint effort to support the most vulnerable through global solidarity.

These dimensions highlight that world leaders are now focusing on a broad agenda that makes sure that nobody is left behind, embracing nations of all income level in an attempt to foster sustainable development (Weitz et al., 2014); they engage in linking the social, environmental, and social aspects of each Goal, and the ambitious challenges they tackle has been seen as one of the main pitfalls of the latter: indeed, strategies, policies, and implementation integration will be needed in order not to fall short on the targets (Le Blanc, 2015). Biermann et al. (2016) underline that one of the main differences from MDGs is the fact the "one-size-fits-all" approach has been left behind, making room for national and local conditions.

The set of SDGs proposed by the UN Member States is summarized in the following Figure.

Figure 4: *The Sustainable Development Goals*

Sustainable Development Goals	
Goal 1.	End poverty in all its forms everywhere
Goal 2.	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
Goal 3.	Ensure healthy lives and promote well-being for all at all ages

Goal 4.	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5.	Achieve gender equality and empower all women and girls
Goal 6.	Ensure availability and sustainable management of water and sanitation for all
Goal 7.	Ensure access to affordable, reliable, sustainable, and modern energy for all
Goal 8.	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Goal 9.	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10.	Reduce inequality within and among countries
Goal 11.	Make cities and human settlements inclusive, safe, resilient, and sustainable
Goal 12.	Ensure sustainable consumption and production patterns
Goal 13.	Take urgent action to combat climate change and its impacts
Goal 14.	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development
Goal 15.	Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation, and halt biodiversity loss
Goal 16.	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
Goal 17.	Strengthen the means of implementation and revitalize the global partnership for sustainable development

Source: United Nations 2015: 14/35

The SDGs represent a significant break from previous models for sustainable development, as they foster a shift from a state-centered, top-down perspective to a system of partnerships addressing both developed and developing countries (Van Zanten and Van Tulder, 2018). Stressing the need for collaboration between different stakeholders, the SDGs also appeal to the difference that business sectors can play in attaining the Goals (Ghosh and Rajan, 2019).

To provide a better grip on the seventeen SDGs and their targets, they have been clustered according to the suggested framework by Waage et al (2015), based on their intended outcomes: the groups identified are divided into Wellbeing, Infrastructures, Natural Environment, and One Health. The four categories are organized according to layers, progressively focusing from the individual to an overarching frame.

1.4.1 Understanding the SDGs: Wellbeing

According to Waage et al. (2015), Wellbeing is the "inner level" of the SDGs, which delivers a people-centered approach: Goals within this stratum aim at bringing individual and collective achievements, in an effort to distribute wealth more equally among and within countries. Within this layer, SDGs are related to human development seen from many perspectives, from health to education, the need for gender equality, and ensuring peace and justice for all.

Goal 1: End poverty in all its forms, everywhere.

Five are the targets linked to Goal 1, all to be achieved by 2030: the common ground is to lift people out of extreme poverty, measured as the population living with less than $1.25 per day, but also halving the population living in poverty according to national definitions (UN 2016). The domain of SDG 1 are mainly social targets (Griggs et al., 2014) and is indivisible from all the others (Nilsson, 2017), since it also entails the welfare and freedom for everybody: it deals with ensuring access to basic services, and protecting people from possible outcomes of climate change, such as natural catastrophes and economic shocks (UN, 2016).

Goal 3: Ensure healthy lives and promote wellbeing.

Here, maternal and children mortality, together with health, are still present following the MDGs, as well as the importance of fighting infectious diseases such as AIDS, malaria and tuberculosis. However, a broader range of health issues are now being taken into account: the focus of SDG 3 is primarily healthy lives for everybody, together with the importance of guaranteeing universal health coverage (Nilsson, 2017). In this perspective, access to basic sanitation and clean water management play a central role (Griggs et al., 2014). Numerous indicators are present in the Agenda 2030 to measure the actual achievements about Goal 3, from under-5 mortality rate to the number of people covered by a private or public health insurance per 1,000 population, to various disease incidence per 1,000 population (UN, 2016).

Goal 4: Ensure inclusive and equitable quality education.

Goal 4 calls for countries to engage in providing free primary and secondary education, and equal access for women and men to an affordable tertiary education (UN, 2016); besides, the Goal demands for the acquisition of skills and knowledge needed to promote sustainable development, enlarge the number of scholarships available in developing countries, and deliver an inclusive education system for all (Ibidem: 19/62). According to Van Tulder (2018) education has the potential to reduce conflict and inequalities, as well as playing a relevant role in fighting climate change and shift towards more responsible production and consumption patterns.

Goal 5: Achieve gender equality and empower all women and girls.

Linked in part to Goal 4, Goal 5 extends its scope by aiming at the elimination of disparities and discrimination against all women and girls. Discrimination, both in the form of harmful practices, violence in public and private, and regarding women's professional path, shall be put to an end (UN, 2016). Gender inequalities can hinder development, thus causing inefficiencies in the economy (Nilsson, 2017). Goal 5 can be measured, among other indicators, by looking at the proportion of women and girls subject to violence, women in managerial positions and the proportion of time spent in unpaid domestic work (UN, 2016).

Goal 10: Reduce inequalities within and among countries.

Foster the social, political and economic inclusion of all, by ensuring equal opportunities in life and in occupational perspectives both for residents and immigrants is at the core of Goal 10. An essential element needed to promote the latter is the shift to more accountable and legitimate institutions, through the inclusion of developing countries in international organizations (UN, 2016). Developing countries are also guaranteed a special and differential treatment in the World Trade Organization agreements. Indicators range from tariff levels applied to developing countries' imports in international trade, to the proportion of people living below 50 percent of median income, and the proportion of the population that feel discriminated against international human rights law (ibidem: 26/62).

Goal 16: Promote peaceful and inclusive societies for sustainable development

The targets related to Goal 16 comprise equal access to justice for all, coupled with a reduction in violence, bribery, corruption in all forms, also guaranteed by a renewed level of transparency of national and international institutions (UN, 2016). Also, peace shall be promoted through a reduction of illicit arms flows and the fight against organized crime. Among other indicators, Goal 16 can be measured by looking at the proportion of homicides per 100,000 population, primary government expenditures compared to the approved budget, and the extent to which developing countries get voting right in international institutions (ibidem: 34/62).

1.4.2 Infrastructure

Infrastructure, the middle level of the framework, groups together those Goals that cut across communities and individuals, focusing instead on the national as well as the international level (Waage et al., 2017). Mainly, infrastructure refers to those mechanisms or networks that should be implemented in order to secure access to clean energy and water, and the production and distribution of goods and services without undermining natural resources and the environment at large.

Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

Malnutrition, hunger and agricultural productivity are the issues tackled by Goal 2. To address these issues, it is essential to increase the production of crops and access to food (Nilsson, 2017): the targets of Goal 2 entail an increased investment in rural infrastructure in developing countries, in order to double the productivity of small-farmers and ensure that food production is carried out in a sustainable way, since agriculture is one of the major activities impacting the environment (ibidem: 3). Also, a greater capacity to adapt to extreme weather conditions is encouraged. To gauge the extent to which Goal 2 is progressing, indicators regarding anomalies in food price and agricultural areas under sustainable agricultural practices have been identified (UN, 2016)

Goal 6: Ensure availability and sustainable management of water and sanitation for all.

Access to safe water and clean air for all is the desired outcome of Goal 6. Targets include the sustainable use of fresh water supply to tackle water scarcity, the possibility to access equitable sanitation and hygiene, and improving the safe recycling and reuse of water globally (UN, 2016). In order to achieve Goal 6, cooperation and participation at the local level are essential to improve the management of sanitation and water, which would also result in positive outcomes for economic growth and food access (Van Tulder, 2018).

Goal 7: Ensure access to affordable, reliable, sustainable, modern energy for all.

By 2030, energy efficiency is set to be improved through the employment of renewable sources and universal access to affordable energy services (UN, 2016). To achieve Goal 7, investments in research and technology to advance cleaner energy infrastructure is needed, both for developed and developing countries: indeed, economic growth requires energy, but fossil fuels also adversely affect global warming (Van Tulder, 2018). The proportion of the population with access to electricity and to cleans fuels measures the advancements made towards the Goal, as well as the percentage of GDP per country devoted to sustainable development services (UN, 2016).

Goal 8: Promote sustained, inclusive and sustainable economic growth.

It is articulated in four main branches: fostering innovation and entrepreneurship to increase productivity, abolishing forced and child labor and improve labor conditions, diminishing the level of unemployed youth and decoupling economic growth from environmental degradation (UN, 2016). Results should comprise fairer incomes and social protection, as well as contributing to a more equal and peaceful society (Van Tulder, 2018) Indicators comprise the annual growth rate of real GDP per capita and per employed person; the unemployment rate and NEETs rate; the proportion of children engaged in labor; the material footprint per GDP and per capita (UN, 2016).

Goal 9: Infrastructures and industrialization.

This SDG is strongly related to the capacity of fostering technology, innovation and science (Nilsson, 2017), thus creating infrastructures that are capable to guarantee equitable access to services and economic resources. Industrialization is set to develop in an inclusive and sustainable way, both in developed and developing countries, by making use of environmental-friendly technology and industrial processes (UN, 2016). The targets deal with measuring the expenditure dedicated to research and development as a percentage of GDP and measuring value-added activities and related CO2 emissions (ibidem: 25/62).

Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable.

Urbanization, housing, and transport systems are the keywords for Goal 11: it calls for access to safe and affordable basic services related to those categories (UN, 2016). Besides, the planning and management of human settlement globally must be developed in a sustainable and integrated way, preserving both the cultural and natural heritage of the world, since most of humanity is projected to live in cities in the years to come (Van Tulder, 2018). Communities are asked to play a central role in their conservation, even by engaging in resource-efficient buildings and public areas: indeed, urban planning can promote a more prosperous society without damaging the environment (ibidem: 25).

Goal 12: Ensure sustainable consumption and production patterns.

The management of natural resources is required to become sustainable and efficient, and it calls for a reduction in waste and an improvement in supply chains in the private sector, in order to adopt sustainable practices that promote recycling and reuse (UN, 2016). As the number of people keeps increasing, by 2050 there would be needed three planet Earth to sustain the population, if measures are not taken to decrease the ecological footprint of humanity (Van Tulder, 2018). Indicators suggest that hazardous waste per capita shall be measured in order to gauge the outcomes of Goal 12, along with the national recycling rate and the number of companies that disclose sustainability information (UN, 2016). Also, developing countries are demanded to engage with sustainability practices in production and consumption, through the support of First World countries (ibidem: 29/62).

1.4.3 Natural Environment

Requiring international cooperation to be achieved, the Goals pertaining to the Natural Environment level relate mainly to those resources that are strongly influenced by human activities. The sustainable management of natural resources and global public goods are at the center of these SDGs, comprising also natural resources and combating climate change (Waage et al., 2015).

Goal 13: Take urgent action to combat climate change and its impact.

The five targets of Goal 13 deal with mobilizing investments to combat climate change, integrating policies and strategies at the national level to address the issue in order to improve adaptive capacity related to the adverse impacts of global warming (UN, 2016). In this perspective, increasing awareness through education is key, with the aim of enhancing climate mitigation and human adaptation (Van Tulder, 2018). The number of countries that integrate and communicate strategies and plans to boost climate resilience and reduce pollution will be an indicator for the improvements towards Goal 13 (UN, 2016)

Goal 14: Conservation and sustainable use of oceans, seas, and marine resources.

Marine pollution due to human activity is set to be reduced by 2025, as well as the restoration of damaged marine and coastal ecosystems and their sustainable management and conservation (ibidem: 31/62). Moreover, overfishing and harvesting that threaten marine ecosystems shall be eliminated or reduced, also by abolishing state subsidies that promote overfishing practices. In this perspective, it is necessary to put an end to overfishing practices and manage marine and coastal ecosystems sustainably (Nilsson, 2017), as well as take actions against ocean acidification, which is closely linked to climate change mitigation (Ibidem: 4).

Goal 15: Protect, restore and promote the sustainable use of terrestrial ecosystems.

Deforestation, desertification, and the degradation of natural ecosystems are issues tackled by Goal 15, which promotes the sustainable management of wetlands, forests and terrestrial habitats to preserve biodiversity globally. In particular, urgent measures are demanded to stop extinction: indeed, poaching and illegal trafficking of animal species are set to be eradicated (UN, 2016). Also, countries are requested to enact plans, both at the national and local level, to protect biodiversity and ecosystems, since forests are a key resource to also mitigate climate change (Van Tulder, 2018). Due to the cruciality of these concerns, most of these targets have been set to be achieved by 2020 (UN, 2016).

1.4.4 One health

"Partnership for the Goals" can be defined as an overarching and cross-cutting Goal, essential to carry out all the other SDGs and strengthening the collaboration between countries, in an attempt to keep on track with the Agenda 2030 (Waage et al., 2015).

Goal 17: Strengthen the means of implementation and revitalize the global partnerships for sustainable development.

Partnership for the Goals touches finance, technology, capacity-building, and trade among countries. In order to implement the SDGs, partnerships are required at all levels (Van Tulder, 2018). As a matter of fact, the Global North is expected to support developing countries to fulfilling their aid commitments and strengthen a non-discriminatory trading system through the World Trade Organization; developing countries shall be devoted help in developing technologies that may improve their achievement of the SDGs, by granting access to science and innovation through the sharing of knowledge enacted by developed countries (UN, 2016). Great importance is given to the access to the Internet, Foreign Direct Investments (FDI) and aid assistance, and the number of countries that design and implement plans for promoting least developed countries (ibidem: 35/62).

1.5 Interdependencies among goals and targets: the key for successful implementation

The above-mentioned framework for grouping the SDGs facilitates the understanding of the latter and their interlinkages: as a matter of fact, SDGs cannot be regarded as separate entities but as an indivisible whole (Nilsson, 2016). The main risk associated with considering SDGs as sectoral goals is that positive outcomes resulting from one of them may end up creating negative externalities affecting another one (Pradhan et al., 2019). For instance, although alleviating poverty is one of the overarching achievements of Agenda 2030, it may lead to the depletion of natural resources such as water and land, thus resulting in the worsening of freshwater sources and ecosystems, natural habitats, and biodiversity.

Waage et al., (2015) hold that the interactions between levels yields several insights: first, the inner level and the middle one influence each other reciprocally. For instance, on the one hand, guaranteeing access to food supply and safe water (middle level) is likely to improve health conditions as well (Goal 3, inner level). On the other hand, advancement in public educational systems would lead to more sustainable consumption patterns and economic growth. Second, the outer level is related to the former ones by the means through which human activities impact natural resources: these are also the two levels that are most likely to conflict with each other. Capitalizing on interactions among Goals would also yield substantial economic, environmental and social benefits: for instance, tackling SDG 7 (Clean energy) would simultaneously deliver benefits in terms of air pollution and global warming, thus positively affecting also SDG 3 (Good health), 11 (Smart cities) and 12 (Responsible Consumption and Production), let alone SDG 13 on climate change (Scharlemann et al., 2020).

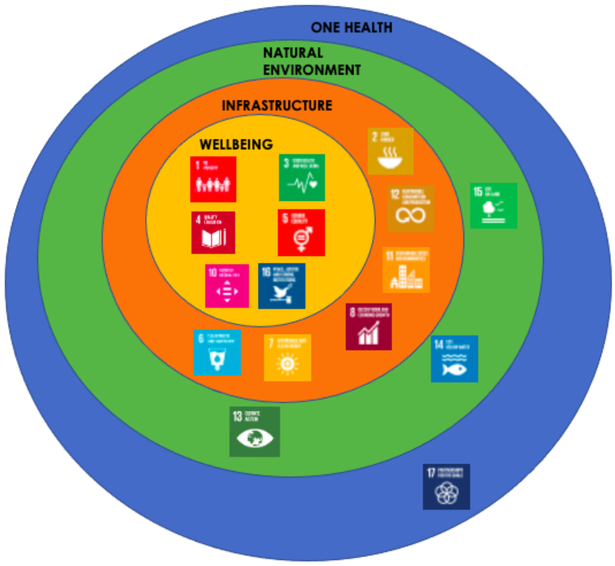
Back in 2014, when the SDGs framework was still being discussed, Weitz et al (2014) had already called attention to the potential challenge of creating sectoral targets that did not interact with each other. Previous agendas have been strongly criticized for failing at integrating Sustainable production and consumption pattern into the overall goal framework (Le Blanc, 2015). A step forward will be to design and understand interactions, which would most probably lead to promote more coherent policy decisions about targets and intended outcomes, as well as reducing or avoiding conflict between Goals. The baseline of SDGs as a unified system has been endorsed by the United Nations:

> "The interlinkages and integrated nature of the Sustainable Development Goals are of crucial importance in ensuring that the purpose of the new Agenda is realized. If we realize our ambitions across the full extent of the Agenda, the lives of all will be profoundly improved and our world will be transformed for the better." (Desa, UN 2016: 2)

Therefore, the General Assembly has conveyed the intent of avoiding potential conflict among Goals and targets. Most scholars acknowledge that having a grip on how the Goals influence each other is critical to set policy strategies with the right priorities (Le Blanc, 2015; Stafford-Smith et al, 2015; Van Tulder, 2018; Pham-Truffert et al, 2020). However, Stafford-Smith et al. (2015) complain about the fact that, although many SDGs targets are addressed to the means for implementation, they do not specify the interlinkages among Goals.

Scharlemann et al. (2020) also argue that, in practice, policy and management on SDGs mainly focus on every SDG, rather than considering them an "indivisible whole". So far, the three nexus approaches adopted to cluster the SDGs have been made, starting from Niestroy (2016), then recalled by Waage et al. (2015), who focused on a system of concentric circles going from the "people-centered" layer, progressively to infrastructure and the natural environment and partnership, where all the other layers are embedded.

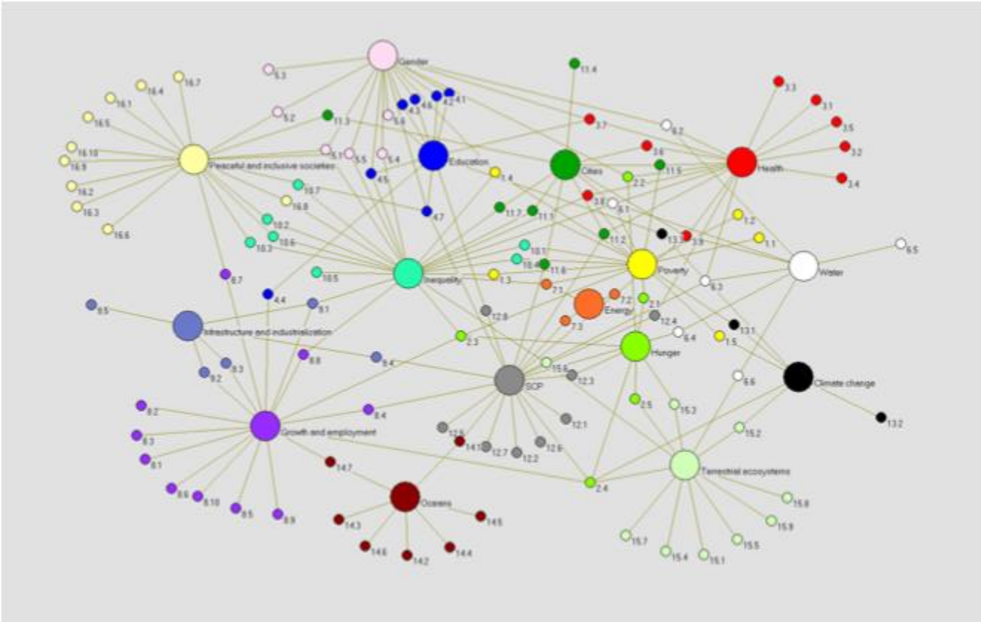
Figure 5: *SDGs classification.*



Source: Author's adaptation based on Waage et al. (2015)

Instead, Le Blanc (2015) suggests the possibility to link Goals through their targets: his findings advocate that the latter are unevenly connected: Fig. 6 shows how some of them are weakly connected to the system, while some others present a strong interaction with the network.

Figure 6: ***The SDGs as a network of targets.***



Source: Le Blanc (2015): 4.

Interestingly enough, by making a comparison with the above-mentioned clustering framework suggested by Waage et al. (2015) it is possible to see that most goals that are strongly connected to the overall network pertain to the inner layer ("people-centered" goals) or to the middle level referring to infrastructures. Instead, peripheral Goals with little or no linkages to other targets mainly pertain to the outer layer, referring to the Natural Environment. This may suggest that there is a missing link for actually decoupling economic growth from the depletion of natural resources. In any case, Brauer et al. (2019) argue that Le Blanc's study does not give any edge on both the empirical underpinnings on these connections and on whether linkages are negative or positive. Finally, the Stockholm research center adopts a nexus approach that is also called "the wedding cake", which sees all the other goals embedded in the biosphere (Goal 15, 14, 13, 6), then looks at how societies contribute to economic growth, while Goal 17 about Partnerships acts as the very core that links together all the other Goals.

Figure 7: ***The "wedding cake".***

Source: Giannetti et al. (2020): 2

1.5.1 Synergies and trade-offs

Griggs et al. (2014) were the first to bring insight into the potential trade-offs faced while trying to achieve simultaneously economic growth and environmental sustainability:

Several approaches have been adopted to try to get an edge on the positive and negative interactions among Goals: on the one hand, some scholars (Nilsson et al. 2016, Pradhan et al. 2017; Kroll et al. 2019; Scharlemann et al. 2020) opted for a statistical understanding on the SDGs, focusing on the evolution interlinkages between of targets and indicators both within and among SDGs, in order to project the progress on SDGs as well. On the other hand, Van Zanten and Van Tulder (2020), Pham-Truffert et al. (2020), Bennich et al. (2020) provided an extensive literature review to assess the positive and negative interactions among Goals, targets and indicators.

According to Pradhan et al. (2017) the accomplishment of the SDGs will strongly depend on the extent to which trade-offs within and between goals will be identified and tackled, whereas opportunities for synergies will be leveraged. In particular, the authors analyze the correlation between significant indicators disaggregated by country and then, at a global level. Their findings include the fact that positive synergies can arise both within and between Goals: a positive interaction within a Goal is established when indicators belonging to the same Goal help each other out in their progress. Instead, the interlinkage between SDG 1(No Poverty) and SDG 3 (Good Health and Well Being) arises from the fact that "alleviating poverty" would also lead to an improvement in the health conditions of the population, thus having a positive impact on SDG 3 as well. Of course, not always interactions lead to a beneficial effect: it is the case of SDG 8 (Decent Work and Economic Growth), Pradhan et al. (2017) hold, an improvement in the economic condition through an increase in GDP per capita is more likely to yield a negative impact on the material footprint per capita, though both indicators are included in SDG 8. However, trade-offs between Goals are mainly found in the interaction between SDG 8, 12 (Responsible consumption and production pattern) and 15 (Life on Land) and all the other SDG.

Figure 8: *Global ranking of SDG pairs with high shares of synergies (left) and trade-offs (right) from top to bottom.*

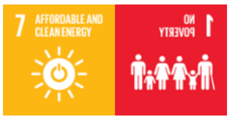
Source: Pradhan et al. 2017: 1174

Fig. 8 summarizes the global synergies and trade-offs ranked at a global level. On the one hand, it can be observed that SDG 12 and 15 dominate the ranking when it comes to trade-offs: they are negatively correlated to most of the other SDGs. On the other hand, SDG 1 (No poverty) and SDG 3 (Health and Well-being) show the most positive interactions with the other Goals. Nevertheless, one of the things that catch the attention is the fact that synergies are mostly created among Goals that pertain (going back to Waage et al thematic clustering) to the inner or middle layer, referring to people or to infrastructure.

A similar pattern was also identified by Lusseau and Mancini (2019), who argue that reducing poverty worldwide is likely to deliver a positive impact on all other SDGs: instead, focusing on sustainable consumption and production patterns and tackling climate change without hampering the achievement of the other Goals will be the toughest challenge that the world is yet to face. Regarding this point, Kroll et al. (2019) claim that ultimately the achievement of the SDGs will depend on the capability of governments, businesses and the civil society to minimize trade-offs, while maximizing positive synergies. In particular, there is a need for scholars to have a deeper understanding of the future interactions between Goals (Kroll et al., 2019). The advancement here, compared to Pradhan et al. (2017) lays on the fact that SDGs interactions are investigated in a cross-sectoral way, thus with no limitation to single countries. Moreover, the study questions the evolution of trade-offs and synergies' management over the decade 2010-2018, thus analyzing whether or not the world's community is being successful in moving trade-offs into synergies. Also, in this case, results show interactions both within SGDs and between SDGs. Regarding the former, the trends that emerged have been an increase in synergies, but also in trade-offs, and the dilution of associations within an SDG (Kroll et al. 2019). More in-depth, SDG 1 (No poverty), SDG 2 (No Hunger) and SDG 5 on gender equality started a stronger interaction between their own targets over the decade observed, and in particular, SDG 2 saw the reduction of trade-offs among its indicators, suggesting that the implementation of Agenda 2030 is proceeding in the right direction.

Moreover, findings by Kroll et al. (2019) investigate whether trade-offs among goals are evolving to become synergies: the authors argue that some of the goals are developing stronger associations, whereas other trade-offs are increasing. The main results are summarized in Fig. 9.

Figure 9: ***Evolving synergies and trade-offs between SDGs.***

SDGs showing diminishing trade-offs or greater synergies	SDGs showing greater trade-offs
	
	
	

Adapted from Kroll et al. (2019)

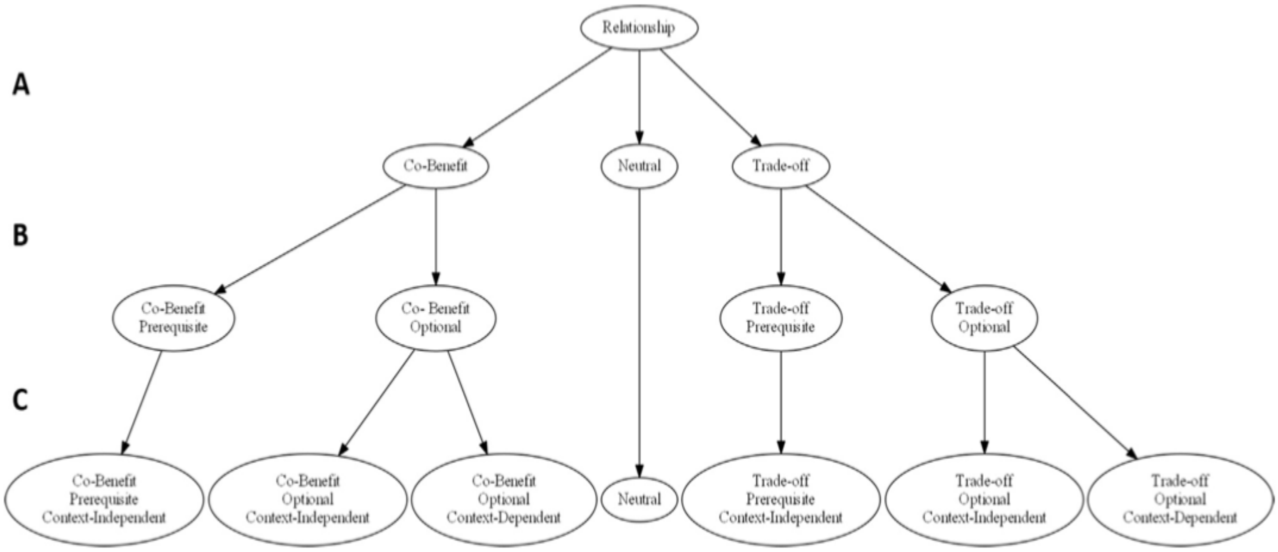
On the one hand, synergies yield many insights: indeed, the synergies with SDG 13 (Climate action) suggest that nations are being successful in building smart infrastructures that help combating global warming, as well as the fact that countries are developing stronger institutions with a positive impact on gender equality or vice versa that gender equality is helping to improve the quality of institutions. On the other hand, trade-offs show the tension emerging from the eradication of poverty: wealthier people demand more energy supply, thus threatening to deplete natural resources unless renewable energy solutions are put in place.

Despite the major evolutions among synergies and trade-offs, both Pradhan et al. (2017) and Kroll et al. (2019) hold that achieving

SDGs 1 and 3 is likely to lead to a virtuous circle with respect to other Goals, since healthier and richer people contribute more to the economy of a country, are more educated and can lead to better infrastructure through tax payments. Nevertheless, the projected trends also suggest that the improvement in economic and health conditions will result in a trade-off with Goals concerning the natural environment and the sustainable management of natural resources, tackled by Goal 6 (Clean Water) and 13 (Climate Action).

Singh et al. (2018) argue that a hierarchical framework can be identified in order to assess the relationships among SDGs and targets, and whether they interact in a positive (synergy), negative (trade-off) or neutral way (Fig. 10).

Figure 10: *SDGs hierarchical framework.*



Source: Singh et al. 2018: 224.

Not limiting their focus on the positive or negative link, Singh et al. (2018) also have an insight on the possibility for a target to be a prerequisite for another target, and whether the interaction depends on the social-ecological background for implementation or not. In particular, their focal point on SDG 14 (Life below water) shows that six SDGs yield a co-benefit for each single target of SDG 14, namely SDG 1, 2, 11, 13, 15 and

16. Instead, SDG 3, 5, 6 and 7 are only positively connected to a few of SDG 14's targets; trade-offs can be found with SDG 8 (Decent Work and Economic Growth).

The literature on SDGs interlinkages seems to suggest that economic growth can be a "double-edged sword for sustainable development" (Van Zanten and Van Tulder, 2018: 2): while economic activity may well promote productivity, innovation, and education, its negative externalities such as pollution can affect the environment at large, including people's health. Therefore, integrated policy decisions shall be endorsed in order to promote sustainable growth.

1.5.2 Policy considerations

Biermann et al. (2016) point out three conditions for the successful implementation of the SDGs:

(1) Improving the adaptability of governance mechanisms
(2) Adapting global ambitions to national circumstances and priorities
(3) Ensuring effective policy integration in implementation

The first condition refers to the ability of governance arrangements and international institutions to be flexible enough to adapt to changes in the socio-ecological environment, which many times are difficult to predict. These changes refer to both economic and technological changes: for instance, back in 2000 when the MDGs were established, the disruptive changes brought about by the rapid development of information were not accurately predicted; these developments made it possible for citizens to be better informed. Also, the fast growth of Asian countries such as China and India lifted many people out of poverty, though at the same time it caused major environmental pollution (Biermann et al., 2016).

Second, there is a need for functioning governmental systems at a national level in order to ensure a proper implementation of the SDGs, which would result in common indicators to assess policies across different countries

Finally, a close view of the interaction between SDGs is needed to manage the preservation of the natural environment while reaching out to economic growth.

In order to address the SDGs, policymakers must be able to adopt an integrated approach that would uncover the impacts of interlinkages (Niestroy, 2016). This means that decision-makers should be able to leave the vertical approach of thinking in silos and start collaborating with colleagues in other portfolios to achieve cross-sectoral cooperation (Nerini et al., 2017). Biermann et al. (2016) argue that many of the targets that support the seventeen SDGs remain not clearly specified, and there is a need to increase the formalization of commitments, indicators and benchmarks to assess SDGs progress.

An approach that has been designed by Nilsson (2016) suggests the employment of a seven-point scale that classifies SDGs interactions type, in order for decision-makers to develop a priority-set.

Figure 11: ***Scale for SDG interactions.***

GOALS SCORING
The influence of one Sustainable Development Goal or target on another can be summarized with this simple scale.

Interaction	Name	Explanation	Example
+3	Indivisible	Inextricably linked to the achievement of another goal.	Ending all forms of discrimination against women and girls is indivisible from ensuring women's full and effective participation and equal opportunities for leadership.
+2	Reinforcing	Aids the achievement of another goal.	Providing access to electricity reinforces water-pumping and irrigation systems. Strengthening the capacity to adapt to climate-related hazards reduces losses caused by disasters.
+1	Enabling	Creates conditions that further another goal.	Providing electricity access in rural homes enables education, because it makes it possible to do homework at night with electric lighting.
0	Consistent	No significant positive or negative interactions.	Ensuring education for all does not interact significantly with infrastructure development or conservation of ocean ecosystems.
–1	Constraining	Limits options on another goal.	Improved water efficiency can constrain agricultural irrigation. Reducing climate change can constrain the options for energy access.
–2	Counteracting	Clashes with another goal.	Boosting consumption for growth can counteract waste reduction and climate mitigation.
–3	Cancelling	Makes it impossible to reach another goal. Pagina 1 di 1	Fully ensuring public transparency and democratic accountability cannot be combined with national-security goals. Full protection of natural reserves excludes public access for recreation.

Source: Nilsson (2016): 321

This can be considered a starting scheme to organize policy decisions according to SDGs interactions: the scale going from +3 (indivisibility) and -3 (trade-off) explains both the strength of the interaction and their polarization (positive or negative). For instance, Goal 9 (Industry, Innovation and Infrastructure) shows both constructive and obstructive linkages with other targets: while promoting inclusive industrialization (9.2) would assist in the alleviation of poverty (1.2), foster the growth of GDP may end up counteracting climate change actions (13.2). Nilsson et al. (2016) therefore argue that member states shall overcome the sectorial approach employed by governments, strictly dividing competencies among ministries, and adopt a cross-sectoral governance system through the integration of administrative practices. These results can be achieved by progressively engaging with Universities and scientific advisory bodies. Nilsson also identifies two possible barriers to integration, namely institutional barriers and disincentives created by policies that are limited in outlook.

Collste et al. (2017) build upon previous methods suggested by Nilsson et al. (2016) to design coherent policies: in particular, the need to create and implement "virtuous circles" is underlined, (ibidem: 922), as for instance the positive interaction between education and the alleviation of poverty. They suggest the so-called iSDG model, a feedback network that puts forward the possible outcomes resulting from the implementation of different policies: it enables policymakers to have a grip on the long-term view on their development path. in particular, Collste et al (2017) focus on the interaction between Goal 7 (Affordable and Clean Energy), Goal 3 (Good Health and Well-Being) and SDG 4 (Quality Education) trying to find a causal link between life expectancy, years spent in the education system and the access to electricity. After having identified the positive correlation between the three Goals, they suggest five policy possibilities and look at the different results that each is likely to deliver, thus putting forward a suggestion for policymakers. In short, "Integrated tools such as the iSDG model can bring inter- links to the forefront and facilitate a shift to a development discussion based on systems thinking." (Collste et al., 2017: 930). Breuer et al (2019) agree that the use of simulation models (M&S) can help policymakers in delivering policy coherence, where M&S refers to Modeling and simulation (M&S) refers to "the computer-aided use of mathematical, physical, or other logical models that allow the representation of the dynamics of complex systems via simulation" (Breuer et al., 2019: 5).

In any event, the common denominator to be found is that how targets interact with each other is an empirical question (Weitz et al., 2018), namely is can be answered only over time and experience. Weitz et al. (2018) build on Nilsson (2016) scheme to fill a cross-impact matrix for 34 targets that suggest an approach built on a network analysis: in this perspective, it would be possible for decision-makers to better understand how targets interact with each other, in order to assess what kind of policy intervention would yield the highest return in terms of overall SDGs progress.

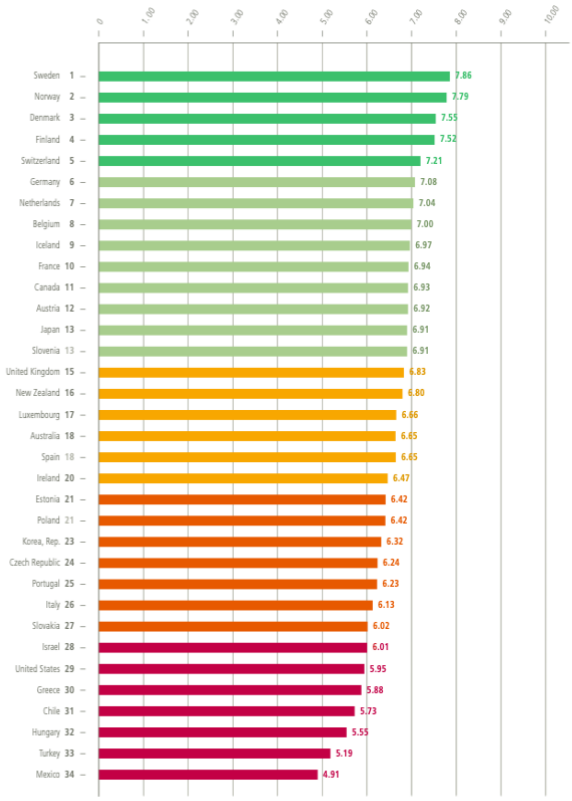
1.6 Assessing the SDGs

Monitoring the SDGs is going to be a major task needed to achieve them (Kroll, 2015): although the 231 indicators identified by the UN Statistical Commission (UNSD) help in measuring, monitoring and control with accuracy many aspects of the SDGs, they are also not designed to display the universal accomplishment measure promptly (Guijarro and Poyatos, 2018). Moreover, for many indicators data availability is poor and there is a need for more unofficial indicators to better track progress on the SDGs (Lafortune, 2020). On top of that, many of them are not comprehensive and lack cross-country data (Schmidt-Traub et al. 2017). Although countries are asked to keep track of their progress through Voluntary National Reviews (VNRs), the latter are not comparable across countries (Lafortune, 2020). To turn the SDGs into a practical tool, sound metrics and indices are needed to assess the progress by country to identify priorities (Sachs et al., 2016). Campagnolo et al. (2016) suggest that monitoring tools should be at the national level, but there is also a need to facilitate comparison among countries to understand where each of them stands in terms of SDG progress.

As to assess the progress of each country in achieving the SDGs, Kroll (2015) suggests two indicators per Goal and applies them to OECD countries, to provide a starting point for those countries to start their engagement with the SDGs and make sure they are on track to reach them by 2030. His study finds out that among the countries members of the Organization for Economic Cooperation and Development

(OECD), the countries that started with the best assumptions were Sweden, Norway, Denmark, Finland and Switzerland (the "fit five", ibidem: 88). This means that these are the countries whose socio-economic models are most fit to achieve inclusiveness and sustainability. Also, Paoli and Addeo (2019) examine European indexes and progress and suggest that the social and economic pillars regarding the SDGs are usually disconnected from the environmental ones. Findings show that for the social and economic pillars, high-income countries in Northern Europe perform better than lower-income countries (Central-East and Southern Europe), whereas, regarding the environmental dimension, richer countries' performance is worse. Indeed, the greatest challenge identified is specifically on the environment, as well as regarding agricultural sustainability.

Figure 12: *The world's first SDG index.*



Source: Kroll et al., 2015: 7

In any event, both developed and developing countries will have to undergo a serious transformation in many areas, from agriculture use to urban management, health and education, energy and ecosystem management and other sectors: good data and clear metrics are essential to keep track of each country's progress, but for the time being data are fragmented and not internationally harmonized (Schimidt-Traub et al., 2017).

Since 2016, yearly, the Sustainable Development Solution Network (SDSN) and the Bertelsmann Stiftung jointly release a Sustainable Development Report in order to assess the degree of compliance from data of 149 members of the UN, using an overall index based on selected indicators for each country (the SDG Index) which is scored between 0 and 100 (Puertas and Bermudez, 2020)[1]. The SDG Index contains 63 global indicators plus 41 indicators only for OECD countries and ranks countries according to their progress in the 17 SDGs (Schmidt-Traub et al., 2017). However, gaps are present: first of all, data gaps regarding a few SDGs become an obstacle to get accurate measures, in particular regarding less developed countries and small islands. Second, some SDGs lack robust indicators definitions, thus are not comparable among countries: therefore, collaboration is needed in order to harmonize indicators. Third, in some countries data are collected by scientists, but not properly communicated to SDG monitoring bodies at the national or international level. This challenge includes SDG 12 (Sustainable production and consumption patterns) and gender-based violence, which show no indicator at all (Ibidem: 551).

Guijarro and Poyatos (2018), instead, argue that a composite SDG index is needed with the addition of considering potential trade-offs between Goals, which are not taken into account by arithmetic and geometric averages. Also, Miola (2019) finds that none of the methods for measurability take into consideration interlinkages among targets. Guijarro and Poyatos (2018) provide the so-called Goal Programming (GP) model and apply it to the 28 members of the European Union (EU). More in-depth, the GP model aims at suggesting a new scheme for calculating the SDG index that overcomes previous gaps, namely the weight that is attributed to each performance. Indeed, Guijarro and Poyatos (2018) hold those previous methods either give an overweight to the worst performance or attribute an equal weight to each performance, thus the models are sensitive to extreme values.

Miola (2019) holds that some of the SDGs are monitored with indicators set that are too vague or limited, while others lack indicators:

[1] To look more in depth: https://dashboards.sdgindex.org/map

for instance, 13 (Climate Action) which shows thirteen targets, but only three of them are considered quantifiable and therefore possible to measure. Also, giving equal weight to each indicator means that countries that prioritize certain targets over others are being disadvantaged in methods that do not apply a weight to each indicator, thus Miola (2019) puts forward the importance of developing indexes with countries that give priorities to certain indicators alone. In short, there is a strong need to agree upon a measurement framework for quantifiable SDGs targets, as right now the relative position of each country depends a lot on the methods and indicators that are being employed for the measurement. Indeed, disconnected or unreliable indicators are found in order to foster a discussion on relevant indicators (Paoli and Addeo, 2019).

Instead, Lafortune (2020) analyzes the differences among results from different sources: SDSN (Sustainable Development Solution Network), OECD, Eurostat and ASVIS (Alleanza Italiana per lo Sviluppo Sostenibile) which are the most ambitious in monitoring country progress on the SDGs and points out that in some cases results directly contradict each other, as well as not estimating whether the progress over time is enough to reach the targets by 2030. The differences are due to whether the organizations employ indicators for measuring international spillovers, the use of unofficial data to cover data gaps, and the employment of a static or dynamic assessment of the gap between the progress and the achievement of targets. For this reason, Lafortune (2020) suggests that both a static and dynamic assessment of the SDG progress would be necessary to understand the distance from the 2030 target and the gap in progress among countries: however, only the SDSN (SDG Index) provides a dynamic assessment. Also, out of four indexes, only one takes into account negative externalities or spillovers among countries, which may prevent one country to meet the SDGs due to another country's actions: Lafortune (2020) argues that only the SDSN report on the SDGs takes into account international spillovers, namely indicators about imported CO2 and SO2 (sulfur dioxide) emissions, but also related to tax havens and profit shifting. And finally, a focus on outcomes is needed, rather than simply track progress. In short, the SDSN (SDG Index) method is the best among the four analyzed and its methodology should be applied by the other three as well, and the employment of Policy Trackers is needed to understand which are the countries that are on track for achieving the SDGs (FELD Action tracker).

Horan (2019) suggests, instead, an assessment tool that takes into consideration also interrelations among targets in order to develop integrated policies, the so-called I-SDG Index. In his findings, Horan focuses in particular on SDG 14 (Life Below Water) to show the interlinkages with other SDGs targets: he does so my fragmenting the process into four steps. First off, defining the SDG targets of interest, then choosing a study area (in this case, a sample of UN Small Island Developing States), identifying the main within-country interrelation among SDGs (in a two-way, namely both the potential influence of SDG 14 on other SDGs and vice versa), and finally selecting official SDG indicators as well as SDSN's global indicators relevant to be focal targets.

In short, scholars generally agree upon the fact that major data gaps remain, more relevant and quantifiable unofficial indicators are needed, and there is a need to take into account both country priorities and interlinkages among SGDs. Indeed, a country's progress may vary according to the methods employed, while data across countries have not been harmonized yet.

1.7 SDGs and the private sector

"I am counting on the private sector to drive success. Now is the time to mobilize the global business community as never before. The case is clear. Realizing the

Sustainable Development Goals will improve the environment for doing business and building markets. Trillions of dollars in public and private funds are to be redirected towards the SDGs, creating huge opportunities for responsible companies to deliver solutions." Ban-Ki Moon, former Secretary General of the United Nations (2007: 16)

Businesses are considered a "key transformative force with its innovation power" (Muff et al., 2015: 1). Indeed, governments are not the only bodies called out to promote the achievement of the SDGs: another challenge to be addressed when it comes to SDGs is the impact that businesses can make through corporate involvement: the bottom-up approach adopted in the development process of the SDGs promoted the involvement of many stakeholders (Biermann et al., 2017). The private sector can deliver great achievements due to its ability to innovate, scale and invest (Van Tulder, 2018). Pedersen (2018) holds that the private sector positively reacted to the introduction of the SDGs, since the latter provided for a long-term policy framework that gives directions to businesses on how to guide their investments in the upcoming years. Van Zanten and Van Tulder (2018) point out that in 2015, 71 percent of businesses had already announced that they would engage with the SDGs. As SDGs represent a new toolbox both for guidance regarding investments and for changes of business models into more sustainable ones, Pederson (2018) points out that uncovering the potential of the SDGs, also through Public-Private Partnerships (PPPs), would yield $12 trillion per year in terms of market opportunities, as well as creating over 300 million new jobs by 2030; this finding indicates how the risk connected to investing in SDGs may also result in a huge potential market if the SDGs targets are met (Van Tulder, 2018).

1.7.1 Getting the picture: global initiatives

UN Global Compact: it is a voluntary initiative based on the commitments of CEOs to engage in universal sustainability principles to support the SDGs; it also has the support of the UN General Assembly, as well as being recognized by other inter-governmental contexts.[2] It encourages companies from all over the world to promote an economic, social, and environmental model for a healthier and more sustainable global economy. Therefore, it asks affiliated companies to share and implement principles regarding human rights, labor standards, environmental protection, and anti-corruption.

Global Reporting Initiative (GRI): created in Boston in 1997, GRI is a not-for-profit organization that has been designed to support sustainability reporting across businesses: it can be defined as the tool that provides companies with a common language to understand and disclose their impacts. GRI is the first global framework for sustainability reporting and its guidelines have been expanded and improved over the years.[3]

SDG Compass: developed in a joint effort by the GRI, the UN Global Compact and the World Business Council for Sustainable Development (WBCSD) and presented at the Private Sector Forum, it is a tool designed to support businesses in engaging with the SDGs. It provides generic steps to align the business strategy with the Goals, as well as monitoring and gauging their impact. [4]

1.7.2 Why engaging with the SDGs?

Companies are relevant in contributing to the challenge of implementing the SDGs for a variety of reasons (Van Tulder, 2018): first off, they can take risks and invest in innovation and technology. This means that they can mobilize significant financial resources, creating new jobs, products, and services. In turn, this process stimulates

[2] https://www.unglobalcompact.org/about/government-recognition
[3] https://www.globalreporting.org/about-gri/mission-history/
[4] https://sdgcompass.org

competition, leading to cheaper solutions for consumers: it means that companies have the potential to deliver an added value to the whole society. Due to their huge potential, businesses can also become a great obstacle if not involved in the transformation process.

Schramade (2017) finds at least two reasons for companies to invest in SDGs:

(1) Returns to society

(2) Returns to shareholders

First, by making an effort for SDGs companies can contribute to the wellbeing of the whole society. Second, SDGs can create financial value for shareholders: indeed, those companies that choose to engage with the 2030 Agenda tend to acquire a long-term view and, therefore, be more adaptive to future changes in the competitive environment. In short, adaptive companies tend to be more responsive to changes in the business environment and modify their business model accordingly (Schramade, 2017). Also, he questions what opportunities can be found in engaging with SDGs for businesses and claims that SDGs have a great potential to communicate with stakeholders. He considers the SDGs from two perspectives: an investor perspective, and a consumer perspective, and calls for the need for public companies (those that are starting to communicate their SDGs progress) to develop KPIs to measure their performance and report on their progress.

Van der Waal and Thijssens (2020) have developed a model employing a two-step approach to understand why companies engage with the SDGs, or better what are the factors and characteristics that influence their engagement with the SDGs.

The result of the qualitative analysis uncovers two main tendencies:

(1) Companies that hold that enterprises are needed to achieve the SDGs

(2) Companies that employ the SDGs as a model for aligning their activities with current trends related to sustainability and better address risks for their business.

In particular, the possible independent variables taken into consideration have been the company size, specific report characteristics, industry and country, and whether the company is a member of the UN Global Compact. Results show that only 23 percent of companies comprised in the sample mention the SDGs in their reports; moreover, companies in Korea-Taiwan-Japan (KTJ) show the highest involvement in SDGs, followed by Continental Europe, Latin America and the Middle East, while the United States and BRICS companies (Brazil-Russia-India-China-South Africa) present the lowest score in terms of engagement with sustainability and the SDGs. Although European companies show the highest number of mentions of the SDGs in their reports, they are divided into enterprises simply mentioning them and others extensively discussing them. Finally, SDGs involvement is strongly associated with Global Compact membership; the majority of companies analyzed employ the GRI standards for their sustainability reports, and countries in Continental Europe display the greatest attention to SDGs issues. Van der Waal and Thijssens (2020) also point out that there are two main reasons that companies highlight for their involvement in the SDGs: some of them look at the SDGs as a way to meet the current global challenges and address megatrends with their business strategy, whereas others claim to share the philosophy of the United Nations to engage in constructing a better world.

1.7.3 How to engage with the SDGs?

Agarwal et al. (2017) argue that most probably no single and universal business case is “right” for businesses to engage with the SDGs: they identify three approaches to dig more in-depth into business involvement in the 2030 Agenda: first, there is a need to increase ambitions about the importance that the private sector can make in achieving the SDGs; second, it should be highlighted that collective rules and expectations are the mechanism behind businesses' calculations of costs and benefits, and therefore the civil society, investors and governments should work on a greater degree of alignment between business strategy and sustainable development; third, a greater relevance in terms of business case calculations should be given to marginalized stakeholders that are influenced by companies' behavior, such as people living in poverty in developing countries.

Van Tulder (2018) describes a four-step framework that describes the degree of SDGs involvement when it comes to corporations, mainly regarding the long-term view that the latter should adopt to progress on the SDGs, as well as the internal changes that an organization needs, and the external network of partnerships that may help in the process. The framework identifies possible levels of intervention:

(1) Addressing market failures

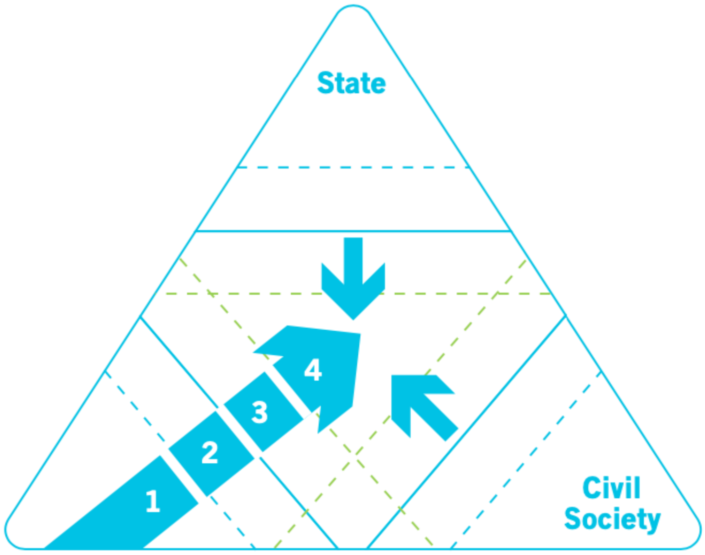
(2) Limiting negative externalities

(3) Creating positive externalities

(4) Stimulating collective action

The levels are summarized in the societal triangulation adopted by Van Tulder (2018), which displays the three groups of societal stakeholders involved in addressing the challenges posed by the SDGs, and how each of them can and will take responsibility and adopt solutions.

Figure 13: ***Four Levels of corporate engagement in the SDGs.***



Source: Van Tulder (2018): 76

In the first case scenario (1), a corporation tackles the market failure produced by its unsustainable practices directly in the market: the latter can be due to a lack of long-term vision regarding sustainable investment and orientation to profit maximization that does not take into account the cost-saving potential in the long term (ibidem: 76).

In the second level (2), companies understand the potential damage deriving from negative externalities and try to limit them: indeed, as they would yield a significant loss in terms of corporate reputation, negative externalities also have the potential to squeeze profit margins (ibidem: 77).

The third level (3) concerns the decisions of companies to engage with the SDGs following a strategic logic. In this perspective, engagement in sustainability is embedded in the long-term competitive strategy and survival of the enterprise, which in turn creates positive externalities as well (ibidem: 77).

The fourth (4) and last level is the business case that refers to a proactive approach by the company, that gets involved in the SDGs challenge to fix the problems of the whole system: in that event, the enterprise aims at becoming the pioneer of a disruptive and radical transformation (ibid: 78).

Instead, Muff et al. (2017) suggest three degrees of Business Sustainability:

(1) An inside-out approach, where companies are only profit-oriented and see sustainability as an opportunity to improve their margins.

(2) A triple-bottom-line approach, still inside-out, that is concerned with calculating the value creation not only for shareholders but for a larger pool of stakeholder; also, the environmental and social value creation are taken into account, rather than focusing only on the economic performance of the company.

(3) An outside-in approach, where the company starts from the most critical sustainability issues and addresses them through its resources and competencies in a problem-solving perspective.

Where approach (3) would be the one delivering the most long-term sustainability for the common good as well as opportunities for the business.

Also, Muff et al. (2017) suggest an outside-in approach that businesses may be adopted by looking at the Gap Frame, namely a model that can be employed for businesses to understand the sustainability issues in the country they operate, to address the most critical ones. The Gap Frame translates the SDGs into steps by finding four sustainability dimensions, namely planet, society, economy, and governance: these are then translated into 24 issues and 68 indicators that are compiled for 197 countries, which permit to set a standard for ideal and worst values to use as a parameter. According to each score, issues can be classified into being either a threat (for scores below 5), critical (between 5 and 6), watchlist (roughly between 6 and

7), safe space (7 to 9) and towards ideal (above 9). Thus, businesses can define their priorities by looking at the Gap Frame[5] .

Figure 14: ***The Gap Frame: translating the 17 SDGs into 24 issues relevant to all nations and to business.***

Source: Muff et al. (2017): 372

1.7.4 MNEs and SDGs

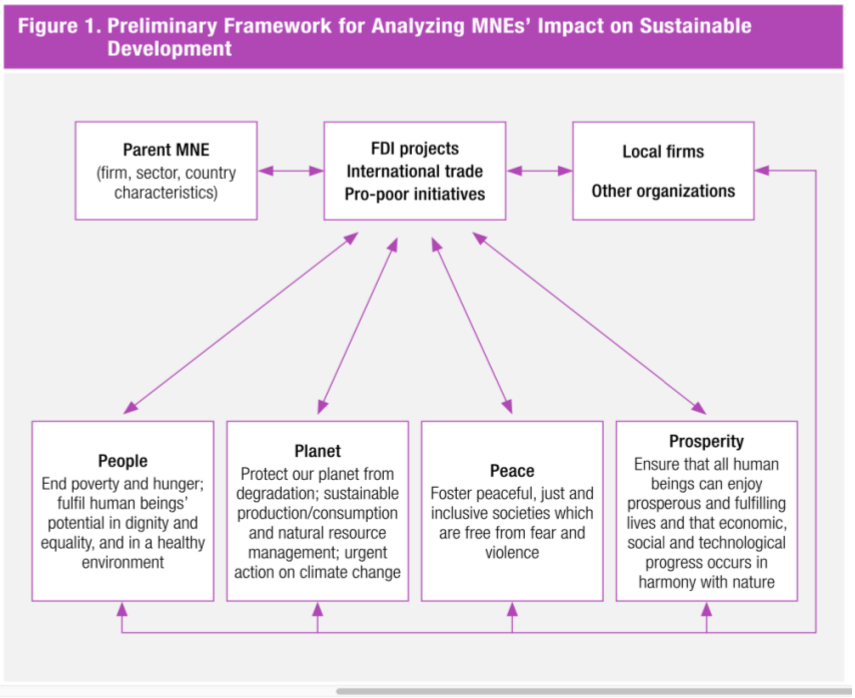
Although the relationship between the SDGs and Multinational Enterprises (MNEs) has still not been studied in-depth, scholars (e.g., Kolk et al., 2017) hold that MNEs have an important role to play in the implementation of the 2030 Agenda. Van Zanten and Van Tulder (2018) argue that many companies have adopted reactive strategies to the SDGs after their introduction, although also rising criticism for "SDG washing", namely displaying their effort towards the SDGs but covering up their malpractices or limited engagement.

Kolk et.al (2017) research on five SDGs to understand more in-depth the involvement of MNEs: these Goals are chosen among those most relevant to the 5Ps of Agenda 2030, namely People and Prosperity

[5] gapframe.org

(SDGs 1 and 10), Planet (SDG 7 and 13), Peace (SDG 16) and Partnership (SDG 17).

Figure 15: ***Preliminary framework for analyzing MNEs' impact on sustainable development.***



Source: Kolk et al. (2017): 11

As Fig. 15 suggests, Kolk et al. (2017) have chosen key goals starting from the 5Ps, and their results highlight that the themes on which MNEs can impact are the following:

(1) Poverty and inequality

(2) Energy and climate change

(3) Peace

(4) Partnership

First, MNEs can impact Poverty and inequality (1) regarding trade and inequality, operating in developing countries, business at the base of the pyramid (BOP) and microfinance. More in-depth, Kolk et al. (2017) argue that MNEs may have both a positive and negative impact in developing countries: on the one hand, they may bring jobs and

develop basic infrastructure, while on the other hand, they can steal talents from local companies.
Second, MNEs have the opportunity to develop "green firms" with specific advantages and link them to profit and growth as well as environmental concern is becoming a topic of utmost importance in the last decades.
Regarding Peace (3), there may be a relation between business and conflict, MNEs' responses to conflict, their employees' reaction, and terrorism. In particular, trade and conflict show an inverse relation, as it strongly limits the ability of a company to attract investment and make a profit.
Lastly (4), Partnership is deemed important bot at a national and international level, also regarding non-market actors such as universities and research institutes to boost innovation. However, being partnerships a recent phenomenon, partnering literature is still to be developed (Van Tulder and Van Zanten, 2018); also, partnering has been criticized for its composition (not properly addressing manifold problems, over-ambitious or too little ambitious, superficial claims), though responses to these critiques argue that partnerships cannot be regarded as the decisive solution to development problems and success is not assured even with collaboration (ibidem: 29).

Moreover, Van Zanten and Van Tulder (2018) suggest which are the traits of SDGs and MNEs that are more likely to lead to MNEs engagement in sustainable practices: they do so by surveying 81 MNEs from North America and Europe listed in the 2015 FT Global 500. Starting from the characteristics of an SDG that are relevant for MNEs engagement, they find the following two:

(1) The actionability of an SDG target
(2) The ethical responsibility carried by the SDG target

Actionability (1) refers to the extent to which a company can impact on a certain target: impact can be made either internally, thus referring to activities that can be implemented or changed inside the company's value chain, or externally, namely those contributions that a company can achieve only by working partnering up with competitors, institutions and the civil society (ibid: 11). In general, Van Tulder and Van Zanten (2018) point out that MNEs are more likely to engage in internally actionable SDG targets that regard their operations; however, externally actionable SDGs are mainly being addressed through partnerships to provide more effective solutions.

Ethical responsibility (2) is two-sided: it may be referred to in negative terms, involving the avoidance of doing harm, or in positive terms, thus meaning the intention to do good. The authors argue that companies are more likely to get involved with SDGs targets that avoid harm rather than doing good.

Instead, two MNEs-side traits that influence their involvement are:

(a) The context in which they are established (home-country and host-country)

(b) The industry in which they compete

On the one hand (a), Van Tulder et al. (2018) hold that internationalized companies are more likely to engage with the SDGs: this is due to the higher degree of different regulations that they must cope with, and the larger pool of diverse stakeholder's pressure.

On the other hand (b), the industry in which companies operate influences their SDGs performance due to the fact that enterprises operating in sectors associated with negative externalities will probably try to avoid harm. Companies involved in the tobacco or chemicals industry will be subject to several institutional regulations, as well as being constantly scrutinized by civil society (ibidem: 15).

Van der Waal (2020) develops a model to look more in-depth at MNEs' involvement in the SDGs, looking in particular at sustainability-oriented innovation, which is a field of study that includes both the social dimension and eco-innovation. His study comprises 1178 MNEs included in the Forbes Global 2000 list: more in-depth, the extent to which the MNEs choose to develop SDG relevant innovation in terms of the content analysis of patents is analyzed. the patents taken into account are divided into "green" patents and "blue" patents from the European Patent Database: the former is those related to climate change and other environmental challenges, while the latter deal with unmet sustainable development needs. These can be either engaged with an improvement in health and wellbeing, education, poverty. The study shows that SDG-relevant patents are a relatively small number compared to the total (12.2 percent). Moreover, green patents roughly account for 5 percent, while green patents around 4 percent. Also, van der Waal (2020) finds out that the companies of the East-Asian JKT group are more active in terms of SOI than their American and European counterparts, though the model is not able to explain the reason; the adoption of patents varies across industries, where the energy sector is the most relevant about the number of green patents owned, followed by the automotive sector and Commercial and Professional Services, while the Pharmaceutical industry shows the highest mean of blue patents. Finally, the independent variable for such engagement is studied, but none of the variables identified as independent seem to provide a model based on the goodness-of-fit: namely, SDG related innovation is not associated with sustainability reporting (Model 1), with Global Compact Membership (Model 2), with the DJSI ranking (Dow Jones Sustainability Index, Model 3). The only association of both green and blue SDG-relevant patents seems to be external assurance, though the reason is not clearly explained.

It is also important to point out that MNEs have carried out normative institutional initiatives to get involved with the SDGs, that Van Zanten and Van Tulder (2018) have divided into:

(a) Principle-based initiatives: among those, the OECD Guidelines for Multinational Enterprises that engage companies in adopting specific norms in their operations, as well as the UN Global Compact.

(b) Certification initiatives: these are associated with specific goods, to tackle development issues.

(c) Reporting initiatives that support companies in disclosing their sustainability information, such as the GRI.

(d) Process-based initiatives: these include procedures for improving corporate responsibility management. For instance, AccountAbility standards, a global consulting firm that works to advance responsible business practices.

In short, as they have also been part of the formulation of the SDGs themselves (Van Zanten and Van Tulder, 2018), MNEs can surely have a strong impact on sustainable development and SDGs, both in terms of negative externalities associated with the environmental and social dimensions, and as problem-solver and innovators (Kolk et al., 2017).

1.8 Conclusion

This literature review led to the following answers for the research questions introduced at the beginning of the chapter:

RQ1: What are the SDGs and how have they been developed?

The SDGs are seventeen Goals created in 2014, set to be reached by 2030. They have been developed during a multistakeholder consultation in Rio de Janeiro in 2014 and comprise 169 targets and 231 indicators. SDGs tackle multiple issues and can be seen as a common ground for defining sustainability: indeed, they aim is at tackling a wide set of issues, which covers the importance of eradicating poverty, promoting growth and ensuring the preservation of natural resources (Hajer et al., 2015). Five dimensions can be identified when it comes to

SDGs: People, Planet, Prosperity, Peace and Partnership (UN, 2015). More in-depth, Waage et al. (2015) have tried to classify the SDGs according to four layers: Wellbeing encompasses those goals that are aimed at improving the wellness of people around the globe (SDG 1, SDG 3, SDG 4, SDG 5, SDG 10, SDG 16); Infrastructure concerns Goals that deal with the improvement of human settlement and food security (SDG 2, SDG 6, SDG 7, SDG 8, SDG 9, SDG 11, SDG 12); Natural Environment deals with SDG 13, SDG 14 and SDG 15, which aim at the conservation of marine and terrestrial ecosystems and biodiversity; finally, One health refers to SDG 17, intending to foster partnerships to promote the SDGs.

Therefore, it can be said that SDGs have made a step forward compared to the MDGs, as an overarching framework to promote more sustainable development across the globe (Weitz et al., 2014). More in-depth, the SDGs have involved and catalyzed the attention of multiple stakeholders, from the government to the private sector, as well as the civil society: unlike the MDGs, the SDGs are not addressed only to developing countries, but to developed countries, too, and this fosters a greater engagement (Van Zanten and Van Tulder, 2018).

RQ2: To what extent are SDGs intertwined and why is it important?

SDGs are closely linked (Waage et al., 2015; Le Blanc, 2015; Weitz et al., 2014), and these linkages can be classified as synergies or as trade-offs (Griggs et al., 2014; Nilsson et al., 2016; Pradhan et al.,, 2017). As to uncover the potential of the SDGs, the understanding of their synergies and trade-offs is of utmost importance (Kroll et al., 2019): indeed, policymakers should adopt an integrated approach in order to assess which policy implementation would best advance the overall SDGs progress (Niestroy, 2016). This is due to the fact that some of the targets positively interact with each other, such as SDG 1 (No Poverty) and SDG

4 (Quality Education), meaning that progress in one of the two positively affects progress towards the other; whereas some Goals show trade-offs, and this is the case for SDG 7 (Clean energy) and SDG 13 (Climate Action), which are likely to obstacle each other. Thus far, no comprehensive solution in literature has been highlighted, though models have been developed to, at least, make it possible for policymakers to maximize synergies and minimize trade-offs.

RQ3: In what way are SDGs evolving in the private sector?

The role of the private sector in contributing to the SDGs is manifold: in particular, the literature stresses the fact that the innovative transformation power of companies is necessary to attain a real change towards sustainability (Muff et al., 2015; Van Tulder, 2018). On the one hand, companies have immediately responded positively to the SDGs, engaging in initiatives that foster partnerships to reduce their environmental and social impact (Biermann et al., 2017; Pederson, 2018). On the other hand, however, companies are more likely to engage in practices aimed at avoiding harm rather than proactively doing good (Van Tulder, 2018). Specifically, a relevant role is said to be played by MNEs (Kolk et al. 2015): indeed, MNEs operation have the potential to negatively impact the social and environmental dimension of sustainable development, thus their engagement with Agenda 2030 is crucial to attaining positive results.

So far, scholars have mainly focused on the importance for companies to engage with the SDGs, on the steps to be taken to get involved, and in general on the motivations behind their choice of getting involved. When it comes to the private sector, SDGs cross paths with other disciplines, in particular concerning the activities carried out by the private sector to contribute to the Goals. These aspects can be disclosed by companies through the so-called Non-Financial Reports, which communicate to the external audience how an organization is dealing with non-financial issues.

Table 1: ***Classification of the literature.***

YEAR	AUTHOR (S)	JOURNAL	TITLE	Interactions among SDGs	Policy recommendations	Corporate involvement	SDG assessment	Generic SDGs/MDGs
2013	Hulme, D.	*Southern Voice*	The Post-2015 development agenda: learning from the MDGs.	Absent	Absent	Absent	Absent	Core
2013	Fehling, M., Nelson, B. D., & Venkatapuram, S.	*Global public health*	Limitations of the Millennium Development Goals: a literature review.	Absent	Absent	Absent	Absent	Core
2014	McArthur, J.	*SAIS Review*	The origins of the Millennium Development Goals	Absent	Absent	Absent	Absent	Core
2014	Griggs, D et al	*Ecology and Society*	An integrated framework for sustainable development goals.	Core	Ancillary	Absent	Absent	Ancillary
2014	Weitz, N. Nilsson, M. Davis, M.	*SAIS Review of International Affairs*	A Nexus Approach to the Post- 2015 Agenda: Formulating Integrated Water, Energy, and Food SDGs	Core	Ancillary	Absent	Absent	Ancillary
2015	McCloskey, S	*Policy & Practice-A Development Education Review*	From MDGs to SDGs: We need a critical awakening to succeed	Absent	Absent	Absent	Absent	Core
2015	Waage, J. Et al	*The Lancet Global Health*	Governing the UN Sustainable Development Goals: interactions, infrastructures, and institutions	Core	Ancillary	Absent	Absent	Ancillary

YEAR	AUTHOR (S)	JOURNAL	TITLE	Interactions among SDGs	Policy recommendations	Corporate involvement	SDG assessment	Generic SDGs/MDGs
2015	Le Blanc, D.	*Sustainable Development*	Towards Integration at Last? The Sustainable Development Goals as a Network of Targets.	Core	Ancillary	Absent	Absent	Ancillary
2015	Hajer, M., Nilsson, M., Raworth, K., Bakker, et al.	*Sustainability*	Beyond cockpit-ism: four insights to enhance the transformative potential of the Sustainable Development Goals	Absent	Core	Ancillary	Absent	Ancillary
2015	Meuleman, L., & Niestroy, I.	*Sustainability*	Common but differentiated governance: A metagovernance approach to make the SDGs work	Absent	Core	Ancillary	Absent	Ancillary
2016	Nilsson, M.	*Expert meeting in preparation for HPLE 2017*	Readying institutions and policies for integrated approaches to the implementation of the Agenda 2030	Core	Core	Absent	Absent	Ancillary
2016	Hak, T., Janousková, S., Moldan, B.	*Ecological indicators*	Sustainable Development Goals: A Need for Relevant Indicators	Absent	Ancillary	Absent	Core	Ancillary
2016	Kim, R.	*Review of European Community and International Environmental Law.*	The Nexus between International Law and the Sustainable Development Goals	Core	Ancillary	Absent	Absent	Absent
2016	Niestroy, I.	*Discussion Paper.*	How are we getting ready? The 2030 Agenda for Sustainable Development in the EU and its Member States: analysis and action so far	Ancillary	Core	Absent	Absent	Ancillary
2016	Nilsson M, Griggs D, Visbeck	*Nature News*	Policy: map the interactions between sustainable development goals	Core	Ancillary	Absent	Absent	Absent

YEAR	AUTHOR (S)	JOURNAL	TITLE	Interactions among SDGs	Policy recommendations	Corporate involvement	SDG assessment	Generic SDGs/MDGs
2016	Sachs, J. D., Schmidt-Traub, G. et al.	*Sustainable Development Solutions Network*	Preliminary sustainable development goal (SDG) index and dashboard. Sustainable Development Solutions Network	Absent	Absent	Absent	Core	Absent
2016	Campagnolo, L., Carraro, C., Eboli, F., & Farnia, L. L.	//	Assessing SDGs: a new methodology to assess sustainability	Absent	Absent	Absent	Core	Absent
2017	Biermann, F. Kanie, N. Kim, R.E	*Current Opinion in Environmental Sustainability,*	Global governance by goal-setting: the novel approach of the UN Sustainable Development Goals	Ancillary	Core	Absent	Absent	Ancillary
2017	Collste, D. Pedercini, M. Cornell, S. E.	*Sustainability Science*	Policy coherence to achieve the SDGs: using integrated simulation models to assess effective policies	Ancillary	Core	Absent	Absent	Absent
2017	Kolk, A. Kourula, A. Pisani, N.	*Transnational Corporation*	Multinational enterprises and the Sustainable Development Goas: what do we need to know and how to proceed?	Absent	Absent	Core	Absent	Ancillary
2017	Agarwal, N., Gneiting, U., & Mhlanga, R.	//	Raising the bar: Rethinking the role of business in the Sustainable Development Goals	Absent	Ancillary	Core	Ancillary	Ancillary
2017	Lima, M. G. B., Kissinger, G., et al	*International Environmental Agreements: Politics, Law and Economics,*	The Sustainable Development Goals and REDD+: assessing institutional interactions and the pursuit of synergies	Ancillary	Core	Absent	Absent	Ancillary
2017	Pradhan, P., Costa, L., et al	*Earth's Future*	A Systematic Study of Sustainable Development Goal (SDG) Interactions.	Core	Ancillary	Absent	Ancillary	Absent

YEAR	AUTHOR (S)	JOURNAL	TITLE	Interactions among SDGs	Policy recommendations	Corporate involvement	SDG assessment	Generic SDGs/MDGs
2017	Stafford-Smith, Griggs, M. D. Gaffney, O. et al.	*Sustainability science*	Integration: the key to implementing the Sustainable Development Goals	Ancillary	Core	Absent	Ancillary	Ancillary
2017	Zhou X, Moinuddin M	*Institute for Global Environmental Strategies (IGES)*	Sustainable Development Goals Interlinkages and Network Analysis: A practical tool for SDG integration and policy coherence.	Ancillary	Core	Absent	Absent	Ancillary
2017	Schmidt-Traub, G., Kroll, C., Teksoz, et al.	*Nature geoscience*	National baselines for the Sustainable Development Goals assessed in the SDG Index and Dashboards.	Ancillary	Ancillary	Absent	Core	Ancillary
2017	Schramade, W.	*Journal of Applied Corporate Finance*	Investing in the UN sustainable development goals: opportunities for companies and investors	Absent	Absent	Core	Absent	Ancillary
2018	Weitz, N. Carlsen, H. Nilsson, M. Skanberg, K.	*Sustainability Science*	Towards systemic and contextual priority setting for implementing the 2030 Agenda	Ancillary	Core	Absent	Absent	Ancillary
2018	Van Tulder, R.	//	Business& The Sustainable Development Goals: A Framework for Effective Corporate Involvement	Absent	Ancillary	Core	Absent	Ancillary
2018	Stig Pedersen, C.	*Procedia Cirp*	The UN SDGs are a great gift to business!	Absent	Absent	Core	Absent	Ancillary
2018	Van Zanten, J. A. Van Tulder, R.	*Journal of international Business Policy*	Multinational enterprises and the Sustainable Development Goas: an institutional approach to corporate engagement	Absent	Ancillary	Core	Absent	Ancillary

YEAR	AUTHOR (S)	JOURNAL	TITLE	Interactions among SDGs	Policy recommendations	Corporate involvement	SDG assessment	Generic SDGs/MDGs
2018	Van Zanten, J. A. Van Tulder, R.	*Journal of international Business Policy*	Multinational enterprises and the Sustainable Development Goas: an institutional approach to corporate engagement	Absent	Ancillary	Core	Absent	Ancillary
2018	Liu J, Hull V, Godfray HCJ, et al	*Nature Sustainability*	Nexus approaches to global sustainable development.	Core	Ancillary	Absent	Absent	Absent
2018	McCollum DL, Echeverri LG, Busch S, et al	*Environmental Research Letters*	Connecting the sustainable development goals by their energy inter-linkages	Core	Ancillary	Absent	Absent	Ancillary
2018	Nerini, F. F., Tomei, J., To, L. S., Bisaga et al.	*Nature Energy*	Mapping synergies and trade-offs between energy and the Sustainable Development Goals.	Core	Ancillary	Absent	Absent	Ancillary
2018	Nilsson, M., Chisholm, E., Griggs, D. et al.	*Sustainability Science*	Mapping interactions between the sustainable development goals: lessons learned and ways forward	Core	Ancillary	Absent	Absent	Ancillary
2018	Patole, M.	*Economies*	Localization of SDGs through disaggregation of KPIs	Ancillary	Ancillary	Absent	Core	Ancillary
2018	Pederson, C. S.	*25th CIRP Life Cycle Engineering (LCE) Conference*	The UN Sustainable Development Goals (SDGs) are a great gift to business!,	Absent	Absent	Core	Absent	Ancillary
2018	Singh, G. G., Cisneros-Montemayor, A. M. et al.	*Marine Policy*	A rapid assessment of co-benefits and trade-offs among Sustainable Development Goals	Ancillary	Core	Absent	Absent	Ancillary

YEAR	AUTHOR (S)	JOURNAL	TITLE	Interactions among SDGs	Policy recommendations	Corporate involvement	SDG assessment	Generic SDGs/MDGs
2018	Guijarro, F., & Poyatos, J. A	*Sustainability*	Designing a sustainable development goal index through a goal programming model: The Case of EU-28 Countries	Ancillary	Absent	Absent	Core	Absent
2018	Lafortune, G., Fuller, G., Moreno, J. Et al.	//	SDG index and dashboards detailed methodological paper	Absent	Ancillary	Absent	Core	Absent
2019	Kroll, C., Warchold, A. & Pradhan, P	*Palgrave Communications*	Sustainable Development Goals (SDGs): Are we successful in turning trade-offs into synergies?.	Core	Ancillary	Absent	Absent	Ancillary
2019	Breuer, A. Janetschek, H. Malerba, D.	*Sustainability*	Translating Sustainable Development Goal (SDG) Interdependencies into Policy Advice	Ancillary	Core	Absent	Absent	Ancillary
2019	Muff, K Kapalka, A. Dyllick, T.	*The International Journal of Management Education*	The Gap Frame - Translating the SDGs into relevant national grand challenges for strategic business opportunities	Absent	Ancillary	Core	Ancillary	Absent
2019	Cerf, M. E.,	*Global Challenges*	Sustainable Development Goal Integration, Interdependence, and Implementation: the Environment–Economic–Health Nexus and Universal Health Coverage.	Ancillary	Core	Absent	Absent	Absent
2019	Ghosh, S. Rajan, J.	*Journal of Sustainable Development & World Ecology*	The business case for SDGs: an analysis of inclusive business models in emerging economies	Absent	Absent	Core	Absent	Ancillary
2019	Lusseau, D. & Mancini, F..	*Nature Sustainability*	Income-based variation in Sustainable Development Goal interaction networks	Core	Ancillary	Absent	Absent	Ancillary

YEAR	AUTHOR (S)	JOURNAL	TITLE	Interactions among SDGs	Policy recommendations	Corporate involvement	SDG assessment	Generic SDGs/MDGs
2019	Bull, B., & Miklian, J.	*Business and Politics*	Towards global business engagement with development goals? Multilateral institutions and the SDGs in a changing global capitalism	Absent	Ancillary	Core	Absent	Absent
2019	Miola, A., & Schiltz, F.	*Ecological economics*	Measuring sustainable development goals performance: How to monitor policy action in the 2030 Agenda implementation?	Absent	Ancillary	Absent	Core	Absent
2020	Bennich, T., Weitz, N., & Carlsen, H.	*The Science of the total environment*	Deciphering the scientific literature on SDG interactions: A review and reading guide.	Core	Ancillary	Absent	Absent	Ancillary
2020	van der Waal, J. W. H. and Thijssens, T.	*Journal of Cleaner Production*	Corporate Involvement in the Sustainable Development Goals: exploring the territory	Absent	Absent	Core	Absent	Ancillary
2020	Pham-Truffert, M, Metz, F, et al	*Sustainable Development*	Interactions among Sustainable Development Goals: Knowledge for identifying multipliers and virtuous cycles	Core	Ancillary	Absent	Absent	Absent
2020	Sanderink, L., & Nasiritousi, N.	*Energy Policy*	How institutional interactions can strengthen effectiveness: The case of multi-stakeholder partnerships for renewable energy	Absent	Core	Absent	Absent	Ancillary
2020	Scharlemann JPW, Brock RC, Balfour N, et al	*Sustainability Science*	Towards understanding interactions between Sustainable Development Goals: the role of environment–human linkages	Core	Ancillary	Absent	Absent	Ancillary
2020	van Zanten, J. A. & van Tulder, R.	*International Journal of Sustainable Development & World Ecology,*	Towards nexus-based governance: defining interactions between economic activities and Sustainable Development Goals (SDGs),	Core	Ancillary	Ancillary	Absent	Ancillary

YEAR	AUTHOR (S)	JOURNAL	TITLE	Interactions among SDGs	Policy recommendations	Corporate involvement	SDG assessment	Generic SDGs/MDGs
2020	Horan, D	*Sustainability*	National Baselines for integrated implementation of an environmental Sustainable Development Goal assessed in a new integrated SDG index	Ancillary	Ancillary	Absent	Core	Absent
2020	Puertas, J., & Bermúdez, M.	*Sustainability*	Development of a Global SDG Progress Index Aimed at "Leaving No One Behind	Absent	Ancillary	Absent	Core	Ancillary
2020	van der Waal, J. W., Thijssens, T., & Maas, K.	*Journal of Cleaner Production*	The innovative contribution of multinational enterprises to the Sustainable Development Goals	Absent	Absent	Core	Absent	Ancillary
2020	Lafortune, G., Fuller, G., Schmidt-Traub, et al	*Sustainability*	How Is Progress towards the Sustainable Development Goals Measured? Comparing Four Approaches for the EU.	Absent	Ancillary	Absent	Core	Ancillary

CHAPTER 2. SUSTAINABILITY, NON-FINANCIAL REPORTING AND THE LUXURY INDUSTRY

The current investor landscape has significantly changed with respect to the past: the focus of the typical investor, interested only in the financial returns of a company, has progressively shifted to an increasing concern about the social and environmental impact of companies (Abeysekera, 2012). Not only investors but also societies and governments are more and more concerned with the accountability and transparency of companies' activities: due to the growing interest in sustainability from stakeholders and the general public, over the last decade corporations have re-thought both their use of resources, as well as how to communicate their non-financial information, especially regarding sustainability.

Due to their footprint in many countries around the world, MNEs have particularly been in the spotlight with respect to sustainability (Sethi et al., 2015). Among other industries, the luxury industry in particular has been subject to attentive scrutiny by stakeholders (Kapferer, 2010), due to its visibility and potential influence on lifestyles and sectors. Indeed, the concept of luxury is about rarity, aesthetics, and privilege: luxury is discriminatory *per se*, as its objective in open and democratic societies is social stratification (Kapferer and Michaut, 2015). Meanwhile, sustainability yields five components: fairness, prudence, security, connectivity, and inclusiveness (Gladwin et al., 1995). However, the luxury industry has started to be engaged with sustainability far earlier than what stakeholders may believe. Nevertheless, they would not disclose such information in an attempt to avoid criticism and keep their status of excellence (Kapferer, 2010), until fully realizing the importance of sustainability disclosure for stakeholders. Intending to unravel the impact of SDGs on non-financial reporting of companies, this chapter starts with a focus on voluntary disclosure, by exploring the means that enable enterprises to communicate non-financial information. More in-depth, the first paragraph analyses the evolution of non-financial information and corporate sustainability; it also focuses on the passage from voluntary NFR to mandatory NFR in Europe, through the EU Directive 2014/95/EU. The second paragraph points out the different types of NFR: in particular, the discussion is focused on the importance of harmonizing the structure and standards employed in NFR, together with the need of providing external verification for the reliability of information disclosed. Instead, the third paragraph analyses the academic literature with respect to SDG reporting, as well as the different guidelines that have been developed over the years to provide a correct SDG disclosure. The fourth paragraph is about the realm of luxury, explaining the definition and history of the term: the specificities of the luxury industry are explained, together with the current situation of the latter. Then, the discussion shifts to possible links between luxury and sustainability, since the two realms are often seen as being at odds. Finally, the literature gap and research questions are identified.

2.1 Disclosing non-financial information: the evolution of non-financial reporting

Corporate disclosure is the process of "communicating economic information, whether financial and nonfinancial, quantitative or otherwise concerning a company's financial position and performance" (Owusu-Ansah, 1998: 608). Hence, it is a means through which an organization can communicate with stakeholders, in order to reduce information asymmetry (Demartini and Trucco, 2017), as well as decreasing the cost of capital by improving investors' confidence (ibidem: 10). Disclosed information can be analyzed according to three levels: mandatory or voluntary, financial and non-financial, historical or forward-looking, though they are not mutually exclusive and the boundaries among these levels are not clearly defined (Trucco, 2015). In particular, mandatory disclosure is carried out in order to comply with laws and regulations and is externally audited (ibidem: 16), whereas voluntary disclosure can be defined as "disclosure in excess of requirements" (Meek, 1995: 555). As pressure groups with the intent of increasing environmental consciousness and company impacts grew during the 1970s, companies had to come to terms with the increasing importance of their relationship with society (Berinde and Andreescu, 2015). Thus, companies started to engage with corporate social reporting, namely a type of non-financial voluntary disclosure in "an attempt to provide additional accounts which will capture some of the externalities and, by doing so, to encourage behavior which will ameliorate the consequences of western economic life" (Gray et al., 1996: 2).

2.1.1 Non-financial disclosure

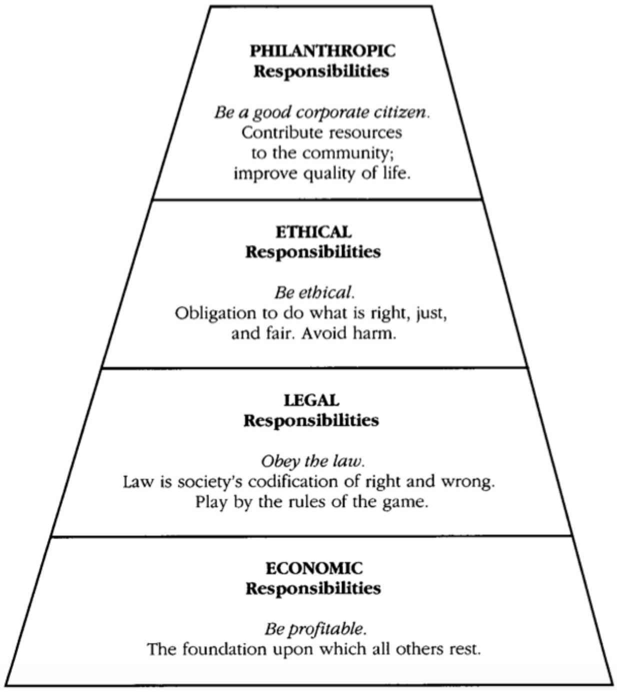
Non-financial reporting (NFR, also addressed as sustainability reporting, or Environment, Social and Governance reporting) offers "a window on the character and competency of the reporting company", which financial reporting alone fails to deliver (White, 2005: 5). There has been a growing interest in corporate disclosure of non-financial information (NFI) in the past two decades (Haller et al., 2017), which boosted academic research on NFI by the late 1990s/early 2000s (Erkens, 2015). On top of that, the definition of NFI is still somewhat blurred: Tab. 2.1 summarizes a few definitions given by scholars.

Table 1: ***Definitions of non-financial information.***

AUTHOR	DEFINITION
Meek et al., 1995: 557	"Nonfinancial information is directed more towards a company's social accountability and is aimed at a broader group of stakeholders than the owners/ investors"
Robb et al., 2001: 72	"Nonfinancial disclosure refers to qualitative information included in company annual reports, but outside of the four financial statements and related footnotes"
Barker and Imam, 2008: 313	"Information drawn from outside the financial statements"
Flostrand and Strom, 2006: 581	"Additionally, information may be considered non-financial even though they are dollar denominated, if that information is not included in any of the four financial statements"
Eccles and Krzus, 2010: 83-84	"a broad term that applies to all information reported to shareholders and other stakeholders that is not defined by an accounting standard or a calculation of a measure based on an accounting standard."
Cinquini et al., 2012: 560	"Facts and claims presented in non-monetary number/ form (e.g., time, quality, per cent, quantity)"
Erkens et al., 2015: 25	"Disclosure provided to outsiders of the organization on dimensions of performance other than the traditional assessment of financial performance from the shareholders and debt-holders' viewpoint.

What can be drawn from Table 2.1 is that NFI refers mainly to qualitative information, which can be expressed either in terms of money or not, but the bottom line is that it is reported to the public (not only to the owners or shareholders) outside of the mandatory financial statements of the company. Furthermore, NFI is mainly addressed with regard to Corporate Social Responsibility (CSR) (Stolowy and Paugam, 2018), namely the idea "whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (European Commission, 2001: 1). CSR has been an issue since the early 1950s (Christofi and Christofi, 2012), when Bowen (1953) elaborated the first definition of it: "the obligation of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (Bowen, 1953: 6). Later on, between the 1960s and 1990s, there was a proliferation of theories about CSR (Christofi and Christofi, 2012) which led to Carroll's four-tier model (1991):

Figure 16: Carroll's CSR pyramid.



Source: Carroll (1991): 42.

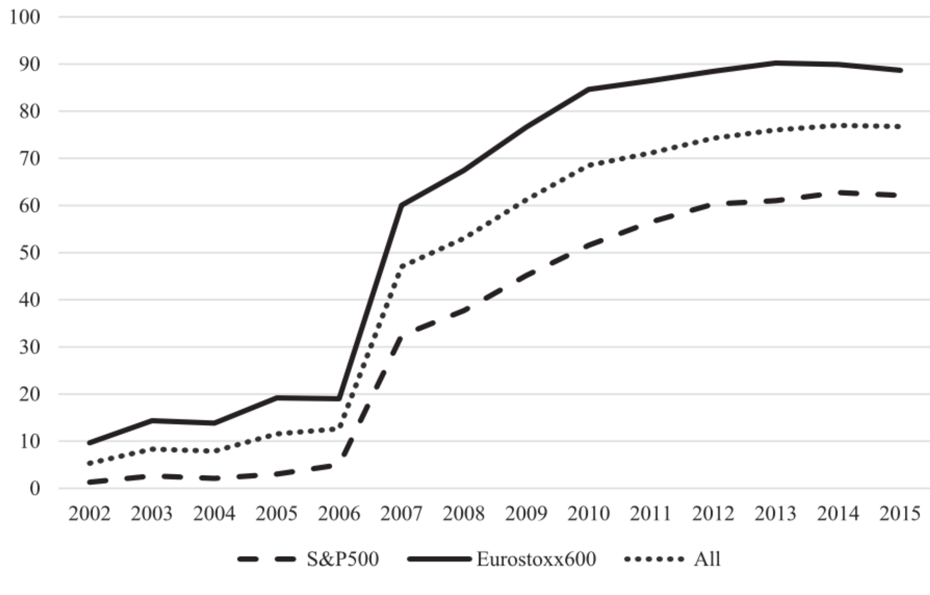
In other words, at the core of CSR is the concept that the actions of corporations should imply policies concerning the business responsibility for a broader societal good, which are then clearly communicated to stakeholders, although the form of communication is up to the single enterprise (Matten and Moon, 2008); CSR, thus, adds the dimension of social and environmental sustainability to business success, which is substantially different from core profit-making and the social responsibilities of government (Friedman, 1970). This concept is closely linked to sustainability, which has been defined by the Sustainability Accounting Standards Board (2013: 7) as:

"environmental, social and governance (ESG) dimensions of a company's operation and performance. More specifically, sustainability includes both the management of a corporation's environmental and social impacts, as well as the management of environmental and social capitals necessary to create long-term value. It also includes the impact of environmental and social factors on innovation, business models, and corporate governance"

Recently, the boundaries of the two terms have become even more blurred and sometimes used interchangeably (Gupta and Chopra, 2018). In any event, as Levy et al. (2009) argue, CSR is still a contested phenomenon: on the one hand, its purpose is a shift towards greater accountability, but on the other hand businesses can employ it as a strategic tool to "accommodate external pressures" (ibidem: 94) and avoid the threat of more stringent regulation.

Since NFI is disclosed through reporting, which can be defined as "the process that results in the production of a report according to a reporting model" (Latorre, 2018: 7), it follows that reporting concepts had to evolve in order to record and communicate this kind of information: the attempts resulted in reporting systems such as the Corporate Social Responsibility Reporting (CSRR), Sustainability Reporting (SR), Intellectual Capital Reporting (ICR), Economics, Social and Governance (ESG) Reporting, and Integrated Reporting (IR) (Haller et al., 2017).

Figure 17: ***Percentage of firms reporting CSR/sustainability information in the period 2002-2015, in Europe and the United States.***



Source: Stolowy and Paugam (2018): 542

2.1.3 From voluntary to mandatory NFR in Europe: the EU Directive 2014/95/ EU

Non-Financial reporting started as voluntary disclosure, and in many national contexts, this NFR is still redacted on a voluntary basis (Stubbs and Higgins, 2015): in this perspective, NFR is disclosed to meet the expectations of demanding stakeholders (O'Donovan, 2002) and the motivations behind it are to be found in the following theories (Hahn and Kuhnen, 2013):

- Stakeholder theory: Freeman's stakeholder theory (1984) drew attention to the fact that companies should overcome the model of communication only with shareholders and broaden their horizon to stakeholders' interests as well: indeed, the latter can contribute to the company's performance as much as investors.
- Legitimacy theory: it is about operating in line with standards and laws and being appropriate to the society in which the firm is embedded (Trucco, 2015). For the company's operations to be perceived as socially legitimate, managers can decide to disclose additional information to communicate with stakeholders, mainly in the form of environmental and social reports (Deegan, 2002). Hence, sustainability reporting can become a means to improve the perceived legitimacy of the company (Hahn and Kuhnen, 2013).
- Signaling theory: it states that, in a situation of information asymmetry between managers and stakeholders, the former discloses additional information to avoid the negative consequences for the firm and the market (Trucco, 2015). Since stakeholders find that sustainability information regarding the performance of a company is difficult to judge, the latter can choose to disclose additional information to reduce the information asymmetry (Hahn and Kuhnen, 2013); if the

additional information is verifiable and credible, the market will react positively, whereas false disclosure may lead to a loss in reputation for the company (Trucco, 2015).

- Institutional theory: it holds that companies are more likely to disclose sustainability information because they respond to political pressures, thus responding to institutional expectations rather than acting in a business rationale (Hahn and Kuhnen, 2013).

Despite the advantages linked to reporting a firm's sustainability performance, Kolk (2005) lists the reasons for which a company may choose to report or not to report:

Table 2: *Reasons for reporting or not reporting.*

Reasons for reporting	Reasons for not reporting
• Enhanced ability to track progress against specific targets	• Doubts about the advantages it would bring to the organization
• Facilitating the implementation of the environmental strategy	• Competitors are neither publishing reports
• Greater awareness of broad environmental issues throughout the organization	• Customers (and the general public) are not interested in it, it will not increase sales
• Ability to clearly convey the corporate message internally and externally	• The company already has a good reputation for its environmental performance
• Improved all-round credibility from greater transparency	• There are many other ways of communicating about environmental issues
• Ability to communicate efforts and standards	• It is too expensive
• License to operate and campaign	• It is difficult to gather consistent data from all operations and to select correct indicators
• Reputational benefits, cost savings identification, increased efficiency, enhanced business	• It could damage the reputation of the company, have legal implications or wake up

development opportunities and enhanced staff	'sleeping dogs' (such as environmental organizations)

Source: Kolk (2005): 32.

Therefore, non-financial information can be used to reduce information asymmetry between managers and stakeholders (Ball et al., 2012); as voluntary disclosure can be considered the complement, not the substitute, of mandatory disclosure (ibidem: 138), companies apply a strategic approach to whether or not disclosing additional information. Managers must be aware of the benefits and costs linked to voluntary disclosure: the former mainly regard the reduction in information asymmetry between managers and stakeholders, which can improve trustworthiness, whereas the latter implies litigation costs (costs incurred in the case of legal actions) and proprietary costs, namely a loss in competitiveness following the disclosure of sensitive information (Trucco, 2015). It follows that voluntary disclosure is a strategic decision: only if benefits exceed costs, will the company engage in voluntary disclosure (Abeysekera, 2013).

Until recently, also European countries have issued non-financial information on a voluntary basis (Carungu et al., 2020): from 2017 onward, with the European Directive 2014/95/ EU, Member States are obliged to mandate NFR from large businesses with more than 500 employees (Haller et al., 2017). Even before the introduction of the Directive, scholars debated on whether a mandatory NFR could positively enhance the quality of reporting (Ioannou and Serafeim, 2017), though academic literature still does not agree on that (Carungu et al., 2020). On the one hand, Luque-Vilchez and Larrinaga (2016) argue that Non-Financial Reports and their quality were not significantly increased after the Spanish regulation requiring mandatory NFR. On the other hand, Bernardi and Stark (2016) positively review the introduction of a mandatory integrated report in South Africa. In general, mandatory

NFR is enacted to improve transparency, foster benchmarking and best practices (Jackson et al., 2020), and in fact, the EU Directive aimed at "increasing transparency and corporate accountability[6] to rebuild investor and consumer trust in businesses" (Latorre et al., 2020: 17). The Directive contributed to spreading awareness with respect to CSR in the European context (Caputo et al., 2019): at the present date, all of the Member States have integrated the Directive into national legislation. The EU Directive requires public-interest entities with more than 500 employees to disclose non-financial information either together with the annual report or in a separate report (European Union 2014), though it does not require specific standards and sets the Commission to publish non-binding guidelines for NFR. On top of that, the control on the reliability of the information is left to the discretion of single Member countries, which should ensure that NFRs are assured (Ibidem: 5). Indeed, although a Directive must be transposed into national legislation, the exact means and forms to achieve the objectives set out in the Directive are up to single Member States (Aureli et al., 2018). Since the EU Directive opted for a minimum harmonization approach, it left countries with great discretion on whether or not to apply more stringent regulation on NFR (Ibidem: 5). Latorre et al. (2020) argue that the EU Directive is too flexible concerning the adoption of a reporting framework, raising questions about the actual improvement in harmonization and comparability of NFR. Indeed, scholars have argued that transposition into national contexts varies with respect to clarity, comparability, and completeness of the information (Aureli et al., 2018). For instance, Venturelli et al. (2017) hold that the Italian Legislative Decree (LD) no. 254/2016 (enacting the EU Directive) does not specify particular content requirements, thus leaving much of the disclosure scope, quality and content up to the single organization. The same issue

[6] "the right to receive information and the duty to supply it" (Gray, 1992: 413); "the responsibility to undertake certain actions and the responsibility to provide an account of those actions" (Moneva et al. 2006: 126)

is found in the German CSR Directive Implementation Act, although the lack of completeness often results in more reliable and credible information (Hoffmann et al., 2018). Instead, Jackson et al. (2020) argue that France mandates more detailed NFR requirements than the UK, and generally speaking the UK is the country that regulated the least between France, UK, and Italy (Aureli et al., 2018), thus raising questions about NFR comparability.

It must be said that the European Commission has opened a public consultation in 2020 to revise the Directive 2014/95/UE (Latorre et al., 2020) in order to address the following issues (European Union, 2020):

- The inadequacy of information on how sustainability and non-financial issues impact organizations, and how organizations impact society and the environment (ibidem: 2). Indeed, NFRs are not sufficiently reliable and comparable; there is a mismatch between the NFI disclosed and those deemed necessary by users; NFI is not readily available for stakeholders (ibidem:2).
- Organizations are not certain about which NFI to report, how and where to disclose them, causing unnecessary costs (ibidem: 2).

Latorre et al. (2020) contribute to the public consultation by advancing the fact that NFR regulation must be more accountability-driven and "establish dialogical accountability by enlarging the boundaries of materiality and the traditional accounting and reporting systems." (ibidem: 19).

For what concerns disclosure quality following mandatory NFR, Carungu et al. (2020) research on a sample of Italian companies to assess their NFRs before and after the LD no. 254/2016, which showed no significant change in the disclosure quality; nonetheless, Carungu et al. (2020) find that the NFR quality could increase over time. Lock and Seele (2016) reviewed the content of a sample of CSR reports issued by European companies in 2014 and found no relevant difference in the report credibility between countries with mandatory NFR and voluntary

NFR. Instead, Jackson et al. (2020) observe that CSR activities have increased in countries requiring NFR, though a more stringent regulation is not associated with a lower degree or corporate irresponsibility[7]. Moreover, despite the fact that one of the theories about this Directive holds that NFR can enhance corporate accountability (Latorre et al., 2018), requiring non-financial disclosure by law may become counterproductive if the coercive power of the regulator is not backed by informal laws and generally accepted principles, which provide for legitimacy to legal requirements (Bebbington et al., 2012). Therefore, mandatory NFR does not automatically lead to improvements in accountability and better reporting and information (Latorre et al., 2018).

2.2 Harmonizing NFR: global frameworks and assurance

2.2.1 Standard setters and reporting frameworks

For organizations, either large or small, the question is not whether to disclose or not anymore, but rather "how" (White, 2005). While the disclosure of financial information is regulated by a specific set of accounting rules, such as the Generally Accepted Accounting Principles (GAAP), the disclosure of non-financial information (NFI) is still not officially harmonized worldwide. As previously mentioned, reporting non-financial information has required new forms of communication with stakeholders: indeed, NFI is being reported either through a stand-alone report or together with the company annual report (Kolk, 2005). Firms' reporting practices are indeed quite heterogeneous, a phenomenon that may be explained by the lack of a comprehensive definition of non-financial reporting (Stolowy and Paugam, 2018): they

[7] "Corporate actions that negatively affect an identifiable social stakeholder's legitimate claims" (Strike et al. 2006: 2)

come under many names, such as sustainability report, CSR report, social and environmental report, triple bottom line reports, intellectual capital disclosure (ICD)[8].

The voluntary disclosure of additional information started with enclosing selected topics in company annual reports, regarding environmental, social, and employment issues (Milne and Gray, 2013); separate reports started to be drafted in the early 1990s on environmental matters, which were then expanded by mid-1990s by including also safety and health matters (Milne and Gray 2013). Four main frameworks have taken place (De Villiers et al., 2014), namely:

- The Balance Scorecard: introduced by Norton and Kaplan (1992), the BCS is an "internal performance measurement, reporting and management control mechanism" (De Villiers et al., 2014: 1044), which includes non-financial and forward-looking measures and seldom includes sustainability information. Since it links financial measures to operational ones, such as customer satisfaction and internal processes, it conveys a comprehensive view of the business to top managers (Norton and Kaplan, 1992).
- The Triple Bottom Line: it is a type of external report and its purpose is to communicate environmental and social information (De Villiers et al., 2014). Most importantly, it focuses on the assumption that an organization should not focus only on profit, but rather on a "triple bottom line": profit, people, planet.
- Sustainability Reporting: a stand-alone report that gained ground by the end of the 1990s. Since social and environmental reporting became more widespread, companies felt the need to address sustainability information in reports separate from the annual report (De Villiers et al., 2014). Kolk (2005) identifies three different trends in sustainability reporting: these are the tendency to

[8] "Intellectual capital is the term given to the combined intangible assets which enable the company to function." (Brooking 1996: 12)

include also social and sometimes financial issues, the proliferation of different ways to communicate NFI, backed by the use of websites, and, lastly, growing attention to governance and legal issues. Sustainability reporting is said to be influenced by country-specific institutional factors (Rosati and Faria, 2019), which are likely to influence the adoption, extent, and quality of SR.

- Integrated Reporting: it is a single reporting framework with the purpose of linking financial and non-financial information, which will be discussed more in-depth later on in the paragraph.

Due to the growth in sustainability reporting practices, there has been a need to develop reporting standards, to harmonize non-financial reports. Nobes (1991) defines harmonization as the process of closing the gap between users, thus improving comparability among reporting practices: since differences in reporting add up to translation costs and reduce information credibility for decision-makers, multiple reporting standards may hinder social and environmental performance, representing a trade barrier (Tschopp and Nastanski, 2012). On top of that, one crucial issue regards the fact that "without comparable, consistent, and reliable standards the reports continue to be viewed by some as greenwash reports[9] or environmental spin rather than a factual representation of the company's actual position" (Tschopp and Nastanski, 2012: 6), namely a marketing tool employed by organizations to placate stakeholders. Although many institutions, both national and international, have attempted to create guidelines for sustainability reporting (SR) (Dumay et al., 2010), the leading international framework employed to report non-financial information is the Sustainability Reporting Guidelines by the Global Reporting Initiative (GRI) (Brown and Dillard, 2014). The latter is a nongovernmental organization that has

[9] Deceptive marketing tools used by companies as a façade rather than conveying real substance (Tschopp 2012)

developed a reporting system with the purpose of assisting companies in the drafting of their non-financial reports. Thus, the main aim of GRI standards is to standardize and clarify the practice of NFR (Levy et al., 2009), in order to be able to compare corporate performance (Brown, 2011), as well as regulate NFR as a routine practice (Levy et al. 2009). This reporting framework has three basic principles (Moneva et al., 2006): transparency, auditability, and inclusiveness. The latter reflects the need to place stakeholder engagement at the very heart of the reporting process, as to improve the quality of sustainability reports, whereas auditability is based on the verifiability of reported information. As mentioned in the previous chapter, the GRI has been founded in 1999, and since then GRI standards have evolved: indeed, five sets of guidelines have been redacted so far, the latest being the GRI standards in 2016 (effective since January 1st, 2018). As Tab 2.4 shows, GRI Standards are a set of interrelated and modular standards: starting with the three universal ones, GRI 101-Foundation is a document that instructs on how to prepare a Non-Financial Report according to GRI standards, illustrating the principles according to which the content and quality of the report must be aligned. It guides companies to focus on the most significant issues for the organization, namely the ones on which the company can have a more powerful impact. GRI 102 (General disclosure) explains how to report information such as the strategy, governance, and stakeholder engagement, whereas GRI 103 (Management approach) aims at reporting how the organization manages its material topics. Lastly, topic-specific standards are picked: the latter can be selected based on the company economic (GRI 200), environmental (GRI 300), and social (GRI 400) material topics. An organization can choose whether or not to prepare a report using all the GRI standards or only a part of them: in the latter case, it will be using selected standards to report specific information, but the report will not be drafted following GRI standards. This option is called "GRI-referenced" (GRI 2020: 21).

Table 3: ***Overview of the GRI Standards.***

Series	Topic	Description
101	Universal standard: Foundation	It presents the Reporting Principles and the requirements to prepare a sustainability report according to GRI standards: more in depth, it describes the content and quality of the report and how the standards should be referenced. In particular, the reporting principles related to the content are: • Stakeholder Inclusiveness • Sustainability Context • Materiality • Completeness And the reporting principles for the report quality: • Accuracy • Balance • Clarity • Comparability • Reliability • Timeliness
102	Universal standard: General Disclosure	It is used to report information about an organization and its sustainability practices, such as the organization's profile, strategy, ethics and integrity, governance, stakeholder engagement practices, and reporting process.

103	Universal standard: Management approach	It provides the opportunity for the organization to explain why a topic is material for the company, and it should be used for each material topic inside the sustainability report.
201-206	Topic specific: Economic	This set of standards deals with: • GRI 201: Economic Performance • GRI 202: Market Presence GRI 203: Indirect Economic Impacts • GRI 204: Procurement Practices • GRI 205: Anti-corruption • GRI 206: Anti-competitive Behavior • GRI 207: Tax
301-308	Topic specific: Environmental	This set of standards deals with: • GRI 301: Materials • GRI 302: Energy • GRI 303: Water and Effluents • GRI 304: Biodiversity • GRI 305: Emissions • GRI 306: Waste • GRI 307: Environmental Compliance • GRI 308: Supplier Environmental Assessment
401-419	Topic specific: Social	This set of standards deals with: • GRI 401: Employment

		• GRI 402: Labor/Management Relations • GRI 403: Occupational Health and Safety • GRI 404: Training and Education • GRI 405: Diversity and Equal Opportunity • GRI 406: Non-discrimination • GRI 407: Freedom of Association and Collective Bargaining • GRI 408: Child Labor • GRI 409: Forced or Compulsory Labor • GRI 410: Security Practices • GRI 411: Rights of Indigenous Peoples • GRI 412: Human Rights Assessment • GRI 413: Local Communities • GRI 414: Supplier Social Assessment • GRI 415: Public Policy • GRI 416: Customer Health and Safety • GRI 417: Marketing and Labeling • GRI 418: Customer Privacy • GRI 419: Socioeconomic Compliance

Source: Adapted from GRI (2020): 3-6-7.

The employment of GRI for NFR started in 1999 (Berinde and Andreescu, 2015) and has evolved over time as companies increasingly use these standards to disclose their Non-Financial Reports. Notwithstanding the fact critiques on GRI standards have arisen over the years (Moneva, 2006; Brown et al., 2009), GRI standards are deemed the best standards to provide useful information for decision-making (Tschopp and Nastanski, 2012). Levy et al. (2009) shed light on the development and success of the GRI: since 2000, it has created three generations of guidelines, namely G1, G2, and G3, and their uptake and pervasiveness are shown by the fact that also competitors have adopted some elements of the GRI. Currently, over 60,000 reporters are publishing according to GRI guidelines[10].

Another well-known set of standards is the Sustainability Accounting Standards Board (SASB) standards, an independent nonprofit organization based in the US that takes a more industry-specific approach to disclosed topics (KPMG, 2017), covering seventy-nine industries within eleven sectors (ibidem: 17) as shown in Tab. 5.

[10] Information available at the Sustainability Disclosure Database (SDD) https://database.globalreporting.org

Table 4: ***SASB Standards.***

SASB Standards		
Consumption I • Agricultural Products • Meat, Poultry & Dairy • Processed Foods • Non-Alcoholic • Beverages • Alcoholic Beverages • Tobacco • Household & • Personal Products	**Consumption II** • Multiline and Specialty Retailers & Distributors • Food Retailers & Distributors - Drug Retailers & • Convenience Stores • E-Commerce • Apparel, Accessories & • Footwear Building Products & • Furnishings • Appliance Manufacturing - Toys & Sporting Goods	**• Financials** **• Health Care** **• Infrastructure** **• Non-Renewable Resources** **• Renewable Resources & Alternative Energy** **• Resource Transformation** **• Services** **• Technology & Communications** **• Transportation**

Source: KPMG (2017): 7.

Due to the industry-specific character of SASB standards and the fact that the latter is concerned with the identification of "sustainability-related risks and opportunities most likely to affect a company's financial condition, operating performance or risk profile" (GRI and SASB, 2021: 5), SASB Standards can be seen as complement, rather than a substitute of GRI Standards (ibidem). While GRI standards provide a framework for disclosing the company's impact on society, the environment, and the economy in a more comprehensive way, SASB standards are more narrowly focused on spotting the portion of issues that are more likely to become financially relevant for a typical organization within an industry (ibidem: 5).

Although non-financial information has mainly been disclosed through stand-alone reports until the 2000s, attempts to employ a more comprehensive reporting model have been made over the years, i.e., since 2010, in South Africa there is a requirement for companies primarily listed on the Johannesburg Stock Exchange to publish an integrated annual report or explain why they have not done so (Humphrey et al., 2017). Nevertheless, the most global-reaching initiative comes from the International Integrated Reporting Council. In 2010, the GRI, together with the Prince Accounting for Sustainability Project (A4S)[11] founded the International Integrated Reporting Council (IIRC), a global semi-regulatory body that fosters a more comprehensive model to report on how companies create value: the integrated report (McNally et al., 2017). The aim of the latter is to overcome different forms of information about an organization's strategy, governance, performance, and prospects (IIRC 2011: 2) such that a clear representation of the short, medium and long-term value creation process of companies is clearly communicated (Cheng et al., 2014), by also conveying the interconnections different types of capital: financial capital, human capital, intellectual capital, natural capital, manufactured capital, social and relationship capital (IIRC, 2013). It follows that the IR framework emphasis integrated thinking (Adams, 2017), meaning to break the silos inside an organization and adopt a holistic approach.

In short, rather than simply adding up information, the objective of the integrated report is to replace an organization's primary report,

[11] "Prince" stands for the Prince of Wales, heir to the British throne

by becoming the international corporate reporting norm (Humphrey et al., 2017) as to avoid "confusion, clutter and fragmentation [..] due to longer and more complex financial reports and management commentaries" (IIRC, 2011: 4). Its focus is, thus, on connectivity, materiality, and consciousness (Humphrey et al., 2017), recommending providing financial and non-financial information in a single report as to communicate how different kinds of capital can generate sustainable value (McNally et al., 2017). Critiques to the IIRC mainly argue that the framework is based on economic value rather than value delivered to society (DeVillers and Unerman, 2014; Flowers, 2015; Dumay, 2016; Trucco et al., 2021). In particular, Flowers (2015) puts forward the fact that, according to the IIRC, the types of capitals mentioned in the integrated report matter only insofar as they create value for the company, thus for investors, rather than for society at large. Despite the critique, Adams (2015) suggests that the primary purpose of the IR is not to deal with sustainability per se but to foster a new way of thinking about corporate success, beyond profit maximization. In this perspective, the success of the IR will ultimately depend on "the extent to which it creates a source of dissonance significant enough to change the way managers think within the constraints imposed on managers to maximize profit" (Adams, 2015: 1).

2.2.2 Structure

As previously mentioned, unlike financial reports, the redaction of sustainability reports is still up to the single company, and not even the GRI standards can guarantee full reliability of the Non-Financial Report (Sethi et al., 2015). Hence, increasing their comparability and evaluation is a key challenge (De Beelde and Tuybens, 2015): a solution to this issue is the standardization of the reports and submitting them to assurance (Sethi et al. 2015). In this regard, KPMG (2017) tries to put forward a guide for structuring a sustainability report. According to KPMG (ibidem), a sound execution of a sustainability report requires 6 key components to be addressed:

- Engage stakeholders: key stakeholders and their concerns should be prioritized through a clear methodology (ibidem: 10); stakeholders' engagement should be a two-way process (ibidem) and the stakeholder's response and decisions should be incorporated in the monitoring and evaluation of sustainability performance (ibidem).
- Assess materiality: in order to assess materiality, an organization should consider both issues raised by stakeholders and business objectives (ibidem: 11), thereby identifying the topics on which the company is more likely to have an impact (ibidem). The Materiality assessment framework is explained in detail in Tab. 6.

Table 5: *Materiality assessment framework.*

Materiality assessment framework	
PHASE 1: Define purpose and scope	• Identify key ESG risks and opportunities • Involve internal and external stakeholders • Embed materiality into business strategy
PHASE 2: Identify potential topics	• Assign responsibilities and involve various business functions • Focus on stakeholders with greatest impacts • Establish a process for capturing changes to material ESG topics
PHASE 3: Categorize	• Determine interconnectedness of material ESG topics

	• Cluster material ESG topics into macro categories
PHASE 4: Gather information about the impact and importance of topics	• Quantify actual and potential ESG impacts of each topic
PHASE 5: Prioritize	• Score each topic against business objectives and key stakeholders • Integrate material ESG topic into companywide ERM
PHASE 6: Engage the Board	• Obtain approval from the Board on materiality process
PHASE 7: Seek Stakeholder Feedback	• Document feedback from internal and external stakeholders

Source: KPMG (2017): 11.

- Establish policies and practices: these refer to the sustainable policies and practices adopted by the organization and its employees (ibidem: 12), and can cover a range of issues regarding environmental, social and governance policies that the company deems necessary to achieve its sustainability objectives (ibidem). Examples are the publication of a Code of Conduct for governance policies, ensuring equal opportunities for employees (social policy), or waste management for environmental policies.

- Set and Review Targets: targets should follow the SMART test (be specific, measurable, achievable, relevant, and timed) (ibidem: 12), and they should be agreed between management and the Board as to monitor performance (ibidem).
- Measure Performance: this step should be carried out by using accurate and timely data in order to foster improvement in performance, even by relying on external assurance (ibidem: 13)
- Build Capacity: it refers to investing in the right capital (human, intellectual, natural, social and relationship) to foster a positive change and value generation (ibidem: 13).

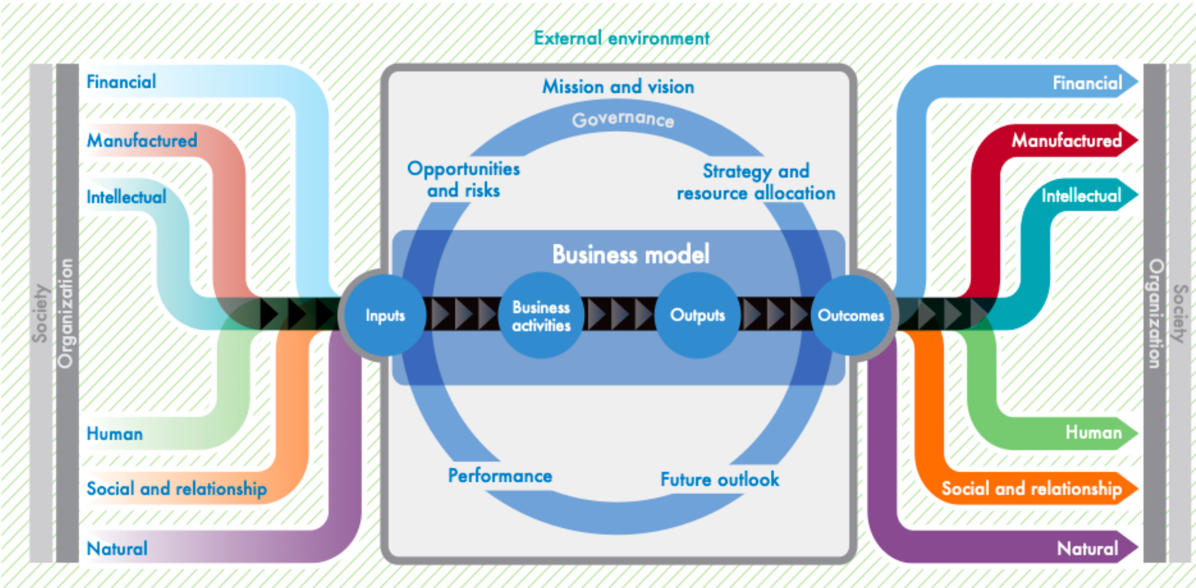
Shifting the focus to the IR, there are three sets of requirements to be followed in its preparation (Cheng et al., 2014): fundamental concepts, guiding principles, and content elements. First, fundamentals concepts are divided into the six types of capital that the company employs and influences, its business model and how it creates value over time. Capitals used are the input for the business model of the organization, which can be modified, destroyed, enhanced, consumed or influenced in some other way (IIRC, 2013):

- Financial capital is the set of funds that a company can employ in its production cycle and that can be generated through operations or investments or acquired through financing (ibidem: 12).
- Manufactured capital refers to physical objects such as equipment and buildings that are employed by the organization in its production cycle (ibidem).
- Intellectual capital is the set of the intangible assets of a company that is either organizational or knowledge-based assets, such as intellectual property (patents, copyrights), procedures or protocols, brand value and reputation (ibidem).

- Human capital relates to the competencies, motivations and experience of people involved in the organization (ibidem).
- Social and relationship capital entails shared norms and values within an organization, as well as the relationships between the company, the communities and stakeholders with which it shares information to foster individual and shared well-being (ibidem: 13).

- Natural capital refers to the environmental resources that the organization employs in its processes and that provide the prosperity of the company, such as air and water, but also ecosystems (ibidem).

Figure 18: *The complete picture of an organization's value creation process, showing the interaction of the Content Elements and the capitals in the context of the organization's external environment.*



Source: IR 2013: 11.

The business model is the link between the company inputs and the activities carried out to create outputs for value creation, and in particular how resources are allocated to reach the strategic objectives that maximize opportunities and minimize risks for the organization (Cheng et al., 2014). Instead, the creation of value over time is reported in the IR by communicating how capitals are transformed and if they create value (IIRC, 2013).

Second, the guiding principles entail consistency and comparability, strategic focus and future orientation, connectivity of information,

reliability and completeness, materiality, and conciseness (Cheng et al., 2014). To prepare an Integrated Report, organizations should comply with the following principles (IIRC, 2013):
Strategic focus: the company should go into detail on how its strategy is related to value creation in the short, medium, and long term (ibidem: 18). More in-depth, the relationship between past and future performance should be highlighted, along with its risks and opportunities; although future-oriented information is likely to be less accurate than historical one, the company should commit to disclose the former as well together with the uncertainty (ibidem).

- Connectivity of information: it refers to the need of an IR to inform about the value creation process of the company in a comprehensive way, by showing the combination, interrelatedness, and dependencies among the issues that are relevant for the capacity of the organization to have an efficient value creation process (ibidem: 18).
- Stakeholder responsiveness: it is related to the disclosure of the relationship between the organization and its key stakeholders, and in particular how the latter's concerns are addressed (ibidem: 19).
- Materiality and conciseness: materiality refers to the relevance of a matter that may significantly influence the ability of the company to create value over time (ibidem: 21). An IR should concisely report information on the ability of the organization to create value over time (ibidem).
- Reliability and completeness: it refers to the need of redacting an IR that discloses all material issues, both positive and negative, in a way that is free from bias and material errors (ibidem: 22). This requirement can be ensured by relying on a robust internal reporting system, an independent assurance and a complete stakeholder engagement (ibidem: 21).

- Consistency and comparability: it is important for an IR to be comparable with those of other organizations and to be redacted in such a way that it is consistent over time unless a change is needed in order to improve the quality of the information (ibidem: 23).

Third, the content elements identified are seven (Cheng et al., 2014):

- Future outlook: it is important to identify the challenges and uncertainties related to the achievement of the strategic objectives of the company (IIRC, 2013).
- Performance: the IR should provide insights about qualitative and quantitative information about performance, such as its targets and effects on relevant capitals (ibidem: 28).
- Organizational overview and external environment: by identifying the company's mission and vision, an integrated report should pinpoint the circumstances under which the organization operates, both inside the company and with respect to the external environment (ibidem: 24).
- Governance: the report should show the company's governance structure (ibidem: 25).
- Opportunities and risks: it refers to providing information on the key risks and opportunities related to the organization, with respect to how the latter impacts its relevant capitals (ibidem: 26).
- Strategy and resource allocation: it is related to the strategies of the company and how it allocates resources to implements those strategies in the short, medium and long term (ibidem: 26).
- Business model: the IR should describe its business model and assess its resilience (ibidem: 27).

2.2.3 Assurance

Another way in which a company can provide greater reliability of its NFR is to rely on assurance (De Beelde and Tuybens, 2015), since verifying the accuracy of information is essential for gaining credibility from external stakeholders (Sethi et al., 2015). According to the EU Directive 2014/95, statutory auditors and audit companies must only verify that companies have issued a non-financial statement or a separate report but they are not compelled to verify the information contained inside the NFR (European Union, 2014). Nonetheless, in order for an NFR to keep its value and not being discharged as a self-promotional document, three conditions should be met (Sethi et al., 2015: 61): containing robust measures of verification and transparency, meeting stakeholders' expectations, and meeting industrial standards with respect to similar information. The authors also address three recommendations for organizations (ibidem: 74): first, the need to assure the whole report rather than only a part of it; second, reporting also the negative aspects of their ESG activities and provide their explanations; and third, to not rely only on the major global financial auditing firms for assurance, since they are mostly specialized in financial audit rather than non-financial, and this may also lead to a conflict of interests. To enhance corporate accountability, several verification standards have been developed over the years (Perego and Kolk, 2012). Examples are the AccountAbility AA100 Assurance Standard, a set of principles launched in 2003 (AccountAbility, 2003); also the GRI contains suggestions on how to approach external assurance for sustainability reports, though the GRI standards are more employed as a general reporting framework rather than specifically for assurance (Perego and Kolk, 2012); and the ISAE3000 standard by the International Auditing and Assurance Standards Board (IAASB, 2003), which aim at establishing a basic set of principles and procedures to help accountants on how to carry out non-financial assurance engagements (Perego and Kolk, 2012).

2.3 Reporting on the SDGs

Sustainable Development Goal 12 (Sustainable consumption and production patterns) includes a target (12.6) that aims at encouraging companies, especially large businesses and MNEs, to adopt sustainable practices, as well as integrating sustainability information into their reporting cycle. As previously explained in Chapter 1, SDGs cannot be achieved without collaboration between governments, civil society, and the private sector. The latter was quick to respond by incorporating SDGs into companies' Non-Financial Reports (Bebbington and Unerman 2017), though attention should be paid with regard to the possibility that organizations employ SDGs rhetoric in their reports only as a façade (ibidem: 10). Nieuwenkamp (2017) stresses the importance of avoiding the so-called SDG washing, namely a cherry-pick approach that communicates the positive impact of companies on some SDGs and ignores the negative impact on all the other SDGs.

SDG reporting can be defined as "the practice of reporting to stakeholders how an organization is addressing the SDGs" (Rosati and Faria, 2019: 5): In order to avoid opportunistic behavior, a clear reporting framework is needed to assess the information stated in the reports. Reporting on the SDGs can help in measuring, leading and communicating a company SDG impact and effort, thus also enabling SDG actions, strategies, and investments (Rosati and Faria, 2019); however, also sustainability reporting itself can benefit from the introduction of the SDGs, due to the latter's potential to provide a globally accepted tool for sustainable development (Bebbington et al., 2017), thus creating a win-win situation. On top of that, as the integration of sustainability into organizational strategies can lead to more innovative business models and solutions to cope with global issues (Boons and Ludeke-Freund, 2013), pursuing the SDGs may emphasize this mechanism: indeed, SDGs represent an opportunity for companies to integrate their business model, identifying future opportunities and strengthening the relationship with their stakeholders (Izzo et al., 2020).

2.3.1 Academic literature related to SDG reporting

Three streams of literature have emerged in response to the challenge of implementing and reporting the SDGs: first, studies focused on internal and external variables influencing SDG reporting. Second, research based on the analysis of corporate sustainability reports in order to assess country-specific or industry-specific disclosure quantity and quality. Third, academic literature highlighting a topic-based analysis regarding the SDGs, focused in particular on how to achieve integration.

Regarding the former, Rosati and Faria (2018) have focused on internal factors associated with SDG reporting, divided into three dimensions reflecting the structural characteristics of companies: the first is size, economic performance, and intangibility, the second regards external assurance and sustainability engagement, and the third the specificity of corporate governance.

Figure 19: ***Organizational factors affecting SDG reporting.***

Source: Rosati and Faria (2019): 2

Here, the starting assumptions hold that larger organizations, with higher economic performance, and higher intangibility are more prone to engage with SDG reporting, due to mainly three considerations: greater access to resources for sustainable investments, vulnerability to adverse public opinion, and possessing intangible assets[12] that provide for superior competitive advantage. Secondly, companies that are already engaged with voluntary disclosure and sustainability programs, as well as turning to external assurance for their sustainable processes, are more likely to cite the SDGs in the reports. Thirdly, a greater presence of women inside the board of directors, together with a younger board of directors, positively influences SDG disclosure. Results strongly confirm the correlation with size, whereas higher levels of intangibility display a weaker positive connection, together with having already shown a great commitment to sustainability in the past the presence of a younger board of directors with a higher proportion of women (which are considered more prone to address environmental and social

[12] Non-physical resource with financial value.

aspects). These findings also support the legitimacy and signaling theory, by stating that early adopters of SDG reporting cope better with stakeholders' pressure, which in turn improves corporate legitimacy (Izzo et al., 2020).

Passing on to the exogenous variables affecting SDG reporting, Rosati and Faria (2019) develop a theoretical framework, summarized in Fig. 20.

Figure 20: ***Institutional factors affecting organization SDG reporting.***

Source: Rosati and Faria (2019): 1315

More in-depth, assumptions are that companies have been pushed to implement sustainable practices in countries where the political and legal framework is more attentive to social and environmental issues. Interestingly, the authors also take into account Hofstede's cultural dimensions[13], stating that higher collectivism, lower power distance, lower levels of uncertainty avoidance and more feminine countries, as well as more long-term oriented countries, are more likely to engage with SDG reporting. Also, the latter is more common in nations that show a higher level of company spending in R&D and more university-industry collaboration. A higher level of education, density in trade union and

[13] Hofstede (2001) holds that cultures can be categorized according to seven dimensions: masculinity, uncertainty avoidance, power distance, individualism, long-term orientation, and indulgence.

spending in tertiary education favors SDG reporting, and, finally, companies based in countries that are more vulnerable to climate change and less ready to adapt to it reflect a higher SDG reporting engagement. Results, however, confirm only the hypothesis regarding: the socio-cultural dimensions, with less power distance and femininity; vulnerability to climate change; the education and labor system dimension. Instead, from a socio-cultural point of view, results overturn the hypothesis, saying that more individualism and short-term orientation are associated with SDG reporting.

The second body of literature has focused on the quantity (Izzo et al., 2020; Cosma et al., 2020) and quality of SDG disclosure (Tsalis et al., 2019; Izzo et al., 2020; Pizzi et al., 2020; Nichita et al., 2020). More in-depth, findings by Pizzi et al. (2020), on a sample for Italian Public Interest Entities, show that SDG reporting quality is related to mainly four variables, namely operating in environmental-sensitive sectors, expertise with non-financial reporting, the length of the reports and the presence of independent directors in the board of directors. Tsalis et al. (2019) analyze stand-alone sustainability reports of Greek organizations operating in 10 different industries, and their results reveal poor quality in SDG disclosure, though it also varies a lot among different industries (with telecommunication and metal industry scoring the highest). However, SDG disclosure proved to be of better quality when it comes to SDG 7 (Affordable and clean energy), SDG 9 (Industry, Innovation and infrastructure) and SDG 13 (Climate action), suggesting these as the SDGs with which companies are more familiar with. A similar familiarity is found by Izzo et al. (2020) which, by providing a sample of 40 Italian listed companies, show that SDG 9 and SDG 13 are the most mentioned in sustainability reports, whereas SDG is not among the top 3, substituted by SDG 8 (Decent work and economic growth). The authors illustrate that there is, generally, high awareness about the SDGs in the sample, mainly disclosed through Sustainability reports or Non-

Financial Reports, whereas specific KPIs to assess SDGs performance are still not defined (except for 5 percent of the sample). This is linked to the absence of embedment of the SDGs into the company strategies and business models. Instead, Cosma et al. (2020) provide a discussion focused on the European banking sector, where it emerges that SDG 8, SDG 13 and SDG 4 (Quality of education) are the most addressed by banks. Furthermore, SDG reporting seems to be influenced by the country of origin (whether the latter is more involved with the SDGs), the legal system (civil law vs common law) and from the adoption of the integrated report: this is consistent with the framework provided by Rosati and Faria (2018). Finally, Nechita et al. (2020) investigate whether financial information influences the quality of SDG disclosure. Their research was carried out on a sample of chemical companies in Central and Eastern Europe, and results suggest that the most influential factors on non-financial reporting related to SDGs are the research and development costs and other intangible assets, due to the importance of innovation and technology in the chemical sector (ibidem: 2).

The third body of literature has fueled the debate about the need to adopt an integrated approach to SDGs, as stated in the previous chapter (Le Blanc, 2015; Hajer et al., 2015) and in particular about SDG reporting (Adams, 2017; Trucco et al., 2021). Trucco et al. (2021) argue that integrated thinking is the missing link to report on the SDGs. This is due to the fact that it can take into consideration, at the same time, multiple issues in the value creation process: thus, the IR framework, adapted to local specificities, can be a useful tool for enterprises to stress "stress the interconnections among SDGs each firm is experiencing" (ibidem: 7). Specifically, the authors hold that, in order for the IR Framework to adjust to SDG monitoring, there is a need to redefine the concept of value creation, thereby shifting the focus from mere economic value creation to the value distributed to society. This would also lead to the involvement of a broader set of stakeholders, instead of narrowing the focus on shareholders only. In turn, the revised IR may help in designing strategies at different levels, by fostering commitment to the SDGs also at the individual and national levels. And, finally, the IR framework has the potential to overturn the existing approach, that consists in aligning corporate strategy to sustainable development: in this perspective, companies could employ a proactive rather than a reactive approach to SDGs, by re-shaping their business model in such a way that SDGs become embedded in the corporate mission and vision.

2.3.2 Guidelines for SDG reporting

Since the publication of Agenda 2030, a range of material has been developed to assist in SDG reporting, both from accounting and professional bodies and from scholars.

Table 6: ***Summary overview of international documents for SDG reporting.***

Year of publication	Author	Title
2015	GRI – UNGC – WBCSD	*(a) SDG Compass. The guide for business action on the SDGs*
	PwC	*(b) Make it your business: engaging with Sustainable Development Goals*
2016	GRI	*(c) GRI's Contribution to Sustainable Development*
	IFAC	*(d) The 2030 Agenda for sustainable development: a snapshot of the accountancy profession contribution*
	PwC	*(e) Navigating the SDGs: a business guide to engaging with the UN Global Goals*
2017	WBCSD	*(f) CEO Guide to Sustainable Development Goals*
	PwC	*(g) SDG Reporting Challenge 2017. Exploring business communication on the global goals*
		(h) Business Reporting on SDGs

	GRI-UNGC-PwC Adams C. ACCA	*(i) The Sustainable Development Goals, integrated thinking and the integrated report The Sustainable Development Goals* *(l) The Sustainable Development Goals: redefining context, risk and opportunity*
2018	KPMG WBCSD CGMA	*(m) How to report on the SDGs: what good looks like and why it matters* *(n) Sdg Sector Roadmaps* *(o) The role of the accountant in implementing the Sustainable Development Goals*
2019	GRI GRI	*(p) Business reporting on the SDGs: In Focus: Addressing Investor Needs in Business Reporting on the SDGs* *(q) Business reporting on the SDGs: Analysis of the goals and targets*
2020	Adams C, Druckmann P., Picot R.	*(r) Sustainable Development Goals Disclosure (SDGD) Recommendations*
2021	GRI	*(s) Linking the SDGs and the GRI Standards*

Among these, seven[14] provide the steps to report on the SDGs, usually between three and seven. Almost all of them are inspired by (a), the SDG Compass guide that illustrates a five-step approach for companies to become involved: it is divided into understanding the SDGs, detecting priorities, setting goals, embedding targets across functions, reporting, and communicating.

Figure 21: *A five-step approach for adopting the SDGs.*

https://sdgcompass.org

(D), (l) and (o) stress the impact that the accounting profession can have on achieving the SDGs; (f) illustrates SDG implications across four pillars, highlighting the risk of inaction, the possibility to capture opportunities provided by the SDGs, as well as the importance of transparency and collaboration. Besides, it identifies action points across four levels: the individual-level, company-level, sector-level and policy-level. (B), (e) and (n) explain why SDGs matter to businesses and how to unlock opportunities and minimize risks; in particular, (E) acts as a practical guide for navigating the SDGs and what implications the

[14] (a), (i), (l), (m), (o), (p), (s)

latter can have for companies, by also illustrating possible linkages between different SDGs and reporting best practices from different companies. (S) is an operational guideline that links the SDGs targets with the GRI standards; (n) builds up a logical framework for the engagement of specific industrial sectors with Agenda 2030; (o) provides, instead, a conceptual approach divided into seven steps.
(M) also identifies nine areas of action, divided into three macro topics: understanding, prioritizing, measuring. Setting priorities is a core element that is stressed by the guidelines. Specifically, the redaction of a materiality matrix to report priorities is suggested, by identifying material issues and reporting both positive and negative impacts of the firm: the former are to be increased, whereas the latter should be minimized. There is a general tension between guidelines that warmly suggest prioritizing those SDGs that will be more relevant (a, m) for the company, and other guidelines (b) that holds, instead, that prioritizing would lead to a "cherry-pick" approach that would not take into consideration the impact on all the other SDGs. Although (b) seems to address more criticism to businesses that choose to engage with SDGs that are easier to be dealt with, while ignoring those SDGs that do not reflect their corporate priorities, the issue seems to be open. Indeed, (a) and (m) clearly state that focusing the attention on a few SDGs enables the organization to address effort and resources more efficiently.
Finally, (l) and (r) support the idea that the IR framework should become the overarching framework for SDG reporting, since it can reconcile SDG targets with the value creation process through integrated thinking.

2.4 Luxury and sustainability: is there a match?

2.4.1 Luxury: origins and definition

The concept of luxury dates back to the dawn of humanity: indeed, the latter has always lived in organized societies, where the leaders were characterized by specific lifestyles, symbols, and objects (Kapferer and Bastien, 2012).

Etymologically, the word "luxury" comes from the Latin "luxus", which means "opulence, soft or extravagant living", and its etymology is also close to the term "luxuria", namely "excess, lasciviousness, negative self-indulgence" (Rigaud-Lacresse and Pini, 2017); it is also similar to the Greek term "lox-os", which means "growing in a twisted way, oblique" (Corbellini and Saviolo, 2014). This seems to suggest that the word "luxury" has a twofold meaning: on the one hand, luxury can be defined as magnificence and splendor, while on the other hand, it may suggest superfluousness, wickedness and extravagance (Ibidem: 4). Indeed, from the Ancient Greek the concept of luxury started to assume a negative connotation, linked to the notion of guilty excess: it was seen as a threat to society, shifting the attention of the regular citizen from the *polis* to private life (Brun and Castelli, 2013). This negative implication only little by little left room to the notion of refinement and distinction (Chevalier and Mazzalovo, 2008), though not until the fourteenth century. The dictionary *Le trésor de la langue française* offers an overview of the evolution of the term "luxury" over two centuries:

1607: Way of life characterized by large expenditures to make shows of elegance and refinement.

1661: Character of which is expensive, refined, luxury clothing. j 1797: Expensive and superfluous object, pleasure.

1797: Expensive and superfluous object, pleasure.

1801: Excessive quantity, a luxury of vegetation.

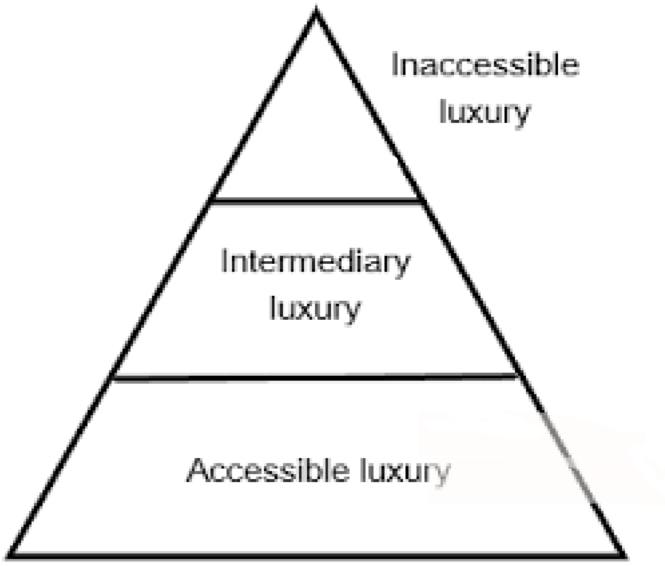
1802: That which is superfluous, unnecessary.

(Chevalier and Mazzalovo, 2008: 3-4)

According to Brun and Castelli (2013), it was the rise of the bourgeoisie that started to shift the concept of luxury to lavish living, needed to open it to any social class. From the nineteenth century, the Industrial Revolution raised the living standard, thus making it possible for more and more people to afford luxury goods (Kapferer and Bastien, 2012). Furthermore, female emancipation, which started in the nineteenth century until the middle of the twentieth century, brought about a more pacifist and feminine society, which is historically more inclined to accept and legitimize luxury, regardless of its prior negative connotation (ibidem: 10). Besides, due to the broader customer base of luxury, from the twentieth century onward the latter ceased to be a realm apart: the so-called "democratization" of luxury began. The democratization of luxury saw the creation of companies to substitute local craftsmen who supplied handmade, exceptional products for the high-ranking society of the time: it follows that luxury companies are now pursuing large-scale production, which clashes with the idea of rarity associated with luxury items. A direct outcome of mass production and the introduction of brands is the advent of intermediate luxury (Chevalier and Mazzalovo, 2008).

Allérès (2000) points out three different degrees of luxury: inaccessible luxury, intermediate luxury, and accessible luxury. More, in-depth, inaccessible luxury refers to exclusive models with a very high pricing point, affordable only by a small elite: this is the case for haute couture. Instead, intermediate luxury corresponds to duplicates inaccessible luxury items, whereas accessible luxury refers to items produced and distributed on a large scale, still belonging to the luxury realm but accessible to the less wealthy.

Figure 22: *The luxury pyramid.*



Source: Allérès (2000): 102

What emerges from the origins and evolution of luxury is that its boundaries are ever-evolving, judgmental and sometimes blurred: indeed, nowadays the luxury industry cannot be narrowed down to a single product category, as it encloses both goods such as leather goods, shoes, cars, yacht, wines and spirits, jewelry, clothing and watches, as well as experiences and services like luxury spas and hospitality (Rigaud-Lacresse and Pini, 2017).

Nevertheless, Amatulli et al. (2017) identify the key components that make up a luxury good:

- *Excellent quality*: it refers both to the unique raw materials employed and to superior craftsmanship, which deliver excellence.
- *Scarcity, uniqueness and exclusivity*: the product is linked to rarity and exclusivity, which result from unique raw materials and artisanal skills employed, but also from deliberately producing a limited amount of goods in order to produce scarcity.

- *Aesthetic beauty*: coupled with the former two characteristics, aesthetic beauty contributes to add value to the luxury product: in this perspective, the collaboration between the designer and the artisans is critical to delivering it.
- *Ancestral heritage and personal history:* luxury brands are associated with a unique history and heritage, also linked to their country of origin.
- *Fulfillment of dreams*: luxury brands and products convey a symbolic value for the consumer, as they deliver a hedonic and emotional benefit to the latter.
- *Very high price*: this last characteristic contributes to the perception of luxury as unique and rare, although it is becoming more blurred since luxury brands have started co-branding with fast-fashion brands, thus closing the existing gap between luxury and the mass market.

What emerges is that luxury products enhance self-esteem and prestige through the psychological and social benefits that they deliver, thus becoming a perceptive reality with a subjective nature (Guercini, 2013).

2.4.2 The luxury industry

Figure 23: ***Top 10 luxury goods companies by sales, FY2019***

Top 10 luxury goods companies by sales, FY2019

FY2019 Luxury goods sales ranking	Change in ranking from FY2018	Name of company	Country of origin	FY2019 Luxury goods sales (US$M)	FY2019 Total revenue (US$M)	FY2019 Luxury goods sales growth*	FY2019 Net profit margin[1]**	FY2019 Return on assets**	FY2016-2019 Luxury goods CAGR[2]*
1	↔	LVMH Moët Hennessy-Louis Vuitton SE	France	37,468	60,069	16.8%	14.5%	8.1%	16.5%
2	↔	Kering SA	France	17,777	17,777	16.2%	14.7%	8.6%	23.3%
3	↔	The Estée Lauder Companies Inc.	United States	14,863	14,863	8.6%	12.1%	13.6%	9.7%
4	↔	Compagnie Financière Richemont SA	Switzerland	13,822	16,188	8.5%	19.9%	9.9%	2.4%
5	↑ 1	L'Oréal Luxe	France	12,334	12,334	17.6%	n/a	n/a	12.9%
6	↓ -1	Chanel Limited	United Kingdom	12,273	12,273	10.4%	19.6%	17.9%	12.5%
7	↔	EssilorLuxottica SA	Italy	10,624	19,463	6.0%	6.8%	2.3%	ne
8	↑ 1	Chow Tai Fook Jewelry Group Limited 周大福珠宝集团有限公司	China/Hong Kong SAR	8,411	8,500	13.9%	7.0%	7.5%	5.2%
9	↑ 1	PVH Corp.	United States	8,076	9,657	9.8%	7.7%	6.3%	8.7%
10	↓ -2	The Swatch Group Ltd.	Switzerland	8,014	8,294	-3.0%	9.1%	5.5%	2.9%
Top 10				**143,662**	**179,418**	**11.9%**	**13.3%**	**7.6%**	**11.7%**
Top 100				**280,640**	**320,291**	**8.5%**	**11.2%**	**7.4%**	**8.0%**
Top 10 share of Top 100				**51.2%**	**56.0%**		**71.7%[3]**		

[1] Net profit margin based on total consolidated revenue and net income
[2] Compound annual growth rate
[3] Top 10 companies share of total net profit for Top 100 companies—based on the 79 companies reporting net profits
e=estimate n/a=not available ne=not in existence (created by reorganization)

*Top 10 and Top 100 sales growth rates are sales-weighted, currency-adjusted composites
**Top 10 and Top 100 net profit margin, return on assets and asset turnover ratio are sales-weighted composites

Source: Deloitte Touche Tohmatsu Limited. *Global Powers of Luxury Goods 2020*. Analysis of financial performance and operations for fiscal years ended through 31 December 2019 using company annual reports, industry estimates, and other sources.

Source: Deloitte, Global Powers of Luxury Goods 2020, The new age of fashion and luxury: 17

The 2020 Deloitte report records the aggregate luxury goods sales at US$281 billion, dominated by the top ten companies accounting for more than half of the total sales. Despite its growth in the last decades (Kapferer 2010 reports an estimate of the total revenues of about US$160 billion), the luxury industry is still quite small compared to other sectors: Walmart alone counts for a revenue of around US$530 in 2020, almost double the whole revenue of the luxury industry as a whole. Indeed, luxury players are usually small- to medium-sized firms with a global stance (Carcano et al., 2011). Notwithstanding the relatively small size of the luxury sector, the latter has undergone enormous scrutiny in the previous decade, as it was being accused of lagging behind in terms of sustainability effort: nevertheless, Kapferer (2010) argues that, in reality, luxury companies were keeping silent over their involvement with sustainable development, while putting it on top of their agenda. Their reluctance to disclose sustainability information may be due to the willingness to avoid a boomerang effect and being accused of greenwashing, in order to maintain their status of excellence and dreamlike offer.

Chevalier and Mazzalovo (2008) point out the specificities of the luxury industry by looking at three major aspects:

- Company size: despite usually being small or medium enterprises, (except for the large groups of small individual companies such as LVMH and Kering) luxury companies are characterized by a strong awareness and reputation among consumers. This suggests that, unlike other industries, size is not the most important element when it comes to comparing luxury firms.
- Financial characteristics: first, the luxury sector is characterized by a high break-even point, mainly due to the requirement of top quality in the whole supply chain until the sales. Nevertheless, once the company breaks even, thus covering all the fixed costs, margins become almost entirely profit. Evidence suggests that luxury brands inside a corporation may not deliver a profit for years yet are still kept in the company's portfolio. This is due to the fact that successful brands, when taking off, become so profitable to make up for all the losses. In short, the luxury industry can be either a "win-all or lose-all" (ibidem: 33). From an economic standpoint, luxury companies focus on quality over cost reduction along the entire value chain (Amatulli et al., 2017): since top-quality is required, they focus on value creation for the

consumer, in an attempt to pass on to the latter a symbolic value of exclusiveness and prestige.

- Time factor: strategic decisions taken for luxury brands cannot deliver an impact in the short term, and timing is crucial. Indeed, the time and investment needed to launch a new product is much higher than in other industries, while a strict system of deadlines remains it is the case of watchmaking, where the yearly Geneva or Basel fair, around the end of February, requires the design and manufacturing to be finalized on time; or in the luxury fashion cycle, where it takes up to eighteen months to complete the process, from the selection of the fabrics to the bargain sale. The long-term frame in which the luxury sector unfolds is the main reason for which luxury firms are usually family firms (including major groups such as Richemont and LVMH) which can "accept poor results for a few years before growing and making money again" (ibidem: 36).

2.4.3 The luxury industry and the Covid-19 pandemic

Currently, the luxury system is made up of mainly four product segments, namely accessories, apparel, perfumes and cosmetics, jewelry and watches. The Altagamma Consensus gives a snapshot of the prospected growth for each category, both before and during the Covid-19 pandemic:

Table 7: ***Altagamma Consensus data, 2021&2020 compared.***

PRODUCT	CONSENSUS 2021	UPDATE MAY 2020	CONSENSUS 2020
Apparel	14%	-21%	3.5%
Leather goods	16%	-16%	6%
Jewelry	13%	-22%	5%
Watches	11%	-25%	3%
Cosmetics	15%	-11%	6%
Shoes	14%	-17%	5%

- Accessories (leather goods): before the pandemic crisis, accessories were experiencing notable growth also due to the phenomenon of "accessorizing". Together with cosmetics, accessories could rely on online sales also during lockdown, thus showing a lower decrease with respect to the other categories. In 2021, leather goods are projected to return to 2019 levels.
- Apparel: although modestly growing until 2020, this category was losing ground with regard to contribution to sales. It has been hit hard by the pandemic crisis, and forecasts show that its growth will be less dynamic due to unsold stock, homeworking, and an increase in Activewear/Loungewear.
- Jewelry and watches: the so-called hard luxury has been the most hit from the pandemic, due to the increase in the price of gold as well as for the unsuitability of being sold online. Indeed, those products are traditionally bought in physical stores and suffer both from the lack of travel retail and the difficulty in recreating an online experience for the customer.

- Cosmetics: similar to leather goods, cosmetics decreased at a slower pace since these categories of products can be easily bought online. Faster growth is expected in the sector of skincare and make-up.

Therefore, despite the losses incurred due to the pandemic outbreak, the Altagamma Consensus suggests a quite positive outlook in terms of margins, which are projected to bounce back and get closer to 2019 figures.

2.4.4 Points of convergence between luxury and sustainability

As mentioned in the previous paragraph, the typical luxury strategy entails the creation of a symbolic value to the consumer, though it should not be seen only in the perspective of hedonism and ostentation (Amatulli et al., 2017): indeed, the modern consumer expects that the luxury brand they choose engages with sustainability issues (Kapferer and Michaut, 2015). The value created by luxury companies comes from the exceptional raw material and unique craftsmanship, as well as from heritage, rarity, and exclusiveness. In this perspective, the concept of sustainability can converge with luxury in the features of durability and rarity (Guercini and Ranfagni, 2013). On the one hand, luxury products do not go out of fashion after one season (Amatulli et al., 2017), as they are likely to endure in time and even be passed on from one generation to another: just think about Philippe Patek, a luxury watchmaking company, advertising slogan "You never actually own a Patek Philippe. You look after it for the next generation". The concept of durability is linked to sustainability due to the purpose of the latter to protect natural resources and avoid waste: the more a consumer can use a product, the less he or she will produce waste and buy something over and over again. On the other hand, rarity is related to luxury due to the rare materials and craftsmanship from which it derives:

employing second-class materials and workmanship would hinder the capability of delivering rare (and, therefore, higher in value) products (Amatulli et al., 2017). Thus, luxury itself depends on the availability of materials in the decades to come, such as gold, diamonds, gemstones, or precious skins. It follows that luxury and sustainability can be powerful allies (Guercini and Ranfagni, 2013).

Despite the theoretical interconnection between luxury and sustainability, the fact that luxury is stratified (see Allérès, Fig. 22) may pose additional issues with respect to the link between luxury and sustainability. Insofar as intermediate and accessible luxury strategies resemble that of the mass market, the feature of rarity fades away. However, this does not stop luxury companies from engaging with sustainability practices, due to pressures from within and without, namely from consumers and stakeholders (Li and Leonas, 2019). With a particular focus on the luxury fashion industry, Lozano et al. (2010) argue that consumers are more and more looking for recycled and more durable materials. CEOs are starting to prove their engagement with sustainability: François-Henri Pinot, Chairman and CEO of Kering, goes as far as saying "for us, Luxury and sustainability are inseparable: only an integrated approach can ensure long-lasting performance." (Kering Integrated Report, 2017: 5) To meet the needs of responsible consumers, a few luxury companies have already captured the market opportunity coming from the convergence of durability and scarcity: luxury resale is booming (Deloitte 2020): as to boost the circular economy, Richemont and Farfetch decided to acquire Watchfinder and Stadium goods (respectively), resale platforms where secondhand luxury products are resold, mainly to younger customers. In a similar vein, Louis Vuitton is reselling some of its limited editions, such as Supreme x Louis Vuitton: due to their artificially engineered scarcity, limited editions have the potential to increase their value over time, rather than losing it. Other best practices are being carried out through partnerships with the Real Real store: Kering sells its unsold stock rather than destroying it, and also Burberry and Stella McCartney are partnering with the platform to support the circular economy. Moreover, luxury Groups are moving towards carbon neutrality across supply chains (Deloitte, 2020: 9): for instance, Gucci claims to have already achieved it by 2019, whereas Armani and Chanel are set to achieve it by 2050.

As trendsetters, luxury companies have the potential to promote a more responsible production and consumption pattern, which would be embraced also by the mass market (Hashmi, 2017): indeed, the luxury industry has a strong impact on consumer behavior, as well as a major transformative power on other industries (Bendell and Kleanthous, 2007), and a paradigm shift towards sustainable luxury can thus pave the way for more sustainable practices also in the mass market (Kunz et al., 2020).

2.5 SDG reporting in the luxury industry: literature gap

This chapter has started with a discussion on voluntary disclosure and non-financial reporting: over the last decades, NFR has become a powerful tool for organizations to communicate more transparently with their stakeholders (Haller et al., 2017), but also for the latter to gauge the extent to which companies address sustainability. Although issuing an NFR started as a voluntary practice (Stubbs and Higgins, 2015), the increased concern for sustainability has led some countries (including the European Union) to mandate NFR as compulsory for large enterprises (Haller et al., 2017). Despite the fact that mandatory NFR is still a contested phenomenon with respect to the quality of disclosure (Carungu et al., 2020; Lock and Seele, 2016), companies had to come to terms with non-financial disclosure, by addressing their stakeholders' concern. Given the growing importance of corporate engagement, scholars have also debated on several aspects of NFR, such as the credibility of disclosed information (De Beelde and Tuybens, 2015; Sethi et al., 2015) and the comparability among reports (White 2005; Tschopp and Nastanski, 2016); the factors affecting SDG disclosure (Rosati and Faria, 2018; Rosati and Faria, 2019) and the quality of SDG disclosure (Tsalis et al., 2019; Izzo et al., 2020; Pizzi et al., 2020; Nichita et al., 2020).

We have already discussed, in chapter 1, the relevant role that can be played by MNEs in achieving the SDGs (Kolk et al., 2017). Furthermore, as highlighted in paragraph 2.4.3, attention has been given to the luxury industry, which seems to be at odds with the concept of sustainability: however, a closer analysis sheds light on the convergence between the realm of luxury and sustainability (Bendell and Kleanthous, 2007; Guercini and Ranfagni, 2013). Moreover, as a trendsetter, the luxury industry can be a role model for sustainability reporting and, in particular, for SDG reporting.

It follows that on the one hand, a common language for reporting sustainability progress can be represented by the SDGs: a generalized set of targets and indicators, with the potential of helping companies to rethink their strategies and contribute to the circular economy. On the other hand, organizations can play a pivotal role in achieving the SDGs (Muff et al., 2015; Van Tulder, 2018) and, for doing so, there is a need for clear and generally accepted standards, as well as for external verification (Sethi et al. 2015). Indeed, enterprises may choose to disclose their progress on issues that are “easier” for them to reach, without considering their negative impacts on other issues, as to respond to stakeholders’ pressure (Nieuwenkamp, 2017). Nevertheless, studies into SDG reporting by multinational luxury companies are still absent. Hence, the research should focus on how the latter companies are coping with the implementation of the SDGs, if and how they are integrating the SGDs in their business strategy. Therefore, the research questions to be addressed are the following:

RQ 1: What is the process of preparation and disclosure of an NFR in luxury companies?
RQ 2: To what extent are luxury companies engaging with the SDGs in the preparation of the NFI?
RQ 3: To what extent are the SDG-related information included in the NFRs of multinational luxury companies verifiable?
The aim is to understand the degree of engagement of luxury companies with the SDGs, as well as identifying weak points and areas that need improvement.

CHAPTER 3. RESEARCH ON THE NON-FINANCIAL REPORTS OF MULTINATIONAL LUXURY COMPANIES

In the previous chapters, it emerged from the literature that the type, structure, and standards for issuing an NFR are still not homogeneous among companies (Stolowy and Paugam, 2018). Indeed, adhering to reporting frameworks for NFRs is still done by companies voluntarily (Brown and Dillard, 2014; Carungu et al., 2020). Although this may lead to problems when it comes to comparing different NFRs, the GRI standards is currently the most adopted framework, and is said to be the most useful in terms of decision-making (Tschopp and Nastanski, 2021). Moreover, so far organizations are more likely to issue a stand-alone NFR, rather than an IR (Humphrey et al., 2017; Izzo et al., 2020).

Furthermore, the reporting of NFI started as a voluntary process and, therefore, its objective was to meet the demands of stakeholders (Stubbs and Higgins, 2015; O'Donovan, 2002). Nonetheless, the European Union now requires certain organizations to disclose their NFRs on a mandatory basis (Haller, 2017) and this has raised questions in terms of accuracy of the information (Latorre et al., 2018; Lock and Seele, 2016; Carungu et al., 2020).

For what concerns reporting on the SDGs, literature can be still considered to be in its infantry: although many guidelines and suggestions arose to suggest how to engage and communicate SDG actions (see paragraph 2.3.2), research so far is mainly quantitative, and takes into account the SDGs in terms of mentions inside the NFR, or specific industries. On top of that, despite the luxury industry being praised for its prominent role in transforming production patterns and consumer behavior (Bendell and Kleanthous, 2007), no study into the luxury industry's NFRs and SDG engagement has been carried out so far.

Therefore, the third chapter is a study on 10 multinational luxury companies, for which each sustainability report from 2015 to 2020 has been taken into account. This chapter aims at advancing the research on the process of NFR and SDG reporting, by broadening it to the luxury industry. In doing so, the number of SDGs reported in each report, the year of the first mention, and assurance of each Group have been considered. Moreover, the managers in charge of issuing the sustainability report in one of these companies were interviewed, in order to gain insights into the process of writing an NFR in multinational corporations.

3.1 Methodology

To find an answer to the research questions, this study was carried out in two phases: the first phase includes a study on the top 10 companies in the luxury industry by sales, according to the Deloitte 2020 report (Fig. 23). In particular, the NFRs or IR of the corporations for the period 2015-2020[15] were considered. This list was chosen mainly for two reasons: first of all, because prior literature has underlined the importance of the luxury industry in paving the way for sustainability in the private sector (Guercini and Ranfagni, 2013; Bendell and Kleanthous, 2007; Hashmi, 2017). Second, scholars (Kolk et al., 2017; Van Zanten and Van Tulder, 2018; van der Waal and van Thijssens, 2020) claim that multinational companies can have a great impact on the SDGs: in particular, Kolk et al. (2017) point out how MNEs can represent a source of problem-solving and innovation for SDG-related issues, but also create issues in terms of negative externalities due to their global activity. Third, size is said to be an endogenous factor linked to the likeliness of disclosing SDG-related information (Rosati and Faria, 2018).

[15] If available: some of the companies mentioned did not publish an NFR in that timespan. For those companies, only the NFRs available later than 2015 have been taken into account.

The second phase was carried out by contacting, between November 2020 and March 2021, a luxury Group. It resulted in two interviews with professionals that personally work for issuing the NFR (from now on, the company will be referred to as "Company Alfa"). The Group has been selected for the interviews for several reasons: first, it is a luxury company with a global presence, that owns 25 of the global leading luxury goods Houses and businesses; it can count on over 30,000 employees in 36 locations and owns more than 2,000 mono-brand boutiques around the world. It has five core regional offices, namely in Geneva, Hong Kong, Tokyo, Dubai, and New York. Second, since the organization does not belong to the European Union, it issues an NFR on a voluntary basis. This means that its efforts for sustainability and SDGs are due to increased transparency and accountability towards its stakeholders, not to comply with external regulation. Third, in order to prioritize material topics, Company Alfa employs an analytical approach to the SDGs, by engaging its stakeholders and issuing a materiality map.

3.1.1 Research Design

The approach employed for this study was a mixed-method approach, by collecting data relative to the companies' NFR and through the interviews, and then triangulating sources (Demartini and Trucco, 2016). In general, this approach permits to improve the quality of the research (Jick et al., 1979): indeed, it was possible to understand the experience and perceptions of the participants inside the business, but also to have insights on the evolution of the process of SDG reporting and NFR.

For what concerns the first phase, this study mainly takes into consideration three parts inside the NFRs: the section dedicated to SDG reporting (if present), the tables related to the standards employed to issue the NFR and the part containing the information relative to the audit. Due to the nature of this method, the interviews and the NFRs were analyzed manually, without the use of software.

The first part of the research sought to identify the following data[16]:

- Type of NFR adopted
- Whether or not luxury companies have already incorporated the SDGs in their NFR, and in which year they have started to do so.
- SDGs prioritized and mentioned.
- UN Global Compact membership.
- Standards employed.
- Assurance.

By looking at this information, it was possible to interpret the extent to which each Group engages with the SDGs, if the NFRs are comparable among each other, and to what extent the NFI can be considered to be reliable.

For the second part of the research, a questionnaire was administered to two CSR professionals. It covered four macro-areas: the first area of interest was the creation process of the CSR report; the second area concerned the link between the CSR Director and the CFO; the third area dealt with sustainability information, focusing on the SDGs; and finally, the fourth area regarded the internal impact of the CSR report. The roles interviewed were the CSR Manager and the CSR Director. The aim of the discussion was to understand the business process behind the redaction of the NFR, as well as the procedure for including the SDGs. These discussions made it possible to have an insight on how an organization manages the NFR process, what actions are put in place and also future outlooks in terms of SDGs and sustainability. In paragraph 3.2.1, all the citations will mention the answers to the interviews. The latter will be cited as "Interview A (IA)" for the interview

[16] The data refer to the latest NFR available for each company.

with the CSR Manager and "Interview B (IB)" for the interview with the CSR Director.

3.2 Companies highlights

- **Louis Vuitton-Moet&Hennessy (LVMH)**: formed in 1987 as a conglomerate, since Louis Vuitton merged with Moet&Hennessy. The latter previously merged in 1971. The Group owns many Houses with a long-dated history, operating in the following sectors: Wines and Spirits, Fashion and Leather, Perfumes and Cosmetics, Watches and Jewelry, Selective retailing, other activities. Its headquarter is in Paris, France.
- **Kering:** based in Paris, France, it was founded in 1963 by François Pinault as a tinder trading company. it then shifted to the luxury sector in the 1990s. Currently, its Houses operate in Fashion, Leather Goods, Jewelry and Watches.
- **Estée Lauder**: its corporate headquarter is in New York, United States. Founded by Estée Lauder in 1946, the company is specialized in the Cosmetics sector.
- **Richemont SA:** established in the 1940s by Anton Rupert under the name of Rembrandt Group, it started by owning interests in diverse industries, from wines and spirits to financial services and gold and diamond mining. Eventually, it turned to the sector of luxury goods by the late 1980s, and officially became Compagnie Financière Richemont SA thanks to Johann Rupert. Currently, its Houses operate in the sectors of Watches and Jewelry, Online Distributors and Apparel and Accessories.
- **L'Oréal Luxe**: it was founded in 1909 by Eugène Schuller, who created a special hair dye for his wife and started selling to hairdressers in Paris, which is also the headquarter of the Group.

Its portfolio entails many powerful international brands, all operating in the Cosmetics sectors.

- **Chanel:** established in 1910 by Gabrielle Chanel, it was initially a hat shop in rue Cambon, Paris. Over the decades, Chanel became a renowned and powerful brand, expanding from Accessories to Apparel, Cosmetics, Jewelry and Watches.
- **Essilor-Luxottica:** merged in 2018, the two companies were both operating in the optical industry. While Essilor was established in Paris, France, in 1849, Luxottica was founded in 1961 in Agordo, Italy, by Leonardo Del Vecchio.
- **Cho Thai Fook**: the name of the company recalls luck and prosperity according to the Chinese tradition. Cho Chi-Yuen opened its first gold jewelry store in Guangzhou, China, back in 1929: he then relocated to Macau and quickly became one of the top gold jewelry companies in the area. Currently, the company operates in Jewelry sector.
- **Phillips-Van Heusen (PVH):** Moses and Endel Phillips, founders of PVH, started their business in 1881 by selling shirts for coal miners in Pennsylvania, United States. They eventually partnered with John Van Heusen in 1919, an inventor that patented his soft-folding collar. The company is currently based in New York, United States, and owns renowned brands in the Apparel sector.
- **The Swatch Group**: operating in the Jewelry and Watches sector, the Swatch Group was founded in 1981 in Switzerland. Today, a large part of the Swiss watch industry relies on the manufacture of components of the Swatch Group.

3.3 Results: NFR analysis

Until 2019, most companies opted for stand-alone Non-Financial Reports, with the exception of Kering and The Swatch Group: the former has adopted the Integrated Report since 2017, whereas the latter reports its sustainability information together with its annual report. While all organizations communicate their progress through a single Non-Financial Report, until 2019 LVMH redacted two reports per year: a CSR Report and an Environmental Report. The 2020 NFR was the first that incorporated both social and environmental information. Starting from 2020, companies based in France have issued the Universal Registration Document (URD) to comply with French law. Thus, Kering shifted to the URD and its 2020 NFR is included in the latter, and the standards employed are the GRI (instead of the IIRC previously employed).

Table 8: ***Type of NFR, first mention of the SDGs and UNGC membership.***

Company	Type of NFR as of 2020	Year of first explicit mention of the SDGs	UN Global Compact
LVMH	Stand-alone	2016	Member
Kering	Stand-alone	2017	Member
Estée Lauder	Stand-alone	2019	Not member
Richemont	Stand-alone	2018	Member
L'Oréal Luxe	Stand-alone	2015	Member
Chanel	Stand-alone	2018	Not Member
Essilor-Luxottica	Stand-alone	2017	Member
Chow Thai Fook	Stand-alone	2020	Not member
PVH	Stand-alone	2015	Member
Swatch Group	Inside the annual report	/	Not member

Concerning SDG reporting, L'Oréal and PVH were the first to mention them in 2015, while Chow Thai Fook first cited them in 2020. Overall, all the companies have decided to engage with the SDGs, with the exception of the Swatch Group, which reports on its sustainability practices but has not yet mentioned the SDGs. It is possible to notice that companies with UN Global Compact membership have usually mentioned the SDGs earlier than non-members in their NFR[17]: indeed, the seven Groups that are members of the UNGC have started to mention the SDGs between 2015 and 2018, while non-members between 2018 and 2020, or not at all.

By looking at Tab. 10, it is possible to notice that SDG 13 (Climate action) is the most mentioned, followed by SDG 17 (Partnership) and SDG 5 (Gender equality). In particular, SDG 13 has been mentioned by all of the 9 companies that cite the SDGs in their NFR. Estée Lauder is the only one not mentioning SDG 17, whereas Chow Thai Fook is the only one not including SDG 5 (Gender equality). The most mentioned SDGs are also the most prioritized: SDG 13 and 17 are a priority for every company (with the exception of SDG 17 for Estée Lauder). Overall, companies prefer to mention only the SDGs that they take into consideration: only Richemont and Kering display all the SGDs and then chooses material topics among them, while LVMH and PVH mention all the SDGs and state that they are taking actions for all of them.

Table 9: *SDGs mentioned and prioritized.*

Company	SDGs [18]mentioned	SDGs prioritized[19]
LVMH	All	No prioritization
Kering	All	SDG 1 SDG 3 SDG 4 SDG 5 SDG 6 SDG 8 SDG 12 SDG13 SDG 14 SDG 15 SDG 16 SDG 17
Estée Lauder	SDG 3 SDG 5 SDG10 SDG12 SDG 13	SDG 3 SDG 5 SDG10 SDG12 SDG 13
Richemont	All	SDG 5 SDG 8 SDG 12 SDG 13 SDG 17
L'Oréal Luxe	All **except:** SDG 2	All **except:** SDG 2

[18] Inside the latest report available
[19] ibidem

Chanel	SDG 5 SDG 7 SDG 13 SDG 15 SDG 17	SDG 5 SDG 7 SDG13 SDG 15 SDG 17
Essilor-Luxottica	All	13 (not specifying which ones)
Chow Thai Fook	SDG 8 SDG 9 SDG 12 SDG 13 SDG 17	SDG 8 SDG 9 SDG 12 SDG 13 SDG 17
PVH	All	No prioritization
The Swatch Group	N/A	N/A

Another aspect to be taken into account is what scholars have defined "cherry-pick approach", mentioned in the previous paragraphs. While some of the companies analyzed report their impact on all the SDGs, though prioritizing some of them over others through a materiality assessment, other NFRs simply show the initiatives put in place that are aligned to and contribute to certain SDGs. For instance, Estée Lauder illustrates its actions for the promotion of Goals 3, 5, 12 and 13, but no further mention on the impact of its activities on the other SDGs is reported. Out of the 10 reports analyzed, 4 take into consideration the impact they can have on all 17 SDGs, and these are: LVMH, Kering, Richemont, and PVH. Only the latter explicitly states to have followed the SDG Compass guidelines to report on the SDGs.

Nevertheless, none of the reports analyzed cites the possible negative impacts on the SDGs resulting from their operations, as they focus instead on the positive contribution they can have. LVMH reports its major contributions to each of the SDGs, plus other contributions that can be either indirect or voluntary; over the years, it has added contribution on how they tackle SDG-related issues: in 2016, contributions on the SDGs were reported half in the social responsibility report (those SDGs more people-centered), while the environmental report showed the progress related to nature-centered SDGs. In 2019, the graph is the same for both reports. Also, more initiatives were added, particularly with respect to biodiversity and fight against climate change: for instance, the company pledges to designing long-lasting products, working for increasingly stringent standards and saving water and energy. Kering takes a more radical approach, with the aim of "rethinking our relationships with stakeholders, so as to ensure fair and ethical treatment that constantly takes into account the social and environmental impacts of our Group's operations" (Kering IR 2017: 22). Kering has changed its priorities with respect to the seven SDGs mentioned in 2017: in 2020, it states to be having a direct impact on 12 SDGs. The SDGs added in the URD 2020 are SDG 1 (No Poverty), SDG 4 (Quality Education), SDG 14 (Life below Water), SDG 16 (Just and peaceful society) and SDG 17 (Partnership) were added to the Group's priorities; instead, the SDGs on which Kering claims to have either an indirect or voluntary impact are SDG 2 (Zero Hunger), SDG 9 (Industry, Innovation and Infrastructure), SDG 10 (Reduced Inequalities) and SDG 11 (Sustainable Cities and Communities). Also, Estée Lauder broadened its sustainability strategy over the years, adding SDG 10 (Reducing inequalities) in its 2020 report. Richemont has mentioned its purpose to align with the SDGs in its 2018 CSR report, while the first materiality matrix to assess its impact on each SDG and prioritize them figures in its CSR report 2020. With respect to 2016, the 2019 NFR of L'Oréal include also

SDG 8 in (Decent work and economic growth) in its contribution; in 2020, it adds SDG 9 (Industry, Innovation and Infrastructure). The case of Essilor Luxottica is a peculiar one: until 2018, before merging, Luxottica published a stand-alone NFR. It mentioned and prioritized SDGs 13 and SDG 17, but since Luxottica merged with Essilor, the company only mentions its engagement with 13 out of the 17 SDGs, without specifying which ones[20]. This latter NFI is included in the Universal Registration Document, in compliance with French law, and available also as an extract on the company's website.

For what concerns the standards employed by each company, half of the companies refer to the GRI Standards, either in the "core" or "referenced" option. The exceptions are L'Oréal, Chanel and the Swatch Group do specify their reporting standard. This leads to problems in comparing the NFR of different companies. For what concerns greenhouse (GHG) emissions, most companies refer to the GHG Protocol to measure them; the only exceptions are the Swatch Group, Estée Lauder and Chow Thai Fook.

[20] This research only takes into account the official NFR of a company. It does not investigate whether or not there are other documents that specify claims made on the NFR.

Table 10: *Standards and assurance.*

Company	Standards employed	Type of NFR assurance[21]	Auditor/Department
LVMH	Report: GRI Carbon footprint: GHG Protocol	External assurance: a selection of indicators is externally audited.	E&Y
Kering	Report: GRI Carbon footprint: GHG Protocol	External assurance	Deloitte
Estée Lauder	Report: GRI	External assurance: certain environmental metrics	Apex Company LLC
Richemont SA	Report: GRI Carbon footprint: GHG Protocol	External assurance on carbon footprint	SGS
L'Oréal Luxe	Report: Other Carbon footprint: GHG Protocol	External assurance: social, societal, environmental and health and safety information were audited	Deloitte PwC
Chanel	Report: Other Carbon footprint: GHG Protocol	Not specified	/

[21] In this case, internal assurance and external assurance are put together in the same column as the main aim is to have an insight on the verifiability of the information.

Essilor-Luxottica	Report: GRI Carbon footprint: GHG Protocol	External assurance	PwC
Chow Thai Fook	Report: HKEx ESG Guide	Not specified	/
PVH	Report: GRI Carbon footprint: GHG Protocol	Not specified	/
The Swatch Group	Report: Other Carbon footprint: Other	Not specified	/

Most of the corporations submit their NFR to external assurance, although for some of the organizations, assurance is carried out only on a limited number of indicators. Kering relied an internal assurance system until 2019, which reviewed the Group's Suppliers for alignment with the Kering Animal Welfare Standards and for gender equality; since the introduction of the URD, an external audit is performed on the NFR by Deloitte. PVH does not have an external audit and this is clearly stated in its GRI tables inside the NFR, while the Swatch Group only assured financial information. Instead, Chow Thai Fook does not mention assurance, neither internal nor external. Richemont opts for external audit only for the carbon footprint indicators: in particular, Richemont also points out that it did not audit the 2020 carbon footprint due to the outbreak of Covid-19. Only Kering and Essilor-Luxottica and L'Oréal submit the whole NFR to an external auditor, although for

L'Oréal not all the non-financial indicators are assured; LVMH and Estée Lauder only state that a selection of indicators is being audited, while L'Oréal holds that environmental, societal, health and safety indicators were externally assured.

In short, 6 of the 10 companies submit all or part of their NFR to external auditors. Among the other four Groups, only PVH clearly states that its report has received no external verification. Instead, Chanel, Chow Thai Fook and the Swatch Group do not mention assurance with respect to their non-financial information. In particular, 4 of the 5 companies that audit their NFR are subject to the EU Directive 2014/95 on mandatory NFR, thus suggesting that external assurance is more common under compulsory NFR. The only exceptions are Richemont and Estée Lauder, which issues a voluntary NFR but provides external assurance for certain indicators, and Chanel, which has mandatory NFR but does not externally assure it.

For what concerns external audit, only Richemont and Estée Lauder rely on audit companies that are not part of the Big Four: indeed, the former submits its carbon footprint to SGS, while the latter to Apex Company LLC. Ernst and Young audits the NFR of LVMH, whereas Kering relies on Deloitte and Essilor Luxottica on PwC. Finally, L'Oréal luxe is the only company in the list that submits its NFR to two auditors, namely PwC and Deloitte.

3.3.1 Results: interviews

Company Alfa is a pure luxury player based outside the European Union: thus, it is not subject to the Directive 95/2014/EU and its effort in writing the sustainability report "*is voluntary, not mandatory. It is on a voluntary basis; it is a question of transparency.*" (IA[22]). Therefore, the Group has decided voluntarily to publish an NFR and it has done so for

[22] Interview A – CSR Manager.

over ten years, with the aim of improving the company's transparency with its stakeholders.

The company yearly issues a stand-alone sustainability report, which complies with the GRI standards. The NFR 2020 starts with an assessment about the company's approach to sustainability and then, maps its material topics with respect to the SDGs: in particular, two materiality matrices were carried out, one for stakeholders in general and another for Gen Z only. The matrices are divided into quadrants, and the two variables taken into account are the impact on the business and the importance to stakeholders, in order to map the topics that are more material for the company. After that, the CSR Report covers the measures taken following the outbreak of the Covid-19 pandemic, such as health and safety and remediation measures. A fourth section is dedicated to the company's governance which, among other things, explains how risk is managed, the organization's codes, standards and policies, and the management of CSR. After that, the approach stakeholder engagement is described, followed by the company's vision and strategy. The last four chapters are dedicated to different focus areas: these are People, Communities, Sourcing and Environment. Finally, the last two pages contain the GRI index.

Inside the company, "*the CSR Department is under the finance department*", thus the Group Chief Finance Officer (CFO), is responsible for corporate CSR and "*chairs the CSR Committee*". The CFO is supported by the CSR Director, who "*is the one who is in charge of all the process. [..] In fact, the persons responsible for the CSR report are all the persons that are involved in what we call the "focus area" (IA)*. The focus areas mentioned are People, Communities, Sourcing and Environment: each of them is led by a Director. This means that the CSR Director is the one managing the process, and each focus area is responsible for a specific field that is reported to the Director.

"For example, if we go back to the environment, I (CSR Manager) am the one in charge of it along with my colleague. Or, if you look for the person in charge of Responsible Sourcing you will go directly to the Director and he will put you in contact. The CSR Director is the central point of contact, he has the bigger view, helicopter view on everything and then he contacts each person of the business responsible for each area, because as I said it is really spread over the business. We are the CSR department but we are not working on all topics." (IA).

In other words, CSR is a matter that does not touch only one department of the company, but it is spread to many areas. Indeed, each House must designate a CSR Representative, who will have the duty to implement the Group standards and initiatives locally. Moreover, an annual CSR Conference of the Group takes place to share progress and set the annual objectives for the next year.

"During the CSR committee we agree each March what is going to change in this year's report: is it just a refresh compared to last year? Or are we going to be radically different, or something in between?" (IB)[23]

That is to say, Company Alfa yearly reviews its strategy for CSR, in order to understand if major changes have taken place during the previous year, which should be addressed with a different approach in the NFR. The chapters are written by the members of the CSR Committee: in particular, the CSR Directors sets the agenda and the timetable and writes most of the chapters, except for the People Chapter, the Sourcing Chapter and the Communities chapter. The CSR Director works in synergy with an external consultant, Global Citizenship, at the beginning of the process, to make sure to be aligned with the GRI Standards. Also, since it is a very technical part to do once a year, the external consultant takes care of the GRI table in the report. Once the NFR is done, it is submitted to the CFO for confirmation, *"and then, just before publication it goes to the Board of Directors for any comments"* (IB). The report is usually published in July and is communicated internally using the company's intranet and internet social media.

[23] Interview B – CSR Director.

For what concerns external media,

"Last year for the first time I did some external media work as well, as we as Company Alfa are more confident now about being public, about what we do not only in terms of financial report, but we are also a responsible business, it is a way to share with the world how we are using our powers, what things we are doing." (IB)

This underlines the importance of communicating the publication of the NFR also to external stakeholders, so that the latter can acknowledge the sustainability effort of the company.

From the interviews, three main criticalities in issuing the NFR emerged: first, until last year not many persons were involved in the process, whereas now *"CSR has involved a lot of internal stakeholders." (IA)*. This shows the importance of including also internal stakeholders in issuing the CSR Report: indeed, it can be beneficial for the analytical part in the identification of material topics. Second, from a more editorial standpoint, the CSR Director gives a structure to each chapter: "*an introduction, some tables stating the progress that we are making, then a discussion of the progress we are making, line by line, anything else you want to say, and then a conclusion*" (IB), but since he is not the only one writing the report, the structure is not always respected. Therefore, this criticality has more to do with individual preferences over following the same structure for each chapter, in order for the NFR to be written in a more homogeneous way. The third point is about quality: indeed, starting this year, Company Alfa will have its entire NFR externally audited, while until 2020 the only part that was being audited was the carbon footprint:

"*in the past, the only area that was audited was the carbon footprint data, and we would have that externally validated by an audit certified. This year for the first time I've asked the auditor to do the whole report, which would mean they will take a closer look not only at the carbon reporting, which we've been doing for 10 years almost, so pretty solid; we're also looking for the first time into validating things like the number of people we employ, how many hours of training they've had, any diversity about gender and so on. All of that is going to be looked at for the first time.*" (IB).

In short, an external audit is a useful tool to validate the data in the CSR Report, and to give stakeholders a greater extent of reliability of the information. Nonetheless, having the whole NFR externally audited is likely to lead to add a significant workload for the company.

The NFR of Company Alfa also includes an analytical approach to the SDGs: the CSR Director started to include the latter in the report in 2020:

"*Last year it was the first time I opened the SDGs box for the Group, for the previous 2 reports, if you go through the 2018 and 2019 reports, you will find the SDGs logo, and that is all. Just to say, yes, we are aware of it but it was a long road, it took me five years to take them into account. So, we are aware of the SDGs and their ability to capture the imagination and taking them into my reporting process." (IB)*

Indeed, the CSR Director is a member of a national Board of Global Compact: from 2015 to 2017, he listened to how other big companies were dealing with the SDGs. *"By 2018 I knew what I wanted to do with it, it is kind of a sphere topic, reserved for a few United Nations people and a few leading companies." (IB)*. As far as 2018, Company Alfa had a big change in its top management team, and the CSR Director had a mandate to "restart everything". Thus, in 2020 *"it was the first time I could publish my analytical approach to the SDGs, which was using the materiality matrix, maps to the SDGs, and a short list";* a few of the Houses inside the Group went through their own journey with the SDGs. From this explanation, it is possible to note how long it can take for a company to include the SDGs in its business strategy. As the CSR Director points out, he was already aware of the SDGs already back in 2015, but he only managed to issue its analytical approach in the NFR three years later. This was also possible thanks to a change in the top management of Company Alfa, which suggests the importance of a Board of Directors that values sustainability. Another key point is to be found in the importance of sharing best practices among organizations: as the CSR Director points out, he has listened for years at the SDG approach employed by other companies.

As previously anticipated, the analytical approach for including the SDGs in the reporting system starts with the materiality matrix: for this purpose, stakeholders are involved by contacting them directly and using the SDG Action Manager tool. The latter is a web-impact management tool that has been developed by the UN Global Compact:

"It tells the company to answer a list of questions to do your baseline and highlight the SDGs that are relevant for you company to understand where we stand. [..] and if the work we have done so far is really accurate and relevant, and so it is a way to have a view on our high priorities to focus on in the future. So far, we have just started with the baseline and depending on the result to see if we will go deeper on this topic, because you have questions really relevant for each SDG." (IA).

Thanks to the SDG Action Manager tool, it is easier for companies to prioritize those SDGs on which they can have a greater impact, and that are more relevant for its stakeholders. Furthermore, it can suggest to the company whether or not it is taking the right path in terms of SDG priorities. This is possible due to the engagement of stakeholders, both internal and external, that must answer a series of questions specific for each SDG.

Currently, the company focuses on five SDGs, on which it can have the greatest impact. When asked whether they believe it is possible to focus on all the SDGs, the interviewees said that

"For me, it is not possible to focus on all of them, that for sure, you have to select, though it doesn't mean you won't have an impact on the other ones with what you are doing as we know that all of them are, in fact, interrelated".

Nonetheless, "*in this field, everything is evolving very quickly*" and the Group businesses are very diverse, thus it is not possible to say whether priorities will change in the future. It follows that, from a company's perspective, engaging with all the SDGs, with no prioritization, may actually be counterproductive. Indeed, the CSR Manager suggests that in order to carry out meaningful actions, it is necessary to have a focus only on a few targets. This point is also stressed by the CSR Director: he holds that, in the very beginning, his objective was for the company to focus on just three SDGs, which eventually became five. Furthermore, the CSR Director has pointed out the importance of partnerships for fostering progress: indeed, one of the company's Houses is partnering up with a competitor in the Jewelry sector to understand how they can best contribute to the SDGs.

Since Company Alfa wants to make sure to be aligned with future stakeholders, the company also issues a second materiality matrix, with only stakeholders belonging to Generation Z.

"Our current customers are not from this generation (maybe only some of them) but it has been more an investment for the future, we'd like to see in which directions, what are their feelings, what is important for them. It is, of course, important to have a look also on our generation now, because they tell what we have done so far, but we need to understand what the upcoming generation wants to focus on." (IA)

That is to say, Company Alfa is interested in knowing what its future consumers value the most in terms of sustainability topics, in order to be ready not only to satisfy the needs of current customers, but also of future ones. Therefore, it is a matter of being forward thinkers and ask the needs of future consumers: more in-depth, the company observed a shift in the stakeholders' need from one year to the other,

"Maybe also due to Covid, there is a shift in the people, they really want to act and do something. There is a change and also when we are looking at the supply chain in terms of traceability to understand where materials come from and what their costs have been. So, I believe there is a higher sensitivity."

Thus, tracing the demands of stakeholders year by year can help analyzing their evolving needs and be up to date with their requirements.

Since the Group has started its transformation strategy last year, linking financial and non-financial information is still a work-in-progress. In any event, the costs related to issuing the NFR are relatively small, since they only include the consultancy work. Instead, implementing more sustainable practices entails two levels, the first regarding choices such as:

"When we try to make something new which we try to make as virtuous as possible, so when we try to build a new watch-making building, we could it for 10, but then it would be the minimum structure. If we spend 12 or more, it would be greener, more beautiful, it will have heat pumps instead of using electricity from the grid." (IB)

In this perspective, being more virtuous can also demand more monetary investments in the present, to become more sustainable in the future. Therefore, the first point to be made with respect to the cost of sustainable practices is that their buildings with less environmental impact need greater initial investment.

The second level is about carbon offsetting, which is quite expensive:

"Each year we offset a measured footprint to neutralize it, it's the least we can do, reducing our emissions is more important, but while we still have a footprint, we neutralize it and for that we still use millions every year. It is money that goes off to the world of carbon offsetting" (IB)

Indeed, Company Alfa participates in one major project and other smaller projects for carbon offsetting, mainly dealing with forest conversation. Although the aim is to reduce emissions as much as possible, as the CSR Directors states, carbon offsetting is currently the major cost related to sustainable practices.

Finally, to issue the NFR, the CSR Director works together with an external consulting company *"to be sure that we are aligned with GRI."* The consulting company helps at the beginning of the process and at the end, for the review of the data. As previously stated, starting this year Company Alfa will have all of its NFR externally audited, while in the past it only audited the carbon footprint. The tests performed to test the verifiability of the information entail:

"They look at the integrity of the system, how it is capturing all of our business or just half, what it is capturing, and are the other conversion factors put in the right way? They are looking for manual areas so they are looking for scope, for errors, and they also look – because we have been doing it for 10 years – they look where there have been big changes, big variations for one of our businesses." (IB)

In short, the external auditors perform the tests necessary to prove the reliability of the information stated in the NFR and look for errors in the data provided and whether or not the company's emissions have had significant changes from the previous year, as to investigate the underlying reasons.

3.4 Discussion, limitations, and further research

The aim of this chapter was to shed light on the process of preparation of an NFR, understanding to what extent multinational luxury companies are engaging with the SDGs according to their non-financial information and gauging the extent to which these companies rely on external assurance for their NFR. The following answers have been given to the three research questions identified:

Research Question (RQ) 1: What is the process of preparation and disclosure of an NFR in luxury companies?

Inside Company Alfa, the CSR Department is under the Finance Department. This means that issuing the NFR is made under the name of the CFO. Each House of the Group selects a CSR Representative for the CSR Committee: the latter reunites each March to decide whether the next NFR is going to be just a refresh compared to last year, or if it is going to change. In this organization, the CSR Director is the individual in charge of writing most chapters of the NFR: he sets the agenda and the timetable. The Director works in synergy with external consultants both at the beginning and at the end of the process, to be sure that the report is in line with GRI Standards. The external consultant is also in charge of redacting the pages relative to the GRI Standards. In order to include the SDGs in the process, the company takes an analytical approach: it submits questionnaires to its stakeholders through the SDG Action Manager Tool. The latter permits to see the areas of major interest for stakeholders and helps the organization choosing its material topics. Following the answers, a materiality matrix is created to assess the most relevant issues for the company. In 2020, Company Alfa chose to include two materiality matrixes in its NFR: the first involved all of the company's stakeholders, while the second addressed Generation Z only. This choice was made to address the demands of future consumers, in order to keep a future-oriented perspective on the company's sustainability strategy.

An audit company reviews the final draft of the NFR once a year for the carbon footprint indicators: the NFR 2021 will be the first one that will entirely externally audited. The tests performed regard the integrity of the document, looking for errors or for big variations with respect to the previous year. Once the NFR is ready, the CSR Director submits it to the CFO, who confirms it and passes it on to the Board of Directors for any comments. The NFR is, then, published on the company's website. This usually happens in July, just before the summer holidays. The publication is usually advertised through an intranet of Company Alfa: since it can be hard to engage people in the NFR, which is over 100 pages, the intranet advertising is made either through weekly highlights or simply by stating the report has been published. Last year was the first time that Company Alfa also did some external media.

The main costs arising from issuing the NFR come from the employment of an external consultant, although it is not a very relevant cost. Instead, the main cost for implementing sustainability practices is the money going to carbon offsetting. Finally, the criticalities that emerged from the interview entail the editorial standpoint and external assurance: the former, since more than one people writes the report, is about agreeing on the structure of each chapter; the latter regards the fact that, starting this year, the whole report will be externally audited, and this may need more reviews to be done on the report or correct possible errors that emerge from the audit.

RQ 2: To what extent are luxury companies engaging with the SDGs in the preparation of the NFI?

These findings suggest that luxury companies are well-aware of the SDGs, and all of them, except for the Swatch Group, has mentioned the SDGs in their NFR. SDG 13 (Climate Action), SDG 17 (Partnership), and SDG 5 (Gender Equality) are the three most mentioned. The importance of partnerships was, also, pointed out during the interviews. Overall, multinational luxury companies seem to have a good degree of engagement with the SDGs, although the latter is still a work-in-progress, as some of the companies analyzed have added more SDGs in their reports over the years. Even the interviews made it possible to understand the difficulties for companies in properly addressing the SDGs in their strategy, and the time it takes to adopt an analytical approach.

Moreover, the analysis carried out in this chapter revealed that the majority of the top 10 multinational luxury companies have already started to report their SDG engagement and are keen to implement additional strategies and initiatives for fostering their progress. In particular, all the companies that are members of the UNGC have at least mentioned the SDGs in their reports; the 3 Groups that are non-members either do not mention the SDGs (the Swatch Group) or mention it later than members (Chanel and Estée Lauder). This may suggest that there is a link between UNGC membership and SDGs engagement, thus confirming Van der Waal and Thijssens' (2020) findings.[24]

Another interesting topic that emerged from the research is the fact that, in practice, taking care of all the SDGs may not be viable for companies: out of the ten corporations studied, only one of them (PVH)

[24] A quantitative analysis on the luxury industry is needed to properly confirm or confute this suggestion.

mentions all the SDGs and does not prioritize some of them over the others. On the one hand, this may suggest that the company implements relevant actions to cover all the SDG targets; on the other hand, by looking more closely into its NFR, the SDGs are mentioned only in the last two pages of the report, and they are accompanied by a list of priorities, with little or no insights on each priority. Along with the comment of the CSR Manager and the recommendation of the SDGs Compass, this may suggest that it would be actually better for companies to focus on a smaller set of SDGs through a materiality assessment, in order to keep the focus and avoid a superficial mention of the SDGs.

Nonetheless, only Kering, Richemont and Chow Thai Fook take an analytical approach for including SDGs in their strategy, by carrying out materiality assessment and aligning it to the Goals. Furthermore, only Richemont clearly states to be following the SDG Compass guidelines to report on the SDGs. The other companies that take the SDGs into account do not specify the guidelines they employ. Also, most companies prefer to mention only the SDGs on which they can have a greater positive impact, instead of mentioning all of them and then, prioritize those that are most significant for the Group. Moreover, none of the companies taken into consideration disclosed both the negative and positive impacts (actual or potential) that their activities can have on SDGs targets, since they tend to cover the positive side of their operations.

RQ 3: To what extent are SDG-related information included in the NFRs of multinational luxury companies verifiable?

The fact that most of the companies studied employ the GRI as reporting standards and GHG Protocol for measuring their emissions makes the NFR quite comparable. Nonetheless, SDG reporting is still heterogeneous and only Richemont states to have followed the SDG Compass guidelines to report on the SDGs. Thus, SDG information is still not very easy to compare across organizations. Moreover, the whole NFRs present quite heterogeneous structures, and this further raises issues about their actual comparability.

Six of these companies submit their NFR to external assurance and the audit companies most employed are Deloitte and PwC However, the reports are not fully audited: in Richemont, only the carbon footprint is subject to an audit. Also, L'Oréal, Estée Lauder and LVMH assure only a fraction of the indicators; the Swatch Group does not assure its non-financial information. From the fact that none of the Groups analyzed audits the NFRs in full, some considerations arise: first, no complete external verification may lead to difficulties for external stakeholders in assessing the actual performance of an organization in terms of sustainability, and be labeled as "greenwashing". Second, all the top 5 luxury Groups by sales according to Deloitte (2019) rely on some kind of external verification, whereas among the other 5 Groups, only Essilor-Luxottica audits at least a fraction of non-financial indicators. This may suggest that bigger companies feel to have a duty for greater verifiability of information, although a quantitative analysis on a bigger sample of companies is needed to assess the accuracy of this statement.

Furthermore, the interviews allowed finding out that Company Alfa, although currently auditing only greenhouse emissions, will start externally auditing the full NFR from 2021. This suggests that companies are taking action to improve the reliability of their NFR, and this can apply also for the other Groups involved in the study. Finally, all the companies subject to mandatory NFR chose to externally assure at least part of their indicators, with the exception of Chanel. Instead, Groups that issue a voluntary NFR do not assure their indicators, except for Richemont.

3.4.1. Discussion

This thesis investigates SDG reporting by major luxury Groups. Therefore, it broadens the body of literature related to SDG reporting and SDG engagement by the private sector, as it extends it to the luxury industry, in particular to large Groups. Several insights arise from the study: first, Van Tulder (2018) holds that international companies are more likely to engage with the SDGs, and in fact, they are endorsed by 9 out of the 10 Groups in this research. Second, since 6 of the 10 companies comply with GRI standards and 7 out of 10 are members of the UNGC, it seems that these luxury companies are in line with Van Zanten and Van Tulder's (2018) claim about the fact that MNEs are taking initiatives to get involved with SDGs. Moreover, the present research shows that UNGC Membership usually entails an early mention of the SDGs in the NFR. The only exceptions are Richemont and Chanel: although they both started mentioning SDGs in 2018, the former is a UNGC member while the latter is not, and this is consistent with Van der Waal and van Thijssens (2020). Third, it is consistent with Kolk et al. (2017), who argue that partnerships are essential for MNEs to engage with sustainable development. Indeed, SDG 17 on Partnership is one of the most prioritized in the companies analyzed, and also the interviews show that companies are taking action in this direction. Fourth, this research extends the body of literature on SDG reporting in different sectors (Tsalis et al., 2019; Izzo et al., 2020; Cosma et al., 2020): while the latter studies confirm the prioritization of SDG 13 (Climate Action) by other industries, luxury companies also prioritize SDG 17 (Partnership) and SDG 5 (Gender Equality), which may be a peculiarity of this sector. This research is also consistent with some of the findings by Rosati and Faria (2018) about economic performance as an endogenous factor that encourages SDG reporting. Fifth, although scholars argue that voluntary NFR does not necessarily lead to less accurate information

(Latorre et al., 2018; Carungu et al., 2020), this study shows that most of the companies that are subject to the EU Directive 2014/95 verify (at least in part) the indicators in their NFR. Instead, luxury Groups that are not based in the European Union (PVH, the Swatch Group, Chow Thai Fook, Richemont, Estée Lauder) do not assure their NFRs, with the exception of Richemont and Estée Lauder. Since external assurance leads to greater credibility of the information (Sethi et al., 2015), it is possible that companies subject to mandatory NFR feel the need to provide greater verifiability to their stakeholders. Nonetheless, the fact that NFRs are mostly audited by one of the Big Four can be connected to Sethi et al. (2015) comment on assurance: indeed, the authors claim that it would preferable for NFRs not to be assured by major audit companies, since they are mainly specialized in financial audit and, on top of that, it may lead to a conflict of interest if these auditors also assure the company's financial information. Sixth, the luxury Groups analyzed tend to uncover the positive impact they can have on the SDGs, without clearly stating the actual or potential negative impacts on other SDGs. This may be due to the need for luxury companies to keep their status of excellence and dreamlike experience (Kapferer, 2010). Nonetheless, as seen in Chapter 1, SDGs are interlinked through either synergies or trade-offs (e.g., Griggs et al., 2014; Pradhan et al., 2017). This means that working for one SDG can indirectly add a positive contribution to another SDG as well, but also have a negative impact on another one. Finally, only Richemont clearly states to be following the SDG Compass guidelines for SDG reporting: even though there is no "right" way for businesses to engage with the SDGs (Agarwal et al., 2017), this makes it difficult to compare the efforts of each organization.

3.4.2 Managerial implications

This study urges companies to improve standardization among NFRs and SDG reporting standards, as well as to have non-financial information externally verified. Indeed, it highlighted the importance for luxury companies to properly address and report on SDGs: the interviews showed how much stakeholders, especially from younger generations, expect companies to take action towards sustainability, and SDGs can be seen as a common language to define the latter. Therefore, it is possible to address sustainability issues by engaging with SDGs: nonetheless, transforming a company's strategy to and properly reporting SDG issues is likely to require years of preparation. Therefore, this is possible with a well-structured CSR department inside the organization, although the culture of sustainability must also be spread inside the Group. Also, the role of top management to mandate a transformation strategy seems to be a relevant factor for SDG engagement.

It is also put forward that, despite the interconnectedness of the SDGs, it may not be viable for companies to concentrate on all of them simultaneously. For this reason, it is recommended to specify the actual or potential positive and negative impact for each SDG, and how the attainment of certain targets may negatively or positively affect other targets, to further increase transparency for stakeholders. Disclosing such information with stakeholders and specifying where the company could have or is having a negative impact, would increase the transparency and credibility of the effort towards a more circular and sustainable economy. Furthermore, this research suggests the importance of implementing an analytical approach in SDG reporting, by involving both internal and external stakeholders in the materiality assessment. This can help mapping priority areas for the company and having the reasons clearly stated in the NFR.

Finally, in order to avoid conflict of interests, it is recommended to assure NFRs with a different auditing company than the financial statement, and that is more familiar with non-financial audit than the Big Four.

An analytical approach to SDGs, together with external assurance and compliance with certain reporting frameworks such as the GRI Standards, can make it possible for Groups to convey the message externally and internally with more confidence and strengthen the relationship with the company's stakeholders.

3.4.3 Limitations and further research

The first limitation of this research can be found in the fact that it only took into consideration only 10 luxury companies: although giving good insights into how leading organizations in this industry are facing the challenge of the SDGs, the sample is limited. Therefore, further research may carry out a quantitative analysis that embraces more firms, to shed light on how different sectors in the luxury industry (Jewelry and Watches, Apparel, Cosmetics) are coping with SDGs; which issues are prioritized and identify common patterns; if size and UN Global Compact membership are actually consistent with the findings of Van der Waal and Thijssens (2020) and Rosati and Faria (2018). In this perspective, a content analysis may be carried out on the NFRs, by looking at how many times each SDG is mentioned, and in which section of the NFR. Otherwise, it would be possible to focus on which firms are integrating the SDGs in their business strategy, and which are instead merely aligning the SDGs to activities that have already been put in place.

A second limitation concerning this research is to be found in the analysis of the assurance, which is limited to acknowledging the type of assurance and the name of the auditor: indeed, another topic worth to be explored is a further study on whether or not NFR audit has evolved over time and what type of assurance (limited or reasonable) is performed on the data.

Lastly, this research contains two interviews, one from the CSR Manager and the other from the CSR Director; the interviews were necessary to understand the process behind the redaction of an NFR and took into account four macro-areas. A future study may attempt to carry out more interviews, investigating more in-depth the motives behind the decisions to approach the SDGs by different departments within the organization. Also, research on why a company chooses to issue a stand-alone NFR rather than an IR would add insights into the firm’s motives or criticalities.

CONCLUSION

This thesis aimed at broadening the research concerning SDG reporting. In particular, it focused on how the non-financial reporting of global luxury Groups has evolved with the introduction of the SDGs. The research started with a systematic literature review of the SDGs, which highlighted the importance of the interconnections among the Goals and their targets, as well as of the endorsement of the SDGs by the private sector. Furthermore, it focused on the evolution of non-financial reporting and SDG reporting. Concerning the latter, a literature gap was identified, concerning SDG reporting in the luxury industry. The latter is said to have a major role in driving the change (Bendell and Kleanthous, 2007) and, therefore, understanding its involvement in SDG reporting could add relevant insights to the current literature.

In order to fill the literature gap, chapter 3 investigated the following research questions:

RQ 1: What is the process of preparation and disclosure of an NFR in luxury company?

RQ 2: To what extent are luxury companies engaging with the SDGs in the preparation of the NFI?

RQ 3: To what extent are the SDG-related information included in the NFRs of multinational luxury companies verifiable?

To answer these questions, this study was carried out with a triangulation approach, and it was divided into two phases: the first phase concerned the analysis of the NFRs of 10 luxury Groups, a list extrapolated from the Deloitte report of 2019 (see pag.118 Fig. 2.12). The second phase consisted of interviewing two professionals from a luxury Group (named "Company Alfa" for privacy reasons), which are involved in the preparation of the NFR.

Findings show that the NFR is issued mainly by one person, namely the Director for Corporate Social Responsibility, and each year the CSR

Committee of the Group meets to decide whether the NFR is going to change radically or not from the previous year; external consultants help at the beginning of the process and at the end, also for the redaction of the GRI Standards index. SDGs are included into the NFR through stakeholders' engagement and a materiality assessment. With respect to the degree of engagement with the SDGs, to this date, the majority of the Groups analyzed have included the SDGs in their NFR, but only three with an analytical approach (through a materiality assessment and a prioritization of material topics). The SDGs most mentioned and prioritized are SDG 13 (Life on Land), SDG 17 (Partnership), and SDG 5 (Gender Equality). Finally, it emerged that the standards most employed are, currently, the GRI Standards, and 6 out of 10 companies have their NFR externally audited, at least in part. The NFR is usually assured by one of the Big Four and takes into account only a selection of indicators.

This research adds up to prior SDG reporting studies, by adding insights into multinational luxury companies. Indeed, it is consistent with Van Zanten and Van Tulder (2018), which state that multinational companies have adopted reactive strategies following the introduction of the SDGs: according to the authors, this is mainly due to the several regulations they must cope with. It is, also, in line with prior studies on non-financial reporting, since NFI is mainly disclosed with stand-alone reports and there is a high awareness of SDGs in the sample (Izzo et al. 2020). Also, it confirms Rosati and Faria (2018) consideration of size as an endogenous factor that leads to SDG reporting and Van der Waal and Van Thijssens' (2020) research on UN Global Compact membership as a reason for SDG reporting. Indeed, in this case, UNCG membership results in an early mention of the SDGs, with the only exception of Richemont (UNGC member) and Chanel (not member), which started mentioning SDGs in the same year, namely 2018. Moreover, SDG 13 (Climate Action) is the most mentioned and prioritized (Izzo et al., 2020) also for these luxury companies, although it is followed by SDG 17 (Partnership), which may be a peculiarity of the luxury industry. Furthermore, it is highlighted that assurance is mainly carried out by one of the Big Four, and it is highlighted that the Groups subject to the EU Directive 2014/95 have at least one part of their NFR externally audited, except for Chanel. Instead, among the companies with voluntary NFR, only Richemont and Estée Lauder provide external assurance to at least certain indicators.

With respect to managerial implications, this study provides a suggestion for luxury companies to follow an analytical approach for SDG reporting, by engaging both internal and external stakeholders in the materiality assessment, and clearly communicate how and why they have chosen to engage with selected SDGs. It also suggests having the NFRs externally audited, as well as reporting both positive and negative impacts that companies may have on each SDG.

The limitations of this research can be found in the fact that only one company has been interviewed, and the NFRs analyzed concerned 10 companies. Further studies may carry out a more extensive set of interviews to understand the evolution of and the motives behind SDG reporting, as well as performing a content analysis on a bigger sample of luxury companies to get insights into how different sectors within the luxury industry are coping with the SDGs.

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