

Louvain School of Management

Will the European Taxonomy be a game changer for the financial market?

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Abstract :

While global warming is a reality that cannot be ignored, several jurisdictions have implemented measures to fight this systemic threat.

Among these effective measures, the European Commission implemented the European Taxonomy Regulation which represents the first legal document providing a scientific-based and global definition of sustainable economic activities. Similarly, through its objective definition, the European Taxonomy aims to provide the financial market with a clear guidance to efficiently reallocate financial flows toward sustainable projects while preventing greenwashing.

This thesis assesses the potential of the EU Taxonomy to provide a concrete impact to the financial market and puts forward proposals on how it could be enhanced to effectively contribute to the European environmental transition.

In this regard, the study conducted several semi-structured interviews with experts in the sustainable finance sector. The interview scripts were then coded through a thematic approach to identify key themes that helped us answering our research question.

Our findings conclude that the EU Taxonomy depicted a step forward in the sustainable finance area by disrupting sustainability reporting practices. More precisely, the regulatory and objective dimensions of the EU Taxonomy contribute to greater transparency toward sustainability performance within the financial market.

Nevertheless, to foster the impact of the European Taxonomy, regulators should implement mandatory measures which would explicitly mandate organizations and financial actors to align on this classification system.

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List of Abbreviations

Capex – Capital expenditure

CDP – Carbon Disclosure Project

CDSB - Climate Disclosure Standards Board

CO₂ – Carbon dioxide

COP – Conference of the Parties

CSR - Corporate Social Responsibility

CSRD – Corporate Sustainability Reporting Directive

DNSH – Do No Significant Harm

EFRAG – European Financial Reporting Advisory Group

ESG - Environmental, Social, and Governmental

EU - European Union

EU Taxonomy – European Taxonomy Regulation

FSB – Financial Stability Board

G20 – The Group of Twenty

GDP – Gross Domestic Product

GHG – Greenhouse gas

GRI - Global Reporting Initiative

IASB – International Accounting Standards Board

IIRC – International Integrated Reporting Council

IFRS - International Financial Reporting Standards

IPSF – International Platform on Sustainable Finance

ISSB - International Sustainability Standards Board

ITW – Interviewee

IWAF - Impact-Weighted Accounts Framework

IPCC - Intergovernmental Panel on Climate Change

NACE - Statistical classification of economic activities in the European Community

NFRD - Non-Financial Reporting Directive

NGOs - Non-Governmental Organizations

OECD - Organisation for Economic Co-operation and Development

Opex – Operating expenses

PBoC – People Bank of China

SaaS – Software as a Service

SASB - Sustainability Accounting Standards Board

SEC – Securities and Exchange Commission

SFDR – Sustainable Finance Disclosure Regulation

SME – Small and medium enterprises

SRI – Socially Responsible Investment

S&P 500 – Standard and Poor’s 500

TEG – Technical Expert Group on Sustainable Finance

TCFD - Task Force on Climate-related Financial Disclosures

UN - United Nation

1 Introduction

1.1 Background

1.1.1 About Climate Change

Nowadays, climate change is a reality that cannot be ignored. According to the Intergovernmental Panel on Climate Change (IPCC), human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and their attribution to human influence, has strengthened.

In this way, climate change poses a systemic risk that will affect countries and economic actors worldwide. Furthermore, while we can already see that climate change is occurring, scientists stress the existence of “tipping points” at which the consequences of climate change would become irreversible and may cause significant harm around the world (Clerc, 2021).

In its last report, the Intergovernmental Panel on Climate Change (IPCC) has shown that human being is directly responsible for the climate change and that human influence has strongly contributed to global warming at a rate that is unprecedented in the last 2000 years (Masson-Delmotte et al., 2021).

In the same regard, in its Summary for Policymakers (2021), the IPCC stated that global warming of 1.5°C and 2°C is likely to be exceeded during this century in the absence of substantial reductions in CO₂ and other GHG emissions over the coming decades.

Consequently, with further global warming, the world is expected to experience more and more simultaneous and multiple dramatic changes in climate related catastrophes such as drought, flood or extreme heatwaves, with increasing impact and occurrence the higher temperature the world will undergo.

As a result, IPCC stressed that global GHG emissions must be reduced by half over the next ten years for the planet to keep the global warming within 1.5 degrees and thereby preventing the worst climate related catastrophes (TEG, 2020).

1.1.2 Global Measures that have been taken so far

The collective awareness of the systemic nature of climate change is relatively recent. It has emerged in the context of international dialogues under the support of the United Nations (UN) and the reports of the IPCC, which have recognized the responsibility of humankind in global warming (Clerc, 2021).

Likewise, there has been forty-three years between the first global response to tackle the climate's change issue (First Earth Summit, 1972) and the COP 21 (Paris Agreement, 2015). The following will highlight the key events that have led to the Paris Agreement.

The beginning of climate issues' collective awareness is represented by the year 1972 which corresponds to the creation of the UN Programs for the Environment. This program was the first international meeting created in order to define some approaches to stimulate sustainable development worldwide.

Twenty years later, the first Conference of the Parties (COP) was born. This milestone marked a turning point in the collective awareness of global warming as it represented the first international treaty recognizing the existence of climate change and the humankind's responsibility in it. In response to this, the first COP acknowledged the importance of stabilizing emissions of man-related greenhouse gases into the atmosphere at a level which would not endanger the climate worldwide (Clerc, 2021).

Then, in 1997, the third Conference of the Parties (Kyoto) resulted in the signing of a protocol, the "Protocol of Kyoto" (enacted in 2005), in which 37 nations committed to cut their GHG emissions from 5% between 2008 and 2012 with respect to 1990's levels (Durand, 2012). However, this protocol was covering around a third of global GHG emissions, leading to insufficient measures to truly stabilize greenhouse gas emissions worldwide. Finally, the protocol of Kyoto depicted a considerable lack of concrete sanctions against the parties that did not effectively fill their mission, making this treaty non-binding (Clerc, 2021).

Afterwards, 196 Parties have adopted the Paris Agreement at COP 21 in Paris on December 12, 2015 (entered into force on November 4, 2016). By signing the Paris Agreement, Parties have been legally bonded to an international treaty on climate change.

More precisely, according its second article (*The Paris Agreement* | UNFCCC, n.d.), the Paris Agreement aims to strengthen the global response to the threat of climate change by:

- (a) Containing the increase in global average temperature well below 2°C above pre-industrial levels and continuing efforts to limit temperature increase to 1.5°C above pre-industrial levels, with the understanding that this would significantly reduce the risks and impacts of climate change.
- (b) Building capacity to adapt to the adverse effects of climate change and promoting resilience to climate change and low-greenhouse gas development in a manner that does not threaten food production.
- (c) Making financial flows consistent with a profile of moving towards low greenhouse gas emission and climate change resilient development.

In other words, by establishing a logic based on the voluntary States' participation and by inviting all countries to make efforts to make the transition, the Paris Agreement was expected to provide the world with a new era in the fight against climate change.

However, the Paris Agreement is also characterized by its low binding and enforceable scope. Furthermore, the contributions brought by each jurisdiction at the COP 21 are considered by law as pledges that are expressed by each nation without considering crucial aspects such as economic power, current GHG level or historic responsibilities regarding this climate change. In the same regard, those contributions are not required by law as they are not covered in the Paris Agreement, but rather in a register kept by the Secretariat of the Framework Convention (Lemoine-Schonne, 2016).

In addition, the commitments made at the COP 21 are deemed insufficient to reach the (well-below) target of +2°C and would instead lead to approximately +3°C (Geoffron, 2015).

Eventually, the last Conference of the Parties to date, the COP 26 occurred in November 2022 in Glasgow. This conference was seen as the last real opportunity to contain global warming.

Indeed, five years after the Paris Agreements, all countries participating in COP 26 had to update their greenhouse gas emission reduction targets for 2030.

This conference resulted in decisions taken by its various members to make it possible to potentially save around 4.8 Gt of emissions in 2030 compared to the COP 21 contributions. However, this relative saving remains far from sufficient to ensure the global temperature to increase less than 2°C before the end of the century. Similarly, if each nation actually meets its COP 26 commitments, global GHG emissions in 2030 would still be about 10 percent above their 2010 level, whereas they should drop by 45% to align with the Paris Agreement objectives (Perthuis, 2021).

1.2 Problem

In response to the Paris Agreement, many countries have made historic commitments to achieve net zero emissions. Similarly, in recent years, organisations and financial institutions have come under increasing pressure to report and contribute to sustainability.

However, until recently, such reporting practices were made by companies and investors on a voluntary basis. In addition, there was no objective definition for sustainability that organizations could refer on. Therefore, firms and financial actors had a lot of flexibility when disclosing the sustainability aspect of their activities. In the same way, they were able to only disclose the positive environmental impacts of their economic activities while deliberately omitting to discuss the harmful aspects of their business.

As a response to this major challenge for sustainability disclosure, the European Commission developed the European Taxonomy Regulation as a regulatory and science-based classification framework for environmentally sustainable economic activities. Likewise, as part of its Action Plan on sustainable finance, the EU Commission implemented the EU Taxonomy in order to strengthen the foundations for sustainable investment by providing organizations and financial actors with an objective definition of green activities.

1.3 Purpose

As the EU Taxonomy is still at an early stage of its application, few research has been conducted on the topic. In this way, this thesis aims to provide a clear understanding of the extent to which the EU Taxonomy is revolutionising the financial market and explores potential recommendations for policymakers and regulators to enhance the EU Taxonomy application.

Therefore, the study intends to be part of a global reflection on the future impact of the European taxonomy on sustainable investments worldwide.

1.4 Method

In order to address our research question, the study investigates the current literature on how companies and financial actors across the world disclose sustainability information about their economic activities and understand how the EU Taxonomy differs from other frameworks. This enabled us to identify critical themes and establish a qualitative study within the European sustainable finance sector in order to confront our themes with insights from industry experts.

1.5 Delimitations

The sample size used to conduct our study is limited to 8 participants having great knowledge and experience across the sustainable finance area. While the interviewees were occupying different positions in diverse areas within the sustainable finance field, the findings might have been more accurate and reliable if we had the opportunity to interview more candidates working in the broader financial market.

Additionally, as the EU Taxonomy is still at a preliminary stage of its implementation, several of its dimensions are still under reflexion and not effectively acted yet. Therefore, this study

has already been subject to multiple updates and some contents might be outdated by the time it will be consulted, depending on effective decisions made by regulators.

2 Literature Review

2.1 The Greenwashing Issue

2.1.1 Context of greenwashing

While the concerns for sustainability issues are growing among companies, investors and individuals, the green market is considerably growing. In the same way, green products, companies and investments emerge every day in the world. However, this significant green growth is followed by the phenomenon of greenwashing (de Freitas Netto et al., 2020).

In this way, the term “greenwashing” which has been used for the first time in 1986 by the activist Jay Westerveld (de Freitas Netto et al., 2020), refers to “misleading communications seeking to promote a company's efforts to engage in activities with an environmental connotation” (Delmas & Burbano, 2011). More precisely, Delmas and Burbano (2011) defined greenwashing as *the intersection between two behaviours: poor environmental performance and positive communication about environmental performance*.

2.1.2 Greenwashing in the financial sector

The greenwashing phenomenon across financial markets refers to companies and investors misleading communication about their sustainability impact in order to capture the financial flows allocated to green projects and/ or satisfy stakeholders' expectations.

With the various greenwashing's scandals that have emerged recently, investors and other stakeholders are increasingly cautious when investing in public companies. Similarly, having invested in a company that is accused of greenwashing by either the medias, consumers or NGOs is significantly impacting for the shareholders given that the company's share price as well as the company's brand image is likely to be affected by those accusations (Gatti et al., 2021). Furthermore, investors are inclined to lose faith and become more sceptical about green labelled products (Delmas & Burbano, 2011).

However, as there is no clear and objective definition of greenwashing (Delmas & Burbano, 2011), it is considerably challenging to keep companies accountable regarding the accusations made against them. In the same way, when organizations choose to disclose about their economic activities' environmental impact, they are likely to disclose positive information in order to please stakeholders' expectations and attract investors while disguising or hiding information about the company's harmful impact on the environment (Bini et al., 2018).

In a complementary manner, due to the lack of regulatory and objective measures and standards to comply on, companies engaging in concrete green claims are expected to suffer from doubts since it is hard for customers and investors to differentiate the effective reliability of green marketing claims (de Freitas Netto et al., 2020).

In addition, while organizations increasingly use relevant tools to report on the sustainability impact of their economic activities, the use of these tools is generally voluntary, and therefore highly variable to the risk of greenwashing (Cordelier, 2020).

Therefore, in order to correctly fight greenwashing issues, organizations should be legally required to disclose their environmental information on objective and comparable standards, leading the investors to have the direct or indirect guidance to make informed choices (Cordelier, 2020). Such mandatory measures would hold companies accountable for their misleading communications about their sustainability claims and therefore, considerably limit the greenwashing phenomenon in the financial sector.

2.2 Organizations taking their responsibilities

The Paris Agreement has become a relevant frame of reference for economic players and financial institutions, who are required to demonstrate that the continuation of their economic activities meets the expectations that the international community expressed at the COP21.

Similarly, in a great majority of G20 jurisdictions, companies and financial institutions with public debt or equity are legally required to disclose material risks in their financial reports—including material climate-related risks (TCFD, 2017). Likewise, G&A's research found that 92% of the S&P 500 companies published a sustainability report in 2020.

Nevertheless, due to the lack of standardized framework for disclosing climate-related financial risks, companies encounter challenges when having to identify what information should be disclosed and how it should be disclosed. In addition, disclosures on climate-related impact are challenging regarding differences in mandatory and voluntary frameworks. Consequently, fragmentations in disclosures and lack of focus on climate-related financial impacts have prevented stakeholders from accessing appropriate information useful for decision making (TCFD, 2017).

2.2.1 The role of finance

Exposed to the systemic risk arising from global warming, financial players are increasingly mobilised in favour of environmental issues. Similarly, they consider sustainable challenges in their future interest in terms of financial performance and risk (Ginglinger, 2021).

Consequently, while jurisdictions worldwide are currently taking considerable time to agree on a relevant global framework to fight climate change, financial actors are trying to take their responsibilities and meet the growing demand of clients on sustainable investments (Charl ty, 2020). Similarly, investors have great capacities to enable climate resilience through several mechanisms.

First, investors have the capacity to exclude from their portfolio companies that do not have a relevant transition plan and/or are active in industries that are considerably harmful for the environment. By doing so, investors are able to reduce their portfolio's carbon footprint as well as the risk toward devalued assets (Charl ty, 2020). For example, in 2019, the Norwegian Parliament required its 1 trillion dollars fund to exit the fossil fuel sector entirely and take stakes in companies active in the renewable energy sector.

Second, significant shareholders can encourage companies to improve their environmental practices, climate sensitivity and disclosure by engaging in dialogue with their management and board of director (Ginglinger, 2021).

Finally, globally powerful but highly diversified shareholders i.e., pension funds and mutual funds, can exert an impactful pressure on organizations (Charl ty, 2020). In this way, having significant participation in many companies, such investors have the opportunity to vote for

climate resolutions at these companies' annual general assembly. Likewise, shareholders' pressure, measured by the number of climate resolutions submitted to the same organization, leads management to disclose additional information on climate-related risks, especially when financial players are institutional investors (Flammer et al., 2019).

The example of BlackRock

As a significant shareholder in multiple companies, the pension fund which manages assets worth more than \$10 trillion (Baer, 2022), leads public dialogue with the CEOs of companies in which BlackRock holds shares.

In this way, for the past two years, Larry Fink, BlackRock's CEO has written annual letters where he has asked companies within BlackRock's scope to engage proactively in climate resilience. Likewise, in his annual 2022 letter to CEOs, Larry Fink asked companies to report on the Task Force on Climate-related Financial Disclosures (TCFD) in order to understand their ability to adapt for the future.

In addition, while BlackRock explicitly asks companies to disclose a transition plan aligned with the Paris agreement objectives, it states that "it will vote against management and potentially divest in companies in which BlackRock does not see progress in this area and in particular where they observe a lack of alignment combined with a lack of engagement" (*BlackRock Client Letter | Sustainability, 2021*).

However, in 2020, while Larry Fink highlights climate risk as a key issue for the pension fund, BlackRock voted in favour of just over 10% of the climate resolutions supported by Climate Action 100+ (Ginglinger, 2021). Similarly, while BlackRock Investment Stewardship reported that it supported 64% of the environmental shareholder proposals during the proxy year 2020-2021 (Posner, 2021), the \$10 trillion pension fund recently indicated that it would not back most shareholder resolutions on climate change in the short term as ,according to BlackRock, such measures have become "too extreme or prescriptive" (Masters, 2022).

Finally, while recognizing incremental improvement in BlackRock's voting record, Majority Action, a non-profit shareholder advocacy group, said the pension fund needs to "substantially enhance its voting and engagement strategies in order to protect its clients,

company stakeholders and long-term shareholders overall against the climate crisis and other systemic risks such as racial inequality” (Bloomberg Law, 2021).

Socially Responsible Investment (SRI) funds

The ambition of these socially responsible funds is to replace the negligence of the jurisdictions unable to set an appropriate carbon price or implement a relevant and global disclosing framework to fight climate change. In this way, socially responsible investment funds play on the GHG emissions’ cost of capital (Gollier, 2020).

However, SRI funds’ attractivity is based on two main requirements: investors demand and potential legal or financial sanctions against economic activities that are harmful for the environment. In this way, while companies with positive sustainable impact should benefit from enhanced access to capital i.e., lower cost of capital, effective sanctions against CO₂-intensive companies should significantly harm such company’s market capitalization, thereby reallocating financial flows to sustainable investments (Gollier, 2020).

Limitations

Without credible legal, fiscal and/or financial sanctions from governments to limit environmentally harmful companies to continue their economic activities, in the absence of financial incentives i.e., subsidies for companies making clear commitments in sustainability, or clients’ demand growing exponentially, the financial sector will remain limited for some time to come in the face of the global warming (Gollier, 2020).

In the same regard, in his 2022 annual letter to CEOs, Larry Fink stated that business and financial actors need governments to provide effective guidance combined with objective taxonomy for sustainability policy, regulation, and disclosure across markets (Larry Fink, 2022).

Ultimately, if we expect from finance to regulate the planet's temperature (Voisin et al., 2021), mandatory disclosure on sustainability as well as economic activities’ alignment with ambitious environmental goals, must be implemented by governments worldwide.

2.3 Initiatives on sustainable finance across major jurisdictions

2.3.1 European Commission's Action Plan on Sustainable Finance

The European Union is leading the way globally in regulation of sustainable finance disclosures by financial sector participants, as for regulation of ESG criteria and definitions through the Taxonomy Regulation and, generally, through other aspects of its 2018 Action Plan on sustainable finance.

The European Commission strategy for the long-term EU's decarbonisation i.e., -55% by 2030 and carbon neutrality in 2050, considers increased investment in Europe's energy system and infrastructure from the current 2% of GDP per year to 2.8% of GDP to reach net-zero GHG emissions - an additional €175 to 290 billion annually (Miguel Arias Cañete, 2018). This is consistent with the Intergovernmental Panel on Climate Change (IPCC) special report that estimated that of 2.5% of world GDP will be needed for the energy system between 2016 and 2035 (IPCC, 2018). In order to achieve this increase in EU GDP's proportion, private sector financial streams must be directed towards green investments (TEG, 2020).

The action plan on Sustainable Finance proposed by the European Commission set out a comprehensive strategy to further connect finance with sustainability. It included ten key actions that can be divided into three categories: (1) Reorienting capital flows toward a more sustainable economy; (2) Mainstreaming sustainability into risk management and; (3) Fostering transparency and long-termism (European Commission, 2018).

While these ten key actions are complementary and form a strong framework to support sustainable finance in the European Union, this report will focus on the first category "Reorienting capital flows toward a more sustainable economy".

A. Corporate Sustainability Reporting Directive

Since 2018, the Non-financial Reporting Directive (NFRD) requires large, listed companies, banks and insurance companies (whether listed or not) – all providing they have more than

500 employees to include a non-financial statement as part of their annual public reporting obligations.

However, this directive (NFRD), due to its lack of impact and implied lack of relevant information disclosed by companies, has been reviewed by the European Parliament and Council to make room for the Corporate Sustainability Reporting Directive (CSRD) proposal in April 2021.

In March 2022, the European Parliament voted to extend the scope of CSRD to include large international organizations having economic activities in Europe while removing listed SMEs from the CSRD's scope and delaying reports publication to 2025 instead of 2024 as compared with the original proposal of the Commission (CSR Europe, 2022a).

Ultimately, the CSRD proposal aims to provide a comprehensive framework to report on while ensuring that companies report the information financial market participants subject to the Sustainable Finance Disclosure Regulation (SFDR) need by including indicators that correspond to those contained in the SFDR. In the same way, CSRD is expected to ensure consistency with the SFDR and the European Taxonomy Regulation (European Commission, 2021a).

B. Sustainable Finance Disclosure Regulation

The Sustainable Finance Disclosure Regulation imposes mandatory Environmental, Social and Governance (ESG) disclosure obligations for financial markets participants (entered into force in March 2021).

More precisely, the SFDR is a “European regulation introduced to improve transparency in the market for sustainable investment products, to prevent greenwashing and to increase transparency around sustainability claims made by financial market participants” (Eurosif, 2021). Likewise, the SFDR requires investors to disclose on how ESG aspects are integrated at both an organization and product level (Nelson, 2021).

In the same regard, one of the major outcomes in the SFDR is the rating of funds in three categories according to their sustainability impact, as laid out by Articles 6, 8 and 9 of the SFDR (Robeco, 2021).

First, Article 6 covers funds which do not integrate any kind of sustainability into the investment process. Therefore, such funds are explicitly labelled as non-sustainable (Robeco, 2021).

Second, Article 8 applies “... where a financial product promotes, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices”¹

Finally, Article 9 covers products explicitly aiming at sustainable investments and applies “... where a financial product has sustainable investment as its objective and an index has been designated as a reference benchmark.”²

With such classification of funds, SFDR is expected to bring better transparency on sustainable investment as end-investors will benefit from comparing funds’ sustainability profile when making their investment decision (Robeco, 2021).

C. European Taxonomy Regulation

As defined by the European Commission, the EU Taxonomy is “a classification system, establishing a list of environmentally sustainable economic activities”. In this regard, the European Taxonomy Regulation is expected to address greenwashing by defining an objective and science-based definition for sustainability. Complementarily, the EU Taxonomy should help financial actors in qualifying Article 8 or Article 9 when designing sustainable funds.

^{1,2} (Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on Sustainability-related Disclosures in the Financial Services Sector (Text with EEA Relevance), 2019)

2.3.2 The United States

While the US President Biden announced a decarbonisation strategy to reduce US GHG emissions by 50-52% by 2030 (The White House, 2021), the Securities and Exchange Commission (SEC) recently made a proposal for mandatory climate reporting.

In this regard, in March 2022, the SEC submitted a draft regulation requiring U.S.-listed organizations to disclose climate related risks as well as GHG emission i.e., Scope 1, Scope 2 and Scope 3 if they are material or integrated in emissions targets (Johnson, 2022). Furthermore, the draft proposed by the SEC which is partially based on the TCFD framework as well as the Greenhouse Gas Protocol, is expected to require listed companies in the U.S. to disclose climate-related risks in registration statements, annual reports as well as associated financial statements from fiscal year 2023 (Alekseyev, 2022).

However, this proposal is still subject to public feedback and is expected to be finalized in the end of 2022 (Johnson, 2022). In addition, while Scope 3 emissions is partially considered under the SEC draft, engaged investors require stronger requirement on Scope 3 in order to hold organizations accountable for their broader GHG emissions. On the opposite, organizations argue that there is no approved methodology to evaluate a company's Scope 3 emission, leading to potential burden for organization to report on this aspect of GHG emissions (Johnson, 2022).

2.3.3 China

Considered as the largest GHG emitter worldwide, China aims to achieve carbon neutrality by 2060 (McGrath, 2020). To do so, China has already implemented several regulations and measures to ensure this transition to net zero.

First, China has established a mandatory framework for listed companies to disclose environmental impact. In this way, every listed companies in China are legally required to disclose those information, especially the organizations which economic activities are considered as harmful for the environment for which the framework is more strict (IPSF, 2021).

Similarly, China has implemented comprehensive and interconnected frameworks for green products linked to relevant taxonomies which allow China to reallocate its financial flows towards economic activities that contributes to this transition while gradually eliminate harmful investments (IPSF, 2020).

Second, financial institutions classify organizations according to their level of environmental, ranking them from green i.e., the organization is considered as contributing to the climate resilience to black i.e., the organization is considered as harmful for the environment. Accordingly, banks are expected to finance organizations that are labelled as green while excluding companies that have been classified as black to benefit from banks' loans. However, this policy is currently still voluntary-based, therefore depending on the goodwill of Chinese banks to implement such classification (Chane, 2018).

In addition, the central bank of China explicitly incentivises financial institutions to invest in green projects by considering such project as entitled for collateral in the People Bank of China (PoBC) monetary policy (IPSF, 2020).

Finally, China is expected to require organizations from the energy sector to provide at least 15% of its energy production based on renewable energy. Likewise, organizations that would not be able to produce this proportion of renewable energy will be required to buy "green certificates" to players that produce or distribute green energy. Therefore, such mechanism should incentivise producing green energy while limiting carbon-intensive energy production (Chane, 2018).

2.3.4 International Platform on Sustainable Finance (IPSF)

The international Platform on Sustainable Finance has been launched in October 2019 by eight relevant authorities, namely Argentina, Canada, Chile, China, India, Kenya, Morocco as well as the European Union in order to foster dialogue on relevant sustainable finance policies to adopt and gathering forces to meet the Paris Agreement commitments (IPSF, 2020).

Since then, the IPSF has welcomed 10 other jurisdictions making a total of 18 members who together represent half of the global population, 55% of the world GDP and 55% of the global GHG emissions.

By such initiative, the IPSF aims to provide a multilateral forum of dialogue between policymakers who are responsible for implementing sustainable finance measures to provide a clear guidance for investors to identify sustainable investment opportunities, leading to a reallocation of financial flows toward organizations that genuinely contribute to the climate and environmental transition (IPSF, 2020).

2.4 Most widely used sustainability reporting frameworks

Voluntary and mandatory reporting schemes on sustainability have multiplied, but there is no single standard about how organizations should identify relevant information on the sustainability of their economic activities and how organizations using this information can interpret it. As a result, the information available is inconsistent and financial institutions do not take sufficient account of environmental factors in their decisions.

In addition, in 2019, only 1.2% of 5,000 big companies globally made substantial disclosures of their climate risks, while more than half were not reporting them at all (Reuters, 2021).

Therefore, several actors are willing to propose investors a standardized framework for reporting environmental information with the aim to become the single standardized framework that investor community will use to report its sustainable information.

2.4.1 TCFD

The task force on Climate – related Financial Disclosure (TCFD) is a standardized framework promoting alignment across existing regimes and G20 jurisdictions and provides a common framework for climate-related financial disclosures which focus on four main areas:

- Disclosing the organization’s governance around climate-related risks & opportunities;
- Disclosing the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning;
- Disclosing how the organization identifies, assesses, and manages climate-related risks and;

- Disclosing the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

In the same way, the TCFD's work depicts an important step toward climate-related risk disclosures, as it highlights the idea that climate risks should be embedded into traditional financial reporting.

Similarly, the TCFD represents the closest framework to a regulatory requirement. In this regard, while reporting on TCFD is still based on a voluntary basis for organizations, governments begin to considerably support mandatory disclosure based on this standardized framework for climate-related financial disclosures. For example, the UK government is the first to announce the mandatory publication of TCFD compliant information by 2025, with most of the measures in place by 2023 (Glen, 2021).

However, according to the 2021 Status Report on TCFD published by the financial stability board, while disclosures on TCFD is significantly increasing among companies, only one third of the organisations surveyed disclosed climate-related information in line with the TCFD recommendations (FSB, 2021).

2.4.2 SASB

The Sustainability Accounting Standards Board (SASB) has implemented sector-by-sector sustainability standards (effective for 77 industries), allowing organizations to disclose the financial impacts of sustainability subject to the same rigor and internal controls as, traditional financial disclosures (e.g., 10-K) while enabling investors to compare between companies' ESG performance of the same industry. Accordingly, SASB standards are designed for organizations to communicate to investors how sustainability issues affect the long-term value of the company. Likewise, one of the most important features of the SASB is its double materiality³ notion i.e., providing information on how sustainability issues affect the company (financial materiality), as well as on how the company impacts the different dimensions of sustainability.

³ As explained by the London School of Economics, the "double materiality" concept refers to the fact that an organization is affected by climate-related impacts while the company's activities also have an impact on the climate.

More precisely, the SASB standards cover issues related to five dimensions of sustainability:

(a) Environmental; (b) Social Capital; (c) Human Capital; (d) Business Model Innovation and; (e) Leadership & Governance.

In addition, each industry standard includes:

(1) Disclosure topics; (2) Qualitative and quantitative accounting metrics; (2bis) Technical protocols related to each accounting metrics and; (3) Activity metrics: measuring the skull of a company's business.

Furthermore, SASB and TCFD are compatible in the sense that, SASB Standards can be used by organizations as a convenient tool for implementing the principles-based framework recommended by the TCFD.

Similarly, SASB and the Global Reporting Initiative (GRI) provide complementary standards for sustainability reporting, which are designed to meet different objectives and are based on different approaches to materiality.

Nevertheless, as reporting on SASB standards are voluntary for companies, they have considerable leeway in establishing the best location for this disclosure. For example, a company will disclose its SASB report on its earning presentation while another will disclose it in a CSR report. Therefore, investors and other stakeholders might lose considerable time researching SASB reports of different companies as it would be all over the place.

2.4.3 GRI

The Global Reporting Initiative (GRI) is considered as the world's most widely used framework for sustainability reporting. Likewise, GRI Sustainability Reporting Standards (GRI Standards) are the most prevalent adopted standards for sustainability disclosure.

In brief, the GRI framework for sustainability reporting asks the reporting organization to describe its approach to materiality and takes a broad view of what needs to be disclosed. By doing so, investors and other stakeholders have access to useful information contributing to evaluate a company's risks and impacts.

In order to report in accordance with the GRI Standards, an organization must comply with nine requirements (see Table 1). More precisely, the GRI Standards are structured as a system of interrelated standards that are organized into three series:

- (1) The GRI Universal Standards: the three Universal Standards, namely (a) Foundation; (b) General Disclosures and; (c) Management Approach, are used by all organizations when reporting in accordance with the GRI Standards;
- (2) The GRI Sector Standards: Organizations use the Sector Standards according to the sectors in which they operate, and;
- (3) The GRI Topic Standards: when using the GRI Standards, the organization prioritizes reporting on risks that represent its most significant impacts on the economy, environment, and people (i.e., list of material topics)

On the other hand, while GRI standards provide a language in a consistent and comparable framework for organisations to disclose labour stability impacts, it is up to stakeholders to determine what they consider to be sustainable or not sustainable. In other words, GRI standards do not provide with an objective definition of what economic activities are considered as sustainable.

2.4.4 CDSB

The Climate Disclosure Standards Board (CDSB) is an international consortium of business as well as non-governmental organizations which provides companies with a framework for reporting environmental and social information through the same rigour as financial reporting.

In this way, CDSB framework provides investors with environmental and social information for decision making through mainstream corporate reports (such as annual reports, 10-K filing, or integrated report), enhancing the efficient and appropriate allocation of capital.

More precisely, the CDSB framework aims to:

- (1) Help companies translate their sustainability information into long-term value;

- (2) Provide clear, concise, and consistent information to investors, connecting the organisation's environmental performance to its overall strategy, performance and prospects;
- (3) Enable and encourage informed investor-decision making on the allocation of financial capital and;
- (4) Add value to an organisation's existing mainstream report, while minimising the reporting burden and simplifying the reporting process.

Furthermore, CDSB framework supports standardisation of environmental and social information reporting by aligning with the recommendations of the TCFD, using the most widely used reporting approaches i.e., CDP, GRI, SASB and IFRS and supporting compliance with mandatory reporting requirements (e.g., NFRD in Europe).

2.4.5 Comparison between the frameworks

According to a comparative study (Irish Funds, 2020), although the approaches and terms used to identify sustainability disclosures vary, the various sustainability reporting frameworks globally share two main objectives:

- (1) Ensuring a sustainable future in environmental, social and economic terms, and;
- (2) Informing decision-makers to make choices that will contribute to a sustainable future by accessing more useful and relevant information.

In this way, on the one hand, there is a significant degree of alignment and complementarity between the existing sustainability reporting frameworks.

On the other hand, there are certain differences in definitions and scope of focus across the diverse frameworks. For example, while the TCFD is principally focused on climate other frameworks such as the GRI, SASB and CDSB have a broader ESG focus.

Furthermore, while these frameworks depict globally the same objectives, their effective impact on sustainability is limited as (almost) no governments legally requires companies to comply with these frameworks. Therefore, as long as there are no mandatory requirements for

a company to disclose its sustainability impact, it is likely that organizations will not be held accountable for their inaction regarding climate change.

Finally, as long as those sustainability reporting frameworks do not provide an objective definition of what is sustainable, this will be left to free interpretation by the companies leading to some risks of greenwashing and relative difficulties to keep companies accountable.

2.4.6 ISSB: A single sustainability reporting framework

In September 2020, the TCFD, CDP, CDSB, GRI, IIRC, and SASB committed to working together toward a global comprehensive corporate reporting system and to support with the IFRS Foundation and multiple other stakeholders, on how to connect sustainability disclosure standards to accounting standards.

In November 2021, the IFRS Foundation Trustees announced the creation of a new standard-setting board—the International Sustainability Standards Board (ISSB) which aims to provide with a “comprehensive global baseline of sustainability-related disclosure standards that provide investors and other capital market participants with information about companies’ sustainability-related risks and opportunities to help them make informed decisions” (IFRS, 2021).

In March 2022, while the ISSB is still at an early stage, they have already reported a first draft of the ISSB standards built according to the TCFD’s recommendations and derived from the SASB industry-based disclosure requirements. As the proposals are currently under reviews and is expecting feedbacks for the draft, new ISSB Standards are expected for the end of 2022 (Pavoni, 2021).

However, as explained by Victor van Hoorn, head of Eurosif: “the standards will only become law once their adoption is mandated in the local legislation of each jurisdiction. If the adoption of ISSB standards follows the same endorsement as with IFRS IASB standards, it can reasonably be expected that implementation of any ISSB standards in binding local legislation will take several years in some cases.” (Hoorn, 2021).

In addition, the European Union and its action plan on sustainable finance introduced ambitious sustainability performance measurement for sectors through Technical Screening Criteria and Do No Significant Harm (DNSH) indicators. As a result, companies and financial institutions which are subject to these reporting requirements are expected to need more information than the ISSB standard is likely to provide.

Consequently, the quest for global alignment on sustainability disclosure among the different jurisdictions could potentially make little sense for players such as the European Union that has already taken ambitious measures (i.e., EU Taxonomy, SFDR and CSRD) towards mandatory sustainability performance measurement.

2.5 About the European Taxonomy regulation

2.5.1 A focus on climate change

The European Taxonomy Regulation will, in regard to the first and second environmental objective, apply for both financial and non-financial companies as of the 1st of January 2022 (“eligibility” data mainly). Consequently, non-financial companies will actually start reporting their own European Taxonomy alignment from 2023. Then, European financial organization will start disclosing their Taxonomy alignment from 2024, at which time the necessary reported data by the non-financial companies they manage in their portfolios and on their books is available (Schoemaker, 2021).

Therefore, this thesis aims to focus on the valuable aspects brought by the EU Taxonomy Regulation against climate change. In this way, the European Parliament and the Council have prioritised economic activities that can make the most relevant contribution to the two environmental objectives under consideration. The first Delegated Act focuses on the climate objectives (climate change mitigation and climate change adaptation) and therefore includes activities that are most relevant for reductions in greenhouse gas emissions and for improving climate resilience. More precisely, for climate change mitigation, sectors responsible for 93.5% of direct GHG emissions in the European Union were prioritised when identifying 70 economic activities for which technical screening criteria were developed while the technical

screening criteria for substantial contribution to climate change adaptation can apply to 68 economic activities (TEG, 2020).

Moreover, the current European Taxonomy Regulation only defines environmentally sustainable activities and provide compliance with minimum social safeguards but does not yet address properly social or governance aspects as independent criteria while environmental, social and governance (ESG) aspects are frequently connected to one another.

In the same way, the social aspect of the European Taxonomy Regulation is currently only covered in the “Comply with minimum social safeguards” which is one of the four pillars required for an economic activity to be considered as Taxonomy-eligible. However, while these minimum social safeguards are based on the International Labour Organisation’s core labour conventions, the OECD guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights as well as the International Bill of Human Rights, the social aspect is not considered as an independent criterion as is the environmental criterion through the European Taxonomy Regulation.

Nonetheless, as the European Taxonomy Regulation is an evolving process, the European Commission is expected to adopt a concrete Social Taxonomy by the end of the year 2021. More precisely, this Social Taxonomy presented by the European Commission is expected to cover the “respect for human rights”, “governance” and “promote adequate living conditions for all” criteria, therefore allowing for a future fully ESG integrated European Taxonomy Regulation.

2.5.2 The purpose of the EU Taxonomy Regulation

Consistent with the EU Action Plan on Financing Sustainable Growth, finance is a critical enabler of transformative improvements in existing industries. In this way, in order to achieve the goal of re-allocate financial flows towards sustainable investments, European capital markets require a classification system that provides a common framework on what constitutes sustainable activities while avoiding greenwashing in the same time (European Commission. Joint Research Centre., 2019).

More precisely, while the OECD estimates that EUR 6.35 trillion a year will be required to meet Paris Agreement goals by 2030, the European financial sector currently weights over €100 trillion in assets (European Commission, 2019) with European savings accounting for 25% of the world's wealth (Sweatman, 2020). Hence investment decisions in Europe will arguably play an important role in financing the global decarbonisation, compared with the 17% of EU's contribution to global GHG emissions.

Basically, public sector resources will not be sufficient to meet this challenge, and mobilisation of institutional and private capital are required. In addition, while expansion of the low-carbon and resilient economy urges, the most substantial contribution to the EU's environmental objectives will be from transitioning existing activities to a more sustainable footing.

This is the critical challenge to which the TEG has responded through design principles, technical screening criteria and guidance on use of the European Taxonomy.

2.5.3 History of the EU taxonomy and the Technical Expert Group

The result of intensive work (started in 2018) by the Technical Group on Sustainable Finance, several public consultations and debates, Regulation (EU) 2020/852 on the taxonomy entered into force on July 12, 2020. It establishes the framework for the European Taxonomy Regulation by setting the general terms and conditions that an economic activity must meet to be considered as environmentally sustainable. In other words, it is the first legal document that provides a standard and global definition of sustainable economic activities while aiming to prevent from greenwashing.

The Technical Expert Group (TEG) has played a major role in the creation of the European Taxonomy Regulation as it was mandated by the European Commission to develop recommendations for technical screening criteria regarding economic activities that make a substantial contribution to climate change mitigation or adaptation, while avoiding significant harm to other European Union environmental policy objectives, in particular: sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention control, and protection and restoration of biodiversity and ecosystems (TEG, 2020).

2.5.4 Definition

The European taxonomy regulation is defined by the European Commission as “a green classification system that translates the EU’s climate and environmental objectives into criteria for specific economic activities for investment purposes. It recognises as green, or ‘environmentally sustainable’, economic activities that make a substantial contribution to at least one of the EU’s climate and environmental objectives, while at the same time not significantly harming any of these objectives and meeting minimum social safeguards”. In other words, the EU taxonomy is expected to prevent greenwashing by providing a robust and unambiguous understanding of which economic activities and assets can make a substantial contribution to the EU’s environmental goals.

Moreover, according to its Transition Finance Report (2021), the Platform on Sustainable Finance presents two main features of the Taxonomy definition:

- a) The definitions directly relate an activity making a “substantial” contribution to global and EU environmental objectives, corresponding to performance levels which substantially contribute to the EU’s 2030 and 2050 goals (aligned with the Paris Agreement). This means that activities making incremental or small contributions do not meet the regulatory definition. In addition, for each environmental objective, the EU Taxonomy recognises three distinct types of substantial contribution that can be considered Taxonomy-aligned:
 1. Economic activities that make a substantial contribution based on their own performance (i.e., activities associated with sequestration or very low and zero emissions). These activities require capital to increase their development and wider deployment.
 2. Transitional activities that correspond to significant eligible sectors and sources of carbon emissions which rapidly decarbonise. These activities contribute to a transition to a net-zero emissions economy in 2050 but are not currently close to a net-zero carbon emissions level.
 3. Enabling activities which correspond to economic activities enabling a substantial contribution to be made in other economic activities.

- b) The definitions are linked to the performance of individual economic activities. Therefore, companies and investors are expected to aggregate their exposure to eligible economic activities in order to calculate their Taxonomy's level of exposure.

2.5.5 How to align an activity with the European Taxonomy Regulation

In order to be considered as Taxonomy-aligned, an economic activity has to meet four specific conditions:

First, the economic activity (NACE codes are used as a framework to capture all economic sectors) has to make a substantial contribution to at least one of the six environmental objectives by passing its defined threshold (TEG, 2020) : (1) climate change mitigation; (2) climate change adaptation; (3) sustainable use and protection of water and marine resources; (4) transition to a circular economy; (5) pollution prevention and control; and (6) protection and restoration of biodiversity and ecosystems.

Second, the activity cannot do significant harm to any other environmental objective. In this way, this second condition allows to avoid the economic activity obstructing on the other environmental objectives from being reached.

Third, the activity must comply with minimum social safeguards which are based on the International Labour Organisation's core labour conventions, the OECD guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights as well as the International Bill of Human Rights.

Finally, this same activity must demonstrate compliance with legally defined and relevant technical screening criteria (which should be quantitative) for determining when an economic activity can be considered environmentally sustainable and therefore, "taxonomy aligned".

2.5.6 Impact of the Taxonomy

The EU Taxonomy Regulation, among other tools, may have a strong impact in re-allocating financial flows toward more sustainable goals.

First, according to the Technical Expert Group (2020), the European Taxonomy Regulation provides many features that could contribute to this financial shift. Among its tools, the EU Taxonomy provides legally defined technical screening criteria, the recognition of capital and operational expenditures (Capex & Opex) that contribute to meeting the screening criteria over time, and the inclusion of improvement measures to reduce GHG emissions and improve energy efficiency where the best available technologies and practices are used nowadays.

Second, when the European Taxonomy Regulation will entry into force, European finance and investments that are marketed as financing the transition to climate objectives will require alignment with the Taxonomy Regulation. Therefore, transition finance that does not meet the screening criteria would not, with respect to the Taxonomy criteria, be considered environmentally sustainable.

On the other hand, there is no mandatory requirement for taxonomy alignment by a company or financial product. More precisely, it is the investors' responsibility to decide for their different funds and investment strategies what level of alignment on revenues and Capex (or Opex, when relevant) they expect.

In addition, the EU Taxonomy Regulation do not constitute a mandatory list of economic activities for investors to invest in. However, while companies are not legally required to ensure any alignment between their economic activities and the EU Taxonomy, it encourages organizations striving to achieve a level of environmental performance that financial markets will recognize as green. Likewise, projects that are not taxonomy-aligned (despite being in eligible sectors) are at risk of having their useful lives threatened by potential future climate regulations, will require additional capital to be taxonomy-aligned in the future or will risk becoming stranded assets.

Finally, the sole fact that a company does not operate in the EU Taxonomy Regulation scope does not mean that conclusions can be drawn about its environmental performance, nor about its ability to access financing.

2.5.7 Who must report on the Taxonomy Regulation?

According to the European Taxonomy Regulation, three main actors will be required to disclose information about the EU Taxonomy.

First, financial market participants offering financial products in European Union (including occupational pension providers) will incorporate disclosures with reference to the Taxonomy.

Second, large companies subject to non-financial statement under the CSRD must make disclosures with reference to the Taxonomy. In addition, European companies bound by CSRD are deemed to assess compliance with DNSH criteria and minimum safeguards when reporting on the percentage of turnover and capex compliant with the EU Taxonomy.

Third, the European Union and Member States, when setting public measures, standards or labels for green financial products or green (corporate) bonds will be required to disclose about the EU Taxonomy Regulation.

2.5.8 How to disclose

First, the level of disclosure against the EU Taxonomy criteria will vary whether the company is active in the financial sector or not.

In this way, non-financial companies under the scope of the EU Taxonomy Regulation will disclose according to two main financial metrics (which have to be computed separately for each of the environmental objectives for which substantial contribution to screening criteria have been developed):

- (1) The proportion of turnover aligned with the EU Taxonomy. To do so, the company's activities need to be broken down by turnover and;
- (2) The capital expenditure (Capex) and, if relevant, operating expenditures (Opex) aligned with the Taxonomy. To do so, the company's activities need to be broken down by Capex and, if relevant, Opex.

By doing so, company's turnover gives a clear picture of where a company currently is relative to the Taxonomy. More precisely, it allows investors to report the percentage of their fund invested in Taxonomy-aligned activities.

Capital expenditure (Capex), in contrast, gives investors a very good sense of a company's vision regarding sustainability. It is a key variable for assessing the credibility of a company's strategy, and it helps investors decide whether they agree with their strategic approach. In this way, companies that disclose their capex investments in economic activities as part of a plan to be Taxonomy-aligned provide invaluable information for constructing environmentally sustainable portfolios, and for analysing companies' transition plans and/or environmental sustainability performance and strategies. Therefore, by including Capex and Opex as key variables, the EU Taxonomy Regulation allows for all companies to access sustainable finance through their investments in greening their activities (TEG, 2020).

Second, for each relevant product⁴, the financial market participants will be required to state:

- 1) How and to what extent they have used the Taxonomy in determining the sustainability of the underlying investments;
- 2) To what environmental objective(s) the investments contribute; and
- 3) The proportion of underlying investments that are Taxonomy-aligned, expressed as a percentage of the investment, fund or portfolio. This disclosure should include details on the respective proportions of enabling and transition activities, as defined under the European Taxonomy Regulation.

Therefore, for climate change mitigation, the following financial metrics will be required:

- The turnover associated with Taxonomy-aligned activities; and
- Costs incurred (Capex and, if relevant, Opex) as part of a plan to achieve the climate thresholds for the economic activity.

⁴ According to SFDR, financial products are only required to disclose against the Taxonomy where they are promoting environmental characteristics or have an environmentally sustainable investment objective.

On the other hand, for climate change adaptation, only costs incurred will be measured (Capex and, if relevant, Opex), and only when they are part of a plan developed in response to a climate risk assessment.

However, implementation of the Taxonomy Regulation will, in some cases, require that financial actors conduct a five-step check process (TEG, 2020):

1. Identify the activities conducted by the company or issuer or those covered by the financial product that could be aligned, and for which environmental objective(s).
2. For each potentially aligned activity, verify whether the company or issuer meets the relevant screening criteria.
3. Verify that the DNSH criteria are being met by the issuer. Investors using the Taxonomy would most likely use a due diligence-type process for reviewing the performance of underlying investees.
4. Conduct due diligence to avoid any violation of the social minimum safeguards.
5. Calculate alignment of investments with the Taxonomy and prepare disclosures at the investment product level.

2.5.9 About international use of the taxonomy

While the European Taxonomy Regulation is, by definition, only applicable to European (financial) organizations, globalisation has an impact on both financial markets and economic supply chains. In other words, the disclosure obligations on (financial) undertakings in the European Union will create implications for international stakeholders.

In addition, momentum is building as many of economic powerhouses demonstrate increasing ambition and pursue more sustainable development trajectories aligned with the Paris Agreement as well as other environmental objectives. Moreover, global markets are also showing increasing appetite for environmentally sustainable financial products, creating more opportunities for sustainable investment.

On the other hand, global convergence of environmental standards is necessary in order to avoid market fragmentation and enable cross-border investments to contribute to global climate as well as environmental objectives.

This is why the European Union remains committed to playing a leading role in strengthening global cooperation through the International Platform on Sustainable Finance and other forms of international cooperation.

2.5.10 Climate change mitigation

The climate change mitigation objectives' thresholds for EU Taxonomy screening criteria correspond to net-zero emissions by 2050 (and a 50–55% reduction by 2030), consistent with the commitments under the European Green Deal.

In order for an economic activity to be considered as substantially contributing to climate change mitigation, it must demonstrate consistency with medium- and long-term climate objectives.

For climate change mitigation, an economic activity can count turnover from this economic activity only after the technical screening criteria are met.

2.5.11 Climate change adaptation

All economic sectors will have to adapt to the negative impacts of the current climate and its expected evolution. However, it is important to make sure that these activities do not harm the other five environmental objectives listed by the EU Taxonomy Regulation.

In addition, for climate change adaptation, turnover can only be counted where the activity is enabling adaptation by others. More precisely, alignment to climate change adaptation objectives should only count the expenses (Opex or Capex) incurred to make an activity resilient to climate change (unless it is an enabling activity), not the revenue generated by that activity⁵ (European Commission, 2021b).

⁵ Unless it can also be considered climate resilient by virtue of its substantial contribution to another environmental objective.

2.5.12 Economic activities that are not covered by the European Taxonomy Regulation

Many economic activities are not (yet) covered by the EU Taxonomy Regulation. Anna Creti divides these non-covered activities into three broad categories (Creti, 2021) :

First, economic activities that account for a large fraction of gross value and employment, but account for a small share of overall emissions.

Second, economic activities that are carbon-intensive but cannot be fully substituted and for which technological progress is needed to reduce their emissions in the future (i.e., aviation and shipping). However, to establish transition pathways for heavily emitting sectors for which low-carbon solutions are not available, consistent with these goals, the TEG adopted two principles:

1. ensuring no lock-in of assets inconsistent with these goals and;
2. environmental performance well above the sector average.

Third, economic activities that are carbon-intensive, but which should be phased out as technological alternatives exist (i.e., coal and oil combustion). In this way, while there may be some short run benefits to decreasing the harm caused by these economic activities, the Technical Expert Group on Sustainable Finance (TEG) estimates they cannot be considered to make a ‘substantial’ contribution to climate change mitigation. Therefore, the European Taxonomy Regulation does not consider activities which would ultimately undermine climate change mitigation objectives if their operation was locked in for the long run.

2.5.13 The limits of the EU Taxonomy Regulation

According to our research, the European Taxonomy regulation presents some significant limits in its implementation as well as its context and scope.

First, financial market participants will be required to complete their first set of disclosures against the European Taxonomy Regulation, covering activities that substantially contribute to climate change mitigation and/or adaptation, by the 31st of December 2021. However, the timeline presents challenges to implementation, as corporate disclosures may not be available

for financial market participants to use in their 2021 disclosures. Therefore, the data required to perform a proper Taxonomy assessment may not be available before the first mandatory reporting period.

Second, some economic activities do not yet have Taxonomy technical screening criteria to report on in order to evaluate their eligibility and potential alignment with the taxonomy regarding their activities. For example, while being an essential enabler for sustainability transition, the mining sector is currently excluded from technical screening criteria (Mellmann et al., 2021) and has been left aside for future consideration (CSR Europe, 2022b). Likewise, the crypto market and activities such as crypto-currencies mining has not been covered yet (expected by 2025) by the EU Taxonomy (European Parliament, 2022).

Third, as it is currently formulated, the Taxonomy tells us which activities are environmentally sustainable, but not necessarily which are at risk of causing significant harm. Nor does it identify those which may have a negligible impact on the environment. Consequently, with the current EU Taxonomy Regulation, investors could easily be misled, and unsustainable activities could be hidden in complex financial products. Therefore, a “brown taxonomy” solution would exclude investments in activities deemed unsustainable, while allowing investments in activities not covered because of their low emissions intensity (Creti, 2021).

Fourth, the EU Taxonomy Regulation alone is not a suitable tool for communicating details of a company’s overall transition, including improvements in performance which do not result in activities being qualified as substantially contributing as defined by the Taxonomy.

Fifth, while the Sustainable Financial Disclosure Regulation (SFDR) requirements are linked with those under the EU Taxonomy Regulation, the EU taxonomy requires a ‘substantial contribution’ to one or more environmental objectives where the SFDR only requires a ‘contribution’. Therefore, there is a strong need to harmonise these terms in order to reduce confusion and streamline reporting.

In addition, EU Taxonomy Regulation could face indirect greenwashing, which could occur with complex financial instruments. For example, according to the taxonomy regulation, a

financial product could be partially Taxonomy-aligned, while the remaining part could finance environmentally harmful economic activities (Och, 2020).

Finally, **financial derivatives as well as sovereign assets are fully out of scope**⁶ (Schoemaker, 2021). This exclusion has been explained through the fact that these instruments were mainly used in mitigating counterparty risk rather than to financing an asset or an economic activity and were therefore determined as “out of scope” in the previous Delegated Act provided by the European Union.

⁶ At least until the next review of the regulation (2024)

3 Methodology

Given the interpretive character of the critical factors to be analysed, this research will adopt a qualitative case study approach using the sustainable finance sector and more precisely, the various stakeholders operating within this field. Indeed, this approach is deemed most suitable for the study, as this allows for the collection of descriptive insights that are not possible otherwise. In this way, this approach will enable the study to provide a comprehensive answer on how the sustainable finance sector aims to integrate the European Taxonomy in their own framework and what impact it has. In order to collect the necessary data, the study mainly used current EU Taxonomy's limits discovered through the literature review to identify the drivers of the sustainable finance reporting framework and conduct some interviews to study the implications of the European Taxonomy Regulation further.

3.1 Case Selection

Through this case study, we focus on the European sustainable finance sector as the main field for the effective implementation of the EU Taxonomy Regulation. Likewise, large companies and financial institutions, especially in Europe, are already mandated to disclose sustainable information on their activities through existing dedicated frameworks.

In this way, the organizations that are disclosing on these frameworks are expected to integrate and align on the EU Taxonomy in order to stay competitive in their market and capture taxonomy-aligned capital. Similarly, large companies and financial institutions having activities in the European Union will be required to disclose on the EU Taxonomy Regulation.

In addition, it is important to consider that while global ESG reporting standards are currently planned through the ISSB, the technical screening criteria developed by the EU Taxonomy, if adopted by the ISSB, could greatly contribute to an effective global sustainability report. Likewise, while the European Union currently seems to be more ambitious than its peers, it would be interesting to see if a global alignment to the EU Taxonomy framework is envisaged.

Finally, as these European reporting companies and financial institutions have a significant focus on sustainability, they should be avant-gardist with the concept and offer insightful information about how they intend to integrate a classification system such as the EU Taxonomy in their own framework and to what extent it will enhance their previous frame for sustainability disclosing.

3.2 Research Philosophy

The research design for this study is a descriptive and interpretive case study that is analysed through qualitative approach as the study topic is not quantifiable. In the same way, this study requires to appropriately interpret the insights from experts and professionals working in the sector in order to set up a relevant framework. Through rigorous inductive analysis, together with focuses on generating highly valid theories, a qualitative approach can provide insightful, inductive generalizations concerning the subject studied (Polit & Beck, 2010). Therefore, the use of interpretivism as research philosophy is seen as most appropriate for this specific study (Williams, 2000).

3.3 Data collection

The data for this research were collected through multiple semi-structured interviews led in French or English, depending on the interviewee's preference. Furthermore, these interviews were based on a list of predetermined questions to be asked during the interview in order to provide an efficient guideline for de discussion and make sure all points were covered, with the leeway to clarify the input provided when necessary and explore domains that could have been omitted when organizing the questions.

Regarding the pandemic and considering that many interviewees were located all over Europe, the interviews were conducted online through video conference (with Zoom or Teams) and took place between January 2022 and March 2022. The interviews each lasted between 30 minutes and 45 minutes (mean of 38 minutes). Furthermore, the interviews were recorded (with the prior consent of each interviewee) to realize the transcripts of the

interviews and translate them (for 4 out of 8 interviews) from French to English, in order to support the data sampling process.

The interviews were conducted with sustainability experts working in organizations related to the sustainable finance sector such as banks, investment funds, ESG data providers and sustainability experts to discuss their view and the impact of the EU Taxonomy on sustainable finance.

In order to reflect the data necessary to clarify the impact of EU Taxonomy on the sustainable finance sector, the interview questions were based on the six themes identified in the limits revealed by through the literature review: (1) Interviewee's background; (2) Impact of the EU Taxonomy on organization; (3) EU Taxonomy's main goals limits; (4) Disclosing costs; (5) Excluded economic activities; (6) EU Taxonomy's Scope & Global Reporting (see Appendix 1: Interview Guide)

3.4 Data Sampling

The interviewees were selected by using the purposive sampling technique (Dudovskiy, 2016) in order to interview relevant people that were able provide in-depth and precise information about the impact of the European Taxonomy Regulation on the sustainable finance sector. The selection criteria for the candidates were:

- (1) individuals responsible for sustainability matters in organizations (in)directly concerned by EU Taxonomy disclosure and/ or having participated in the implementation of the EU Taxonomy (e.g., TEG member) and;
- (2) operating economic activities related to sustainable finance in Europe.

This purposive sampling technique allows for choosing relevant profiles regarding criteria discussed above for the data collected to be of great significance. In order to find profiles that were most relevant to the research, we used our private network as well as the professional social network "LinkedIn" from which we added the website "Rocket Reach" which allowed us to obtain the professional e-mail addresses of these profiles. In total, we contacted 20 people, 8 of whom were willing to give us an interview (see Table 2).

Regarding the purposive sampling technique, it is important to consider that such technique presents significant weaknesses. Likewise, the purposive sampling method is subject to vulnerability to errors in judgment by researcher, low level of reliability and high level of bias (Dudovskiy, 2016). Therefore, the candidates must be chosen extremely wisely as considerable part of the study will be based on the findings. In order to tackle this challenge, the study specifically sought to have representation from a range of organization types and industries related to sustainable finance (banks, investment funds, ESG data providers, sustainability experts as well as asset managers) allowing for an efficient diversification within the sample, leading to minimising the potential biases and ensuring greater data collection reliability.

3.5 Data Analysis

Having collected the necessary data through the semi-structured interviews, this study used thematic analysis to process in the analysis of the interviews results. Thematic analysis is a method for analysing qualitative data that entails searching across a data set to identify, analyse, and report repeated patterns (Kiger & Varpio, 2020)

In order to conduct this thematic analysis, this study focus on the six-steps method outlined by Kiger and Varpio (2020):

First, we repeatedly and actively read through the data collected through the 8 interviews' transcripts in order provide a valuable orientation to the raw data and building the foundations for the five subsequent steps.

Following these active readings, we began to take notes on potential data items of interest which could provide the study with a greater understanding of the EU Taxonomy's potential impact on the field of sustainable finance. Thereby, we have been able to manually determine a coding framework which we applied to the entire data set by labelling data extracts with relevant codes and making note of potential patterns and connections between items that might inform subsequent theme development.

From there, as the study approach is based on an inductive analysis, we explicitly brought out themes from the coded data, so the themes identified were more tightly related to the original data and reflective of the entire data set.

Then, we made sure that coded data suited the theme to which they were assigned by re-sorting data extracts and modifying some themes. Once this step was completed, we ensured the selected themes were representative to the entire data set by carefully re-reading the interviews' transcript, re-examining themes and re-coding additional data that could have been omitted in the first coding phase.

Afterward, we labelled each theme while explaining why they were important to the understanding of the potential impact of the European Taxonomy regulation on sustainable finance, and clearly delimits the scope of what each theme dealt with and spotting areas where they might overlap. In order to illustrate those themes, we depicted a table (see Table 3) using study specific characteristics.

Eventually, we produced the report where we wrote the final analysis and presented the key findings while providing concise, and logical on how the study interpreted the data and why the selection of themes and interpretation of the data are relevant.

3.6 Methodological limitations

The study acknowledges that the methodology used to lead this study might presents some limits regarding the findings' relevance. In this way, the different paths taken to conduct this study might have certain weaknesses.

First, the open-ended nature of semi-structured interviews sometimes lead to ask suggestive questions, biasing the interviewee's answers. Alternatively, the interviewee could have sought to give the answers they were convinced we wanted to hear i.e., social desirability bias (Ricee, 2021). In addition, semi-structured interview's results might sometimes be difficult to compare as the interviewees responses may considerably differ based on the extent to which the interviewee deviated from the predetermined list of questions.

Then, the interpretivism research philosophy used in this study relates to subjective nature and opens up considerably to potential bias on the behalf of the researcher (Dudovskiy, 2016). Furthermore, as a considerable part (50%) of the interviews have been led in French and then translated to English for the purpose of data sampling and analysis, the presence of potential bias could be greater.

Finally, given the flexible nature of the thematic approach used to analyse the data collected, it might be challenging to determine which relevant aspects of data to focus on and/or which theoretical frameworks to use for the analysis (Braun & Clarke, 2006).

4 Empirical findings and analysis

This chapter aims to present the findings collected from the interviews. In this way, the chapter depicts nine themes that came out when analysing the findings using the thematic approach. These themes provide the foundations for the conclusion, which will be covered in the next chapter.

From the conducted interviews, the study applied a coding framework to the entire data set in order to analyse the data further. More precisely, the study highlighted key quotations from each interviewee and looked for repeated patterns. By doing so, we were able to bring out representative themes from the coded data (see Table 3). The themes that emerged are intimately related to the study's research question and are eventually each an element of the answer to the latter.

The nine themes will be further investigated in this chapter, looking at the interpretation of the EU Taxonomy, its potential limits and attractiveness. This will be investigated using additional quotes from the eight interviews that describe more precisely the common themes identified.

4.1 A common definition for “Green”

When asked about the impact of the EU Taxonomy on their respective organizations, half of the interviewees revealed that this classification system depicted a clear and common definition for green economic activities. In this way, as said in the interview G, “now we understand what is objectively green within our own company” (ITW G) and that is a major step forward, because, as explained by Thibaut Clisson, Climate lead at BNP Paribas Asset Management, “the taxonomy as such is very useful and necessary because before the taxonomy every company could claim to be green without having to justify why” (ITW H).

Nowadays, the classification system imposed by the European Taxonomy Regulation provides a clear and science-based framework limiting interpretation and nuance when considering the sustainability's degree of an economic activity. Likewise, as pointed out by an interview, “the EU taxonomy allows us to have a very science-based approach to deciding not

well, we don't decide, we read the EU taxonomy and say then what is green and what is not green” (ITW G). By doing so, the EU Taxonomy should act as an efficient barrier against greenwashers who will be legally required to report on this objective definition of sustainability. In other words, as explained by ITW C, “Those who are likely to be most affected by the taxonomy are people who claimed to be responsible but who were not and who therefore have to change [...] it will eliminate actors who were greenwashing”.

Furthermore, the strict definition that emerges from EU Taxonomy is expected to bring the necessary transparency in the sustainable finance sector. More precisely, as stated by an interviewee “it (EU Taxonomy) is necessary for having the necessary transparency and then to keep the players accountable to whatever they said and promised” (ITW E). Such transparency is expected to allow completing one of the major EU Taxonomy’s objectives, i.e., directing investments towards economic activities that are taxonomy-aligned.

However, the strict definition implied by the EU taxonomy might limit, at least in the short term, the effective re-allocation of capitals toward taxonomy-aligned companies. In this way, as explained by Mr Clisson, “we have looked at the figures and we realise that the percentage of alignment at company level is likely to be relatively low in the first few years” (ITW H). In other words, the criteria’s ambition set by the implementers of this classification system is very high, leading to few companies able to align fully on the taxonomy’s criteria in a first stage. In the same way, as stated by Fuleky Eszter, Lead Expert Sustainability Advisory at Van Lanschot Kempen & active group member of IWAF and EFRAG, “in the short term, because companies don’t have these data, because it will be all over the place, I think it will be more confusing than clear” (ITW F).

Finally, while recognizing that “EU taxonomy is a view on what economic activities are considered sustainable” (ITW D) and that is a leading step forward in trying to create an objective measure of what economic activities are environmentally sustainable, such regulation does not explicitly incentivise the market to align on the European Taxonomy Regulation. Similarly, an interviewee mentioned that “just because you have a booklet of what is defined as sustainable, it doesn't mean that it will influence the behaviour of all the different actors on the market” (ITW E). Such assumption depicts the criticism of reporting as the only channel for concrete sustainability actions. This will be discussed in the following theme.

4.2 A Strong Reporting Tool

A considerable part of the interviewees considers the EU Taxonomy as an effective sustainability framework to report on their economic activities.

First, as mentioned by Ashley Tucker, Vice-President Sustainable Finance at ING, “it's a really pervasive set of rules and it's got the backing of the regulators” (ITW G). Likewise, as opposed to previous frameworks for reporting sustainability, the EU Taxonomy is a legally required document to report on for organizations under the European Taxonomy Regulation’s scope. Therefore, “you have to comply, it’s not like saying GRI where you can comply or not, here you have to comply” and “these are the regulations, where we need to provide regular information to the regulators and the public regarding the composition of our banking books. [...] So, we would have to then say what percentage of our books is aligned with EU taxonomy eligible and aligned assets” (ITW G). In other words, organizations under the scope of the EU Taxonomy have to comply and report to what extent their activities are aligned with the definition of environmentally sustainable economic activity set by this classification system.

Second, the regulatory dimension of this framework also allows for stakeholders in the sustainable finance sector to have a tangible direction to follow. In the same way, as explained by Felix Bourdreault, Managing Partner at Sustainable Market Strategies & Nordis Capital, “there are many different reporting frameworks that exist, all of which are different and never really regulated, whereas the advantage of starting to align with the taxonomy right away is that we know that European companies will be obliged to report their data according to the framework” (ITW A).

However, while reporting to what extent an organization’s economic activities are aligned with EU Taxonomy will be mandatory for companies having economic activities in Europe, the Taxonomy Regulation does not require companies to have any percentage of their economic activities aligned with the classification system.

In this regard, interviewees’ opinion diverged. On the one hand, some argue that “people underestimate the importance of reporting as a powerful tool. As reporting can create a huge

amount of change in the organization because structures and systems need to be put in place for it.” (ITW G) and that having awareness on such practices in an organization makes reporting a powerful tool to enact change.

On the other hand, most of the interviewees are concerned with the voluntary dimension of alignment with the taxonomy. In this way, interview B states that “the taxonomy is just a classic reporting framework of the company's green activities, but it doesn't really quantify [...] then, there's also no restrictions that are really going to say to investors you're obliged to invest in companies that have 60 percent green alignment in the activities that are included in the taxonomy. It's more of a reporting and not really a way of showing how to change the investments to be greener”. In other words, if no regulatory measures are taken to oblige companies to align (part of) their economic activities with the thresholds set by the European Taxonomy, the latter could be considered by the involved organizations as a basic compliance exercise rather than a tool to engage and enact the re-allocation of capitals toward green assets. Similarly, Etienne de Callataÿ, Economic Advisor and Chairman of the Board at Orcadia Asset Management, explains that “the European taxonomy cannot be seen as the decarbonisation and environmental transition strategy without other more binding and regulatory measures being applied” while adding “it is important not to give the impression that now that we have the taxonomy, we have THE lever that will do all the work” (ITW C). In addition to this voluntary aspect of the EU Taxonomy, interview D highlights the fact that “it (EU Taxonomy) is subject to self-reporting by organisations and therefore it contains risk that organisations will be cynical about their disclosures” which could imply some companies to disclose biased information to be seen as greener than it actually is, leading to a certain form of greenwashing.

Eventually, in the short term, companies will undoubtedly face some obstacles when reporting on the EU Taxonomy as “it will cause lot of confusion because companies won't be able to report, they will report on a best effort basis [...] the first couple of years data will be all over the place” (ITW F), leading investors still having to rely on working with third party data providers even after the effective implementation of EU Taxonomy for non-financial organizations.

4.3 Black or White

The majority of persons that have been interviewed across this study shared a common concern about the binary dimension of the European Taxonomy. In this way, Judy Kuszewski, Chief Executive at Sancroft and chair at GRI, expressed her concern about the idea that the “EU Taxonomy is very black and white, an activity is either 100% sustainable or 100% not sustainable” (ITW D) leaving no room for nuance. Similarly, one interview stressed that because of its binary aspect, “taxonomy alone cannot account for the full complexity of climate and environmental performance” (ITW B).

In the same regard, concerns are expressed about the idea that according to the EU Taxonomy’s framework, “anything that isn't green, you don't know if it's dark green, yellow or black” (ITW B), “they’re (about screening criteria) very black and white, there's no graduation to it and there's no subtlety to it” (ITW D). Such stance taken by the regulators considerably limits the EU Taxonomy’s scope and as explained by an interview, “you won't have enough economic activities trying to disclose against the Taxonomy, so you won't capture enough of the European economy to be able to make the judgement about whether or not we’re on course to meet the Paris Agreement” (ITW D). Likewise, with too few companies able to align on the ambitious criteria set by the EU Taxonomy, the re-allocation of investments toward Taxonomy-aligned projects will therefore be relatively curtailed.

Furthermore, many interviewees agreed that the EU Taxonomy lacks nuance, leading to automatically exclude economic activities and actors which play a tangible role in the climate transition. Similarly, Mr Boudreault explains that “there's a whole grey area in the middle where there are companies which are potentially agents of change but who might fail or who don't allocate enough resources towards that. There's this whole part of the environment that unfortunately requires too much judgement so unfortunately, we can't put them in boxes” (ITW A). In the same way, interview A illustrated the limited understanding of sustainability performance which the EU Taxonomy demonstrates by using the example of the necessary energy transition : “from a really natural resource point of view, for example having mines, copper or lithium mining companies would be impossible because they do have a big impact on their immediate environment but everyone accepts for example that Tesla is a company

that qualifies for this kind of fund whereas Tesla could not exist without the natural resources that are upstream, it's a bit hypocritical”.

Finally, as stressed by interview D, “EU taxonomy could be limited in fully enabling a kind of proper mature and transparent understanding of sustainability performance” leading to questionable exclusions of sectors and activities that are sometimes part of the value chain of eligible economic activities or contribute considerably to an effective climate transition.

4.4 Only a piece of the puzzle

While recognizing the EU Taxonomy Regulation as a major milestone in the sustainability sector, interviewees collectively agree that the classification system for sustainable activities set by the European Union is only “a part of the sustainability picture but it's not the whole picture” (ITW D). Indeed, in order to understand the whole sustainability landscape, it requires for an organization to consider many other relevant aspects that the EU Taxonomy does not consider (yet).

First, the EU Taxonomy does not provide a concrete framework for an organization to report on its transition plan. Likewise, while some organizations are not (yet) eligible to comply with the EU Taxonomy, they still have to implement a roadmap for their economic activities to move towards net zero emission. Similarly, interview G stressed that “while it has been designed with net zero transition and transition in mind, you still need to keep in mind and abreast of transition pathways and transition roadmaps. [...] You need to understand what a good use of capital is and what is it bad and those kinds of roadmaps are very important for us”. In the same regard, the EU Taxonomy, by its very nature, does not explicitly require companies to reduce their emissions over the course of time. As proposed by interview B, “there should be transition plans, saying that I commit as a company to reduce my emissions by 2030” which, based on the EU Taxonomy’s framework, would be quickly audited each year by the regulators to see if the company honours its commitments on sustainability.

Second, as mentioned before, the taxonomy fails to cover many sectors that are necessary to consider if we want to transition the whole economy. In this regard, interview G said “a lot of companies don't really know what they're supposed to do, and this is when transition

pathways come into play. If there's no EU taxonomy guide, well then you have to look at other things". In the same way, as many sectors are not covered by the EU Taxonomy and the latter does not provide any relevant guidelines for those excluded economic activities to organize for transition, the EU Taxonomy could fail to provide the financial markets with enough sustainable projects to invest in. Similarly, interview G added that "a lot of hard to decarbonize sectors were left out of the EU Taxonomy but we still bank those clients and it's our job to make sure that we then bring the tools available to those clients to help them transition" (ITW G). In other words, while the EU Taxonomy fails to provide guideline for some intensive-carbon sectors, banks still finance those economic activities. Therefore, the lack of appropriate measures taken by the taxonomy for these sectors fails to reward and incentivise organizations that are proactively supporting climate transition in these specific economic activities. Likewise, as stated by an interview, "there is a significant potential for the EU taxonomy to fall short in respect of its potential to drive change I mean it might end up being a bit of a floor rather than a ceiling for performance" (ITW D).

In addition, because of its very nature, the EU Taxonomy is geographically limited to companies having economic activities in Europe and as mentioned by an interview, "we invest our clients' money all over the world, so the taxonomy will not meet our needs [...] we'll have to look outside the taxonomy" (ITW C). However, even if we imagine that the EU Taxonomy could lead to a contagion effect across other jurisdictions, interview B explains that "necessarily what Europe develops is more specific to its own continent" and that "Europe is more of a service economy so it's easier to adopt a more binary taxonomy but there are all these sectors that are still in this grey area so it would be advantageous to also think about this transition and then to know who is going to play a role in it" (INT A).

Nevertheless, many interviewees stressed that the effective role of the EU Taxonomy has to be considered through the broader picture of sustainability in Europe. Similarly, Claudia Lavorenciuc, Financial Engineering Manager at CINEA, mentioned that "we should not look at it (EU Taxonomy) in isolation, it's an essential steppingstone, but I think let's say I take it in the context of the EU Green Deal, it will be a game changer, but you are talking about 55 different regulations and directives" (INT E). In the same regard, interview B added that "when we see all the other regulations disclosing the SFDR in Europe, but in France in particular, there is article 29 as well, we see that taxonomy is part of one of the criteria that is compulsorily required, but there are many others and taxonomy cannot replace the rest".

Additionally, one interviewee mentioned that “the taxonomy is great in a disclosure, or in an accountability way but accountability needs to be preceded by the strategy, actions, changing of corporate culture” and “it needs to be matched with collective engagement plus direct engagement, fighting shareholder proposals, supporting shareholders proposals. Then, you will have some assets managers ready to divest” (ITW F). In this regard, the EU Taxonomy needs to be completed with effective and collective engagement from stakeholders to proactively complete its mission which consist in redirecting capital flows toward sustainable economic activities.

Similarly, Mr Boudreault stressed the role of investors who “have a very big role of influence especially in terms of shareholder engagement in the way they vote at general meetings” while adding that “the impact of the influence of asset owners is almost greater than the European taxonomy. It has gone much faster. We saw it when the Norwegian sovereign wealth fund started to make exclusions and wanted to get out of oil and so on, it activated and made things move much faster than when a government tried to do something” (ITW A). By their nature, investors have great power to increase the scope and impact of the EU taxonomy by proactively encouraging the companies in which they invest to align their activities with the taxonomy.

Finally, regarding the investors side, it is important to consider that financial actors offering sustainable products are subject to the SFDR regulation and more precisely, Article 8 or 9 which “must have a certain percentage of alignment with the taxonomy” (ITW B) and as explained through interview H, “from the moment you are in article 8 any article 9 you have to carry over the impact of your funds following so you have 14 indicators article 8 you have the choice and article 9 you have to carry over the 14” which considerably contribute to avoid financial actors to design controversial financial products which could be likened to a certain form of greenwashing when proposing sustainable financial products. Likewise, as mentioned by interview B, “the taxonomy can be a good compass for investors qualified by Article 8 and 9” as they are complementary in the implementation of an appropriate sustainable financial product.

4.5 Power of Press/ Media

As mentioned by several interviewees, the EU Taxonomy enable stakeholders to have an objective view on what economic activities are considered sustainable. Consequently, as explained in interview H, this important step forward “is going to give tools to the different stakeholders to come and challenge the investors. I'm talking about the regulatory authority in France, but also NGOs and journalists. From the moment there is a text that defines things, it becomes easier to oppose it to companies and investors”. In the same way, as stated by interview E, medias are expected to be “very vocal about this and starting to ask for accountability from these players”.

Similarly, the threat of being accused of greenwashing will become more pronounced for players that would claim their activities are more sustainable than what they actually are according to the EU Taxonomy's definition. In this regard, interview A stated that “there are some (medias) who are more sophisticated than others and who will question the labels on certain funds, but for the moment it's more a game of "naming and shaming". We've seen a few articles in sustainable finance publications saying that such fund by such asset manager is classified under Article 8, but here are the holdings and find the mistake, how they did it to justify it, so I think that this is almost more powerful than anything else that can come from the regulator in the sense that people don't want to get bad press” (ITW A). Likewise, Ms Tucker added that “the threat of being accused of greenwashing is so strong in some hard to decarbonize sectors that they will often go to the efforts of structuring and incorporating ESG into their financing or into their policies and they won't say a word of it to the public because they are so concerned that the public will then accuse them of greenwashing” (ITW G). In this regard, we have already seen many greenwashing scandals brought to light that have considerably affected numerous brand images such as Shell, Nestle, H&M and many other famous brands. Today, thanks to the presence of the EU Taxonomy, greenwashing is expected to be recognized more rapidly and “allow these different stakeholders to take appropriate measures and make them enforceable” (ITW H), leaving little room for companies to misrepresent the sustainability of their business activities without being held accountable.

4.6 Taxonomy's attractiveness

According to many interviewees, taxonomy-aligned products or companies are expected to attract a lot of investor attention from banks or the public investors, shareholders, and the other stakeholder for different reasons.

First, as explained by Mr de Callatay "a certain number of people will use this as a commercial aspect, as a selling point. There is also the fact that over the last 15 years, responsible investment has outperformed traditional investment, so it is reasonable to have an ESG filter because this filter creates value" (ITW C). In this way, taxonomy-aligned financial products are expected to be more attractive. Similarly, interview A revealed that "European taxonomy has a commercial side, a very powerful marketing side. Our fund is an article 9 SFDR and this is a very strong argument, sometimes they (investors) will say they don't even want to see the funds that are not article 8 or 9". Likewise, with such objective and regulated definition of sustainable financial products, clients willing to invest in sustainable funds will be aware whether the fund they invest in is classified as Article 8 or 9 i.e., green financial products. This is a major step forward in the sustainable investment area.

In the same regard, according to Mrs Kuszewski, "markets have already essentially determined that they are going to pursue the aims and objectives of the EU taxonomy, so investors are already marketing products that make a very clear and explicit commitment to align with the EU" (ITW D).

However, many interviewees agreed that the actual EU Taxonomy's attractiveness will depend on three key factors: (1) client demand; (2) regulation and; (3) pricing.

Regarding the client demand, Mr Clisson explained the notion of ecosystem where "if you have a very large proportion of your clients requesting Article 8 and Article 9 funds, we (banks) too will proactively position ourselves on these funds, we will have to report and we will have to have more and more assets that meet their expectations and therefore we will ask the companies and then the commitment via the vote in the general meeting via our investment decision, putting additional pressure on the companies so they report on these subjects and they increase the amount of the funds, the companies will need to report more if

they still want to be financed” (ITW H). Consequently, as stated in interview B “if investors are more willing to put their money into companies that are aligned with the taxonomy, companies will no longer have enough money to develop their non-green activities”. Additionally, investors failing to answer the client demand for sustainable investments i.e., Articles 8 or 9 will face a huge risk of losing clients.

Then concerning the regulations, it is critical for the EU Taxonomy to be backed by rules required by regulators in order for the latter to be used to its full potential. In this regard, interview B highlighted that the EU Taxonomy would develop its full capacity “if the regulators start to demand a certain amount of alignment which would be compulsory on investments but otherwise it is their goodwill”. Similarly, interview C proposed to “require a certain number of investors to invest in funds that comply with Article 8 by default [...]. This solution would certainly have an impact on the flow of funds”. Indeed, through this idea, Mr de Callataÿ explained that regulators should require investors to automatically present clients funds that would be Article 8 or 9, and it would only be if the client explicitly asks to be taken out of this Article 8 or 9, that it could be invested in Article 6 funds. Through this measure, client demand for green financial products is expected to increase substantially, leading investors to proactively guide companies they invest in to report and align their economic activities with the EU Taxonomy.

Afterwards, regarding the pricing, Mrs Fuleky stated that “the place where this could occur most is the primary markets for corporate bonds [...] higher taxonomy alignments would give you the lower cost of capital on the primary corporate bond market moment of issuance of bonds and so that's where the actual capital flows can change, it's a small part of stock market, but it would be significant” (ITW F). By reducing the cost of capital for taxonomy-aligned products, bonds would be more attractive on the primary market compared to its peers that do not align on the EU Taxonomy. In the same regard, interview D explained that “if the market starts seriously responding to the motivations behind the EU taxonomy, then we should start to see a difference in the cost of capital for companies that are able to align to the taxonomy versus companies that are not”. Additionally, interview F mentioned that “if taxonomy aligned activities get subsidies going forward instead of brown activities and if that favourably impact the pricing attractiveness of security of companies, it helps high level taxonomy alignment”. Likewise, subsidizing, or more generally incentivising, companies

according to their level of Taxonomy-alignment could greatly contribute to the amplification of the Taxonomy's scope.

In contrast, while admitting that the EU Taxonomy has the capacity to be very attractive to investors and companies, interview F shared its concern about the fact that the EU Taxonomy is “a huge project and by the time you'll be done by the first iteration, I'm quite sure that the thresholds under climate change attenuation and mitigation will be outdated because new technologies will be deployed. So, it's like a never-ending project”. In this regard, Mrs Fuleky highlights the fact that while regulations take generally considerable time to be implemented effectively, other aspects such as technology and climate change evolve very quickly, leading to have current measures taken through the EU Taxonomy potentially outdated in few years.

4.7 Investors diversification

While we have already stressed the importance of investors for the effective implementation of the EU Taxonomy, an interview stated that institutional investors and pension funds “are asset owners that are so big they have to own essentially some of everything that's out there in order to have sufficient diversification in their portfolios, they are not investors by their very nature” (ITW D). More precisely, even if the sustainability market is considerably growing, such investors will always have to invest in the whole market in order to spread the risk around. Similarly, interview A stressed that “they invest in the whole market, BlackRock is in 2-3% of just about every company in the world so they can't afford to divest themselves because there is just too much money to be reallocated”. In this regard, it is assumed that such investors have so much money under management that they would find difficult to find to divest from a whole sector to invest more in another as it will lead to a considerable risk for the portfolio diversification.

However, as mentioned before those players have significant participations in about every company in the world. By doing, so such investors have the capacity to proactively intervene in the manner companies behave towards sustainability. In other words, the fact that they have to diversify does not prevent their great responsibility toward climate change.

4.8 Cost-rewards disclosure trade-off

While all respondents admit that reporting on the EU taxonomy will require additional work and costs, they are convinced that “the opportunity cost may well outweigh the cost of putting in place the processes and resources needed to meet these obligations” (ITW H). In this regard, interview G and H stressed the risk that clients are going to be “increasingly exposed to transition and physical risks. And if we are aware of them and we incorporate ESG data into our decision-making processes, we are going to be in a better position to support our clients to withstand those risks” (ITW G) and “we are convinced that considering extra-financial ESG elements allows us to make better decisions when investing, thus reducing our risks and better meeting our fiduciary responsibility as investors” (ITW H). Likewise, the environmental data that emerge from disclosures on the European Taxonomy are expected to feed and enhance the investors’ decision-making process while decreasing their risks.

In the same regard, Mrs Lavorenciuc stated that “we have lots of costs like externalities that are not yet there on the on the balance sheet and if we really take these costs into account, then it's a totally different discussion and I think that causes much higher costs than this cost of just doing this specific reporting” (ITW E). In other words, if companies had to internalize all the externalities that could affect their business, the costs would be far more important than the ones implied by the EU Taxonomy.

Similarly, such disclosures might help investors to better understand their customers as well as their needs. Indeed, Ms Tucker is convinced that these necessary costs will “also bear fruit in the future and will allow us to provide better services to clients” (ITW G)

Furthermore, a great majority of the interviewees agreed that these costs do not represent a financial burden for companies. In the same way, interview F stated that she disagreed “with the argument that reporting is a huge cost center and an excessive burden [...] It is additional work but not excess work if we are serious about sustainability”. Accordingly, disclosing on the EU Taxonomy can considerably help companies to understand better their economic activities and constitutes a foundation for businesses to realize their transition plan toward net zero emission pathway. By doing so, companies are expected to attract investors attention and potentially have access to lower cost of capital to finance their growth.

In addition, interview A mentioned that while “it still costs much more to administer a fund that is aligned with Article 9 taxonomy [...], like any other data it's going to become more and more of a commodity. Therefore, ESG data costs should still come down at some point”. Meaning that while the cost of those data will be more expensive in the short term because companies will, in a first stage, face some challenges to report correctly on the EU Taxonomy and therefore, investors will have to rely on ESG data providers, in the mid-term, ESG data is expected to tend to mainstream data, reducing considerably their costs.

Moreover, as explained by Mr Boudreault, technology is expected to drive those reporting costs down thanks to “products based on artificial intelligence that are able to do 80% of the work for a company to report all their data so there are going to be tools integrated into the companies' SAP systems” (ITW A). In this way, some Tech actors such as “Plan A” or “Greenomy” have developed reporting SaaS that aim to assist companies and investors to report their alignment with the EU sustainable standards i.e., CSRD, SFDR and EU Taxonomy. Such technological players are expected to considerably contribute to the effective implementation of EU Taxonomy reporting among the companies and financial institutions.

However, while admitting that the opportunity costs of reporting on the EU Taxonomy may outweigh the actual costs of reporting, multiple interviewees expressed their concerns about the significant difference between small and large companies regarding their capacity and resources in place to report on the EU Taxonomy. Similarly, E. de Callataÿ and J. Kuszewski explained that “a multinational company will have more capacity to measure than a small company, so there is a dimension of inequality such that large companies are relatively advantaged. That's why responsible indices are often indices that will be biased towards what we call large cap logic. This is one of the aspects, when you reinforce the rules when the regulation is more demanding it favours the big companies” (ITW C) while “the burden on SMEs organisations will really be proportionately greater than they will be for large organisations that just have much more sophisticated resources [...] there needs to be a real market driven effort to build capability in Europe to meet these expectations all across the economy” (ITW D). In this regard, if there is no simplified framework for smaller companies in the scope of the EU Taxonomy, there is a risk of seeing those players being not able to

correctly report their alignment on the EU Taxonomy and therefore, be potentially disqualified from being held by certain investors.

4.9 No need for a brown taxonomy

When asked about the potential need for a brown taxonomy which would imply the EU Taxonomy to state which economic activities are considered as explicitly unsustainable, interviewees did not see the actual use of it. In this way, interview G stated that “there is a lot of existing work and processes in place to catch up, particularly harmful activities on top of EU taxonomy” while adding “having a green EU taxonomy is so important that there I think we should focus our efforts on that”.

Similarly, interview E mentioned that “the focus is more on transition, I think it’s known what is unsustainable. Do we need to have also even a rule book saying that yeah oil and gas is unsustainable? I don’t know”. In this regard, a brown taxonomy is unlikely to make sense as economic activities that are harmful for the environment are widely known to the public. In addition, a great majority of investors already depict a policy of exclusion towards unsustainable activities.

However, as explained before, the EU taxonomy could play a crucial role in distinguishing harmful activities that can respond to the climate transition. In this way, by determining economic activities that currently harm the EU Taxonomy’s objectives though having the potential to transition toward no harmful activities, the EU Taxonomy could provide investors with reliable data allowing them to design financial products that respond to the sustainable transition path.

5 Conclusion

While a growing range of organizations disclose on the environmental and climate impact of their economic activities, the EU Taxonomy Regulation provides a milestone in the sustainability landscape.

In this way, the EU Taxonomy constitute the first legal document providing a scientific-based and global definition of sustainable economic activities while aiming to prevent greenwashing. Accordingly, the mandatory dimension of the framework brings the necessary transparency required to keep the economic and financial players accountable when they communicate about the sustainability aspect of their activities. Similarly, the transparency brought by the EU Taxonomy is expected to provide end-investors with a clear understanding of companies or investment funds' sustainability level when making investment decision, leading to potentially increase the customers demand for green financial products.

Furthermore, the pervasive and regulatory scope of the EU Taxonomy enables all stakeholders within the sustainable finance sector to agree on a common definition for green activities that provide them with a tangible guidance to pursue. As a result, financial institutions are already marketing products that make a very clear and explicit commitment to align with the EU taxonomy, which will lead to a significant re-allocation of financial flows toward sustainable activities.

However, the European Taxonomy must be seen in the broader context of sustainability and cannot be considered as the only strategy for environmental and climate transition without other more binding and regulatory measures being applied. In this regard, the EU Taxonomy alone is not suitable for communicating companies overall transition plan. Additionally, a range of sectors are currently excluded from technical screening criteria while being essential for an efficient climate and environmental transition.

Consequently, in order for the EU Taxonomy to reach its full potential, regulators and policymakers must focus on extending its scope to a broader set of economic activities and establishing efficient measures binding organizations and financial institutions to align their economic activities with the EU Taxonomy objectives.

In this regard, two major potential measures could be drawn from this study.

First, regulators should legally require fund managers to automatically offer clients funds that favour environmental characteristics or have an environmentally sustainable investment objective i.e., SFDR article 8 and 9 respectively, by default. Similarly, such funds answer proactively to the EU Taxonomy objectives and, if promoted by default to end-investors, this would result in increased pressure from funds manager on organizations to align a greater proportion of their economic activities with the EU Taxonomy. Therefore, we should observe an efficient reallocation of capital toward sustainable activities.

Second, organizations should be mandated to provide a 10-year transition plan depicting a clear evolution of its alignment with EU Taxonomy. In this way, regulators could assess the organisations' performance on an annual basis by comparing their committed alignment with the actual alignment with the EU Taxonomy for this specific year and introduce significant sanctions for companies failing to meet their respective target. Likewise, a consistent transition plan based on the EU Taxonomy's framework would provide financial institutions with reliable data allowing them to design financial products that truly respond to the sustainable transition path.

6 Discussion

6.1 Implications

This thesis has outlined the key drivers of the EU Taxonomy and enables investors to increase their awareness on the potential for the EU Taxonomy to become a true game changer. Similarly, while there is a growing trend toward green investments, the EU Taxonomy is expected to become the common ground for sustainable financial products in Europe.

Additionally, our findings completed previous research on the topic by highlighting concrete approaches for policymakers and regulators to enhance the application of the EU Taxonomy. If these proposed measures were to be implemented by some jurisdictions, we should see their organizations and financial institutions strengthening their efforts toward effective taxonomy-alignment.

Finally, comparing our results with the literature review, the study allows a better understanding on how the EU Taxonomy differs from current reporting frameworks and measures that have been taken so far across the world.

6.2 Limits

This study depicts several limits induced by the early stage of the European Taxonomy Regulation. In this way, while the first draft for the EU Taxonomy has been released in 2018 following the TEG's work, at this date, organizations are only required to disclose on climate change mitigation and adaptation objectives, the remaining 4 objectives applying from January 2023. Hence, considering that the study was led at an early stage of the EU Taxonomy implementation, it focused on the first and second objectives of the EU Taxonomy and does not consider the remaining 4 objectives and the EU Social Taxonomy.

In addition, as the EU Taxonomy is still at the beginning of its effective implementation, little research has been done on the topic. Consequently, this study is essentially based on the

findings we were able to draw from the interviewees' personal knowledge and experience regarding the EU Taxonomy and its impact on the sustainable finance sector.

Furthermore, while the sample of interviewees for this study was highly relevant regarding the fact that the interviewees occupied key positions (e.g., Climate Lead, Executive, Vice-President, etc.), they came from diversified areas of sustainable finance (e.g., banks, asset managers, data providers, etc.) and shared common concerns and expectations regarding the implementation of the EU Taxonomy, interviewing a larger number of experienced persons would have been convenient to obtain more precise and reliable results.

6.3 Future research

Although this study has highlighted concerns and possible improvements to the European Taxonomy regarding its current scope and status, further research is crucial to follow the evolution of this regulation.

In this regard, future research comparing expected and actual EU Taxonomy's effect on capital reallocation toward sustainable activities could be conducted. Likewise, once the EU Taxonomy will be fully implemented, it would be interesting to compare these study findings with the effective proportion of capital reallocated to sustainable activities and see if such reallocation led to reach the European Green Deal commitments toward sustainability.

Additionally, future research could be conducted regarding the potential for a broadening of the scope of the taxonomy. In this way, if the EU Taxonomy shows actual results when fully implemented, other jurisdictions might be interested in implementing their own taxonomy for sustainable activities. Similarly, this would allow for a comparative study on the impact of taxonomies implemented around jurisdictions worldwide.

Finally, additional research could be performed regarding the potential of EU Taxonomy to be a new ground for governmental measures related to sustainability. Accordingly, as identified in the empirical findings, thanks to its objective definition of sustainable activities, the EU Taxonomy offers room for policymakers across different jurisdictions to provide measures

that could enhance the scope of the EU Taxonomy such as green fiscality, green subsidies or minimum alignment threshold for economic activities.

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