Course: BUSN79 - Degree Project in Accounting & Finance Term: Spring 2022 Supervisor: Liesel Klemcke Examiner: Wenjun Wen

The Implementation of the EU Taxonomy: the Big Fours' perspective

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Lund University School of Economics and Management Master's Programme in Accounting & Finance



Executive Summary

Seminar date:	2 nd June 2022
Course:	BUSN79 – Degree Project in Accounting and Finance
Authors:	Mirza Husović & Peder Kogstad
Advisor/Examiner:	Liesel Klemcke/ Wenjun Wen
Five Key Words:	EU Taxonomy, Big Four, Sustainability Reporting, Imple- mentation, ANT
Purpose:	The purpose of this study is to contribute to enhanced under- standing of the EU Taxonomy ("EUT"), the challenges asso- ciated with such framework and more importantly, the role of the Big Four in this implementation.
Methodology:	This study is of a qualitative nature. The authors follow a sin- gle case study methodology in which the authors gather the empirical data from representatives of the Big Four compa- nies, by performing semi-constructed interviews.
Theoretical perspectives:	This study's theoretical framework is Actor Network Theory ("ANT") developed by Callon (1986), Latour (1986) and Law (1986). ANT is commonly used to determine the role of dif- ferent actors in shaping a given group, also known as a net- work in the case of ANT. The networks are created through the "translation", which takes place in a four-stage process with the following stages: 1) Problematization; 2) Inter- essement; 3) Enrolment; 4) Mobilization.
Empirical foundation:	For its empirical data gathering, this study conducted 11 in- dept interviews with high-level experts from all Big Four companies, as well as Accountancy Europe.
Conclusions:	This study concludes that the Big Four perform four main roles in the implementation of the EUT, namely an advisory role, an interpretive role, a collaborative role, and a control- ling role. In particular, the interpretive role and the collabora- tive role are considered interesting because of the significant power given to the Big Four in interpreting the EUT, as well as the uniqueness of such external collaboration between competitors.

Acknowledgments

We would like to thank the representatives from the Big Four as well as from Accountancy Europe for the valuable insights they have provided us during the interviews. Our special thanks go to our supervisor, Liesel Klemcke, for supervising our Master Thesis and her valuable proposals and commitment. Lastly, we would like to thank our family and colleges for their moral support throughout the whole studies at Lund University.

Lund, Sweden 26th May 2022

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List of Abbreviations

AAAJ	Accounting, Auditing & Accountability Jour-	
	nal's	
ANT	Actor-Network Theory	
САРЕХ	Capital Expenditure	
CSR	Corporate Sustainability Reporting	
CSRD	Corporate Sustainability Reporting Directive	
DG FISMA	Directorate-General for Financial Stability, Financial Services and Capital Markets Union European Financial Reporting Advisory Group European Strategy and Policy Analysis System Environmental Social & Governance EU Taxonomy or Taxonomy	
	nancial Services and Capital Markets Union	
EFRAG	European Financial Reporting Advisory Group	
ESPAS	European Strategy and Policy Analysis System	
ESG	Environmental Social & Governance	
EUT	EU Taxonomy or Taxonomy	
EU	European Union	
EY	Ernst & Young Global Limited	
FAR	Institute for the accountancy profession in Swe-	
	den	
GAR	Green Asset Ratio	
GHG	Green House Gasses	
GIR	Green Investment Ratio	
IASB	International Accounting-setting Board	
IFRS	International Financial Reporting Standards	
КРІ	Key Performance Indicators	
OPP	Obligatory Passage Point	
OPEX	Operational Expenditure	
PIE	Public Interest Entities	
PwC	PricewaterhouseCoopers	

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1. INTRODUCTION

The focus on climate and sustainability has increased dramatically over the last decade and private individuals, companies and nations all over the world are now acknowledging the urgency of action. Consequently, the global political agenda also reflects an increased focus tied to sustainability. Further, it is assumed that it is the existing financial structures that are to solve, or mitigate, the climate crisis. This focus is visible in the European Union ("EU"), which is in the process of dramatically transforming its politics and economy to deliver on the European Green Deal, a set of legislative measures and policies ensuring the EU's goal of climate neutrality in 2050. The root of the European Green Deal is the 2016 Paris Agreement, which aims to keep the global temperature increase below two, or preferably one and a half degrees Celsius by the end of the century, compared to pre-industrial levels (United Nations, 2015). In order to achieve the goals of the Paris Agreement and climate neutrality, the European Green Deal set forth several objectives. Among the more highlighted is the attempt to purposely direct investments towards projects and activities of the sustainable category (European Commission, 2019). Consequently, the EU released the Action Plan on Sustainable Finance in May 2018, incorporating sustainability into the governance of the European financial market. The Action Plan introduced four legislative measures, among them – an EU classification system (the Taxonomy).

The final draft of the EU Taxonomy regulation was published by the EU Commission in June 2020 and is among the largest environmental policy developments ever to be implemented in Europe. This framework is a part of the broader movement in climate and sustainability focus which will foster a full business transformation from brown to green activities, in other words, a massive step toward climate neutrality in Europe. It does so by introducing "an enhancement of mandatory sustainability reporting in the EU by driving capital towards activities that are 'irrefutably' green" (Pettingale, Maupeou and Reilly, 2022, n.p) which will change the way Europeans, and possibly the world, look at sustainability, sustainable investing and everything related to it.

Unfortunately, the implementation of the EU Taxonomy has been anything but smooth. The framework has received critique for its structure, its content and for the way in which it has been implemented – which can be seen later in this study. In the middle of the confusion are the professional service networks, which are the reporting companies' biggest support in

implementing and complying with the EU Taxonomy, thus having a major responsibility for the success of the implementation. However, the professional service networks are experienced with serving their clients during major regulatory changes and have previously had a central role in the implementation of IFRS, GRI reporting and similar. In essence, the professional service networks' number one purpose is assisting clients, no matter the specific needs, and thereby driving progression of industries. The focus of this study will solely be on the EU Taxonomy framework and the four biggest global professional service networks, also known as "The Big Four", namely Deloitte Touche Tohmatsu (DTT), PricewaterhouseCoopers ("PwC"), KPMG and Ernst & Yong ("EY"). These firms will be referred to as "the Big Four" and "networks" interchangeably.

Lastly, the authors of this thesis, Mirza Husović and Peder Kogstad, will be referred to as "the authors" or "the undersigned" throughout the study.

1.1. Background

Because of the complexity of the EU Taxonomy framework, the following section is dedicated to carefully explaining the basic components of this rather large concept. The legislative and political landscape of the sustainability-enhancing efforts of the European Union ("EU") is highly complex and challenging to manoeuvre. A detailed explanation of the landscape would require a separate study and is outside the scope of this paper. The EU Taxonomy (from now "EUT", "EU Taxonomy" or "framework") is a classification system which introduces standardized definitions to determine whether economic activities are environmentally sustainable. The EUT presents uniform criteria and a common language of sustainability which enhance the comparability and reliability of non-financial or sustainable information, limiting the possibility of greenwashing (European Commission, 2021a). In practice, this entails that companies must disclose how much of their economic activities are taxonomy aligned, or environmentally sustainable.

The outline of the EUT was published as a regulatory framework ("Regulation (EU) 2020/852" or "the Taxonomy Regulation") in June 2020 and entered into force July 12th the same year. (European Union, 2020). The classification system is uniform for all member states and replaces current diverging attempts of classifying sustainable activities across industries and companies.

The Taxonomy Regulation

The Taxonomy Regulation establishes six environmental objectives, namely 1) *Climate change mitigation*; 2) *Climate change adaptation*; 3) *The sustainable use and protection of water and marine resources*; 4) *The transition to a circular economy*; 5) *Pollution prevention and control*;
6) *The protection and restoration of biodiversity and ecosystems* (European Union, 2020; see Figure 1)

Further, the Taxonomy Regulation set forth four overarching conditions that the economic activity of a given business must fulfill to be considered as environmentally sustainable (European Union, 2020; *See Figure 1*).

(1) Firstly, the activity must contribute substantially to one or more of the six environmental objectives mentioned above. For *Climate change mitigation*, "stabilisation of greenhouse gas emissions by avoiding or reducing them or by enhancing greenhouse gas removals" (European Union, 2020) is the overall aim of the objective. For *Climate change adaptation*, the overall aim is "reducing or preventing the adverse impact of the current or expected future climate, or the risks of such adverse impact, whether on that activity itself or on people, nature or assets" (European Union, 2020). The degree of contribution to these objectives and aims is then assessed using designated *Technical Screening Criteria* for each activity – essentially determining the sustainability of the activity (see condition 4 below).

As of now, there are only *Technical Screening Criteria* defined for the two first objectives (*Climate change mitigation* and *Climate change adaptation*), which means that companies can currently not fulfill objective 3 through 6. Yet, it should be noted that Technical Screening Criteria for the remaining four objectives is expected in H1 2022.

(2) Secondly, the activity must fulfil the "Do no significant harm principles" ("DNSH-principles"), which ensures that an one cannot achieve substantial contribution to one objective on the expense of one of the other four objective (the DNSH is only valid for five of the six objectives because impeding *Climate change mitigation* does not cause significant harm). The determination of fulfillment-or no fulfillment of the DNSH principles is based on already existing legislative rules concerning the given activity in question.

For example, conducting "an Environmental Impact Assessment (EIA) in line with the Directive 2011/92/EU, a Strategic Environmental Assessment (SEA) in line with Directive 2001/42/EC16, or Sustainability / Climate Proofing, as laid down in the guidance

from the Commission on sustainability proofing under the InvestEU Regulation" strongly indicate fulfillment of the DNSH-principles according to the Commission (European Commission, 2021b)

- (3) Thirdly, the activity must comply with minimum social safeguards, which means the fulfilment of minimum international human rights guidelines such as "OECD guidelines for Multinational Enterprises, United Nations Guiding Principles on Business and Human Rights, including the declaration on Fundamental Principles and Rights at Work of the International Labour Organisation (ILO), the eight fundamental conventions of the ILO and the International Bill of Human Rights" (European Union, 2020). In most European countries, the aforementioned standards are already embedded in economic activities and will not demand further actions.
- (4) Fourthly, the activity must meet the *Technical Screening Criteria*, which are elaborate and detailed criteria which determine the alignment, or the environmentally friendliness, of a given economic activity. The *Technical Screening Criteria* are also what determines the magnitude of an activity's contribution to environmental objectives. This means that there will be a designated set of criteria for each economic activity per environmental objective.

As mentioned, there are only *Technical Screening Criteria* defined for the two first objectives (*Climate change mitigation* and *Climate change adaptation*) as of now, which were published December 9th 2021. To illustrate, the following citation is the first of five *Technical Screening Criteria* the activity *Forest management* must comply with to substantially contribute to *Climate change mitigation;* "The activity takes place on area that is subject to a forest management plan or an equivalent instrument, as set out in national law or, where national law does not define a forest management plan or equivalent instrument, as referred to in the FAO definition of 'forest area with long-term forest management plan'. The forest management plan or equivalent instrument covers a period of 10 years or more and is continuously updated." (European Union, 2021a).

Economic Activities

"To avoid market fragmentation and harm to the interests of consumers and investors as a result of diverging notions of environmentally sustainable economic activities", financial and nonfinancial undertakings in all member states must incorporate and report according to the EUT framework (European Union, 2020). As of today, European companies reporting under the Non-Financial Report Directive, Public Interest Entities ("PIE") with 500+ employees, are in the scope of the Taxonomy Regulation, although the scope of companies will widen from 2023 (European Union, 2020). Despite this, not all companies are eligible to report under the EUT. The term eligibility is important and does not dictate whether an activity is sustainable or unstainable, it simply refers to whether an activity is included in the EUT. As previously stated, the inclusion of the activity, and thereby the eligibility, is based on the significance of its possible impact on the environmental objectives. The environmental sustainability of an activity is then determined by the alignment of that activity which is decided according to the four over-arching conditions set forth by the Taxonomy Regulation.

As previously mentioned, the European Commission's focus is currently only the two first objectives (*Climate change mitigation* and *Climate change adaptation*) and the activities with the most impact on objectives one and two include energy, buildings, transport, forestry, and manufacturing. In aggregate, the activities are responsible for 80% of Europe's Green House Gasses ("GHGs"), thus testifying to their large impact on environmental objectives (European Commission, 2021a). It is also important to note the separation between financial undertakings (credit institutions, investment firms, insurance companies and asset managers), and non-financial undertakings. Whereas non-financial undertakings started reporting on eligibility from fiscal year 2022 and must report both eligibility and alignment from January 2023, financial undertakings are only required to report eligibility until 2024 before alignment must be considered as well.

Practical Implications and Reporting

The practical implications of the EUT framework for eligible companies mainly revolves around the disclosure requirements and the resources needed for such disclosures. To determine the alignment to the EUT, a comprehensive assessment of all economic activities must be conducted, with the four overarching conditions as parameters. Following the assessment, the percentage share of activities fulfilling the conditions must be reported. According to the Disclosures Delegated Act (EU) 2021/2178, the KPIs that should be reported are Turnover, Capital expenditures and Operating expenditures - following a specified methodology presented in the same delegated act (European Union, 2021b). The KPIs for financial undertakings will naturally differ from those of non-financial undertakings due to the nature of the financial activities. For financial undertakings, the KPIs will be a measurement of taxonomy-aligned activities within their respective debt portfolios, rather than their turnover. For example, investments, underwritings or other financial activities. The measurements are referred to as Green Asset

Ratio ("GAR") or Green Investment Ratio ("GIR"), dependent on the specific financial institution (European Union, 2021b).

Future Development

It is important to note that the EUT is a "living document", which will develop over time in terms of eligibility of further economic activities, clarifications, criteria, and general adjustments. Such amendments will come in the form of delegated acts of a supplementary capacity to the already adopted regulation. Most recently, the Complementary Climate Delegated Act (EU) 2021/2139 was approved by the Commission, including certain nuclear and gas activities in the Taxonomy, though under strict conditions (European Commission, 2022). The EU Commission has created an advisory body (Platform on Sustainable Finance), consisting of 57 experts and 11 observers, that will ensure all developments are in line with the European Green Deal (European Union, 2020). In early March 2022, Platform on Sustainable Finance published a report on how the EUT can be extended to include social and governance aspects (Platform on Sustainable Finance, 2022). This exemplifies possible future developments for the EUT as we approach 2030.

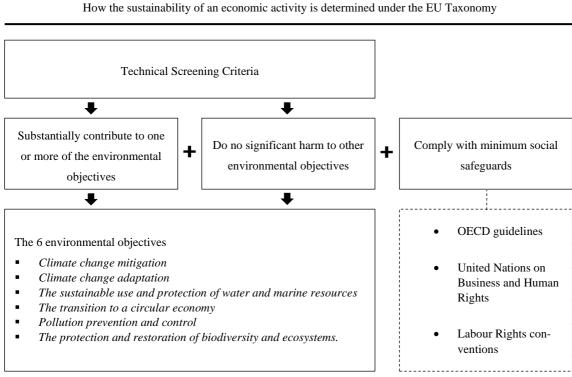


Figure 1: Overview of sustainability assessment under the EUT

1.2. Research Question and Research Motivation

This study aims to answer the following research question: *What is the role of the 'Big Four' in the implementation of the EU Taxonomy?* As the research problem suggests, this paper will consider all roles across the Big Four professional service networks as whole, rather than focusing on specific services within these firms such as audit, advisory and other.

The motivation of this study is twofold. Firstly, the authors identify a scarce body of literature covering the EU Taxonomy. The EU Taxonomy is poorly researched because of its recent emergence; yet, given its magnitude and importance, the research coverage of the EU Taxonomy should be far greater than what can currently be seen. The EU Taxonomy is a massive legislative effort which significantly interferes with the everyday lives of European businesses, financial institutions, investors, regulators and more. The ever-evolving regulatory framework entails increased complexity and unpredictability as we transition to accounting practices including non-financial disclosures in the form of environmental and social aspects, among others (Unerman and Chapman, 2014). Therefore, it is important to systematically understand the multifaced implications, consequences, and possible reverberations to the implementation of the taxonomy – something which can be done through contributions from the academic community (Alessi, Cojoianu, Hopener and Michelon, 2020).

Further, the research that does exist on the aforementioned topic mostly covering general implications of the framework, often from the perspective of the reporting companies. As suggested by the above research question, this paper is more focused on the professional service networks', rather than reporting companies, in the implementation of such standards and frameworks. Research on the role of professional service networks, let alone the Big Four companies, is a fairly undiscovered topic where the current scarce body of literature mostly focuses on the general societal role of certain departments within these professional service networks, such as auditors, rather than the complete company. These are all important factors to the authors' motivation for conducting this study.

A unique feature of this paper is the relatively rare perspective of an often-overseen participant in the organizational landscape – the professional service networks, or more specifically the Big Four. This study's applied perspective is a direct response to the Accounting, Auditing & Accountability Journal's ("AAAJ") call for research engagements on sustainability accounting and related, with an intra-organizational perspective focusing on micro-processes (Adams and Larrinaga, 2007; Adams and Larrinaga 2019). Such requests, either in the form of call for papers or suggestions for future research, serve as the second motivation of this study. The desire for research on both the EU Taxonomy and the professional service networks is also reflected in several other calls for papers, among them: a special edition of Accounting Forum. In their call for papers, the guest editors set forth an objective to "academically [derive] sound insights for policymakers, regulators, financial institutions and investors on the EU Taxonomy and its implementation, use and implications" (Alessi et al., 2020, n.p). Moreover, Cooper and Robson (2006) state that studies on how accounting rules are used and enacted, as well as the interpretation of these, is an excellent area of future research. In similarity to AAAJ, Cooper and Robson (2006, p.435) share the interest in the organizational perspective and recognize the difficulty of gaining access to the Big Four but encourage researchers to try given the "[accounting firms'] public utterances about their support for 'relevant' research". This testifies to the fortunate situation we, the undersigned, are in, having achieved access to top management, directors, and experts of all Big Four firms.

In sum, we hope to contribute to enhanced understanding of the EU Taxonomy, the challenges associated with such framework and more importantly, the role of the Big Four in this implementation. Further, we want to study this from the rare intra-organizational point of view of the professional service networks.

1.3. Structure of the Thesis

The rest of study is structured as follows: following the introduction, the existing literature will be presented in Chapter two *Literature Review* with topics including but not limited to organizational implementation, policy implementation, professional service networks' roles and sustainability reporting. After having examined the existing literature, Chapter three explains this study's theoretical framework in detail and describes how it can be applied to this study by helping to investigate the role of the Big Four in the implementation of the EUT. In the following chapter, *Research Methodology*, a careful investigation of this study's methods in collecting, processing and using empirical material is conducted. This *Research Methodology* further consists of six subsections covering a) Research Approach; b) Research Strategy; c) Research Design; d) Research Limitations; e) Research Ethics; f) Reflexivity. The main discussion and analysis take place in chapter five, *Empirical Analysis and Discussion*, where the authors aim to communicate rare empirical data while in parallel conducting an analysis utilizing the theoretical framework of the study. Lastly, chapter six concludes the study with final remarks on the earlier analysis, the study's contribution, and suggestions for future research.

2. LITERATURE REVIEW

As far as the authors are aware, there is currently no research undertaken regarding the implementation of the EUT and in particular from the perspective of professional service networks. Not necessarily because the topic is highly complex, but more so because of the recent publication of the EUT framework and the relatively limited access to professional service networks like the Big Four. Due to the lack of existing research surrounding the implementation of the EUT , the following literature review examines literature concerning related phenomena, such as general accounting implementations, the general role of auditors, and sustainability reporting.

For the purpose of this literature review, the focus will be implementation of standards, principles, policies, or accounting-related organizational topics as this reflects more relevant literature that helps to inform the more specific context of the implementation of the EUT and why the professional service network's role matter.

Lane (1987, p.17) defines implementation as the act of implementing, or "to carry out something", but refines the aforementioned to a formal definition of "implementation = F (Intention, Output, Outcome)", where the implementation is a result of "bringing about, by means of outputs, of outcomes that are congruent with the original intentions(s)". In simpler terms, implementation is the process of intentions followed by a given outcome which revolves around the accomplishment of aims or objectives. The outcome then results in the less abstract intended output, or practice in the case of regulations.

Sabatier and Mazmanian (1979) study the five conditions of effective implementation of policies, which in this context refers to a situation in which social behavior is altered by public policy – for example a legislative act. As pointed out by Lane (1987), implementation refers to the accomplishment or fulfillment of objectives and according to Sabatier and Mazmanian (1979), certain conditions are required in order to the fulfill such objectives in the case of policy implementation. The policy implementation must be rooted on sound theory which connects the target group's behavior to the desired objectives. This is natural as the theory-aspect ensures a connection to factuality and rationality, while also aligning the behavior of the target group doing the implementation with the output or practice being implemented.

Further, the policy implementation must be unambiguous, in the sense of not allowing too much interpretive flexibility and ensures the maximum likelihood of the desired target group behavior. The implementers, i.e. the actor posing the implementation, must also possess "managerial and political skill" and show genuine commitment to the objectives of the implementation –

not surprisingly, given the effort required by the target group. Another condition tying into the genuineness of implementers to objectives is that the implementation is supported by constituency groups, legislators, and possibly top management during the course of the process.

Lastly, the objectives of the implementation remain over time and will not be undermined by the emergence of policies, initiatives or conditions in conflict with the original objectives by diminishing technical or political support (Sabatier and Mazmanian, 1979). In the end, if objectives constantly change, the unambiguous nature of the implementation is diminished.

A relevant topic within existing literature of implementation is the challenges tied to the introduction of International Financial Reporting Standards ("IFRS") – a concept with several similarities to the EUT in the sense that both are forms of regulation concerning a significant share of European companies, or in case of IFRS – all companies, as well as causing radical practical implications for the reporting of those companies. Moreover, the purpose of IFRS is to serve capital-market investors, exactly like the overarching objective of the EUT (UNCTAD, 2008). On the basis of this, it is assumed that several parallels can be drawn from IFRS to the EUT, and most importantly on the challenges of implementation.

The challenges associated with the implementation of IFRS are heavily researched and existing literature is highly homogenous in its conclusions. Jermakowicz and Tomaszewski (2006) found that the number one challenge of the IFRS implementation was the "complex nature of these standards", referring to the presentation of financial instruments and fair value measurements of such. Further, specific standards were highlighted as particularly complex, including *Accounting for Taxes on Income, Employee Benefits, Impairments of Assets, Intangible Assets, Share-Based Payments* and *Business Combinations*.

Some of these standards were also specifically mentioned as highly complex by Hoogendoorn (2006, p.25), a partner at Ernst & Young. Further, he stated that "IFRS is too complex, even for auditors and specialists", also referring to fair value and impairment approaches.

Similarly, UNCTAD (2008, p.45) mentioned the need to "apply more complex accounting standards with an increasing tendency to market valuation", which is the same as fair value measurement, as a major challenge of the IFRS implementation. Dagnew (2020) also highlights fair value measurements as the complicating aspect of the framework, which then seems to be a reoccurring concern in literature. Dagnew (2020) also adds that the requirement of collecting the prior year's financial data is also something that makes the exercise more complex and cumbersome. Other than the market valuation, the complexity communicated by UNCTADs interviewees was the differing classification of equity and liabilities between the existing

standard and the new IFRS standards, thus representing a slightly different aspect of complexity compared to Jermakowicz and Tomaszewski, Hoogendoorn and Dagnew.

Interestingly, Weaver and Woods (2015) state that among the respondents to their study of challenges tied to the IFRS implementation, very few identified complexities of specific IFRS standards as a challenge. Rather, lack of sufficient training and education was highlighted as the main challenge. The requested training was not intended for the application of rules or standards, but the interpretation and judgement. Weaver and Woods (2015) point out what they referred to as black spots in the IFRS accounting rules, where interpretation was necessary, consequently creating a risk for errors.

Going back to Jermakowicz and Tomaszewski (2006) and Dagnew (2020), they also found that the lack of detailed implementation guidance was a reoccurring point of concern for reporting companies. In their case, the guidance seems to be intended for the application of the rules and standards, thus referring to a challenge of missing adequate education and training (Jerma-kowicz and Tomaszewski, 2006). Dagnew (2020) also identified lack of training as a challenge and pointed out the magnitude of the costs tied such training. Similarly, UNCTAD (2008) high-lighted the need of training and general costs associated with conversion to IFRS in Germany. Here they state that hiring of in-house staff, reorganization of information technology, external consultants and training represented the major conversion expenditures. Particularly interesting in regard to the undersigned's paper is the external consultant costs as a share of total major costs which amounted to 20% (UNCTAD, 2008). In addition to external training by experts, "experience sharing" with other reporting undertakings was recommended by Dagnew (2020, p.270).

Further, Weaver and Woods (2015) explain that lack of management support and commitment to the implementation serves as a challenge, after having conducted interviews with preparers transitioning to IFRS. Venkatesh and Bala (2008) also refer to management support and commitment as important, though in the context of implementation of IT-systems, displaying the similarities and overlaps within implementation studies. The discovered importance of management also testifies to the conditions of successful implementation set by Sabatier and Mazmanian (1979).

One interesting aspect only touched upon by UNCTAD (2008) and Hoogendoorn (2006), is the reporting companies' required number of months needed for the transition from the existing standards to the new IFRS standards – in this case, in Germany. Eighty-eight companies from the Frankfurt Stock Exchange were interviewed and on average, a company needed 5.7 months

for the planning of the transition and 7.7 months to do the actual implementation (UNCTAD, 2008). Hoogendoorn (2006) only referred to auditors specifically and did not state the number of months needed; however, he indicated that even auditors were struggling and used much more time than expected. It is important to note that the time needed for such transition is assumed to be highly dependent on the size of the company and its resources, as well as the amount of similarity between the existing and the new accounting standards - but it is an interesting find, nevertheless.

The interpretive flexibility and freedom tied to standards or rules is the last emphasized challenge in the IFRS-implementation literature, but also seemingly in regulatory processes in general as will be touched upon below. According to Cooper and Robson (2006) and Barrett, Cooper and Jamal (2005), accounting rules may be interpreted very differently within global audit firms depending on several factors including but not limited to national characteristics, need for visibility and specifics tied to the client. Further, Cooper and Robson (2006, p.434) states that even detailed rules require interpretation and leave "significant choices to the preparer and auditor". Interestingly, such interpretive flexibility, or ambiguity as Sabatier and Mazmanian labelled it, is assumed to cause failure in policy implementations – or at least hinder the success (Sabatier and Mazmanian, 1979). Hoogendoorn (2006) does not comment on the success or failure of implementations with room for interpretation; however, he states that with interpretive flexibility is diversity in the practice unavoidable – in his case, referring to IFRS. Kohler, Pochet and Le Manh (2021, p.1) did not study the challenges of the implementation of IFRS specifically, rather the auditors' role as "regulatory intermediaries in the international accounting standard-setting process", more specifically the International Accounting-setting Board ("IASB") - the body responsible for developing IFRS. Although the focus is on auditors and not the general professional service networks, many parallels can be drawn. Kohler et al. (2021) also explain how the auditors have an interpretive role, primarily after the promulgation of standards or rules. The auditors also play a part in the drafting process where their two main roles include formalizing the consensus within their respective professional service firms before sharing it with IASB and participating in meetings, discussions, forums and similar (Kohler et al., 2021). Giner and Arce (2012) seems to identify similar patterns and suggests that professional service networks, or more specifically the accountants, are heavily involved in the standard-setting process – only beaten by the preparers themselves. Interestingly, Giner and Arce (2012) note that the accountants' influence on the final published standard is unknown. In addition to Hoogendoorn (2006) and Kohler et al. (2021) and Giner and Arce (2021), Kakabadse, Louchart and Kakabadse (2006) examine the more general role of business consultants through the consultants' own perspective – a highly interesting scope in regard to the undersigned's paper. According to the consultants taking part in the study, their role is based on three pillars, namely contribution, control, and discretion. Contribution is about adding value for clients as well as moving them forward in terms of progression from the point prior to the consultant's entry. This is done by helping management take decisions they otherwise would not be capable of or comfortable taking alone. Further, Kakabadse et al. (2006) find that consultants have a controlling role, in the sense that they are given different levels of controlling responsibilities depending on the project, client or consulting expertise. Lastly, the role as a discrete actor was stressed. Given the access granted to several of clients' internal processes, discretion is highly important for all consultants in the study and the further up in the hierarchy the consultants consult the more discretion is required (Kakabadse et al., 2006).

Sustainability reporting is another relevant topic which is highly related to the EUT and also showcases the demand for the professional service networks, or more specifically – the audit and assurance department of these networks. The EUT is a type of sustainability reporting, which is also known as non-financial reporting. The sustainability reporting is comprised of disclosures related to environmental and social aspects of a business. The *raison d'être* of sustainability assurance is the reduction of asymmetric information between the disclosing companies and society (Martínez-Ferrero and García-Sánchez, 2017b) through an assurance provider who reviews both the quality and the reliability (Ball, Owen and Gray, 2000; Boiral, Heras-Saizarbitoria and Brotherton, 2019; Global Reporting Initiative, 2013; Kolk and Perego, 2010; Martínez-Ferrero and García-Sánchez, 2017a, b; Moroney, Windsor and Aw, 2012; Perego, 2009).

According to a study by KPMG (2020), 96% of the world's largest companies (G250) have disclosed sustainability-related information. Of these, 71% assured their sustainability reports from independent third parties such as audit firms or consulting firms, suggesting that the assurance of sustainability information has now become a common practice (Jones and Solomon, 2015; Radhouane, Nekhili, Nagati and Pache, 2020; Sellami, Hlima and Jarboui, 2019).

A large stream of academic literature has studied how and to what extent the assurance process and practice contribute to the reliability and quality of a company's sustainability disclosures, which shed light on the role of assurance providers (Ball et al., 2000; Boiral, Heras-Saizarbitoria Many suggest that the commissioning of independent assurance for sustainability reporting ensures transparency and credibility of the information disclosed, enhancing shareholders' confidence therein (Ball et al., 2000; Channuntapipat, 2018; Cohen and Simnett, 2015; Gillet, 2012; Manetti and Toccafondi, 2012; O'Dwyer, 2011). Healy and Palepu (2001) note that only reliable sustainability disclosure is sufficiently regarded by shareholders, which highlight the importance of the assurance process (Dando and Swift, 2003; King and Bartels, 2015; Rasche and Esser, 2006). A study conducted by Hodge, Subraniam and Stewart (2009) showed that the confidence in sustainability reports through the assurance process increases particularly when the assurance is implemented by a well-recognized third-party assurer. Similarly, Fernandez-Feijoo, Romero and Ruiz (2017a) found that the verification by the Big Four auditors tend to enhance the reliability of sustainability reports, consequently leading to an increase of visibility and improvement of corporate image.

On the other side, this optimistic perspective on assurance of sustainability reporting has also been questioned and criticized by a growing body of literature (Ball et al. 2000; Boiral et al., 2020; Boiral, 2013; Hummel, Schlick and Fifka 2019; Michelon, Pilonato and Ricceri, 2015; Owen, Humphrey and Bowerman, 2000). For example, Michelon et al. (2015) empirical analysis on Corporate Sustainability Reporting ("CSR") showed that the assurance practice is not associated with notable quality of sustainability reports which mainly lacks profound content and sufficient information disclosed. Further, the implementation and verification of sustainability information through assurance providers is criticized to be of superficial and symbolic nature (Boiral, 2013; Boiral et al., 2020; Boiral et al., 2019; O'Dwyer and Owen, 2005; Perego and Kolk, 2012). Based on semi-structured interviews with sustainability assurers, Boiral, Heras-Saizarbitoria, Brotherton and Bernard, (2019, p.1118) argue that the implementation of sustainability reports remains superficial because clients consider it as too costly. Further, clients are of the opinion that such disclosures mimic well-established methods used in financial reporting that are inconvertible to the complex nature of sustainability reporting. According to the interviewees, the audit is quite perfunctory, which is a "problem because the report indicates that it has been assured and verified ... but only a part of the report has actually been verified".

A study by Boiral et al. (2020) on auditor's professionalism in providing sustainability audit services found that the auditor's involvement and role in the implementation is of minor importance for improving the credibility of sustainability reporting, implying that auditors lack the competence to guide implementation, to audit and provide quality assurance. Similarly, O'Dwyer (2011) study indicates that the Big Four face significant discomfort and conflict in their endeavours to establish a robust and legitimate knowledge base for audit practices. Moreover, O'Dwyer (2011) illustrates the difficulties auditors encounter in transferring traditional methods of financial reporting and the related mindset to the new area of sustainability reporting, which is characterized by vague qualitative data and unsupported by (auditable) areas suitable particularly for techniques used in financial reporting. The author concludes that the implementation of sustainability reporting relied largely on "tacit knowledge" as well as "gut feel" that contributed to highly subjective assessments of individual data reported (O'Dwyer, 2011, p.1233).

Briem and Wald's (2018) field investigation also touched upon the Big Four contribution to the implementation of sustainable reporting and disagrees with Boiral et al. (2020) and O'Dwyer (2011). According to Birem and Wald (2018), companies highly rely on the Big Fours opinion regarding both implementation and assurance of sustainability reporting. Moreover, according to one of the interviewees, adopting first- and second-time regulatory changes are associated with extensive implementation efforts in which the Big Four are responsible for the verification, validity and robustness of the implementation, thus being a valuable asset for companies.

3. THEORETICAL FRAMEWORK

3.1. Actor-Network Theory

In this study which seeks to examine the role the Big Four play with respect to the implementation of the EUT, actor-network theory (ANT) is chosen as the theoretical framework. ANT otherwise known as the "sociology of translation", is a constructivist approach developed by Callon (1986), Latour (1986) and Law (1986), which was originally designed in the field of science and technology. ANT is used as a framework or "tool-box" (Law, 2007, p.8) to determine the role of groups of actors in shaping structures of networks between individuals, their ideas, and technologies to create a specific knowledge (Latour, 2005; Callon, 1986; Law, 1986). According to Law (1986), ANT assesses the robustness of networks that are constructed through a heterogeneous engineering process to achieve specific knowledge or ideas – or become considered a "scientific truth".

An actor in ANT is a semiotic definition for "something that acts or to which activity is granted by others. It implies no special motivation of human individual actors, nor of humans in general. An actant can literally be anything provided it is granted to be the source of an action" (Latour, 1987, p. 4). Thus, actors who constitute and make a difference within networks may be human (users and stakeholders) or non-human (technology, organizations, assurance standards, reporting guidelines). Using ANT as a framework involves a radical symmetrical treatment of both human and non-human actors within the network regarding power, position, priority, or any assumptions on how these actors determine and associate with other allies (Callon, 1986). Therefore, a regulation for example can be considered as having the same level of agency as a person within the network. Furthermore, the related actors within the network are highly connected and depended on each other regardless of whether they are of human or non-human nature and require cooperation as to ensure a stable network (Law, 2007). Hence, as a broad theoretical constellation, ANT is regarded as a dynamic and complex series of interactions between actors that interlock within a constantly changing network of construction and reconstruction, which facilitates the creation of specific knowledge (Callon, 1986).

The aforementioned networks are created through what Callon (1986) refers to as translation. A successful translation entails that a controlling actor, also known as a primary actor, of a network is able to have remaining actors align their interests or beliefs with those of the controlling actor - essentially agreeing on the aforementioned "truth" set forth by one or more

actors in control (Callon, 1986). On the other hand, if the remaining actors do not agree on a common "truth" in the end, the translation might fail. The translation, or how the actor-networks take form, is a four-stage process first covered by Callon (1986).

The first stage is referred to as "problematization". Here, one actor, or network builder, take control by rendering itself indispensable. The indispensability is achieved through the actor establishing itself as an obligatory passage point ("OPP"), which in practice means that the actor attempts to get the remaining participants of the network to agree with a certain fact or definition, thus converging all interests in a certain direction – or more specifically, the desired direction of the controlling actor (Callon, 1986; Jeppesen, 2010).

The second stage is "interessement", which can be looked at as harmonization of the network. At this stage, the aim is to "overcome resistance and competing problematizations and solidify the network" (Whittle and Mueller, 2010). This is achieved through "devices of interessement", which are mechanisms and strategies that deal with resistance, also referred to as inscription. More specifically, inscription may include tools such as visual diagrams, statistics or tables that help persuade the actor or party receiving that information (Callon,1986; Jeppesen, 2010).

The third stage is "enrolment", which is when the network actors' opinions and interests are converged with those of the controlling actor, i.e. the mechanisms set forth in the interessement-stage were successful in convincing remaining actors of their fact or truth (Callon, 1986).

The fourth and last stage is "mobilization". As the name suggests, this stage refers to the situation where the enrolled actors become spokesmen or representatives and mobilize external actors and persuade them into giving their support through an alliance common of interest and beliefs – but again, based on the interest, truth or fact decided by the controlling actor (Callon, 1986; Whittle and Mueller, 2010). These intra-network interests, or as referred to by Latour (1987 - specific knowledge, is defined as a "claim" since outsiders of the network could potentially reject the specific knowledge or interests as truth. After the successful acceptance of the specific knowledge or interest, controversies about its truth become settled and considered a "fact" also outside the network (Latour, 2005).

The established fact, which is built by the network can be separated over time and the "fact" becomes a "black-box". As a result, it is difficult to gain access to information on how the "fact" was produced and the network that has built the fact due to the separation. Further, it becomes challenging to question the authenticity of the "fact" by unboxing the black-box and reconstructing the network. According to (Latour, 1987), this is primarily achieved by heterogeneous

actors that seek to "black-box" the network through stabilizing the translation, shutting down existing controversies as well as setting related costs for alternatives at a high-level (Whittle and Spicer 2008). In theory, for example, a consumer good could be "black-boxed" when it changes from a prototype that involves an interchanging coalition of actors to a mass product that becomes too difficult and costly to alter (Whittle and Spicer, 2008, p.613).

There is an established body of scholarly literature that has usefully utilized ANT as one of the key approaches in the accounting area where a group of actors collectively seek to create a "truth" that is not yet generally accepted by using accounting as a "tool-box" (Ahrens and Chapman, 2007a; Law, 2007, p.8; Lounsbury, 2008). Indeed, ANT as a framework has been applied to a variety of accounting issues and settings. For example, Emsley's (2008) study "Different interpretations of a 'fixed' concept" utilized ANT in its examination of whether different interpretations occur when introducing fixed accounting techniques – namely the Juran's cost of quality technique. As a broad theoretical constellation, ANT has primarily been applied to illustrate how heterogeneous actors influence companies accounting practices by implementing activity-based costing (Briers and Chua, 2001), the introduction of new accounting systems in Australian hospitals (Chua, 1995), the importance of a collaborative and well-connected network of actors in order to successfully implement a specific knowledge rather than "heroic actions" of individuals (Whittle and Mueller, 2008), hereby particularly the role of management accounting systems in the construction of a company's business strategy (Whittle and Mueller, 2010), the involvement of actors in "interessement" as a key requirement for the standard setting by the Danish professional auditing body between 1970 and 1978 (Jeppesen, 2010), and the processes through which public accountants in Canada develop their professional expertise (Gendron, Cooper and Townley, 2007).

Drawing on the concept of ANT, the authors aim to show that the EUT framework is a nonhuman controlling, or primary actor, and has made itself indispensable by utilizing technical screening criteria, activity classification, and other legislative texts as an obligatory passage point (OPP) for the remaining actors within the network – namely, investors, corporates, professional service network and many other stakeholders. By utilizing ANT, the framework's success in creating a common truth or fact, in other words the success of translation, can be examined. In the case of the EUT, the common fact or truth refers to the interpretation of the rules or criteria set forth by the taxonomy framework. As mentioned earlier, such translation might also fail which in the case of the undersigned's paper would be different interpretations among preparing companies, as well as professional service networks, on how to report - consequently resulting in differing practices. The authors' choice of theoretical foundation is also a response to previous literature's statements on ANT as a particularly interesting theory in accounting research "for those able to negotiate access [to the Big Four companies]", because of their central role as actors when accounting and audit rules are to be stabilized in networks upon implementation of standards (Cooper and Robson, 2006, p.435).

4. RESEARCH METHODOLOGY

The following section, which is divided into four parts, discusses the methodological approach for this study. Firstly, the choice of a qualitative research approach is explained. Secondly, the research strategy is presented. Thirdly, the research design is detailed, including the selection of the case companies, and the data collection and analysis are described. Lastly, the methodological choices made in this study are critically reflected upon, and ethical considerations are discussed.

4.1. Research Approach

In this study's examination of the EUT and the role played by the Big Four, a single descriptive case study approach was employed. The use of a case study, which often consists of "what" questions, is considered most suitable for the investigation of EUT because of its potential to provide a comprehensive and in-depth understanding (Eisenhardt, 1989; Yin, 2018). The essential feature of a case study is that it attempts to explain a series of decisions. In particular, it is concerned with why and how these decisions were made and with the result of the decisions, which are all covered in this paper (Schramm, 1971). More specifically, this study was designed to answer the following research question:

What is the role of the 'Big Four' in the implementation of the EU Taxonomy?

Referring to the richness aspect of case studies – that is, a complex theoretical framework as a foundation – Larsson (1993, p. 1517) concludes that case studies provide the opportunity to examine "more complex phenomena" and are consequently considered superior compared to a broad number of perfunctorily examined observations. A thorough case study enables process data to be gathered, and thus it allows for the examination of various organizational "events, activities, and decisions" over time (Langley, 1999, p.662). Therefore, using a case study can enable researchers to reveal hidden relationships and connections. Particularly, the potential of revealing and analyzing a multitude of complex and dynamic organizational phenomena to gain a deep understanding justifies the choice of a case study approach for this study (Miles & Huberman, 1994; Langley, 1999). A case study typically involves a researcher extrapolating information from a specific organization or a specific department within an organization (Yin, 2018). This might mean extrapolating information from only one multinational professional services network to demonstrate how the profession is involved with a new regulatory implementation, such as the EUT. However, this study goes beyond this boundary by studying a case

Furthermore, the aim of this study is not to elucidate an established condition, which would be a case study of explanatory nature. It also does not intend to devise a specific method or approach that could be used in future research, which would be exploratory (Yin, 2018). Rather, this study is designed to describe a new phenomenon. Descriptive case studies are usually utilized to provide the researchers with a broad description of the phenomenon being examined (Yin, 2018).

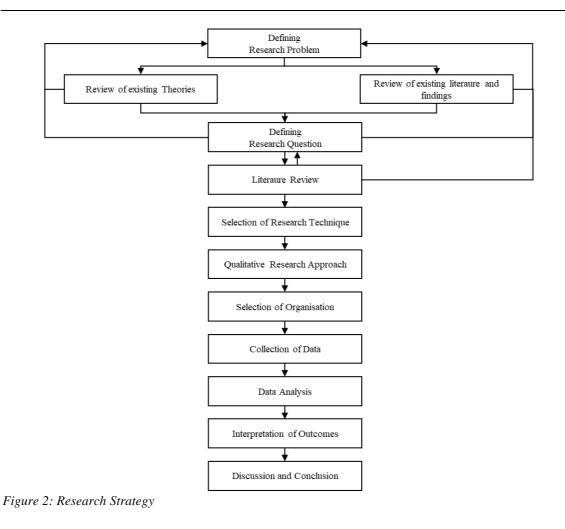
Moreover, this study used a single case study methodology. The rationale for this choice pertains to the deep insights by conducting a single case study as the context in which the behaviour occurs is required to be elaborated on and explained in depth. Dyers and Wilkins (1991) state that conducting a single case study is associated with several benefits compared to a collective case study. Furthermore, they conclude that there is a crucial trade-off between "the deep understanding of a particular social setting and the benefits of comparative insights" (Dyers and Wilkins, 1991, p.614). Thus, a collective case study allows for broader insights than a single case study, particularly by predicting either similar or different outcomes for a predictable cause (Yin, 2018). Hence, the level of clarity and in-depth narratives often provided in single case study as help other researchers identify similarities, allowing the contributions to be more generalizable, even though the study may be of a more specific nature. For this study, a single case study was appropriate because it allows for a more detailed understanding of the extent of the accounting professions' involvement in the construction and adoption of a new regulatory system.

Accomplishing the aim of this study requires proper contextual knowledge and an extensive processual evaluation, which fits with a qualitative case study method (Larsson, 1993). The qualitative method was chosen as it allows for thorough explanations and insights about the phenomenon being studied. More specifically, Ahrens and Chapman (2007, p.2) observe that qualitative research strongly combines theories and empiricism: "With qualitative methodology goes an acknowledgement that the field is itself not just part of the empirical world but is shaped by the theoretical interests of the researcher." According to Bryman and Bell (2015), the interpretation of both the empirical data and the theoretical framework involves an iterative process that guides further data collection and contributes to the development of the research question. For this study, a qualitative approach is considered to be advantageous because it facilitates an

iterative approach – that is, it blends the deductive and inductive approaches in an iterative pattern. Throughout this study, the authors identified which theoretical framework was considered most appropriate by using an iterative process, which means that the collected data was reviewed continuously and compared to the chosen theoretical framework. This ensured that the theoretical framework is suitable for the collected data. This process involved a deductive approach to the extent that the authors began with a hypothesis to "test" certain concepts, for example to examine certain theories, which may be used as an explanation for the challenges surrounding the implementation of the EU Taxonomy. However, the aim of this study is not to test the validity of these theories, as would be done in the deductive approach. Rather, following an inductive approach, this study gathered, analyzed, and interpreted data with the help of an existing theory to explain the findings of the empirical material. As this study employs a qualitative research method using in-depth interviews, one researcher cannot precisely anticipate the direction in which the interview might go. Thus, utilizing an iterative approach in a qualitative case study is considered beneficial as it allows the researchers to conduct a series of open interviews.

4.2. Research Strategy

As presented in the research strategy flowchart (see Figure 2), the authors began the study by determining the research problem (see Section 1). Following this, the existing theories and scholarly literature on the implementation of new standards and sustainability reporting were reviewed. Next, an appropriate research question was formulated (see Section 1), which narrowed down the scope and specified the goal for the study. Subsequently, the authors conducted a literature review to obtain a thorough understanding and overview of the research area (see Section 2). More specifically, the authors searched for relevant scholarly literature on databases, such as Google Scholar and LUBsearch, using keywords, for example "sustainability report", "role of auditors", "implementation", "IRFS", "Big Four", "consulting". Following this search, both authors performed an assessment of the relevance of the literature, primarily allocating relevance according to the area of interest. If the literature was considered relevant, the authors reviewed the articles more comprehensively. Furthermore, the authors used additional material outside of the scholarly literature, including directives and specific annexes of the European Parliament and EU Commission, to get an in-depth understanding of the technical aspects of the EUT, which is a crucial part of the background of this study. As can be seen in the flowchart, an iterative method was used for all the previously described steps in the research strategy, leading back to the origin of this study – the research problem – which was further refined and specified. In the same way, the research question was refined and specified after completing the literature review. The next step was to decide upon the research technique. This was done by analysing a variety of research techniques used in previous scholarly literature in the field of implementation and sustainability reporting (see Section 2). Following this analysis, the authors decided to use a qualitative research single case study approach, which involved conducting in-depth interviews (see Section 4.1). Then, the data was collected, analyzed, and coded by using an iterative process (see Section 4.5 and 4.6). Next, the findings of the semi-structured interviews were analyzed and discussed (see Section 5). Lastly, a conclusion (see Section 6) of the results was given.



4.3. Selecting the Organizations

Given the scope and problem area, the Big Four were considered an appropriate target for this study. The term Big Four is used to collectively refer to the four largest companies, namely Deloitte, Ernst & Young, KPMG, and PwC. These companies offer extensive audit and consulting services and are comparable in terms of size relative to the market. Furthermore, the Big Four are meaningful representatives for the entire professional association of auditors and consultants that not only give advice to large PIEs, which are required to report for the first time against the Taxonomy eligibility from January 2022, but also play an essential role in the EU Taxonomy working groups. Moreover, the service range provided in regard to the EUT is broad, meaning that reporting companies need advice from both consultants in sustainability finance and auditors, which calls for the selection of organizations that compromise all these service lines in full.

4.4. Data Collection

The interviewees were identified through two main processes:

- Visiting the Big Four firms' websites and reviewing articles and presentations covering the EUT or sustainable reporting, which were often accompanied by contact details of their experts in the given field.
- Conducting extensive research on platforms such as LinkedIn and Xing to identify potential experts who have been absent or did not receive an adequate description of their focus area on the company websites. Furthermore, LinkedIn and Xing were expedient platforms for gaining insights into the specific job description of the experts, supporting the authors to evaluate the interviewees' level of expertise.

Most of the respondents were first contacted by email or LinkedIn, and the focus of the study was explained in depth, in accordance with the ethical approval obtained from LUSEM. Nine respondents representing each Big Four company were selected for an interview as their profile fit the focus of the study. All respondents had several years of professional expertise in the field of sustainability, for example in the EU Taxonomy, Environmental Social & Governance ("ESG") reporting, climate change, and sustainable finance. Additionally, the total number of respondents was appropriate given the focus on ensuring a high quality of the study by conducting in-depth interviews with 9 selected participants. Further, the use of a focus group rather than a more general but high-level survey provided the authors with an in-depth understanding of specific challenges as well as the general responses of the interviewees. This study did not apply any particular geographic scope. Rather, the focus was to identify interviewees with extensive knowledge in their field.

A list of the interviewees' positions and titles is presented in Table 1, but the name of each interviewee and the company in which they work has not been given in order to preserve the interviewees' anonymity. This anonymization also applies to sensitive information used in the empirical discussion of this study (e.g., quotes in which interviewees elaborate on specific names of internal groups), which has been replaced with "X" or a pronoun in square brackets (e.g., [we]).

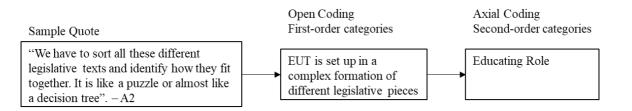
No.	Type of organization	Interviewee's position and tittle	Region	Interview format	Interview date	Duration (min.)	Code name ^a
1	Big4	Climate & Sustainability Expert, EU Taxonomy	Norway	In Person	April, 26, 2022	120	A1
2	Big4	Head Partner - Accounting Consulting Services and Chm. of X Global EUT Working Group	Sweden	Video Call	April, 22, 2022	90	A2
3	Big4	Partner - Sustainability Reporting & Assurance	Sweden	Video Call	April, 20, 2022	60	A3
4	Big4	Director - Head of Sustainable Finance	Norway	Video Call	April, 25, 2022	60	A4
5	Big4	Senior Manager - ESG Reporting, EU Taxonomy	Germany	Video Call	April, 26, 2022	60	A5
6	Big4	Senior Consultant - Climate Change & Sustainability Services	Norway	Video Call	April, 22, 2022	60	A6
7	Big4	Manager Accounting Advisory Services, EU Taxonomy	Netherland	Video Call	May, 13, 2022	60	A7
8	Accountancy Europe	Advisor - Sustainability & Non-financial reporting	Belgium	Video Call	May, 06, 2022	60	A8
9	Big4	Consultant - Climate Change & Sustainability Services	Norway	In Person	May, 05, 2022	120	A9

Table 1: List of research participants and details of the interviews

The interview guide for the interviewees was based on insights from preliminary discussions with trusted interviewees, the identified problem area, previous literature, and the authors' inquisitiveness about the topic in general. Additionally, before the interviews took place, the authors conducted an interview test with a candidate working as an assurance provider in one of the Big Four in the area of sustainability reporting. This test was highly valuable to the design of the interview guide because it enabled the authors to improve the interview questions and ensured a targeted procedure during the interviews. The interview guide included open-ended questions and revolved around the following themes: the role of the Big Four in the EU Taxonomy, potential implementation challenges, and general thoughts on the EU Taxonomy. The interview guide was sent to the interviewees in advance, and all interviewees were guaranteed absolute confidentiality. Additionally, the interview guide was continuously adjusted and modified based on new insights throughout the process of the study. The guide is presented as an example in Appendix 1. Overall, 11 interviews were conducted in English with a total of eight representatives from the Big Four companies and one representative from Accountancy Europe, which is the global organisation for the accountancy profession. The interviews took place in April and May 2022, lasting between 60 and 120 minutes each. In one of the interviews, two interviewees participated (A1 and A9) as this was a condition set by the practitioners to provide further insight into the topic. Given the geographical dispersion of the interviewees and their limited availability, most interviews were conducted using Microsoft Teams. A semi-structured approach was used for the interviews because the aim of the study is to depict and examine a relatively unfamiliar topic. Furthermore, it was assumed that semi-structured interviews would create a structure that allows for more flexibility regarding the deviation from the interview script depending on interview answers. Moreover, both authors participated in all interviews with pre-defined responsibilities, such as asking follow-up questions, taking notes, promoting a friendly atmosphere, and guiding the interview.

4.5. Data Analysis

All interviews were recorded and transcribed verbatim after each interview to facilitate the qualitative analysis of the data. The material was constantly analyzed by the authors through an iterative process, which entails moving back and forth between the empirical material and theory. The authors reviewed and coded each transcript separately to maintain a holistic and objective perspective on the data. More specifically, they performed multiple steps to reduce information, display the data, and make conclusions (O'Dwyer, Owen and Unerman, 2011). In the first step, the transcript was analyzed, and key aspects that supported the authors in addressing the research question were recognized. Furthermore, an individual coding scheme was utilized for each key aspect in which the authors carefully examined any contradictions or similarities in each of the transcripts, followed by open coding of the raw data and determination of the first-order categories. The coding scheme was extended in the second step by re-examining the empirical material and the initially assigned codes by recognizing commonalties across the open codes. Thus, this axial-coding procedure determined the second-order categories, which the authors classified to the possible research question. Following this, the authors blended the more inductive (open codes) approach with the more deductive (axial codes) one and hence applied an iterative approach. As illustrated in Figure 3, the coding procedure started with a quote utilized from the empirical material in which the open code allocated this quote to the related first-order category: "EUT is set up in a complex formation of different legislative pieces." Next, the axial codes classified this to the second-order category: "Educating Role", which corresponded to the research question: "What is the role of the 'Big Four' in the implementation of the EU Taxonomy?"



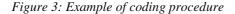


Table 2 provides an example of important first and second-order categories used for this study.

First-order categories	Second-order categories
EUT is set up in a complex formation of different legislative pieces	
Highly complex framework	
Non-financial standard	
Unclear legislation	Education Role
Poorly written	
Process of EUT implementation is a major challenge	
Companies have not been given enough time	
Misconceptions of EUT basics	
Enhancement of commercial position	
Internal System and Processes	
Significant interpretive choices	
Vagueness	
Unclarity	
Internal Value Chain	Interpretive Role
Interpretive flexibility	
Comply with the framework	
Power to shape the direction	
Clarification on the legislative wording	

Table 2: Example of first-and second order categories

4.6. Research Limitations

Like all research methods used in the scholarly literature, the methods used in this study are not without limitations. Although the chosen research method was considered most suitable to answer the research question and thereby to contribute to academia in the field of accounting, it is necessary to emphasize that the chosen research method affects the study's findings (Mills, 2017). An iterative qualitative analysis entails drawbacks that are further discussed in this section. Moreover, this section is split into subsections where the authors emphasize the challenges that developed from using a qualitative method. Furthermore, this section provides insights into the actions that were undertaken to mitigate these limitations and to enhance the reliability and trustworthiness of this study, particularly by considering four criteria: credibility, transferability, validity, and confirmability (Guba, 1981).

Data Collection

This study required the authors to collect data but not generate the data. However, the data collection is regarded as one of the main difficulties when conducting qualitative research as it can affect the trustworthiness. Moreover, high-quality data are dependent on the selection of a proper sample to ensure credibility and relevance for answering the research question (Elo, Kääriäinen, Kanste, Pölkki, Utriainen and Kyngäs, 2014). In this study, the authors focused on

the Big Four for the sample selection. However, it is essential to point out that the generalizability of this study's results is limited by the authors' focus on these companies. As most interviewees in this study have pointed out, in countries in the Nordic regions, terms such as Big Five or Big Six are used to refer to a fifth or sixth multinational professional services network that were also participating in the working groups or providing services for PIEs. Thus, the results of this study and its validity could be enhanced by also considering the opinions of these additional networks.

Another limitation is the researchers' subjective perception of the interviewees' understanding of the topic, which has been selected by reviewing their focus area on the company websites, short preliminary talks, and descriptions of their responsibilities. This subjective perception could lead to a misperception of the interviewees' ability, which directly impacts the data collection and consequently the credibility of the study. However, in pursuit of a trustworthy qualitative study, the authors tried to mitigate these limitations, in particular, by considering the four key criteria of trustworthiness. The authors ensured credibility of the data collection by familiarizing themselves with the culture of the participating companies that were selected for an interview. This was done before the initial data collection took place (Lincoln and Guba, 1985). Therefore, the researchers were aware of the Big Four's values, structures, and service lines, which facilitated the establishment of a relationship of trust between the researchers and the interviewees (Shenton, 2004). The authors used tactics to enhance the honesty of the data by giving the interviewees the right to refuse to participate at any time and underlining during the interviews that there are no right answers to the questions (Lincoln and Guba, 1985).

Furthermore, the researchers decided not to choose interviewees through snowball sampling, in which interviewees from the Big Four could provide referrals to more contacts within the company. This decision not to use snowball sampling mitigated the risk of biased decision making.

Data Analysis

In this study, both researchers were responsible for analysing and coding the empirical material thoroughly, which resulted in enhanced credibility. The authors acknowledge that the study's trustworthiness is impacted by subjectivity when analysing the empirical material, a risk that is difficult to minimize within qualitative research. More specifically, the content analysis of the empirical material was performed by the authors and is therefore affected by their own subjectivity. Consequently, this means that if other people would have analyzed the empirical material, the outcome might have been different. However, the researchers ensured credibility by analysing and interpreting the empirical data and by obtaining confirmation from the

interviewees on the specific statements made and the interpretation of these statements. It is important to note that due to the qualitative nature of this study, the findings are not generalizable and lack credibility and statistical controls, as opposed to quantitative research (Creswell, 1998; Bryman & Bell, 2018; Mills, 2007). These constraints occur because of the researchers' focus on empirical material, which is based on the interviewee's individual rationale and perception. Nevertheless, the researchers mitigated these constraints to a great extent by providing the reader with a detailed and clear description of the qualitative method and context, which ensures transferability. More specifically, providing a thorough understanding and transferability allow future researchers to determine to what extent the findings in this study are transferabile to other studies (Merriam, 1998). Furthermore, trustworthiness was accomplished by meeting dependability. More specifically, the authors presented a clear picture of the processes involved in conducting the study, describing each step carefully and supporting it using a flowchart (see Section 4.2) and reasoning for the different choices taken. Next, in an attempt to minimize bias, confirmability was achieved by the researchers through open and thoughtful discussions on different perspectives of the empirical material.

Furthermore, the authors used corroboration as an additional technique to enhance trustworthiness by considering multiple sources of data. More specifically, the consideration of regulatory sources published by the EU provided the authors with a greater understanding of the EU taxonomy framework and thus facilitated the data analysis.

Moreover, the authors formulated similar questions for the interpretation of the EU Taxonomy and for the role of assurance provider in two different themes to verify whether the answers were consistent.

4.7. Research Ethics

The authors have considered the following four main ethical principles, which are based on Bryman and Bell (2019), for this qualitative study: harm to participants, lack of informed consent, deception, and invasion of privacy. Firstly, the authors complied with these principles by providing the interviewees with sufficient information on the purpose and aim of the study through a briefing document. Furthermore, the interview guide together with a confirmation email ensured that the interviewees were well-informed and confirmed their consent to conduct the interviews. Additionally, the authors emphasized that all questions were voluntary and therefore could be left unanswered. Secondly, invasion of privacy was avoided by asking the interviewees how they would like to be presented in the study and their desired anonymity level. The interviewees stated that they would prefer not to use their name or the company's name in the study results. Furthermore, the quotes from the interviews that were used by the authors were presented to the interviewees after the interview to ensure reliability and to ensure that the interviewees were comfortable with the results. Thirdly, the authors considered the principle of deception in full, particularly by ensuring a high degree of responsibility, trustworthiness, and integrity for the data handling and the use of interview material in the study.

4.8. Reflexivity

Given the qualitative nature of this study, the authors were aware that "positionality" has an impact on all related aspects of a research study (Creswell and Poth, 2018), which called for an engagement in reflexivity. Roulston (2010, p. 116) defines reflexivity in qualitative research as "the researcher's ability to be able to self-consciously refer to him or herself in relation to the production of knowledge about research topics". In an attempt to engage in reflexibility, the authors of this study acknowledge that their backgrounds in corporate finance, including in areas such as mergers and acquisitions, private equity, and venture capital, might have influenced the study.

Through employment at the Big Four, investment banks, or private equity funds, the authors have been exposed, either directly or indirectly, to some internal processes, service lines, or department structures of the selected organizations (i.e., the Big Four). Consequently, when identifying the research scope, research problem, and organizations for this study, the authors may have been influenced by their backgrounds, as particular results and directions of this study were anticipated beforehand.

Furthermore, the authors came into this research field with the ambitious expectation of describing a new and unexplored phenomenon by conducting a qualitative case study without having extensive experience with in-depth interviews. The authors encountered challenges, including lack of area expertise within sustainable reporting and a fear of misinterpretation regarding technical questions, when conducting the interviews with the highly experienced individuals. Thus, the authors acknowledge that the answers of the "high-profile" experts have influenced the knowledge acquisition and hence prevented the authors from achieving true objectivity. Additionally, the authors engaged in reflexibility through the research methodology, during the interviews and the data analysis. First, the authors took notes on the interviewee's general comments, the use of voice, emotions, the relationship between the participants, and the authors own thoughts. These notes provided the authors with a snapshot of the interviews; however, the primary goal during the interview was to listen, analyze, and ask relevant follow-up questions. Thus, the notes taken during the interviews could not lead to a thorough understanding of the complex empirical material, as these notes were mostly superficial.

Second, the authors engaged in reflexibility by writing memos shortly after the interviews to make sure that both authors tried to be attentive to what the interviewee had described and how the atmosphere affected the direction of the interviews. In addition, the authors' memos ensured that the details of the interview were understood correctly. Again, the authors acknowledge that the memos mostly focused on related interactions during the interviews – hence, it does not lead to the desired thoroughness in terms of both content and interactions.

Thirdly, the authors believe that transcribing the collected empirical material verbatim after each interview leads to reflexive thinking. While the transcription of the empirical material seems to be a standard procedure following interviews in qualitative research, the authors argue that this is associated with several decisions, which facilitates reflexivity. Moreover, the act of transcribing provided the opportunity to decelerate the authors dedication with the exchange and allowed the authors to invest more time to analyze the related content and interactions. Furthermore, the authors are aware that the act of transcribing suggests a complex interaction that was based on reciprocal comprehensions.

Through transcribing, the authors became aware that they were able to ask a follow-up question on the "challenges in the interpretation of the EU Taxonomy", for example, because they understood the complexity and vagueness of the framework by studying the technical screening criteria. Thus, the authors could only follow the interview because of the work being done to gain an understanding of the fundamentals of the framework. This realization became clear in the end of the engagement through a reflexive detour towards a more complex nature of interaction that was achieved by transcribing rather than by jotting notes or writing memos.

5. EMPIRICAL ANAYLSIS AND DISCUSSION

This discussion presents and analyzes the empirical findings from the interviews conducted with representatives from the Big Four companies. Throughout the discussion, references are made to the existing literature presented in Chapter 2 of this study and to the study's theoretical framework – ANT – which was presented in Section 3.1.

On the basis of the interviews conducted, this study identifies four main roles that the Big Four perform when implementing the EUT, namely the advisory role, the interpretive role, the collaborative role, and the controlling role. In particular, this study addresses the underlying reasons for performing the roles, what the roles entail, and possible future changes to the roles. The identified roles are presented and analyzed separately; however, it is important to note that there are both overlaps and clear connections between them.

5.1. Advisory Role

Before examining the Big Four's advisory role to the EUT and how this is performed, it is important to highlight the underlying reasons which create the need for such a role. As evidenced in Section 1.1 in this study, the EUT is a highly complex framework; what adds to the complexity of the framework is the nature of non-financial standards and its apparent differences to what practitioners are used to:

The EU Taxonomy is not written in the same way as we are used to when it comes to accounting standards for financial reporting, because there we know how to derive the principles In the EU Taxonomy, we have specific rules where words and texts need to adhere to word by word, and the text is not written for laymen. It is really hard to decipher [The EUT] is so poorly written, to be honest, and has so many weak areas, so many grey areas, and our clients are scared that they are not going to be compliant, that they are going to get this wrong. (A2)

Furthermore, the interviewees described that the legislative texts are unclear, poorly written, and open for interpretation, consequently resulting in confusion among the Big Four. The room for interpretation is addressed later in this study, as the Big Four has a dedicated role in this regard. In addition to the complex framework and the unclear legislation, the interviewees described the process of the EUT implementation as a major challenge – referring to the speed, timing, and communication with policymakers. For example, interviewee A3 stated the following:

I mean, they have not been given any time whatsoever. If we are looking at eligibility reporting, there were two delegated acts that were actually approved in December, and they had to report on it in January, that is two weeks. ... And then [the] EU is sending out FAQs that came after the

year-end. And right now we are in the end of April, and we do not even know how the reporting would look like in year two; so have the companies been given enough time? No, it is not enough time at all We are not really getting any information from the EU. (A3)

In the quote above, interviewee A3 is not only referring to the lack of time in implementing the framework as a whole but also to the limited period between the approval of the delegated acts and the time at which they come into force. Furthermore, the respondent explained how the FAQ (a guiding document published by the policymaker to address questions related to the framework) was published long after the reporting companies needed it. Drawing on examples from the aforementioned implementation of IFRS, Jermakowicz and Tomaszewski (2006) and Dagnew (2020) discuss the lack of detailed implementation guidance, which again seems to be the case with the EUT. Furthermore, according to UNCTAD (2008), the IFRS transition time for the average company was estimated to be 13.4 months from initial planning to the completed implementation. For the EUT, there were 18 months between the publication of the framework and the first reporting; however, essential information was not released until 2 weeks prior to the first report, as explained by interviewee A3 (Hoogendoorn, 2006).

The nature of the framework and the lack of guidance from the EU Commission now results in the reporting companies' and clients' much-needed education, which became apparent after talking to the interviewees in this study. Although some interviewees were less aggressive in their statements regarding reporting companies' knowledge gap on the EUT, the vast majority agreed that there is a lack of knowledge within the reporting companies across all industries. Interviewee A1 described clients' common misconceptions of EUT basics:

We spoke to some very large companies with thousands of employees. And they thought in the next year, they needed to disclose on EU Taxonomy alignment. And we said no, you need to start reporting on alignment from January 2023. (A1)

Furthermore, interviewee A1 emphasized this fundamental misunderstanding by pointing out that clients wrongly strive for high eligibility, which has nothing to do with the sustainability of the company:

Companies think they need to have the highest eligibility numbers to be best-in-class, and we say no, you make your life very hard by having high eligibility numbers because you cannot prove that this is aligned with the EU Taxonomy. So, they think the higher, the better without knowing what eligibility even means. (A1)

Similarly, interviewee A4 affirmed the existing knowledge gap and stated that the demand for detailed instructions stems from the client's inability to differentiate the EUT from other related regulations in the sustainability field. Hence, the Big Four are required to start with a general regulatory mapping:

I think they do not understand anything. They have no idea of what is going on. There is too much How does the EU Taxonomy relate to the Sustainable Finance Disclosure Regulation? Is the EU Taxonomy a part of the GRI or not? All these questions. You have to start at this point. There are so many reporting frameworks, and so much is happening in the ESG space that companies are just completely confused. (A4)

Slightly more diplomatic, interviewee A3 described a different experience regarding clients' capacity to understand the complexity of the EUT, indicating that one should not underestimate or generalize the reporting companies: "I would not generalize it. I would say that there are companies that have sufficient resources, time and that are very advanced in their reporting."(A3). The resource perspective is in line with what Hoogendorn (2006) stated during the implementation of IFRS; however, other interviews indicated that even the most resourceful companies need significant assistance. Despite the slightly different perspectives, it is clear that most companies are currently in a position where they need help to cope with the new framework. It is, however, important to note that the interviewees do not put this on the clients, rather the overwhelming complexity and interpretive freedom of the EUT.

The aforementioned lack of knowledge testifies to the need of the advisory role for the reporting companies. Interestingly, this role is predominantly performed by the Big Four. According to the interviewees, some second-tier professional service networks also occupy the EUT space; however, the Big Four dominate because of two main reasons: 1) currently, the companies that are obliged to report under the EUT are large PIEs which tend to have an existing client relationship to one of the Big Four; 2) the Big Four currently have the highest concentration of sustainability experts among professional service networks and will invest heavily in this area. However, a couple of other professional service networks were also mentioned as competitors, though to a smaller extent. Interviewee A1 stated that none of the Big Four has a well-established set of services in the sustainability field; they are just simply more advanced than the remaining actors. The sustainability path is very immature, and the networks are investing to "become the big player".

Regarding what the advisory role of the Big Four entails in practical terms, all interviewees emphasized the importance of the Big Four as knowledge institutions, and in the case of the EUT they act as a "translator". The first step entails educating and familiarizing the clients with the fundamentals of the framework, such as the overarching objectives, the timeline, and simply how it works. Most of the respondents referred to this as the first layer of technical difficulties, which require the Big Four to spend a significant number of hours on webinars, conferences, and other forms of interaction with clients. The apparent challenging process mentioned earlier adds to the need to educate clients. Interviewee A2 stated that

[The clients] say it is not fair. legislation comes late. It is hard to understand and apply, but we are supposed to be compliant with it. And I think that is where we come in, sort of tries to give them comfort and guidance through this, saying it is enough if you do this and that. Just drawing up the timeline and getting them to understand how we believe the system works and when to apply what took a bit of time actually. (A2)

Furthermore, the legislative set-up of the framework is important to understand, and here the Big Four are a great asset. The interviewees pointed out that since the EUT is set up in a complex formation of different legislative pieces, clients need to be educated on how the different legislative texts interact with each other. Interviewee A2 acknowledged the difficulty of seeing the connections: "We have to sort all these different legislative texts and identify how they fit together. It is like a puzzle or almost like a decision tree." (A2). The different delegated acts released under the EUT are confusing in themselves for the reporting companies; however, interviewee A2 also referred to connections to external directives that are not included in the EUT. Following the education of clients on general fundamentals comes the more technical and client-specific part of the education. The respondents explained that a natural first step during initial client meetings is to identify relevant sections of the EUT by dissecting the framework in a systematic order with the purpose of evaluating what specific economic activities (e.g., Economic activity 3.3 Manufacture of low-carbon technologies for transport) entail and how they match with the existing business model. Moreover, the Big Four helps determine when (e.g., fiscal year) and what to report (e.g., eligibility vs. alignment) since both industry and geographical differences in reporting exist under the EUT. In general terms, the aforementioned services are referred to as the compliance part of the advisory role.

Another aspect of the Big Four's advisory role is tied to the activities performed after clients are sufficiently educated on the EUT and its fundamental principles. Here, the advisory role adopts a more micro-focused scope and turns to more operational or strategic considerations, such as the technical implementations that are necessary to report, preparing the reports, and advising management on strategic manoeuvring of the framework.

Although many of the companies reporting under the EUT already conduct voluntary or mandatory non-financial reporting, the internal system and processes for the taxonomy-specific disclosures, such as the KPIs, are not necessarily in place. Here, the Big Four's role is to advise clients on various operational aspects, such as software or IT-service tools that ensure accurate and sufficient data gathering and readily available sustainability information from the given company. Among the Big Four, the involvement in the development of tools and software for clients varies. Whereas some do joint ventures or partnerships with external IT specialists, others keep the development in-house, according to the interviewees. In the following phase of the technical implementation comes the advisory role related to the preparation of reports. Here, the Big Four either assist or take over the information collection and provide guidance on how to interpret legislative texts that may impact the final KPIs or other key disclosures in the report. To perform this service and role, the interviewees stress the importance of understanding the framework itself and its disclosure requirements (Disclosures Delegated Act), as this is currently subject to significant uncertainty in interpretation – a point which this study comes back to.

The final way in which the Big Four perform the advisory role is in the form of a more strategic advisor for the reporting companies' management. As far as this study is concerned, it is common knowledge that all of the Big Four provide advisory services aimed at operational structuring, optimalization, transformations, or other related strategic areas. Interestingly, only two of the interviewees touched upon this part of the advisory role specifically, though in a different manner. A4 explained how the commercial position can be enhanced using the EUT:

One of the things we try to do as well is to advise companies, not just on compliance, not just on actually getting the reporting in place, but then, also on using the taxonomy, using the reporting to improve their commercial position. (A4)

The majority of the remaining interviewees were only focused on complying and implementing and did not mention any strategic considerations tied to the EUT. Although this study assumes that all of the Big Four companies have a strategic focus, it may seem like some of the networks are more conscious about this focus than others. The lack of focus on strategy and performance was confirmed by interviewee A5, who thinks that the reporting companies dedicate to much attention to compliance, in other words how, what, and when to report. Rather, the focus should be split between compliance and strategy:

None of the companies, and I'm saying that very black and white right ... are discussing how to steer according to those KPIs. So, that is something that really worries me ... in terms of the future orientation. Because it is nice to do a reporting; it is nice to prepare an Excel sheet and to say that those are the numbers. But how do I make sure that those numbers look better in the next year? What are the measures? How do I get there? What is my steering model? (A5)

This study argues that the focus on compliance and implementation is understandable given the early stage in the lifecycle of the framework; however, using the EUT disclosures to enhance the commercial position of companies is a highly likely development. With this in mind, more will be demanded of the Big Four's advisory role in the coming years as clients move from

solely complying with the framework to strategically manoeuvring it. Regardless of the scope of the advisory role (e.g., education, operational implementation, or strategic manoeuvring), the reporting companies' reliance on the Big Four is not surprising. As covered by Briem and Wald (2018), first- and second-time regulatory implementations are associated with significant efforts by the Big Four, and the EUT is no different.

Since this study indicates that the Big Four provide comprehensive knowledge to reporting companies and thereby facilitate the application of the EUT, it is important to emphasize the massive efforts this role entails in terms of knowledge building and being up to date with regulatory changes. As the EUT framework is a living document – in other words, it is continuously being amended or extended – it is vital for the Big Four to stay on top of new developments, which was expressed as a constant struggle by respondent A4:

What keeps me up at night is not being updated. Everyone in the Big Four is in [a] panic as well, because there [are] a lot of things happening in the regulatory space. You need a systematic way of following up what is coming from the regulatory bodies to be on top of things If we are not a couple of steps ahead of clients, then we are obsolete, we are not going to be able to help them. (A4)

This constant fear is based on what seems like an unorganized regulatory process by the EU Commission, which all interviewees agreed is the case. An example of this is the aforementioned late approval of the two delegated acts in December 2021 and the general pace of the implementation. Such late approvals restrict the Big Four in educating clients (e.g., identifying eligible economic activities), since knowledge and guidance can only be provided on a conditional basis until confirmation is announced. Despite this, the interviewees pointed out that new amendments to the EUT framework are discussed weekly on a consolidated level to make sure that the companies are up to date on the most relevant topics.

As for the future, this research suggests that the role of the Big Four as key advisors for the EUT will only grow in importance. Clients' need for education and general support will increase given a rising strategic focus and constant updates of the framework in the coming years. This becomes evident when, for example, looking at the social taxonomy, in which companies will need to contribute significantly to social goals that will not be based on scientific standards but on international norms and conventions, thus requiring more extensive knowledge.

5.2. Interpretive Role

The interpretive freedom or flexibility in the framework, the confusion among reporting companies, and the concentration of EUT knowledge at the Big Four clearly indicates another crucial role of the Big Four – namely, the interpretive role. This role was mentioned by all of the interviewees, which indicated the importance and responsibility tied to such a role. While Kohler et al. (2021) confirmed the role of auditors in the interpretation of accounting standards, this study argues that services provided earlier in the Big Four's value chain also contribute heavily to the interpretation – at least in the case of the EUT.

Before proceeding to explain the various aspects of this particular role, it is important to understand the parts of the EUT require interpretation, which leaves companies with significant interpretive choices. According to A3, the room for interpretation is created by unclear, vague, and "high level" legislative texts in several parts of the EUT, from the initial eligibility assessment (i.e., whether the company's economic activity is covered in the EUT) to the way in which the final three KPIs should be reported.

To illustrate the vagueness and unclarity of the legislative texts, a few case examples were provided by the interviewees, without specifying specific clients, names, or other sensitive information. One interesting example was explained by interviewee A1 concerning the reporting of the three KPIs, namely revenue, CapEx, and OpEx, which is the most crucial exercise in the EUT reporting as it classifies a company's degree of sustainability. For CapEx and OpEx, the legislation states that there are three ways in which one can report these figures: 1) CapEx that is related to assets or processes corresponding to taxonomy-eligible economic activities; 2) CapEx/OpEx that is part of a plan to expand taxonomy-eligible economic activities or enable taxonomy-eligible economic activities to become taxonomy-aligned; 3) CapEx/OpEx relating to the purchase of output from taxonomy-eligible economic activities and individual measures enabling the target activities to become low-carbon or to lead to greenhouse gas reductions (European Union, 2021b). In point three, the interpretive flexibility seems to arise from the meaning of "related to" (or "relating to") and the ambiguity tied to it. According to A1, this causes confusion and consequently leads some companies to simply report all OpEx that is related to one of the three alternatives as taxonomy aligned:

I also understand that from reading the text like this, you think about it, this is the way to do it. So, let us say you have a company and you have only one factory, which is 100% from a turnover perspective eligible, and you also consider OPEX as 100% eligible. But the regulation itself is a little bit different. It does not say that it is one to one the same, it actually says they are orthogonal to each other. So, the one can be 100, the other can be lower, or the other way around. It is not

clear at all, you just have to analyze it. So, we see many companies reporting high OPEX numbers, which is simply because of different interpretations. (A1)

Another example was provided by interviewee A3 and relates to companies where the majority of their economic activities in the internal value chain are defined and covered by the EUT but where the end-product may not be included in the framework:

To give you an example, you are a forest company. Your forestry is included in the taxonomy. However, a forest company, they do not necessarily sell logs. They might sell paper; that is their actual end-product. But they own a lot of forest. However, they also sell forest to other forest companies, but the Taxonomy says you can only consider external revenue, but they are actually selling this forestry or logs internally – into another company that produces the paper. Paper is not included in taxonomy. So, should they be allowed to report alignment? Because forestry is an economic activity within the taxonomy. Should they be allowed to have that one? Yes or no? And interpretation? Nobody knows. (A3)

In this last example, this study would argue that the interpretive flexibility is slightly less predominant compared to the first example, but present, nonetheless. One could argue that the separation between internal and external revenues should be clear; however, the confusion is rooted in the logical flaw of two companies with the same value chain and the same activities reporting KPIs with 100% and 0% alignment, respectively. Again, this is left to interpretation.

More generally, all interviewees highlighted the significant need for interpretation and characterised it as a massive effort and a huge job. As touched upon in the literature review of this study, accounting rules may be interpreted in very different ways even within highly professional organizations, such as the Big Four, even though they may be of a detailed nature (Cooper and Robson, 2005). In the case of the EUT, it seems as though the divergence in interpretation might be significantly higher compared to what Cooper and Robson (2005) indicate based on the confusion among preparers. Although the success of the EUT implementation is outside the scope of this study, it could be interesting to revisit Sabatier and Mazmanian's (1979) work, which states that ambiguity might hinder a policy implementations' success. Consequently, this demands more of the professional service networks, and in the case of the EUT, it requires the Big Four to step into a more complex interpretive role.

The specific way in which the Big Four performs the interpretive role varies depending on the client; however, this study identifies two main stages in performing the role. First and foremost, the areas that are open for interpretation in the EUT, either generally or specifically concerning the client, need to be interpreted so that reporting companies know how to comply with the framework. In this case, the Big Four's goal is to reach the policymaker's intended interpretation while not being too far from other competitors. Interviewee A3 stated that "hopefully we

We had a meeting [with the representative from DG FISMA], and we said 'Well, these are some issues we have right now. And we have read your FAQs as well as the legislation, and we believe this is the answer. There is choice A and choice B, we among the Big Six, think B is the correct one. And the representative from the DG FISMA said no it is A. So, all of us reached the conclusion that it was B, and you say it is A? Yeah.' (A2)

This quote displays how these networks engage with policymakers to enable sound interpretations, but more interestingly, it again testifies to the interpretive flexibility and confusion tied to the EUT. The degree of cooperation among the Big Four and these networks' attempt to harmonize the interpretation in a direction that is assumed to be desired by the EU Commission is discussed further later in this study. The second stage of the Big Four's interpretive role takes place when one cannot reach a sound interpretation with certainty, even after having communicated with associations, peers, or policymakers. Consequently, the uncertainty tied to interpretation creates an opportunity which this study refers to as flexible interpretation. In contrast to the first stage, where the goal was to identify the desired but unspecified interpretation set forth by the EU Commission, the flexible interpretation leaves the reporting companies with multiple interpretations to choose from, as can be seen in this statement made by interviewee A1:

What we do sometimes is writing like two or three different views and just saying look, this is what we think is correct; we are looking for more clarification; this is our recommended view. But if you go for this view with some argumentation, you can still show it is fine. (A1)

The role of the Big Four, and in this case the advisor, is to identify the different interpretations that can be used while still assuring that the client is within the reasonable borders of the legislative text. Although interviewee A1 did not explicitly state it, this may also be considered a strategic opportunity as companies may want to choose the interpretation that benefits them, thus, tying the Big Four's interpretive role to the strategic advisory role mentioned earlier. The reporting companies' strategic focus is worth mentioning in regard to this study because of the possible implications this will have on particularly the second stage of interpretation performed by the Big Four. When the reporting companies shift their focus from a compliance-only focus to performance or both – this demands more from the Big Four and their interpretive role, which is a similar case to that of the advisory role.

An interesting aspect of the interpretive role performed by the Big Four is the responsibility and power that such a role might entail. This responsibility and power is also what makes this particular role the most important role performed by these networks. The importance derives from the possible implications on the application of the EUT and the soon-to-be established practice. The Big Four represent, among others, the biggest companies in the market. The EUT currently applies to large PIEs with more than 500 employees (European Union, 2020), many of which are assumed to be existing clients of the Big Four. If not clients already, the concentration of EUT knowledge at the Big Four surely results in many companies that are now required to report under the EUT seeking the expertise of these networks. Under the reasonable assumption that the Big Four represent or engage with the majority of the companies reporting under the EUT in one way or another, in addition to the current interpretive flexibility, this study raises the possibility that the interpretive role of the Big Four gives them the power to shape the direction of the necessary interpretation under this framework and thereby establish practise, or precedence if you will. When presented with the question of whether the Big Four have the power to shape the direction and interpretation of the framework, the interviewees did not fully agree with the accuracy of this statement. Whereas some interviewees agreed with and elaborated on the statement, others were less sure about the influence the Big Four has on the framework and the way forward. Interviewee A1 underlined the consequences of wrong interpretation:

Absolutely, and this is also a danger, right? Because if we are interpreting it in the wrong way, then we lock it in the wrong way. This is what you see this year, this reporting season. I am sure that in the next weeks, you will see reports where they are describing on a meta-level what we saw in the first reports across the industry; there [are] a lot of different interpretations and misunderstandings. (A1)

Moreover, the respondent here confirms an underlying question of whether a practitioner should actually be able to have such an influence. Other interviewees agreed that practitioners should have an influence but communicated it slightly more defensive. For example, interviewee A5 stated the following:

Yes and no. These working groups that are being set up, they are industry specific. So, it is about the industries coming together and discussing their thoughts and bringing their topics [to] the table But we, [and] all the other Big Four, are obviously a part of these working groups as well, but it is not like we are necessarily driving them. So, I would generally say the knowledge would be available for everybody who wants to be part of that and who wants to drive these discussions. On the other side, I think that [the question raised] is a very valid one and an important point. (A5)

In similarity to interviewee A5, interviewee A4 opined that the industry and interest groups possess the most influence but that the Big Four also have influence of the direction in which the framework develops. Interestingly, and as stated under the examination of the Big Four's advisory role, interviewee A4 stated that the reporting companies "Don't understand anything. They have no idea of what is going on", which was also expressed by other interviewees. Considering the lack of knowledge in the industry that is suggested by some of the interviewees, this study questions the influence or power the reporting companies have in shaping the framework, at least at this point in time. Rather, it can be argued that the Big Four indeed have power and influence of the EUT's direction, as indicated by interviewee A1. Under the assumption that the Big Four do indeed have the aforementioned power and influence, this study does not indicate that this privilege will be exercised - at least not with the Big Four's interest in mind. Rather, it is clear that the Big Four will do what is best for their large body of clients and will act on behalf of the reporting companies when interpreting the EUT. In relation to the question on the power of interpretation, A4 responded that the Big Four have no interest or agenda in setting a certain path in the interpretations and added that the consultants are just doing the job that is required. As indicated in the quote below, and mentioned by all of the interviewees, the Big Four do not necessarily want this interpretive role, rather it is forced upon them by the lack of clarity from the EU Commission. The role being forced upon them, therefore, suggests that the Big Four have no interest in shaping the interpretations of the EUT in a certain way. Interviewee A3 stated the following:

I believe that the ones that write the law [are] the ones that should interpret it and tell the companies how this should be applied. Unfortunately, I would say, or maybe it is fortunate, I don't know, it has become, in many instances, the audit profession that is doing the interpretations. I am not sure that is the right way of having it. ... I would assume that the EU platform should be taking this interpretation, because at the end of the day, it is ESPAS [European Strategy and Policy Analysis System] (i.e., the oversight body of the securities) that are governing and saying whether you are interpreting this the right way or not? ... So, we have a huge role, and we are taking that role. I would say and obviously I enjoy that role, but is it the right way? I am not sure, at least not to the extent that we are actually doing it right now. (A3)

After examining the interpretive role in light of this study's theoretical framework, it is clear that the obligatory passage point ("OPP") established in the problematization stage, namely the technical screening criteria, activity classification, and other stipulated legislative texts, is not able to converge the interpretation of the remaining actors sufficiently. Therefore, the OPP fails to agree on what ANT refers to as the "truth" or the "fact". Consequently, a non-primary actor of the network is forced to take an interpretive role to ensure the framework's function. Among

these actors are companies reporting under the EUT, but also the Big Four which is at the forefront of setting the direction of the EUT interpretation, possibly unwillingly, because of the concentration of knowledge in these networks. Therefore, the Big Four acts on behalf of the EU Commission, the primary actor, in the interessement stage. As mentioned in Section 3.1, interessement is the harmonization of the network by "[overcoming] resistance and competing problematization" (Whittle and Mueller, 2010), which in the case of this study refers to harmonizing in the direction of the EUT interpretation. As mentioned earlier in this study, one of the overarching goals of the EUT is to increase comparability between companies when it comes to sustainability. To achieve such comparability, companies must report their respective numbers using the same interpretation. This means that the interpreter, predominantly the Big Four companies, is in charge of the EUT fulfilling its goal and can only do so by aligning interpretations across the Big Four. The interviewees suggested that they doubt if this is possible in practice, but they recognized that without a common interpretation, the comparability will deteriorate.

When it comes to future developments for the interpretive role currently performed by the Big Four, the majority of the interviewees opined that, as the framework evolves in its lifecycle and as companies have the chance to adapt reporting, entities will cope better with current requirements and possible new amendments. As the EUT is a living document, significant extensions will occur, for example with the already mentioned inclusion of social reporting, and the Big Four clearly states that there will be even more to interpret when disclosing social performance. On the one hand, according to the interviewees, the Big Four's responsibility regarding interpreting the EUT will most likely not grow at the same pace as the framework itself. On the other hand, the reporting companies' strategic focus and manoeuvring of the framework is expected to develop in the coming years, thus demanding more of the Big Four.

5.3. Collaborative Role

The third identified role of the Big Four is the collaborative role. As the name suggests, this role entails cooperation within and between various parties: internally in the Big Four companies, across professional service networks (predominantly the Big Four), and with regulators, which in the case of the EUT is the EU Commission and its related bodies. As is shown in this section, the collaborative role performed by the Big Four is highly related to the interpretive role mentioned earlier, as a collective effort across the Big Four is needed to harmonize the interpretive direction.

Addressing this ambiguous collaborative role separately when the spectrum of other roles performed by the Big Four is so clearly defined might seem strange. However, it is necessary to address this role given the significant importance of collaboration in the implementation of the EUT – maybe even more so than earlier policy implementations. Not surprisingly, the reason for this importance is the much-mentioned complexity of the EUT framework and the immature stage of sustainability departments among the Big Four and other professional service networks. The Big Four's first instance of collaboration takes place in internal working groups, either at the national or international level. Here, a diverse set of pressing topics are discussed across several departments within the given Big Four companies, including but not limited to sustainability advisors, auditing and assurance companies and tax and legal companies. Regarding this collaboration, interviewee A6 explained that

We established working groups ... where we get together and discuss, this at both the European level and own subgroup in the Nordics. ... we discuss ongoing questions that we get from our clients, and it has proven to be a great initiative because, with the level of interpretation that the taxonomy opens for, it is really great to have a dialogue, and then we come to a common, harmonized answer to these things. Especially, as it is such a fast-moving space, with many people with varying roles and backgrounds involved, both in creating the taxonomy and in implementing it. For us, it is therefore great to gather auditors, lawyers, and other experts together to discuss questions that arise. (A6)

Interviewee A3 stated the following:

Within X, I have had for the past one and a half year[s], almost weekly, more than weekly meetings going through these things in the network. I mean, in our European network we have different member states where I am representing Sweden, and we take up different questions. At the beginning, it would be simple questions, who is included and not, how do we define what is turnover and so on, and then you go down into much more detailed questions. (A3)

As can be seen from the statements made by the interviewees, the interpretation is a reoccurring topic for these working groups, thus testifying to the working groups' role as a point of harmonization internally for the Big Four. Despite the working groups being mentioned by all of the interviewees, this study argues that these groups are not necessarily well-coordinated within certain companies and that some firms show signs of newly established sustainability departments. This argument is based on the fact that some interviewees representing the same company referred to different working groups by different names despite talking about the same jurisdiction.

The second instance of collaboration takes place externally in the form of collaborative meetings or workshops with other market participants – or in relation to ANT, in the form of actors. These could be sector-specific working groups (i.e., consisting of reporting companies within a given sector and the Big Four) or working groups consisting of solely professional service networks, predominantly the Big Four companies, and branch associations. Going back to the lack of coordination, some interviewees suggested that there is no form of cooperation across the Big Four; however, this could be a case of different definitions of cooperation and is therefore not emphasized in this thesis. Interviewee A5 touched upon the interaction between the external and the internal ("Center of Excellence") working group:

So, there are working groups existing, those are the standard working groups, also from the industry sectors, etc. And [we] are a part, as all the other Big Four, in these working groups. And coming from there, we then get the insights, what is being discussed there, what changes, what interpretations, and then we do have a Center of Excellence. ... if there is a question where we are not sure within the project, if we should go left or right, we would go and consult with them. And they do have this clear statement (A5)

In this statement, the interviewee is referring to working groups consisting of both reporting companies and the Big Four. Here, the interviewees discussed changes and the ever-reoccurring topic of interpretation. Interviewee A3 described a group that was more concentrated around the professional service networks organized by the national branch association, also known as the institute for the accountancy profession in Sweden. The involvement of the branch associations in arranging such meetings was mentioned by several interviewees as a point of contact among the Big Four. For example, interviewee A3 stated the following:

Within the Swedish branch association, we have meetings with, I would not say the Big Four I would actually say the Big Six We never discuss specific companies, but we discussed different questions that I had in my network. X had similar questions and so on. So, we discussed this, and we also do that on a European level. Not to discuss specific clients but to discuss certain questions that come up. (A3)

As far as this study is concerned, the individual companies in the Big Four are motivated to engage with close competitors so that they can draw upon their peers' experiences and discuss topics that in the end will help the individual firm determine how to assist their own clients in the best possible way. Furthermore, the Big Four believe that a joint effort is necessary due to the lack of direction given by the EU Commission and because it is simply a more organized channel of communication with policymakers. Regardless of the individual firm's motivation, this helps harmonize the different interpretations of the EUT, thus fulfilling the EUT's objective of increased comparability between reporting companies.

Relating the collaborative role to this study's theoretical framework, the collaboration across the Big Four or the working groups works as the "new" OPP – since the intended OPP does not converge the interests and definitions of the actors in the network, as mentioned earlier.

The third and last instance of the Big Four's collaboration is their cooperation with the regulators and policymakers – in the case of the EUT, this includes the EU Commission and its related bodies, such as the Platform of Sustainable Finance, the European Financial Reporting Advisory Group, and the European Strategy and Policy Analysis System. As is shown in this section, this may be a rather one-sided collaboration where most of the effort is located on the Big Four's side. This particular part of the collaborative role involves the Big Four asking questions and providing feedback to the policymakers on behalf of themselves or the reporting companies. Interviewee A2 explains that

We go to the legislator and tell them these are the areas that you need to take care of. And since these frameworks are so immature, I think right now we have a major important role to play. Now we say that these [issues] are unclear, there is no right or wrong answer to these, and we have sent them back to the European Commission. Loads upon loads of issues that we have sort of summarized, explained and said should you read it this way or that way? ... And we have sent those issues both to the experts in the platform that supports the commission and directly to the commission. So, I think that has been a major role for the accountancy firms to play. (A2)

In this statement, the importance of the collaborative role can be seen as the practitioners clearly communicate the challenges of the EUT. Interviewee A1 elaborated on how the Big Four also join forces to create a clear and organized channel of communication to the policymakers:

And [the Big Four] are then going to the authorities and asking questions. For instance, they are going to EFRAG [European Financial Reporting Advisory Group] or they go to the sustainable finance platform, and say like, okay, bottom-up, we came up with these questions in all countries across all four companies ... we came to these three views, can you give us a clear interpretation? Which then the regulators often avoid. (A1)

In other words, as the Big Four provide feedback and ask questions to the EU Commission, this makes the Big Four a "sparring partner" of a collaborative nature. However, the response given by policymakers, or regulators, has not been satisfactory, as can be seen above. The policymakers' lack of motivation to accommodate healthy discussions was pointed out by the majority of

the interviewees of this study. In this sense, the third instance of collaboration within the collaborative role may be less clear than the two priors. Kohler et al. (2021) explain how the auditors play a part in the drafting process of international accounting standards by formalizing consensus within the networks before sharing it with the IASB. Seemingly, there is a parallel to the EUT in terms of the role of the networks, although the counterparty is different. In contrast to the remaining roles of the Big Four, the collaborative role will likely decrease in magnitude over the coming years as the framework matures – even despite extensions, such as the social taxonomy. Although many difficult questions will arise, the need for collaboration across the Big Four will not be the same as the networks adapt and the regulators become clearer.

Earlier, this study stated that the EUT was a non-human controlling or primary actor in the network of various actors tied to the EUT. The study has also determined that the OPP, in this case the technical screening criteria, activity classification, and other stipulated legislative texts, did not fulfil its purpose of converging the definitions and interests of the remaining actors because of the significant interpretive freedom of the framework. Consequently, the Big Four act on behalf of the primary actor in the interessement stage to harmonize interpretations, as mentioned in Section 5.2. In practice, it is the collaborative role of the Big Four, or more specifically of the external working groups, that ensures the harmonization of interpretations. As defined in Section 3.1, the OPP has the function of converging interests and definitions, thus suggesting that the external working groups act as a "new" OPP in the case of the EUT, as this is where the common interpretations are achieved. Since the implementation of the EUT is currently underway, it is too early to examine whether all interpretations will result in a common fact, so the enrolment stage defined by ANT. Furthermore, the final stage of the ANTprocess - mobilization - will only be ready for examination once actors outside the network accept the interpretation, which is a few years away given that the current structure of the EUT is too complex for non-experts to understand.

5.4. Controlling Role

As the assurance of sustainability reports by an independent third-party provider has become a common practice (see Section 2), this study highlights another vital role: the controlling role in form of the assurance of EUT disclosures. This role was described by the respondents in this study as an "amazing" business opportunity that will evolve over time and be a crucial part in the framework implementation. Before examining the controlling role, it is important to understand that the EUT framework stipulates different levels of application in terms of reporting requirements for large companies and hence in terms of the verification level provided by sustainability assurers, such as the Big Four.

More specifically, the Taxonomy Regulation stipulates that from January 2022, in-scope companies must report taxonomy-eligibility for the previous financial year of 2021. This means that in its first year of implementation, companies only need to indicate whether their economic activities or investments are within the scope of the EUT framework.

Furthermore, in the second year of implementation, starting January 2023, the legislator stipulates that in-scope companies must report against taxonomy-alignment on the three KPIs for the previous financial year of 2022. This means that companies must disclose whether their economic activities or investments significantly contribute to one of the six defined environmental objectives, thereby showing their degree of sustainability while doing no significant harm and being compliant with the minimum social safeguards.

Therefore, this study indicates that the importance of the controlling role exerted by the Big Four in the form of assurance will develop together with the EUT as a "living document" and is not executed to the fullest in its current implementation stage (eligibility). This is confirmed by all respondents across the Big Four, who underlined that the aforementioned speed of the framework led to the realization and indulgence by the regulator. According to respondent A2, this realization and indulgence impacts the level of implementation and consequently the controlling role by the Big Four in the first year of adoption:

They will be sort of a little bit lenient on the first year's application and the scrutiny of that, because they know that you did not have enough time. So, the legislator also understood that. They said, well, let us give you a grace period for the first year. So, there are different levels of application: you do eligibility first, and then you do alignment. It is actually not full, the application on the taxonomy. It is just pieces of it. (A2)

After understanding the status of the EUT implementation and pinning down the controlling role of the Big Four within the context of the first-year adoption, this study further aims to examine how the controlling role is defined in practical terms (i.e., which specific parts of the

EUT report are currently assured by the Big Four). The interviewees stated that the controlling role is primarily compromised of two workflows: 1) traceability and rationale of the accounting principle used for the three KPIs and 2) critical proofreading of the EUT report and its comparison with the clients' competitors. Furthermore, interviewee A3 expressed that

Most of the times, our work would be on the accounting principles, so the three KPIs. So, what are the accounting principles that we took out? When we are looking at capital expenditures, how did we treat ISA 16? How did we treat Property, Plant and Equipment? And then at the end of the day, we are looking through the whole EU Taxonomy report, reading it, and comparing it with other companies. (A3)

Seemingly, the controlling role performed by the Big Four combines two already well-established in financial reporting – verifying the compliance with accounting standards and the crucial annual report review. Additionally, most interviewees point out that the comparability of the EUT report with the client's closest competitors ensures an unambiguous assignment of economic activities in the Taxonomy Regulation, which becomes clear considering the aforementioned current uncertainty tied to interpretation.

Although the controlling role performed by the Big Four is emerging and concentrated on the KPIs and report review, the implications from the client's perspective are already noticeable. Most respondents emphasized the importance of the controlling role, which is manifested in clients seeking credibility of the EUT report, particularly in the first-year adoption, even though sustainability reporting is still not mandatory across the EU. Interviewee A2, for example, reflected on the pressure of companies to correctly apply the EUT framework:

Right now, there are very few jurisdictions in [the] EU where you need to have an audited sustainability report, because not in every country sustainability reporting is mandatory. But clients want to be compliant with the legislation or EU Taxonomy legislation in your case. They want to be able to say to their supervisory authorities that they are compliant. They want to have someone with an audit background to help them in that process. So, if they are then trying to sit there and dig through the legislation and trying to figure out what to report by themselves, they want to have someone who tells them that how they are thinking about it is correct. Because in a few years from now, it is going to be their auditor who puts the sign on it. (A2)

The quote illustrates that clients strive to comply with and enhance the reliability of the EUT report assured by the Big Four. This is in line with the observations of previous literature in the field of sustainability reporting (Ball et al., 2000; Boiral et al., 2019; Global Reporting Initiative, 2013; Kolk and Perego, 2010; Martínez-Ferrero and García-Sánchez, 2017a, c; Moroney et al., 2012; Perego, 2009) and particularly being assured by the Big Four (Briem and Wald's, 2018, Fernandez-Feijoo et al., 2017).

This study thus indicates that the Big Four take on a controlling role where they act as "wardens" by offering clients assurance that they are correctly applying the EUT framework and related principles.

However, the aforementioned empirics also indicate that to carry out the controlling role, particularly as the framework develops and sustainability reporting becomes mandatory across the EU, the Big Four need to ensure quality audits by conducting highly objective assessments of the EUT report, using proper techniques and establishing a sustainability-specific mindset. In this vein, interviewee A2 discussed the utilization of traditional techniques and tools applied in financial reporting for the assurance of sustainability reports including the EUT reports: "Right now, we use our own old systems, we just push it in there."(A2). Thus, this study recognizes similar observations to Boiral et al. (2019) and O'Dwyer (2011), who have previously criticized this practice, in respect to the application of well-established methods used in financial reporting.

Interviewee A2 went on to argue that clients will continue to rely on the Big Four for assurance regarding their sustainability reports, thereby seeking credibility of the information disclosed, even though the assurance lacks cogency:

We have to do it, and we know that in a couple of years' time from now, even if we were to be super bad at gaining new business, we would still have a huge chunk of audit clients coming to us to ask, even if we are miserable, they will still come to us and ask for auditing. (A2)

However, the interviewees also state that due to the speed and complexity of the framework and the relatively new area of sustainability that requires an extensive reskilling of auditors, it becomes challenging to ensure the desired quality. Despite being less complex, comparable standard implementations, such as the IFRS, took a significant amount of time to reach an appropriate level of assurance quality. Moreover, the interviewees across the Big Four agree that the controlling role will be sufficiently performed in regard to the EUT, since the reskilled auditors can bring their "old" methodology into the field of sustainability. Therefore, in comparison to climate and environmental engineers or other environmentalists, auditors are experienced in performing systematic assurance controls, checking data points, and monitoring such projects.

As for the future developments of the controlling role of the Big Four, political interference might cause significant implications on the assurance. The interviewees stated that under the new directive, the Corporate Social Responsibility Directive ("CSRD"), of which the EUT will be a part, the regulatory bodies are currently debating whether the Big Four should be allowed

to verify both the sustainability report and the financial report of their clients. This is particularly emphasized by interviewee A2, who argued that the regulators are considering preventing the audit oligopoly of the Big Four in relation to sustainability reporting, which could have significant implications on the controlling role of the Big Four:

I think there is a political idea in the parliament that they want to break down the audit oligopoly of the Big Four, or the Big Six. So, there is a notion on the table saying, if you have a financial auditor, they should not be allowed to do the sustainability audits, which I think is not a great idea, because it is going to be super costly for the clients. So, you will basically have two auditors doing the same thing, so twice the costs. In those cases, in the audit profession, we strongly believe that we are not speaking on our own behalf, because we want the business. We are speaking on behalf of the clients; it is going to be a mess if they go down that route. (A2)

This quote does not only illustrate the importance of the controlling role but also the potential impact of such political decisions for the Big Four, which have already started establishing certain audit approaches in respect to the EUT reporting for existing audit clients. After all, it is common that existing clients approach their auditor when a new report has to be assured, in this case – the EUT report.

6. CONCLUSION

As explored in this study, the EUT is a complex framework with significant implications for many European companies. Because of the significant implications and the limited body of literature on the EUT, several academics have called for research related to various aspects of the framework, including but not limited to implementation challenges, application, and future implications (Adams and Larrinaga, 2019, Alessi et al., 2020). Furthermore, several academics encourage adopting an intra-organizational view (i.e., the perspective of practitioners). This study aims to contribute to this area of research through the following research question: "*What are the roles of the 'Big Four' in the implementation of the EU Taxonomy?*" Through a set of in-depth interviews with experts within the field of sustainability and sustainable finance, this study gained rare access to the Big Four's perspectives. Furthermore, the results were organized and analyzed drawing upon the study's theoretical framework: ANT. To the best of the author's knowledge, this is the first study to include this particular scope to the research on the EUT.

This study concludes that the Big Four perform four main roles in the implementation of the EUT, namely an advisory role, an interpretive role, a collaborative role, and a controlling role. Although the above-mentioned roles may seem like standard roles that are performed by the Big Four, this study argues that in the case of the EUT, the networks change their normal approach, resulting in major practical differences to the standard roles performed historically.

For the advisory role, the empirical evidence shows that the Big Four act as translators for their clients due to an apparent knowledge gap on EUT fundamentals, consequently leading to an out-of-the-ordinary advisory role. More specifically, they educate clients on the essentials of the framework, such as overarching objectives, what to report, and when to report it, which are referred to as the compliance part of the advisory role. Furthermore, the advisory role contains a strategic element where the Big Four can advise clients on how to manoeuvre the framework with the intention of improving the clients' commercial position or performance.

Moreover, this study explores the interpretive role. In this role, the Big Four act as sole interpreters, given the frameworks extensive interpretive flexibility compared to earlier standards. How the Big Four performs the role is divided according to the intended aim of the interpretation. One aim is to reach the intended interpretation set forth by regulators, and the second aim is to utilize the interpretive freedom to interpret legislative texts in a way that benefits the client. The central part of this role is to assist the harmonization of interpretation to increase comparability of companies. A particularly interesting point relating to this harmonization is the Big Four's ability to influence the interpretive direction and thereby establish practice. Despite mixed opinions among interviewees, this study concludes that this particular role gives the Big Four the power to influence the direction of the EUT.

The third role identified through the empirical evidence is the more ambiguous collaborative role. This role revolves around the collaboration between key EUT stakeholders or between actors in the network when referring to ANT. The collaborative role is mainly performed in three instances, namely in internal working groups, external working groups, or interaction with policymakers or regulators. In both the external and internal working groups, the aim is harmonization of interpretations and discussions on pressing topics. In the collaboration with regulators, the Big Four's collaborative role revolves around providing feedback and asking questions to the relevant bodies of the EU Commission. This study finds the collaboration between actors to be of a more extensive nature in the EUT implementation.

The fourth and final key role identified by this study is the controlling role. This study finds that, in the first-year implementation, clients seek credibility and confirmation regarding the EUT report and wish to be assured that they comply with the report; however, the Big Four's controlling role is not fully established. Furthermore, the empirical evidence shows that the Big Four act as wardens for their clients by assuring that they comply with IRFS standards for the KPIs and critical proofreading, which ensures that clients apply the EUT correctly. Moreover, this study demonstrates that in the case of the EUT, the Big Four still rely on the reutilization of well-established methods used in financial reporting for sustainability assurance.

This study concludes that, together with the interpretive role, the collaborative role displays and an interesting take on the ANT. Furthermore, it finds that the primary non-human actor, the EUT, created the technical screening criteria, activity classification, and stipulated legislative texts as the OPP in an attempt to converge the interpretations and applications of the remaining actors – in this case, mainly professional service networks and reporting companies. With the conclusion that the Big Four have had to take on an interpretive and collaborative role to determine that legislative texts published by the EU Commission are correctly interpreted, the original OPP has failed to achieve its intended purpose. In the end, the interpretation conducted by the Big Four in the collaborative external working groups will converge the interpretations and definitions of actors, thereby ensuring increased comparability and the correct application of the EUT. Consequently, this study argues that the external working groups are the "new" OPP, which ensures converging interpretations and fulfils the comparability-objective set forth by framework. Furthermore, it is assumed that it is too early to examine the later stages of the fourstage ANT process, as the implementation of the EUT and the related interpretation is currently ongoing.

Contribution

On the basis of the findings from the interviews, this study contributes to the existing literature on the EUT, policy implementation, and Big Four professional service networks in three ways. Firstly, this study contributes to the research on the EUT itself as well as the implementation of the framework and its associated challenges. By doing so, this study responds to repeated calls for research from AAAJ and the Accounting Forum, respectively. Whereas AAAJ called for research on sustainability accounting, in which the EUT is included, the Accounting Forum called for research on the EUT specifically. Within this study's contribution on EUT research, the authors have also added to research on general policy implementations and the EU Commission, as well as its related bodies.

Secondly, this study contributes to academia's understanding of the role of the Big Four in policy implementations and the associated challenges of such a role. Furthermore, utilizing the intra-organizational perspective by conducting personal interviews with the Big Four contributes to increased transparency in the policy implementations process. Here, the study contributed first-hand insights on the interaction between regulators and practitioners in the policy implementation processes. By utilizing the intra-organizational perspective of the Big Four, this study responds to AAAJ and Cooper and Robson (2006), who encouraged this exact research perspective as well as all attempts to gain access to the Big Four for empirical data gathering. Thirdly, this study makes a theoretical contribution as it employed ANT in the EUT policy implementation. Due to the difficult nature of the ongoing implementation process, more specifically the confusion around interpretation, ANT in its intended form with one OPP was not applicable. The introduction of a "new" or second OPP can be applied to research where the original OPP failed to converge definitions or interests of actors in the network, as illustrated in the case of the EUT provided by this study.

Future Research

This study not only presents three contributions to the research field but also highlights a few interesting avenues for further research in area of the EUT. Since this study focuses on the roles performed by the Big Four, it only covers consultants' and auditors' perspectives, experiences, and opinions on EUT implementation. Therefore, an avenue for future research would be to conduct a similar study from the perspective of the reporting companies. As this study found that the EUT is a highly complex framework with unclear legislation that was introduced with

a tremendous amount of speed, future research could examine which challenges the reporting companies face in the implementation of the EUT. Another research opportunity would be to investigate how the roles of the Big Four have developed together with the EUT, particularly with the introduction of the social taxonomy. By combining the findings of this study with the future research, an even deeper understanding of the roles played by the Big Four in policy implementations, as well as their importance, can be achieved. Furthermore, a dedicated expost examination of the influence the Big Four has in shaping the EUT's direction through interpretive freedom would possibly yield interesting insights, given the responses received in the author's study. Lastly, it would be interesting to examine the assurance quality of the verified EUT report, which would implicitly put the controlling role performed by the Big Four to the test. More generally, this study encourages future research to also utilize the intra-organizational perspective of different actors when conducting research within the field of accounting, as this provides first-hand insights.

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Appendix

Appendix 1: Interview Guide example (send out to interviewees in advance)

INTERVIEW GUIDE Date: 04/22/2022 Interviewee: n/a Interviewers: Peder Kogstad, Mirza Husović Topic: The role of Big Four firms in the EU Taxonomy Duration (min): +/- 60 - 120



INTERVIEW SCOPE:

The scope of the interview is to gain insights into the EU Taxonomy from the Big Fours perspective. After a short introduction of the interview participants, the following focus areas will be discussed: The role of Big Four within the EU Taxonomy, possible implementation difficulties in the everyday use of the framework as well as general views on the EU Taxonomy. Further, minor changes in the questions and scope should be expected.

INTERVIEW GUIDE:

THEME 1: Introduction

- Background of the study and presentation of the researchers
- Can you please tell us about your professional background and your role in [the company]?

THEME 2: Role of Big Four

- Can you tell us about what you as firm specifically do for companies that are within the scope of the taxonomy?
- In our current research, we have noted down, for example, Big Four participation in the Technical Expert Group as well as advisory on the regulatory design as other possible roles. Can you tell us about these roles, or potentially other roles you may have?
- Is there a working group across the Big Four? And if yes, what is the purpose of the cooperation?

THEME 3: Implementation challenges

• What do you consider the challenges of implementing the EU Taxonomy for you as a firm?

THEME 4: General thoughts on the EU Taxonomy Framework

- What are your general thoughts on the framework? For example, do you think it fulfills its objective and has the companies been given enough time?
- Is the need for such framework still the same today as when it was proposed some years ago?
 For instance, given the increased popularity of green investments
- Given the fact that the Taxonomy framework is a living document continuously develop, do you see your role as an auditor changing or developing over the coming years?