UNIVERSITY OF GOTHENBURG
SCHOOL OF BUSINESS, ECONOMICS AND LAW

Financial Economics and Corporate Sustainability

Facilitating Sustainable Investments

- How the EU Taxonomy is expected to change the principal-agent relationship between fund managers and retail customers

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Abstract

There is currently an information asymmetry on the financial market, which has implications for the practice of greenwashing, hindering the capital allocation towards the Sustainable Development Goals. To fill this information gap, the EU Commission initiated the development of an EU Taxonomy - a standardized classification system to facilitate sustainable investments. This thesis aims to examine how the principal-agent relationship between retail customers and fund managers is expected to change because of the EU Taxonomy, by answering the research question *"How do fund managers expect the principal-agent relationship with their retail customers to change by the EU Taxonomy?"*

The findings from interviews with Swedish fund managers indicate that the information asymmetry between retail customers and fund managers will decrease due to the EU Taxonomy, and that their interests will become more aligned. The information disclosed by fund managers expressing an equity fund's alignment with the EU Taxonomy will comprehensible for the retail customer and will limit greenwashing. According to the findings, these disclosures will be comprehensible and therefore useful for retail customers to shift their financial flows, facilitating sustainable investments.

Keywords: Fund manager; Retail customer; Environmental Sustainability; Sustainable Investments; EU Taxonomy; Capital reallocation; Sustainable Development Goals Agenda; Principal-agent; Greenwashing

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As we have a strong personal commitment to the subject of sustainable finance and we had the privilege of researching one aspect of the field, we are now excited to expand our knowledge further and contribute to a more sustainable economy.

Contents

List of Figures

1. Introduction

The world is facing urgent issues related to political, environmental, and economic challenges, all of which encompass factors that need to be addressed (United Nations Development Programme [UNDP], n.d.). To combat these issues, the United Nations (UN) adopted the Sustainable Development Goals (SDG) Agenda in 2015 (United Nations [UN], n.d.-a). The SDGs are an ambitious global commitment that sets out a plan to bring wellbeing for people and planet, for both current and coming generations (UN, n.d.-b). However, fulfilling the SDGs requires a capital reallocation to sustainable economic activities (Clark, Reed, & Sunderland, 2018; TEG, 2019). More specifically, the reallocation of capital has to bridge an investment gap estimated to amount to 5-7 trillion USD of sustainable investments[1] (UN, 2018). The financial sector, and in particular, the actors in the investment fund sector, have the ability to redirect capital to sustainable investments and therefore need to take part in this transition (Peterson, 2019).

One of the aforementioned environmental challenges which the SDGs address is climate change (UN, n.d.-a). Tackling climate change is important for financial stability, as it's estimated to result in huge economic losses (European Commission, 2018b). Therefore, the European Commission proposed a regulation for an EU Taxonomy in 2018 (2018/0178 (COD)), in an attempt to mitigate climate change and address the reallocation of vast amounts of capital, utilizing the private financial sector in the process (European Commission, n.d.-b). The EU Taxonomy provides a unified classification system for environmentally sustainable economic activities (TEG, 2020a). The purpose of this classification system is to define what company activities are environmentally sustainable (TEG, 2018). By providing a unified definition of sustainability, the EU Taxonomy is supposed to increase transparency and facilitate sustainable investments (TEG, 2019).

As the actors in the investment fund sector need to take part in the transition towards achieving the SDGs, they are the main focus of the EU Taxonomy. To understand the interrelation between them, a simplified visualization is provided below in Figure 1. The figure shows an outline of the investment chain depicting the relationships among the three main actors identified in the Technical Report developed by the Technical Expert Group on Sustainable Finance, TEG, but Figure 1 does not explicitly exclude intermediary actors.

[1]The definition of sustainable investments is not universal (Peterson, 2019) and should be specified in each context. In this study, a sustainable investment is defined as an investment in an equity fund which finances environmentally sustainable economic activities while not jeopardizing the social dimension of sustainability. A full list of definitions can be found in Appendix A.

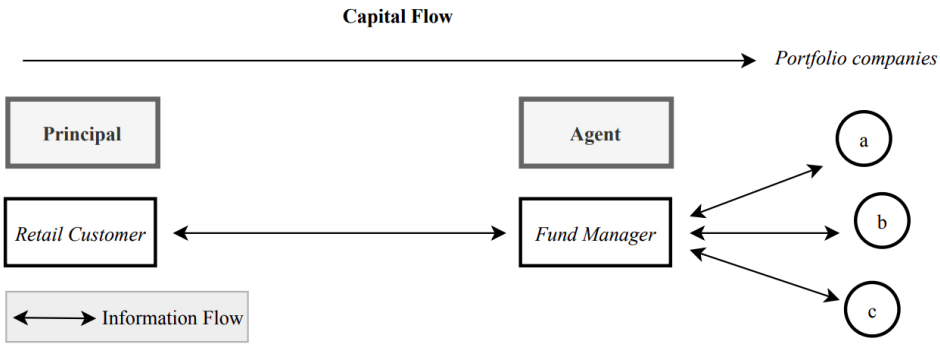

Figure 1. Actors in the EU Taxonomy.

The first actor identified in the EU Taxonomy is retail customers (TEG, 2019). Retail customers contract fund managers to invest for them, for example in equity funds that integrate environmental sustainability. The second actor is fund managers (TEG, 2019). A fund manager is defined as a professional asset manager of a fund or pension fund company who invests capital on behalf of their retail customers. The third is portfolio companies, in which the fund managers invest with the capital of the retail customers (TEG, 2019). The investments are structured in equity funds that retail customers purchase, and the fund manager manages the capital by shifting financial flows from retail customer to portfolio companies, as shown in Figure 1.

To shift the financial flows towards the SDGs, the information flows must function properly. In the investment chain depicted in Figure 1, the EU Taxonomy will require fund managers to disclose and communicate to retail customers the extent to which their equity fund holds assets that are considered environmentally sustainable in accordance with the EU Taxonomy (TEG, 2019). Disclosures of these equity funds increases information, which enables the shift in financial flows towards the SDGs. The portfolio companies will provide data and information to the fund managers, which allows them to assess the environmental sustainability of those companies. Therefore, as retail customers and fund managers are part of the private sector and possess the capital which needs to be redirected to fulfill the SDGs (TEG, 2019; Peterson, 2019), they have an important role in this reallocation. The EU Taxonomy was created with this reallocation of capital in mind, but what will its implementation mean for these actors?

1.1 Problem Discussion

In recent years, the market for sustainable investments has grown as retail customers become more interested in sustainable investments (Heinemann, Zwergel, Gold, Seuring, & Klein, 2018). Plenty of research has shown that the interest in sustainability has increased substantially over

time. In 2008 the interest had increased substantially (Renneboog, Ter Horst, & Zhang, 2008), and in 2016 it was still on the rise, likely to continue into the present (Unruh, Kiron, Kruschwitz, Reeves, & Rubel 2016). However, despite this interest in sustainability, informational barriers hinder retail customers from investing sustainably. Complex terminology and information, an overload of information, and a lack of credibility and quality in the information are challenges which the retail customer faces when they try to invest sustainably (Peterson, 2019). Information barriers on the market hinder retail customers from turning their interest in sustainability into sustainable investments. Private capital needs to be mobilized towards the SDGs through regulatory measures (OECD Development Co-operation Directorate, 2020). Therfore, information barriers are problematic in that retail customers cannot reallocate capital towards sustainable activities. This has implications for the achievement of the SDGs because retail customers have an important role in financing portfolio companies, as shown in the investment chain in Figure 1.

To overcome the informational barriers, retail customers may rely on intermediaries (Nilsson, 2014). These are referred to as fund managers and are depicted in Figure 1. The majority of retail customers lack knowledge to create long-term financial plans that give both high returns and consider sustainability, and must therefore contract someone to do it for them (MacMaster, 2019). When retail customers contract fund managers to manage their capital, they enter a principal-agent relationship, in which the retail customer acts as principal, delegating work, and the fund manager as agent, performing that work (Dalmacio & Nossa, 2004; Eisenhardt, 1989).

Relying on a fund manager as intermediary may pose other problems for the retail customer, as the fund manager may, if no regulation is present, manipulate the information provided (Peterson, 2019). Such a principal-agent relationship is characterized by an information asymmetry between the principal and the agent (Panda & Leepsa, 2017). This information asymmetry may be exploited by the fund manager, for example by communicating manipulated and misleading information about the sustainability characteristics of the equity fund. When fund managers manipulate information, it can be referred to as greenwashing, which is defined as the practice of intentionally communicating misleading information about environmental performance (Olatubosun and Nyazenga 2019; Laufer, 2003).

Greenwashing is argued to be a widespread problem in the finance sector and is one way through which information asymmetries manifests. Of 230 sustainability-themed funds studied in the EU, 52% of them claimed to be environmentally sustainable in the sense they made an

environmental impact of some type (2 Degree Investing Initiative, 2020). But of these claims, 99% of them did not comply with the regulatory guidance set up in different ways, for example, the claims were either incorrect, too narrow, or unclear (ibid). Ultimately, retail customers want to allocate capital to sustainable investments, but greenwashing hinders them from doing this (ibid).

Greenwashing is an outcome of the asymmetric information between retail customers and fund managers, and to reduce it, the EU has imposed different regulatory measures (European Commission, 2018a). The EU Taxonomy is one such measure that is part of the greater EU Action Plan on Sustainable Finance, which is an overarching umbrella for initiatives in the EU that aim to reallocate capital to a more sustainable economy (ibid). The EU Taxonomy attempts to solve the problem of asymmetric information by requiring fund managers to disclose how large share of an equity fund that is aligned with the screening criteria of the EU Taxonomy (TEG, 2019). TEG (2019) have communicated that retail customers will enjoy reduced information asymmetry and increased certainty and confidence in fund managers because of the EU Taxonomy. The reduced information asymmetry indicates that the EU Taxonomy will, according to TEG (2019), likely impact the principal-agent relationship between the retail customer and fund manager, but it is unclear how.

This attempted solution to the problem of information barriers on the financial market warrants further examination. A fruitful attempt may help retail customers in reallocating their capital towards the SDGs with implications for the market for sustainable investments. It is also important to research as it gives an understanding of the factors that may affect the equity financing of portfolio companies seeking capital. The ability for a company to make transitions towards more sustainable economic activities is determined by the investors' perception of the feasibility of the investment. Clarifying these incentives will be important for companies seeking financing as investors divest from sectors that are not perceived to be sustainable, which will strangle financing to companies in these sectors (Lozano and Reid, 2018). For portfolio companies currently at the forefront of sustainability, the EU Taxonomy can in this sense enlighten investors' understanding and increase financing to those companies (Aggerstrøm Hansen, 2020). Hence, an understanding of the relationship between retail customers and fund managers is important for the financial sector and is needed to facilitate sustainable investments. Therefore, it is what this thesis aims to examine.

1.2 Purpose and Research Question

To gain more knowledge about the factors contributing to the capital reallocation towards the Sustainable Development Goals, this thesis aims to examine how the principal-agent relationship between retail customers and fund managers is expected to change because of the EU Taxonomy. This will be achieved by answering the following research question: ***How do fund managers expect the principal-agent relationship with their retail customers to change by the EU Taxonomy?***

1.3 Expected Contribution of Thesis

This thesis contributes to existing research in a few ways. Previous literature has examined environmental regulations for financial advisors (MacMaster, 2019), and more specifically, the EU Taxonomy from the retail customers' perspective (Peterson, 2019). The shift from voluntary to mandatory environmental disclosures has been researched as another strand of the field (Etsy and Karpilow, 2019). Additionally, the implications of a weak regulatory environment and green-washing has been studied (Olatubosun and Nyazenga, 2019). In relation to previous literature, this thesis increases knowledge of how fund managers perceive a mandatory environmental disclosure regulation, the EU Taxonomy, to change the relationship with their customers. By utilizing Agency Theory to contextualize its insights and provide practitioner input, the contribution is therefore of both practical and theoretical importance.

1.4 Delimitations and Disposition of Thesis

The thesis is delimited to Swedish fund managers of pension fund and fund companies, as Sweden is at the forefront of sustainable development (Sustainable Development Solutions Network, 2019). In addition, the Swedish fund market is of significant size, as Sweden was among the top 10 largest investment fund markets in Europe in 2018 (Statista, n.d.). These two aspects of the Swedish market may indicate that the fund managers will be well versed in sustainability and the EU Taxonomy, which might encourage accuracy and pioneering results. Another delimitation is that not all of the regulations in the EU's Action Plan for Sustainable Finance, of which the EU Taxonomy is part, will be covered in this thesis. This delimitation is to ensure detail and specificity of the subject of interest.

The thesis proceeds in the following way. Chapter two gives an overview of the intended use

of the EU Taxonomy, including screening criteria and sector coverage. Thereafter, chapter three presents the theoretical framework. It is structured around the assumptions of Agency Theory including information asymmetry, conflicting interests, and costs, along with the related problems of moral hazard, adverse selection, and greenwashing, all applied in a context of sustainable investments. Chapter four explains our method, with detailed descriptions of the semi-structured interviews, our four-step data analysis process and how the literature studies were carried out. This chapter considers potential methodological biases and reocurringly addresses ethical aspects. Chapter five then follows with a presentation of the empirical results structured around the themes: The sustainability interest of the customers, the implementation of a unified definition, greenwashing, drawbacks with the EU Taxonomy and costs related to its implementation. Continuing, chapter six contains both analysis and discussion of the empirical results from the lens of Agency Theory. We also address the implications for the principal-agent relationship and the capital allocation towards the SDGs. Chapter seven concludes with an overview of our final interpretations and lastly, areas of further research are identified.

2. Overview of the EU Taxonomy

The EU Taxonomy as a regulation was agreed upon on the political level in December 2019 (European Commission, 2019). However, it will not tread into effect until the 31st of December 2021, when fund managers will be required to disclose the alignment of their equity funds with the EU Taxonomy's screening criteria (TEG, 2020a). As practical guidance for implementation of the EU Taxonomy, the Technical Expert Group, TEG, created the Technical and Final Report, which provide recommendations for design of the regulation and practical guidance for how users should implement the EU Taxonomy (ibid).

2.1 Calculating an Equity Fund's EU Taxonomy Alignment

Fund managers will use the EU Taxonomy to prepare disclosures of their equity funds' EU Taxonomy alignment. Fund managers offering equity funds will calculate the Taxonomy-alignment by assessing each portfolio company's activities, as shown in Figure 2.

Figure 2 elucidates how the investment chain described in Figure 1 will be affected by the EU Taxonomy. Each portfolio company will provide data on their activities and financials to the fund manager (TEG, 2020a). With the data from the portfolio companies, the fund manager has

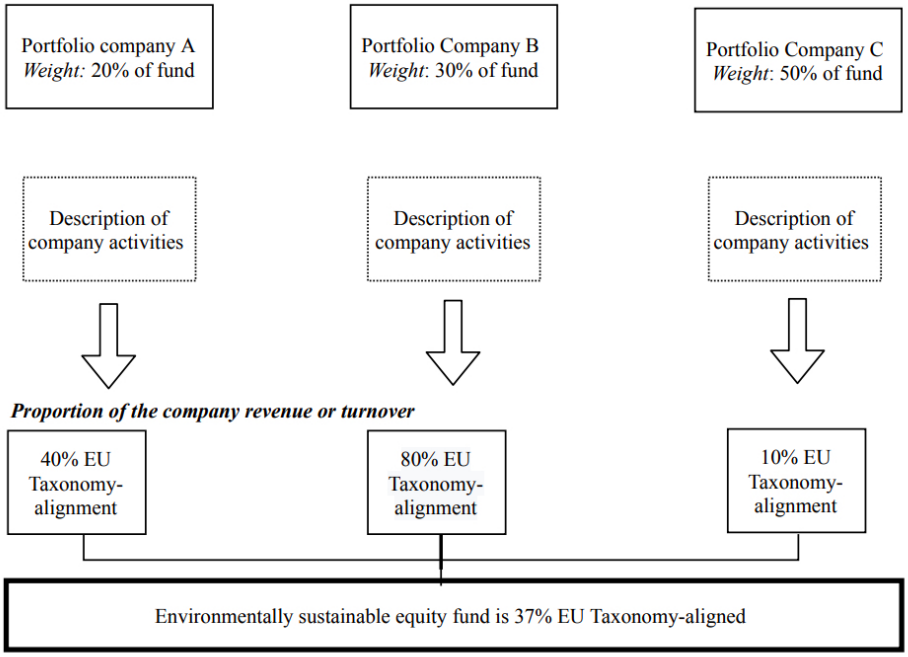

Figure 2. Calculating an Equity Fund's EU Taxonomy Alignment

to determine the fund's alignment with the EU Taxonomy based on revenue, capital expenditure or operating expenditure (ibid). Thereafter, each economic activity's fulfillment of the screening criteria, as described below, are assessed. When this has been done for all underlying companies, the fund manager will calculate the total fund alignment by weighing each portfolio company's alignment against its total weight in the fund. For example, as illustrated in Figure 2, if Company A is 40% taxonomy aligned and weighs 20% of the total fund portfolio, Company B is 80% taxonomy aligned and weighs 30% of the total fund portfolio, and Company C is 10% taxonomy aligned and weighs 50% of the total fund portfolio, the total EU Taxonomy alignment is 37% (ibid). Finally, this alignment percentage of the fund will be communicated to the retail customer. The levels of alignment are going to be relatively low-numbered unless they are very specific equity funds with a stated environmental purpose (European Commission, 2020).

The alignment percentage of the fund will be communicated from the fund manager to the retail customer in a few different ways. For each equity fund, the alignment with the EU Taxonomy and to what environmental objective(s) the investments contribute has to be disclosed (TEG, 2019). Also, fund managers must disclose narratives explaining for example investment strategy or deviation from the EU Taxonomy (ibid). These disclosures will be made in pre-contractual documents with information about the equity fund, in quarterly and annual reports and ongoing publications on the company's website (ibid). The disclosures will not be audited

by a third party, meaning that fund managers who prepare these disclosures will not have to seek external verification. However, TEG (2020a) notes that this will be revisited by the year 2022 for a follow-up.

2.1.1 Screening Criteria

To classify if economic activities of a portfolio company are environmentally sustainable, screening criteria are used. The TEG developed the EU Taxonomy for economic activities which may be classified as contributing to climate change adaptation or mitigation[2]. Furthermore, the TEG identified so-called Do No Significant Harm criteria, which an activity has to fulfill in order to be included in the EU Taxonomy (TEG, 2019). The technical screening criteria which could be used to judge economic activities are the following (TEG, 2020a):

Their contribution to: 1) Climate Change Mitigation, or, 2) Adaptation	3) Sustainable use and protection of water and marine resources, 4) Transition to a circular economy, 5) Pollution prevention control,
While simultaneously avoiding harm to the other EU-environment objectives:	6) Protection and restoration of biodiversity and ecosystems

These screening criteria are used to assess portfolio companies' activities. When this has been done, the total EU Taxonomy alignment of a fund can be calculated as described above.

2.2 Sectors Covered

When developing the screening criteria, economic activities were chosen in sectors where the largest impact could be made. The EU Taxonomy will help increase financing to those companies that need to improve environmental performance and also identify the activities that are already environmentally sustainable in order to decrease sectors that emit large amounts of greenhouse gas emissions. Therefore, sectors within the EU that emit 93,5% of the direct greenhouse gases were prioritized and are currently included in the Taxonomy (TEG, 2020a). The sectors which are currently covered by the EU Taxonomy are the following:

[2]For a detailed explanation, refer to Appendix A

"Forestry;	Information and Communications;
Agriculture;	Construction and real estate activities;
Manufacturing;	Buildings;
Electricity, gas, steam, air conditioning;	Financial and insurance activities;
Water, sewerage, waste and remediation;	Professional activities
Transportation and storage;	Scientific and technical activities"

(TEG, 2020b, pp. 3-8)

It is clear that the process of disclosing and assessing EU Taxonomy alignment is technically complex and requires a lot of data. Not all the sectors of the economy are covered by the EU Taxonomy, however those that emit the largest amount of greenhouse gases are. These complexities add nuance to the problem of asymmetric information as outlined in the introductory chapter and will be taken into account in the proceeding chapters.

3. Theoretical Framework

3.1 Agency Theory

Agency Theory is used in several academic disciplines, and therefore the principal-agent relationship can manifest in various ways (Eisenhardt, 1989). There are however a few general assumptions in Agency Theory that define the principal-agent relationship from a theoretical point of view (Thomsen and Conyon, 2012). These assumptions are brought up to give an understanding of the principal-agent relationship, and the assumptions valid in this study are presented in the analytical framework.

One general assumption of Agency Theory is the separation between ownership and control, which is regulated by setting up a contract (Jensen and Meckling, 1976). This contractual relationship between principal and agent is explored by Eisenhardt (1989) in an organizational and firm context. With regards to the characteristics of the contract, which will be shown below, Eisenhardt's (1989) study is relevant in this thesis as it frames the origin of Agency Theory. The contractual relationship can be defined in a few ways. A definition of the principal-agent relationship offered by Jensen and Meckling (1976 p. 308) is: "/.../ a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent." This contractual relationship is especially prominent in relationships in which the agent has more information and knowledge than the principal. Dalmacio and Nossa (2004) also claim in a

statistical study, that a principal-agent relationship arises more precisely when retail customers delegate work to fund managers by investing capital in their funds. Tasks that are too costly or too complicated for the principal to perform themselves, are solved by hiring an agent who performs the task (Sappington, 1991). As fund managers are engaged in professional asset management, they have experience and knowledge of management of equity funds, therefore prompting such a contract. Another influential definition of this relationship is: "/.../ when one designated as the agent, acts for, or on behalf of, or as a representative for the other, designated principal, in a particular domain of decision problems." (Ross, 1973, p. 134).

3.1.1 Information Asymmetries

Another assumption in Agency Theory is asymmetric information between the principal and agent (Thomsen and Conyon, 2012). This is because the agent manages the fund, which the principal is not part of, who only owns the capital invested. The agent has more and better information than the principal (Ross, 1973) which may be problematic for the principal (Miller, 2008). It is problematic that there is an information asymmetry prevalent because together with conflicting interests between the two actors, it may lead to that agents act in their own interest rather than the principal's (Connelly et. al, 2011). However, to resolve the information asymmetry, the quality and comprehensibility of information also has important implications for the principal which is developed below.

3.1.1.1 Decision-Making Under Constrained Information

Making well-informed decisions requires an ability to process comprehensible information and act on this. The implication is that the amount of information will not be sufficient in solving the information gap between the principal and agent, but the information must be of high quality and comprehensible. It is unlikely that individuals in a given economic scenario are objectively rational (Doucouliagos, 1994). Instead the theory of bounded rationality may be proposed. According to this theory, the individual makes rational decisions under the constraint to their cognitive limitations (Simon, 1955). Assuming that the individual is subject to bounded rationality, they cannot fully process and solve the complexities of the problems due to the limitations of the human mind (ibid). On the other hand, when information becomes comprehensible to the individual, it can be assumed that they have the opportunity to process it and thus act on it to make bounded rational decisions. The individual can be viewed as an information processor, through which the input, information, is turned to the output (Lipman, 1995). Output

is in this sense for example a decision to purchase a fund. In the same vein, information has to be understandable and contextualized for the principal in order for them to comprehend it, or they will resort to decision heuristics to reduce the complexity of the information (Tversky and Kahneman, 1974). As such, the information asymmetry is subject to information which is computational. The agent has to provide information which is comprehensible to the principal for the actual information asymmetry to decrease.

3.1.2 Conflicting Interests

Within a principal-agent contract, it is expected that the agent acts in line with the principal's interest, but this may not always be the case (Eisenhardt, 1989). The interests of principals and agents vary because the two actors have their own rational self-interests that drive their actions and motivate decisions. Agency Theory assumes that both parties in a principal-agent relationship are utility maximizers (Jensen and Meckling, 1976). The concept of utility maximization is also applicable to the context of investments as shown by Dalmacio and Nossa (2004), who propose that the agent may make decisions that increase their utility at the expense of the principal's, thus conjuring an agency conflict as a result of their diverging actions. One example of conflicting interests is when the principal and agent enter a contract, as there is a risk that the agent will not act in a way which maximizes utility for the principal (Dalmacio and Nossa, 2004).

As conflicting interests can be problematic in terms of diverging actions between the principal and agent (Eisenhardt, 1989), finding solutions to manage this is important for the functioning of the relationship. When the principal's interest can be derived from a genuine consideration for the environment, the agent must be aware of how this interest stands in conflict with the agent's own (Connelly, Ketchen, & Slater, 2011). *Aligning* interests in the context of sustainable investments requires agreeing upon a common definition of what an environmentally sustainable economic activity implies (Peterson, 2019). On the other hand, to *manage* the conflicting interests between the principal and agent, the actors may incur costs.

3.1.3 Costs

To limit the conflict of interest between principal and agent, the principal can provide incentives and incur costs to the agent, in hopes of making their interests more aligned (Jensen and Meckling, 1976). Important to note is that incentivizing does not eradicate the problem of conflicting interests, however, it may decrease the costs of entering a principal-agent relationship for the

principal. It is not possible for the principal to completely monitor the agent at no cost (Jensen and Meckling, 1976). If it were possible for the principal to gain access to the same information as the agent at no cost, the information asymmetry would disappear, ultimately dissolving the principal-agent relationship (Thomsen and Conyon, 2012).

Costs in a principal-agent relationship are called agency costs and are defined as the sum of bonding costs for the agent, monitoring costs for the principal, and the residual loss (Eatwell, Milgate, & Newman 1989). An example of a bonding cost is education cost because this can function as a guarantee that the agent acts in a way that is aligned with the principal's interest (Peck, 2011). Monitoring costs are used to prevent the agent from making diverging actions from the principal's interests (Jensen and Meckling, 1976). The residual loss is defined as the loss by the principal as a result of the agent's diverging actions (Eatwell et al., 1989). This occurs because it is simply not possible to create a contract between the principal and agent that completely aligns their interests with each other (Jensen and Meckling, 1976; Peck, 2011).

The general assumptions in this chapter are the essence of Agency Theory and characterize the principal-agent relationship. These assumptions give rise to the problems of adverse selection, moral hazard, and greenwashing, which will be developed further below.

3.2 Problems in Principal-Agent Relationships

3.2.1 Adverse Selection

Adverse selection is an information asymmetry that manifests before the principal decides to contract the agent and can be referred to as "hidden knowledge" (Guesnerie, Picard, & Rey, 1989 p. 807). It occurs when the agent, but not the principal, has information about qualities of a product (Thomsen and Conyon, 2012). An agent may participate selectively in trades which benefit himself the most, at the expense of the principal. A classic example of this problem is the Market for "Lemons", where all cars sell at a market price which is the price for the average quality car of that type (Akerlof, 1970). Only the seller of a car knows if this car is worse than the average car (and thereby of lower quality) and the buyer has no way to get this knowledge. Because the buyer, the principal, has no opportunity to tell the difference between a "lemons" car, with low quality, or a high quality car, the principal will continue with the purchase of the car, and not realize anything faulty until it is used. In this sense, the transaction was based on knowledge that was hidden to the principal (ibid).

When there is a discrepancy in information between the principal and agent, it results not

only in an unfair situation for the principal, but may also lead to a collapse of the capital market. The existence and proper functioning of markets requires honest and good quality information exchange (Akerlof, 1970). There is hence the issue of trust and uncertainty in business transactions (ibid). The price tag for not being honest includes the costs of driving legitimate companies out of business as the trust for the entire market is exhausted (Akerlof, 1970; Delmas and Burbano, 2011). Akerlof's (1970) description of the functioning of markets can be applied to the market of sustainable investments. As the retail customer can't differentiate between the environmentally sustainable and the greenwashed funds, they will not want to pay more than the average market price for them, effectively driving the honestly environmentally sustainable funds out of the market. The market ultimately contains "Lemons", i.e. greenwashed funds, and the customer demand will diminish, implying that the quality of products available on the market will decrease and the market may collapse (ibid).

3.2.1.1 Signaling: A Control Mechanism for Adverse Selection

The conflicts in principal-agent relationships need to be managed by control mechanisms. Signaling is a common control mechanism for adverse selection (Pijanowski, 2014). Signaling by agents can be used to communicate intangible qualities of a product that principals are interested in knowing (Spence, 1973). Because the agent signals to satisfy the principal, understanding the theoretical explanation for signaling is important as it can give an explanation for what drives agents to do this. Agents signal because it communicates the agent's commitment to sustainability for the customers (Connelly et al., 2011).

3.2.2 Moral Hazard

While the problem of adverse selection occurs prior to the contract, moral hazard occurs after the principal has contracted the agent. This is because an individual cannot observe another individual's actions, due to an information asymmetry (Holmström, 1979). Moral hazard is characterized by conflicting interests between agent and principal and because the principal has little insight into what the agent is doing, the agent's actions are hidden (Thomsen and Conyon, 2012) and can be referred to as "hidden action" (Guesnerie et al., 1989 p. 807). The key variable being that the principal cannot fully monitor the agent, and as such is unable to enforce their contract. Moral hazard of fund managers is a specifically alarming problem, as decreased income for fund managers further lowers their incentives to act in the principal's interest (Brown and Davies, 2017).

3.2.3 Greenwashing as an Information Asymmetry

Apart from adverse selection and moral hazard, greenwashing is another problem that may arise in a principal-agent relationship. Greenwashing and information asymmetries are related in the sense that opportunity, or risk, of greenwashing arises because one actor has more information than the other and takes advantage of it. In the case of sustainable investments, the fund manager may use this information advantage to manipulate information to mislead the retail customer. This implies that the principal, cannot control the real performance and is an information asymmetry according to Holmström (1979). As greenwashing is seen as a practice of covering up real performance (Olatubosun and Nyazenga, 2019), and since creating confusion is a central element in greenwashing, this can be expressed as restraints in information flows (Laufer, 2003). Greenwashing is a practice carried out by companies who seek to obtain a better position by covering up real performance. Deluding real performance to form a certain image is referred to as "greenwashing" and it requires active and intentional manipulation to misinform the receiver of the information to gain a more beneficial position (Laufer, 2003; Olatubosun and Nyazenga, 2019). Greenwashing of investments funds in Zimbabwe was studied by Olatubosun and Nyazenga (2019) through interviews with pension funds where it was found that greenwashing exists as a marketing tool.

When products are marketed as environmentally sustainable by emphasizing good or hiding bad performance, in an attempt to gain competitive advantages, it gives rise to the emergence of greenwashing (Olatubosun and Nyazenga, 2019). When firms greenwash and market a product as sustainable when it is not, this has negative effects in that investor confidence decreases (Delmas and Burbano, 2012). Greenwashing may even lead to a case where the market for environmentally sustainable products erodes, because customers will become more skeptical towards these false claims of consideration for sustainability (ibid). Delmas and Burbano (2011) recommend a strict regulation to decrease greenwashing but at the same time claim that the confusion in terms related to greenwashing constitutes a hinder for more strict regulation on greenwashing (ibid). Their focus on regulation is not surprising considering that institutional theory is the article's framework. In this sense, the study is suitable for placing the EU Taxonomy and its theoretical implications in context, considering the Taxonomy is a regulation that clarifies definitions. However, it should also be noted that when no external verification is required or regulations are weak, greenwashing tends to arise (Laufer, 2003; Olatubosun and Nyazenga, 2019).

Undermining trust as a result of inadequate exchange of quality information on the market, as discussed above, could also be related to greenwashing. Greenwashing damages the credibility of sustainability information (Etsy and Karpilow, 2019), and an outcome of greenwashing is that the market for the product dissolves (Delmas and Burbano, 2011). Etsy and Karpilow (2019, p.665) further state that "In this way [Greenwashing], the market for corporate sustainability becomes a market for lemons: because investors cannot differentiate sustainability leaders from sustainability imitators, markets will not reward sustainability leadership with a premium". Etsy and Karpilow (2019) study how mandatory environmental regulation would help distinguish portfolio companies that are environmental leaders from laggards on the market. They express a need to satisfy the mass of investors by making it more understandable what would be considered an environmentally sustainable investment (Etsy and Karpilow, 2019). Because we look at how greenwashed funds, which could be considered as environmental laggards, can be distinguished from truly environmentally sustainable funds, the concepts presented by Etsy and Karpilow (2019) are applicable in the context of studying sustainable investments from a fund managers point of view.

3.2.3.1 Greenwashing of Equity Funds

There are several funds that masquerade as "'plain vanilla funds'" holding the same assets as conventional funds that do not explicitly exclude certain investments for sustainability reasons (MacMaster, 2019, p.3). Greenwashing becomes more challenging for fund managers when retail customers have standardized criteria to evaluate the environmental sustainability of a fund (Peterson, 2019). Furthermore, greenwashing decreases as retail customers can compare funds and gain insight into what criteria were used to measure sustainability (ibid). This indicates that an increase in transparency, as it pertains to how the sustainability of a fund was assessed, leads to a decrease in greenwashing.

3.3 Analytical Framework

To present how different theoretical perspectives are interrelated and used in the forthcoming analysis, this analytical framework is provided to gain knowledge on the principal-agent relationship between fund managers and retail customers. The analytical framework in Figure 3 frames how our empirical results will be analyzed by relating to previous literature and how it is contextualized in this study. The empirical results include interview results and the EU Taxonomy.

The point of departure for the analytical framework is Agency Theory. Three of the general assumptions in Agency Theory valid also in this study are: 1) Conflicting interests between the principal and agent (Dalmacio and Nossa, 2004), 2) Costs (Jensen and Meckling, 1976) and 3) Information asymmetries prevalent between the two actors (Ross, 1973; Miller, 2008).

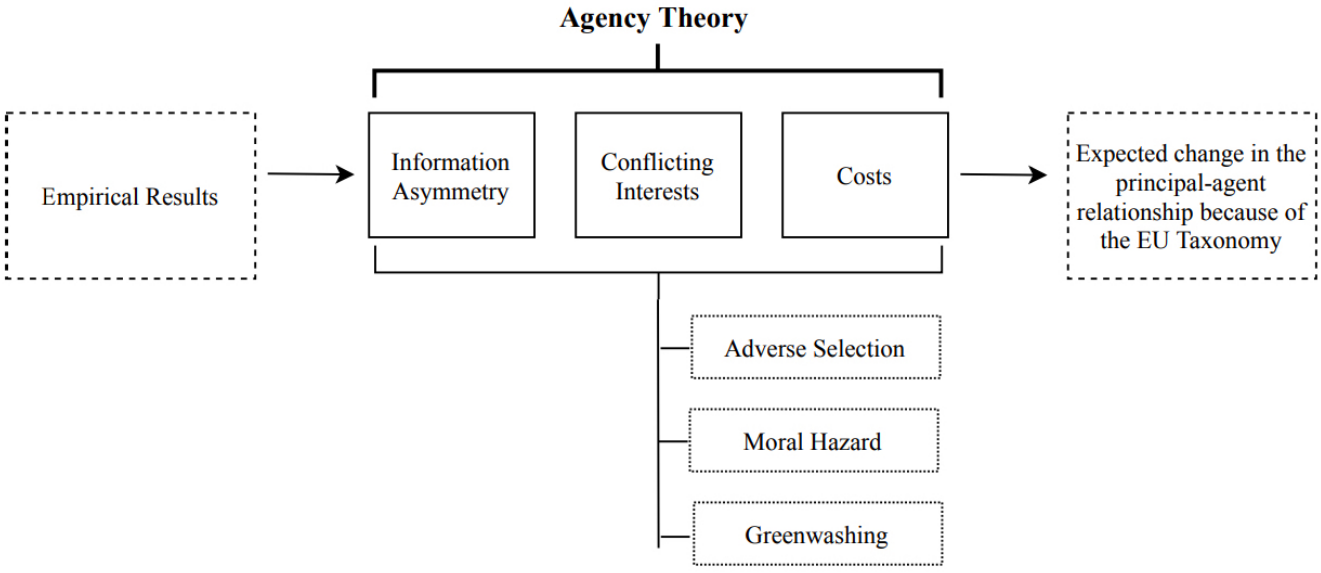

Figure 3. The Analytical Framework of the Study.

These assumptions give rise to the problems of adverse selection, moral hazard and greenwashing, as depicted in Figure 3. Hidden action and knowledge are assumed to disfavor the principal, as they are on the disadvantageous side of the information asymmetry (Miller, 2008; Guesnerie et al., 1989). Therefore, the opportunity for agents to exploit the information asymmetry is noticeable in the practice of greenwashing (Laufer, 2003). Greenwashing is one way in which information asymmetries manifest, apart from the traditional asymmetric information problems of adverse selection and moral hazard. It is through this lens the results are analyzed to answer the research question.

4. Methodology

4.1 Choice of Method

To suit the purpose of our study, a qualitative approach was chosen to collect data from fund managers on how they expect the principal-agent relationship to change because of the EU Taxonomy. The current literature has reviewed different aspects of environmental regulation

on the financial market, for example Peterson (2019), MacMaster (2019), Etsy and Karpilow (2019), and Olatubosun and Nyazenga (2019). Furthermore, theory developed by Ross (1973) and Holmström (1979) use a quantitative approach to examine properties of Agency Theory, and are, amongst other literature, utilized in our analytical framework. Against this background, a method that provides an understanding of the phenomenon from the fund managers point of view, while utilizing Agency Theory, was required. A qualitative approach was appropriate as it is the most optimal way to find answers to research questions formulated with "how" (Doz, 2011). In addition, to gain a contextual understanding, a research method that "gains insights from the field" is therefore preferred (ibid p. 586). Because of the short time since the EU Taxonomy Reports were published and the regulation has not gained legal force, there is sparse data available which also motivates the qualitative approach as it tends to be more open-ended and exploratory in its nature and questions (Easterby-Smith, Thorpe, & Jackson, 2015).

To gain a contextual understanding, semi-structured interviews was the preferable data collection method (Easterby-Smith et al., 2015). Holding interviews with financial market participants is a common way to research aspects of sustainability in relation to investments (Olatubosun and Nyazenga, 2019). Semi-structured interviews give the interviewees the opportunity to answer with their own wording and develop their thoughts, extending the discussion outside the scope of the prepared questions (Patel and Davidson, 2011). One potential issue with a qualitative method is that the personal experiences and knowledge of the researchers may lead to methodological biases (Noble and Smith, 2015). Analyzing the empirical data may lead to the researchers' personal worldview influencing the results. To address this, the interviews were recorded and transcribed to ensure that all information was captured, which is described more below.

4.2 Sampling of Interviewees

We set out to interview a sufficient number of representatives to get a rich understanding of how fund managers expect the EU Taxonomy to change their relationship with retail customers. Initially, we strived to interview at least 12 representatives from companies offering pension funds or funds in Sweden. How many interviewees and who they would be is motivated below.

4.2.1 Initial Index

We initially indexed companies offering pension funds or funds in Sweden. Representatives from the companies were then contacted through publicly available information in an attempt to reach a representative with knowledge on both the EU Taxonomy and asset management. Upon asking the contacted representatives, we explained the purpose of the study, the expected time the interview would take and also that anonymity would be granted. Explaining the purpose of the study is one of the four ethical aspects of research raised by Patel and Davidson (2011) together with consent, confidentiality and usage of data. By granting anonymity, we made sure that confidentiality was addressed (ibid). The anonymity covers their personal names and the organization they represent, which were not used in any part of the thesis. We perceived that anonymity allowed a more genuine discussion, as the interviewees may have expressed more open thoughts about the topic, in line with previous research (Opdenakker, 2006).

A concern may be that the initial index of companies was not complete. Indeed, more companies were discovered throughout the research process. However, the sample was limited with regards to the accessibility of interviewees. To account for this, the two methods snow-ball sampling and theoretical sampling were used. Theoretical sampling is used when the researchers know what type of interviewee is needed to match the theory being researched, and the interviewees are judged based on whether they live up to eligibility criteria (Easterby-Smith et al., 2015). The eligibility criterion we used was that the interviewee represents a company which offers an equity fund that will be covered by the EU Taxonomy. This criterion permits the interviewees to be categorized in the principal-agent relationship in Figure 1, and also mean they will be familiar with sustainability aspects which pertain to theory such as greenwashing. On the other hand, snow-ball sampling is when one individual in the sample recommends or refers to another interviewee based on their knowledge of the field or other characteristic that is relevant to the study (Biernacki and Waldorf, 1981). If a company was neither encountered during indexing nor through snow-ball sampling, it was considered inaccessible.

4.2.2 Size of Sample

12 interviews was proven to be an adequate number to achieve a thickness and representativeness. This was supported by studies using a similar method in which the number of interviews were seven (Heinemann et al 2018), five (Lozano and Reid, 2018), and 16 (Armitage 2008). Marshall, Cardon, Poddar, and Fontenot (2013) argue that a sample size of between 20 and 30 interviews

is recommended for research which aims to discover new concepts, ideas, or theories, to ascertain that data saturation is reached. However, the method used in this thesis is based on existing theory and then a sample size of at least 12 will most likely lead to data saturation (Guest, Bunce, & Johnson, 2006).

The population was defined as at least one representative from each of the companies that were indexed. The aim was to interview fund managers that work with both sustainability and asset management. In addition, the interviewees needed to have knowledge of both the equity funds that the company offers and the EU Taxonomy, which defined who we were able to interview. There may be a concern of only interviewing those who feel they have an opinion on the EU Taxonomy. However, this chance is estimated as marginal, as the number of non-responses were less than 15%. In Appendix B, we outline a table containing the roles of the interviewees and their average experience in the finance-industry which was slightly less than 15 years.

4.3 Interviewees

Both individual and group interviews were held, as this provided complementary insights. In total, 21 interviews were held, 18 individual and three group interviews. Individual interviews are useful when investigating complicated issues as they allow for probing of questions and let us explore individual perceptions and decision-making processes (Easterby-Smith et al., 2015). In addition to this, group interviews allow wider research as a range of interviewees participate with their competencies, thus capturing a more extensive sharing of experience (DiCicco-Bloom and Crabtree, 2006). For example, in one group interview, both a Senior Sustainability Analyst and Quantitative Portfolio Manager were interviewed, which gave us insights into both of their working domains and how they interrelate with regards to sustainable investments. This may however have drawbacks, as the interviewees may affect each other during the interview and provide biased answers.

The majority of the interviewees, 12 of 21, are categorized as fund managers, agents, as depicted in the simplified Figure 1. Five of the interviewees have a different relationship with retail customers than identified in Figure 1. For example, some of the pension funds do not distinguish between individual principals or refer to them as retail customers. But as they manage the principals' capital, they have a relationship that is contingent on investing in the interest of the principals' and are therefore of empirical interest. In addition, four of the interviewees are

placed outside the investment chain in Figure 1. These four interviews were held to provide a nuanced view and give us general insights into the phenomenon studied not tied to one specific company. Interviewing different actors ensured that multiple aspects of the phenomenon studied are fully represented (Morse and Clark, 2019). The different type of actors interviewed are separated in Appendix B. One limitation of the sample is that we did not interview any regulator from the EU Commission or member of the Technical Expert Group. Interviewing these would have been beneficial, as it could have explained the intended use of and provided further insights into the main objective of the EU Taxonomy. However, because our interviewees were chosen based on theoretical and snow-ball sampling, we were able to interview a sufficient number of representatives from several different companies and sectors. This gave us a sample consisting of actors that will influence how the EU Taxonomy is implemented and thus influence how sustainability is integrated into investments in the future on the Swedish financial market. We therefore assessed the sample size to be sufficient for the validity of this study, which will be developed further below.

4.4 Interview Process

The semi-structured interviews were held during March and April 2020 which was a period characterized by economic turbulence due to the spread of the pandemic Covid-19. This had an effect on the availability of the interviewees and introduced an obstacle for holding face-to-face interviews. However, researchers should adopt an opportunistic approach when conducting fieldwork in organizations, by balancing the implicit conflict between what is theoretically desirable and practically possible (Buchanan, Boddy, & McCalman, 1988). While the most theoretically desirable method was to hold face-to-face interviews as a complement to telephone interviews, the second most desirable method was interviewing over phone (Bryman and Bell, 2011). Furthermore, both Lozano and Reid (2018) and Olatubosun and Nyazenga (2019), who conducted similar studies, integrate a mix of face-to-face and remote interviews. Interviewing over phone is however advisable when interviewing hard-to-reach groups (Bryman and Bell, 2011), which our interviewees turned out to be due to the turbulence in the time frame in which the interviews were conducted. To account for the accessibility of the interviewees, the interviews were held over phone or computer software such as Skype, Microsoft Teams, or Whereby. Interviews held over telephone are more likely to be characterized by a high degree of standardization, meaning that the interview questions will be asked in a predetermined order (Patel and Davidson, 2011).

This difference is due to that social cues such as body language are absent in telephone interviews which therefore means one less source of information (Opdenakker, 2006). However, if those contextual clues are not needed for the data collection, it may not be necessary to hold face-to-face interviews (Farooq & de Villiers, 2017). The need for contextual data is crucial in ethnographic studies, (Tucker and Parker, 2014) which this study is not, and therefore, we determined that face-to-face interviews were not necessary.

The ethical aspects of anonymity, consent and data usage were addressed during all interviews to account for our personal relationship with the interviewees. In the beginning of each interview, we asked for approval to use the interview results as empirical results of this study in order to account for ethical aspects (Patel & Davidson, 2011). We also asked if it was accepted to record the interview. Together with anonymity, consent is another important ethical aspect that must be considered in qualitative studies with regards to the relationship we have with the interviewee (Sanjari, Barhramenezhad, Fomani, Shoghi, and Cheraghi, 2014). The personal relation is especially prominent in qualitative studies considering we as researchers hold and analyze the interviews. Consent puts responsibility on us as researchers to explain to the interviewees in a comprehensible way how the results will be used and presented (ibid). After these aspects were covered, the interviews proceeded with the prepared interview questions. On average, the interviews lasted 44 minutes. In addition to recording the interviews, notes were also taken which were later on used to transcribe the interviews prior to the analysis.

It is recommended to set a deadline for organizational research after which the data collection should come to an end (Buchanan et al., 1988). Our point of no new learning was the 17th of April 2020. At that point, the data had been collected from different actors, and the coding and conceptualization indicated that the data had reached saturation, which was supported by the fact that 9 interviews had been made in excess of the initially established goal of 12 interviews. This relatively large sample can also resolve the initial concern that certain companies may have been accidentally omitted in the initial indexing of companies, as the data analysis indicated theoretical saturation, and thus, the result may be representative of the phenomena studied.

4.4.1 Interview Questions

Semi-structured interviews give the interviewees space to develop their answers, which also shaped the formulation of interview questions. The questions were designed not to be limiting, permitting personal interpretation and reflection and extending the discussion (Patel and Davidson, 2011). As the interview questions were supposed to facilitate discussion it was impor-

tant to formulate them to open up for discussion and be comprehensible for the interviewees, i.e. not too theoretical[3]. The interview questions are based on themes from existing theory, more specifically, Agency Theory, conflicting interests, information asymmetry, and costs. Therefore, the questions were asked to guide the discussion towards these themes. We developed a set of main questions, allowing for follow-up questions based on the interviewee's response. This is one way of avoiding bias and what Olatubosun and Nyazenga (2019) do in their study. Because the interview questions were few and open to allow in-depth discussion and an attribution to the interviewee's actions, the problem of researcher bias in forming illusory cause and effect relations in the data was addressed (Saldaña, 2013). The questions were sent to the interviewees in advance as a way to establish the credibility of us as researchers (Saunders, Lewis, & Thornhill, 2007).

4.5 Literature Studies Methodology

The selected literature was reviewed and analyzed from the theoretical perspective of Agency Theory to provide an outline of how sustainable investments can be viewed from this lens. Keywords such as Agency Theory, information asymmetry, greenwashing, investments, sustainability, qualitative and interviews were used to search academic databases in order to find sufficient support for our analytical framework.

A variety of sources has been used for the literature studies. The articles utilized in the theoretical framework are retrieved from databases supported by the University of Gothenburg and were also peer-reviewed to ensure the academic quality of articles (Bornmann, 2013). The legal acts from the EU and articles based on conducted research are two examples of primary sources that have been used. Primary sources are those that have been published by the author of the information and are first-hand reporting and all other types of sources are secondary (Patel and Davidson, 2011). Considering the use of the European Commission and TEG as reoccurring sources throughout this thesis, we determine these to be experts on the subject thus providing accurate facts. In addition to the primary sources, the secondary sources used have been books, for example Thomsen and Conyon (2012) and Bryman and Bell (2011).

Certain sources require attention considering their potential bias, for example 2 Degree Investing Initiative, which is a think tank that works for aligning the financial sector with international climate goals (2 Degree Investing Initiative, 2020). As such, they may have an incentive to por-

[3]The interview questions can be found in Appendix C

tray the development of sustainable finance as excessively alarming. Such a source contrasts to peer-reviewed articles which ensure unbiasedness (Bornmann, 2013).

The literature studies were affected by the fact that the EU Taxonomy Reports were recently published and the regulation has not yet gained legal force. This made it difficult to find relevant articles to compare our results and frame our study against. Such complications compose one limitation of studying an immature regulation, as nuances may have been difficult to distinguish.

4.6 Data Analysis

To analyze the data, an approach with multiple steps was applied. Bryman and Bell (2011) propose a 12-step analysis of the data, and Easterby-Smith et al. (2015) propose a seven-step analysis. However, these approaches are designed for research that aims to discover new concepts and ideas, and entail steps that are concerned with developing new theory. Since the research question of this thesis is based on existing theories, these steps are not relevant and can be omitted to better suit a semi-structured interview-format (Armitage and Marston, 2008). Therefore, this thesis follows a modified seven-step data analysis in which the last three steps are omitted, leaving four steps of data analysis: 1) familiarization, 2) reflection, 3) open coding and 4) conceptualization.

The first step of the data analysis involves familiarization with the data. The interview recordings were transcribed, and notes were taken for reference during this initial stage of the analysis. The second step involves reflection in light of the data, meaning that brief summaries were made of each interviewee's thoughts as they relate to each interview question. We relistened to the recordings and added further completion to the notes that were taken during the familiarization step. The finalized notes were then processed through the use of codes in the third step, as shown in Figure 4 below. Familiarization and reflection were carried out prior to the coding and is not illustrated in the figure.

Open coding is used to discover new patterns and systematically analyze data. The data was assigned codes: words or short phrases that refer to an idea or concept which represents the meaning of the data (Easterby-Smith et al., 2015). For example, a statement from an interview about the communication challenges related to the implementation of the EU Taxonomy was coded with "communication" as shown in Figure 4 below, which thus constitutes step number three in our data analysis process.

By organizing the data in codes, codes sharing a common concept could be grouped into

different categories in the final step of our data analysis. Qualitative researchers search for connections within qualitative data through analysis by using relationships and patterns to form hypotheses and concepts (Rabinovich and Kacen, 2010). The codes were examined for patterns and identifiable concepts were labelled as such. "Communication" and "external verification" were for example grouped into the category "greenwashing" as shown in Figure 4. When categorizing data, one should account for patterns that may aid clarity and understanding (Saldaña, 2013). Patterns can be characterized in several different ways and categorizing by similarity, difference, frequency, sequence, correspondence or causation are examples of some ways (ibid). The word "comparability" arose in 6 of 21 interviews and is thus a code. Added together with another code: "quality", this constitutes a category which is also shown in Figure 4.

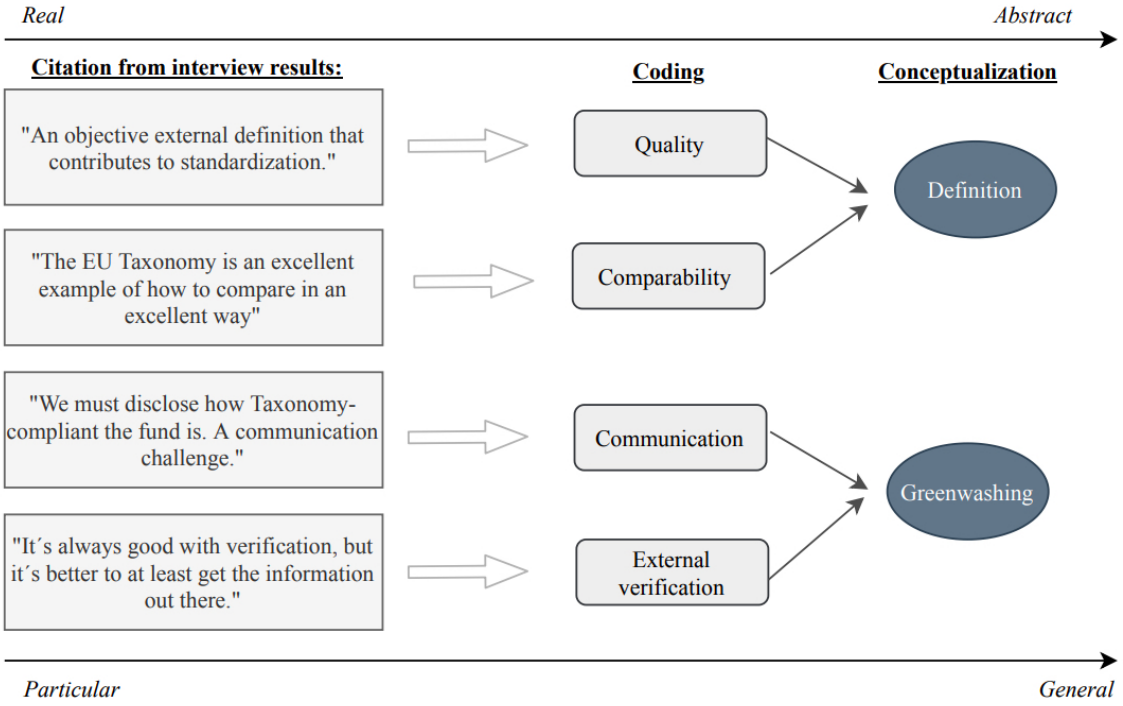

Figure 4. Data Analysis. Overview of How Interview Results Were Coded and Conceptualized.

After the data had been analyzed as shown in Figure 4, our empirical results could be distinguished in a clear and structured way which allowed us to proceed further with composing chapter five. In the end, we ended up with over 600 open codes, 45 concepts, and 12 categories, 2 of which were unrelated to the research topic leaving 10 categories in the empirical results. These categories constitute the result. All interviewees were contacted afterwards to get approval to cite them in this thesis, in accordance with the ethical aspect of data usage raised above (Patel & Davidson, 2011). The outcome of our data analysis, more specifically the number of and

content of the categories, has shaped the presentation of the empirical results in chapter five. The empirical results are structured around the major categories found in the data analysis. The categories and their respective findings were thereafter compared to the theoretical findings in the literature to uncover potential insights and find confirmation of existing theory, which is discussed in chapter six.

4.7 Validity and Reliability

For a study to be valid, it should give an overview of the phenomenon studied and portray the context in a realistic way (Brink, 1993). Validity refers to the entire process of formulating research questions, gathering data and analyzing the results (Patel and Davidson, 2011), and is a measure of the accuracy of a study and how close to the truth the findings are (LeCompte and Goetz, 1983). In this sense, validity refers to how true the findings of a study are and also how the results can be generalized (Brink, 1993). Validity is an important ethical aspect in maintaining a high academic quality (Cortina, 2002), and to increase it, a triangulation strategy may be used (Bryman and Bell, 2011). There are four types of triangulation (Denzin, 1978; Patton, 1999), and we used two of them: Investigator- and data-triangulation. Investigator triangulation refers to the participation of more than one researcher. During all of our interviews, we both participated to account for this. Data triangulation means that there is a heterogeneity in the data. To introduce a diversity in the data, a wide variety of actors were interviewed, and both individual and group interviews were conducted. Regarding the accessibility of our interviewees, some of the indexed companies were busy with ensuring that their operations were undisturbed by the pandemic Covid-19 and therefore declined interview. However, we are convinced that, as many of our interviewees were working from home, we were able to get a hold of more interviewees than we could have if we held face-to-face interviews. This resulted in a larger sample and a more nuanced view of the results which is important for the validity of the study. We also think that the anonymity increased the interviewees' willingness to share their opinions on the topic, and raised trust during the interviews, which we perceive as an important factor in ensuring high validity. On the other hand, anonymity may limit the credibility, as it is difficult to assess what has been expressed during the interviews.

Reliability is another aspect of assuring high quality. As the empirical results indicate that the interviewees seem to have the same opinion on how the EU Taxonomy is expected to change their relationship with customers, it can be interpreted as an indication of high validity and

reliability of this study. Reliability is dependent on our ability to interview and report the results accurately, implying that a different pair of researchers should receive the same result (Brink, 1993). Reliability is dependent on our ability to interview and report the results accurately, implying that a different pair of researchers should receive the same result (Brink, 1993). To ensure high reliability of the results, detailed notes were taken during the interviews, which were also recorded and transcribed afterwards.

Regarding the results, the aim was to present it without any strands of analysis in order to assure the objectivity of the results. This is another important aspect of validity, as our intention is that the reader will be able to transfer generalized knowledge based on results from this study to another context. To ensure that the empirical results are complete enough to allow the full meaning of the data to be found, we used a thick description (Onwuegbuzie and Leech, 2007). To achieve this thickness, the interviews were transcribed before they were analyzed.

5. Empirical Results

5.1 Sustainability Interested Retail Customer as Principal

According to the results, it is common that retail customers want to allocate their capital to sustainable investments. All of the interviewees responded that their customers are interested in sustainability. There are however different reasons for the retail customers interest in sustainability as expressed by one of the interviewees who mean that some principals demand sustainability information about their investments because they want to, and others do it because they must.

When discussing the reason as to why the EU has targeted the private sector in this regulation aiming to reallocate capital towards a more sustainable economy, one interviewee offered a profound explanation:

> "[The EU] see a larger case as the growth in the Euro-zone has been too low since the Euro-crisis in year 2012-2013 and many member states are highly in-debted in relation to GDP. Previously this type of financing could come from national treasuries, but now EU is trying to use the consumer strength and private capital needs to be mobilized."

The efforts in the EU to target private retail customers is by this interviewee seen as a necessity, in that the private sector has an important role to play in the capital reallocation. Another interviewee is more critical towards how the general public will adopt the EU Taxonomy and

doesn't believe the greater mass of private investors will become interested in it. However, a majority of the interviewees are convinced that the EU Taxonomy will increase retail customers interest in sustainable investments. The current market outlook seems to provide evidence that fund managers customers are interested in sustainable investments and demand information about these types of equity funds.

5.1.1 Retail Customers' Demand for Sustainability Information

During the interviews, it was apparent that the demand for sustainability information regarding the retail customers investments is noticed by the fund managers. According to one interviewee, customers demand this information because it is decisive for where they invest their capital. Previously this was important for the customers, but now it has become crucial to investment decisions. The demand from customers regarding sustainability information is most noticeable during advisory meetings, according to many interviewees. Upon asking the interviewees if they experience that customers demand sustainability information about their investments, one interviewee said: "Definitely; there's not a single advisory meeting which doesn't incorporate sustainability".

5.2 A Unified Classification System of Definitions

Definitions was a category identified during the data analysis. According to the interviewees, the absence of a universal definition for sustainable investments is currently a problem, because even though retail customers are interested in sustainable investments, the fund managers all have different interpretations of what that is. Up until now fund managers have used different definitions and meanings of the term sustainable investments. This is expressed by one of the interviewees as: "Because there is no unified definition, all investors have their own assessment". As such, a vast majority of the interviewees express that it is positive that the EU Taxonomy brings a standardized definition of sustainable investments. They therefore show receptivity to the EU Taxonomy as it will provide a standardized definition of sustainable investments. Despite this, it is necessary to reflect on the ambiguities still prevalent in the term sustainable economic activities. Ambiguities which complicate defining what an environmentally sustainable investment is. One interviewee raises a word of caution: while an equity fund can be compliant with the EU Taxonomy, there is still no single definition to use when evaluating how sustainable an investment is.

5.2.1 Comprehensibility of the EU Taxonomy

Some interviewees expressed that, because the EU Taxonomy is technically complex, it will be of limited usability for retail customers unless the information is disclosed in a comprehensible way. One interviewee stated that "The EU Taxonomy is technically complex and therefore not so user-friendly." and another interviewee proposed a solution and said that: "Everything complex can be communicated in a less complex way." Summed up, several of the interviewees see the risk of a technically complex EU Taxonomy, but they also proposed ways of overcoming these technicalities. One interviewee said that, while the technicalities may be incomprehensible to the retail customer, the percentage-figure displaying Taxonomy-alignment may be easier to understand. Most interviewees agree that it's a question of communication in helping retail customers understand the meaning of it.

Another interviewee noted that it will be important to compare the percentage-figure of a given equity fund to an index. In this way, the share of alignment can be benchmarked and ranked, offering insight into what a low or high alignment score means. One interviewee emphasized the fund managers role in communication: "There is a great responsibility in being clear in your communication. Being transparent and responsible is a necessity towards customers that save for their pensions." Ultimately, the interviewees think that it's their responsibility to help the customers comprehend disclosures by preparing documentation that is communicated clearly and use words and definitions that retail customers are familiar with.

Regarding the communicative value of the EU Taxonomy, a majority of the interviewees thought that it will be a signaling factor in a competing market. In that case, it's a question of hygiene or image of being a provider of equity funds that are compliant with the EU Taxonomy. One example was given with reference to another financial regulation, MiFID II, which became such a hygiene factor: compliance is now expected by the customers, not something that gives a competitive advantage.

5.2.2 Absence of External Verification

The EU Taxonomy disclosures do not need to be externally verified. The interviewees were divided in their opinions regarding the absence of external verification. Many of the interviewees considered that third-party verification would be positive, since it provides assurance to the retail customer that the equity funds truly are environmentally sustainable. This can be exemplified by one of the interviewees who expressed that: "[Revision and verification of percentage disclosed]

will be important for the customers as they can understand and accept that a third party has reviewed the disclosure." Understanding the information disclosed seems to be dependent on whether or not it has been verified, according to this interviewee.

However, many interviewees expressed that external verification was superfluous, at least initially, and that the main focus should be on implementing the EU Taxonomy. One interviewee expressed this by saying that: "It's always good with verification, but it's better to at least get the information out there." Some of those who expressed skepticism to third-party verification did mention that it may become relevant in the future, once the EU Taxonomy has been tested practically. In relation to external verification, many interviewees also mentioned that if the disclosures will be third-party verified in the future, it would help decrease greenwashing. This would bring the funds that do make a real effort in terms of environmental sustainability, to the light. The interviewees also argue that this would make it more difficult for fund managers that greenwash, as the EU Taxonomy disclosures will be based on common definitions.

5.3 Greenwashing

More than half of the interviewees explicitly mentioned greenwashing during the interviews, and it was one of the major categories identified during the data analysis. All of those who mentioned greenwashing also saw it as a problem. One interviewee said that greenwashing has a negative impact on those who are environmentally sustainable, as it makes it harder for them to distinguish themselves among their competitors. Many interviewees think that the EU Taxonomy definition of an environmentally sustainable economic activity will make it more difficult for funds to greenwash, because claims about sustainability can be evaluated based on the EU Taxonomy screening criteria. One interviewee explained that the link between the EU Taxonomy and greenwashing is the ability to evaluate sustainability based on its criteria, which ultimately decreases the information asymmetry between customer and fund manager. Another interviewee provided a different angle: "Currently, it is hard to prove that a fund is not environmentally sustainable because of the many nuances of sustainability." As such, this interviewee proposed it is difficult for a customer to tell the good funds from the bad, which is thus related to definitions of the term sustainable investment.

5.3.1 Increased Comparability of Equity Funds

Requiring fund companies to disclose a funds' alignment with the EU Taxonomy holds the key to standardize and thus enable comparison. A majority of the interviewees expect that the EU Taxonomy will allow retail customers to separate funds that simply claim they are sustainable from funds that make a real effort.

The ability to separate the funds which simply claim that they are sustainable, from the ones who make a real effort, is one of the expected results of the implementation of the EU Taxonomy according to a majority of the interviewees. This was expressed during one of the interviews as: "The entire point with the EU Taxonomy is that it should be standardized, so the pension saver will actually be able to compare all funds." In this way, the EU taxonomy is clear because it compares the same things, and thus, the comparability and standardization will raise the transparency in the market as it will be possible to differentiate funds. Many of the interviewees expresses that increased clarity provides grounds for making comparisons. One interviewee said that: "The EU Taxonomy is an excellent example of how to compare in an excellent way." Because the EU Taxonomy is expected to provide a unified classification system of definitions, the difference is hopefully clarified.

The interviewees believe that the ability to compare funds will lead retail customers to invest in sustainable investments that truly address environmental sustainability. One interviewee referred to the concept of sustainability definitions as a fruit salad: "many people compare apples and oranges, often without knowing what they are comparing. The EU Taxonomy will make this clear, as the users can compare two of the same things". In this way, the EU Taxonomy allows the retail customers to differentiate funds as a result of increased comparability. In addition, many interviewees also said that greenwashing is likely to be less widespread on a financial market covered by the EU Taxonomy because of this comparability.

5.3.2 Certification of Environmentally Sustainable Equity Funds

The absence of a definition for sustainable investments has several implications; one example of this, raised by an interviewee, is the difficulty in using certifications to assure environmental sustainability of an equity fund. Some of the interviewees mentioned certifications like Svanen and Morningstar's Sustainability Rating[4] as current ways to assure customers that their equity funds are environmentally sustainable. However, some interviewees were critical of the objectivity

[4]Please refer to Appendix A for an explanation of these certification organizations.

of these certifications. The conflicting opinions stem primarily from the objectivity of these certifications as it relates to defining sustainability. One interviewee claimed that until Svanen, Morningstar, and Sustainalytics propose a clear definition for sustainable investments, funds will be able to greenwash, and another interviewee claimed that: "You must be aware that almost all, [certifications] have a methodological bias.". In comparison, many of the interviewees state that the EU Taxonomy is objective. In general, the interviewees welcome a unified classification system, against the background of current problems related to definitions and certifications.

5.4 Costs of Implementing the EU Taxonomy

The remaining category identified in the data analysis was how costs are related to the EU Taxonomy. The large majority of the interviewees answered that there will be costs related to the implementation of the EU Taxonomy, but which the largest costs are differed between them. While there are costs associated with the implementation of the EU Taxonomy, the majority of interviewees think that these costs are negligible in relation to the value of the portfolios or to potential benefits. Costs related to data-collection, staffing and education were brought up in relation to the discussion on costs during the interviews. According to the interviewees, these staffing costs would occur as more employees work with the implementation of the EU Taxonomy, requiring education and resources to integrate sustainability in their investing practice.

Regarding who bears these increased costs, the interviewees also had different opinions. One interviewee explained that one implication of these costs is that it may lead to decreased margins, if fund managers have to bear them. However, this interviewee is not sure that this will be the case if they are able to transfer these costs to the customers. Another interviewee said that, since a fund can only charge their customers for transaction and management fees according to Swedish law, these costs will not be transferable to the customer. A third interviewee said that, in the end, the customer ends up paying for everything. One gave the example of "finding ways" to increase the management fee, which they also claimed could be justified as long as the fund is environmentally sustainable and not greenwashed.

5.5 Drawbacks with the EU Taxonomy

The majority of the interviewees were positive towards the EU Taxonomy, but it also has limitations in two aspects. Firstly, one drawback may be the customer reactions which might arise. Many of the interviewees have already started mapping their portfolios and found that the per-

centage aligned with the EU Taxonomy is very small, mostly ranging from 2 to 5%. One of the interviewees mentioned that communicating this figure to a customer will most likely bring reactions: "If you for example proclaim that only 2% of the product is 'Taxonomy-aligned', is this relevant? What if the customer doesn't understand this and thinks that 98% of the fund is bad?"

Once again, the interviewees emphasize communication to be important and reliance on numerical figures, such as the percentage can be beneficial in the communication with customers. The handling of these reactions is, according to many of the interviewees, related to communicative factors. As expressed by one of the interviewees: "We must disclose how Taxonomy-compliant the fund is. A communication challenge." While the fund managers will provide the mandatory documentation, a question raised by a few of the interviewees is if this documentation will be comprehensible for the customers.

Secondly, another concern raised by the interviewees was the small sectors coverage of the EU Taxonomy. One interviewee said that: "EU has started with those sectors that emit most greenhouse gases. From an investor's perspective, this is a small part of the market." That the EU Taxonomy only covers a small part of the economy was raised as a concern for the usability of it, both in relation to its expected effect and of communicative aspects. However, most interviewees agreed that the impact of the EU Taxonomy will increase as it covers more sectors of the economy in the future, and that it will have a larger impact in the future because of this. Regarding the time aspect, another interviewees said: "The EU Taxonomy must cover more sectors in order to fill the information gap and decrease the asymmetry". One interviewee explicitly stated that: "It [The EU Taxonomy] will solve the information gap, but it will take time. Information and data, it will work out. We will get there, but it may take 5 to 10 years. We don't have to worry." The belief that the EU Taxonomy will have a larger impact over time is a view shared by many of the interviewees, as they suggest that the implementation must start and go on for a couple of years until real effects can be noticed.

6. Analysis and Discussion

The empirical results shed light on various features of the entire spectrum of the principal-agent relationship, extending from its core assumptions to its related problems. As we aim to examine the results from the lens of Agency Theory, this section is structured around discussion of the

following. Firstly, a possible decrease in the information asymmetry and how comprehensible information is crucial for this. Secondly, how standardized definitions may help align the interests between principal and agent. Thirdly, the existence of costs and who bears them. Afterwards, the problems which result from these assumptions are discussed separately.

6.1 Information Asymmetries in Principal-Agent Relationships

The increase in information as a result of the EU Taxonomy can have important implications for the principal-agent relationship. It seems like fund managers currently view their relationship with retail customers similarly to how Ross (1973) describes a principal-agent relationship: the agent has an information advantage. However, the empirical results indicate that, because of the EU Taxonomy, information provided by fund managers will now be more comprehensible for retail customers. A principal-agent relationship is characterized by the agent's information advantage (Ross, 1973), and when the agent has information that is unknown to the principal prior to the transaction, the principal has no opportunity to tell the difference between a high- or low-quality product (Akerlof, 1970). In this sense, the information asymmetry decreases because of the EU Taxonomy, as the agent no longer has as much of an information advantage as before. Fund managers will have to disclose a percentage of how environmentally sustainable their equity funds are. The information flow between retail customers and fund managers, outlined in Figure 1, may thus become less asymmetrical. As the information disadvantage was previously a problem for the principal (Miller, 2008; Ross, 1973), the increased information access may lead to an improved position for the principal. The decreased information gap due to the EU Taxonomy implies that the principal-agent relationship also changes. This is because information asymmetries are a general assumption of Agency Theory (Thomsen and Conyon, 2012; Ross, 1973).

6.1.1 Comprehensibility

The EU Taxonomy is expected to lead to a decrease in information asymmetry. However, for it to decrease, the disclosures must be comprehensible for the retail customer. This should enable retail customers to make decisions in accordance with their interest in sustainable investments. For the principal to act on this comprehensible information and make decisions, Lipman's (1995) view of an individual as an information processor in which information is turned to decisions, seems accurate. One important prerequisite is that that information is understandable and contextualized in order for the individual to understand it (Tversky and Kahneman, 1974).

If the information is too complex, the output of the processing may be faulty, as explained by Simon (1955). The requirements on contextualizing information to make it understandable places responsibility on fund managers who prepare the disclosures. This confirms both Peterson's (2019) and Nilsson's (2014) explanation that retail customers are dependent on intermediaries. The dependence on intermediaries will most likely be maintained as long as retail customers don't have enough knowledge to invest sustainably on their own. The EU Taxonomy does not necessarily increase knowledge, but provides more comprehensible information to retail customers aiming to invest sustainably.

MacMaster (2019) proposes that retail customers need guidance in setting up financial plans that consider both returns and sustainability. This seems to be the case also when unified definitions of environmentally sustainable economic activities have been introduced to the market. The dependence implies that retail customers will continue to rely on intermediaries. Reliance of intermediaries in a financial market where the information asymmetry has decreased because of the EU Taxonomy is interesting, considering what Nilsson (2014) says regarding the need for intermediaries under informational constraints. It seems like retail customers' reliance on intermediaries is not only because of information asymmetries, but maybe more due to lack of knowledge, as proposed by MacMaster (2019). This is related to the reasoning above, that the EU Taxonomy provides comprehensible information rather than increased knowledge.

The fund managers' responsibility in providing comprehensible information would also explain why alignment disclosed in a percentage is deemed sufficient: because a numerical measure is easy to benchmark. It means that the percentage-figure can be considered a comprehensible input which helps the customer process information and thus make rational decisions in line with their intentions, as proposed by Tversky and Kahneman (1974). The implication of this could be that retail customers will reallocate capital to sustainable investments if the information disclosed is comprehensible and presented in a way that the retail customer can understand. Ultimately, this expected reallocation of capital from retail customers is likely to reach sustainable portfolio companies seeking financing, as shown in Figure 1, which could positively affect their development.

6.1.2 Limitations to Decreased Information Asymmetries

The proposed decrease in information asymmetries is constrained by the extent to which the EU Taxonomy covers the sectors of the economy. Although the principal's position is thought to be improved, in terms of increased access to information, how prominently this changes the principal-

agent relationship is unclear. This is because several interviewees propose that the narrow sector coverage of the EU Taxonomy limits its effects. One implication of this may be that the agent's information advantage is maintained, and the information asymmetry does not decrease as much as initially argued. This challenges what is argued above, i.e. that retail customers will have access to more and better information because of the EU Taxonomy disclosures, enhancing the retail customer's position. The net effect may in this case be that the information asymmetry remains unchanged, at least initially, which stands in contrast to one of the EU Taxonomy's goals which is to reduce the information asymmetry for retail customers (TEG, 2019).

6.2 Conflicting Interests in a Principal-Agent Relationship

Apart from the decreased information asymmetry, the interests are expected to become more aligned between principal and agent, as the definition of environmentally sustainable will be common to both actors. Dalmacio and Nossa (2004) apply utility maximization to the concept of investments and state that agents may act in ways that increase their utility at the expense of the principals, which results in a conflict. As one actor's definition of utility maximization can differ from another actor, using the EU Taxonomy as a standardized classification system might align their interests. It could be the case that, since the agent no longer has the ability to use their informational advantage due to the common definitions, the conflicting interests may be relaxed between the two actors. Jensen and Meckling (1976) argue that actors in a principal-agent relationship have conflicting interests and that they are driven by rational utility maximization. Therefore, if utility is affected, then there is also reason to believe the characteristics of the principal-agent relationship will change if utility maximization is a central assumption in Agency Theory (Jensen and Meckling, 1976; Dalmacio and Nossa, 2004). Therefore, it's plausible that the interests of the principal and agent will become more aligned because of the EU Taxonomy.

6.2.1 Limitations to Alignment of Interests

As the alignment of the interests between principal and agent is dependent on unified definitions of what is environmentally sustainable, it is indicated that the alignment will be proportional to the number of sectors covered, which was also shown for the decrease in information asymmetries in 6.1.1. This has implications for the principal-agent relationship, because in a case where the principal is interested in environmental sustainability and the agent isn't, it is especially important to align their interests (Connelly et al., 2011). If the interests are not initially aligned

and need time to become aligned, it may be a problem, considering that the SDGs are to be fulfilled by 2030. We may not have sufficient time to wait for more sectors to be covered. On the other hand, the results show that the EU Taxonomy already has an instrumental value to the fund managers using it to prepare disclosures, as a majority of the interviewees welcome the EU Taxonomy in comparison to other certifications. But important to keep in mind is the expanded influence the EU Taxonomy may have in the future.

6.3 Costs When Entering a Principal-Agent Contract

Costs are an indicator of conflicting interests, as contracts are established to manage diverging actions between principals and agents (Jensen and Meckling, 1976). This is because otherwise there is a risk the agent will not act in a way which maximizes utility for the principal (Dalmacio and Nossa, 2004). As the interviewees express that there currently are costs related to the EU Taxonomy, it implies that the interests of the two actors are not completely aligned.

The costs discussed during the interviews were mostly related to how the implementation of the EU Taxonomy would increase costs for the fund managers in terms of data, education, and staffing costs. In a principal-agent relationship, there are three types of costs present: bonding, monitoring, and residual costs. The latter being costs that arise from the agent's actions which conflict with the principal's best interest (Jensen and Meckling, 1976). The results indicate that fund managers have the ability to act in line with the retail customers' interests, as the previous problem of a missing definition has now been resolved. Whether the agent will act in line, is another question. If the agent acts less divergently as it pertains to sustainable investing because of the EU Taxonomy, then ceteris paribus, the residual costs would decrease, based on the definition of residual loss by Eatwell et al. (1989), i.e. costs which arise due to divergent actions. However, this assumption of ceteris paribus is a simplification, as the world is more complex than the theoretical explanation accounts for. As such, it is difficult to establish an explicit relationship between costs of entering a principal-agent relationship with the empirical results of this study, and is therefore recommended for future research.

6.3.1 Burden of Costs and Transfer to Products

The size of the costs due to the implementation of the EU Taxonomy and whether they will be borne by the fund manager or retail customer differs between the interviewees. The varying results show how one type of cost, for example costs for data collection, can manifest as either a

bonding or monitoring cost, depending on how the fund manager transfers costs to the offered equity fund through fees. Below, two examples are provided of when the fund manager and the retail customer, respectively, bear the increased costs of the implementation of the EU Taxonomy.

Firstly, the education costs raised by some of the interviewees are bonding costs according to theory. This is because bonding costs can provide the principal with a quality assurance, and are thus borne by the agent (Peck, 2011). In this sense, the education costs raised are viewed by the fund managers in the same way as outlined in the theory, as bonding costs are borne by agents and monitoring costs by the principal (Eatwell et. al, 1989).

Secondly, if a fund increased its management fee, it would mean that the cost is transferred to the retail customer. If the principal bears the cost, it affects the attractiveness of the investment because the management fee might increase. On the other hand, as Brown and Davies (2017) propose, if fees for the fund were to decrease, it is more likely that moral hazard increases because the agent's incentives to act in line with the principal decrease. This can be contrasted to what some of the interviewees said, that if the costs are not transferred to the retail customers, the fund fee decreases in relation to those costs that are transferred to the retail customers in terms of fees.

Regarding the discussion on decreased fees, it gives us insights that it leads to an increase in moral hazard (Brown and Davies, 2017). Moral hazard is when the principal does not have the ability to control the agent (Holmström, 1979). This might negatively affect the attractiveness of sustainable investments, because the principal cannot control the actions of the agent and whether or not greenwashing occurs. Greenwashing in turn hinders retail customers from investing sustainability (2 Degree Investing Initiative, 2020). A decrease in sustainable investments is harmful for the development of the market for sustainable investments. This is with reference to the large investment gap of 5-7 trillion US Dollars required to fulfill the SDGs (UN, 2018). So, if the fund fees instead were to increase because of the costs related to the implementation of the EU Taxonomy, the occurrence of greenwashing is likely to decrease. This should therefore be researched further, as limited greenwashing is a desirable outcome.

6.4 Implications for the Principal-Agent Relationship

In this study, it was confirmed that information asymmetries, conflicting interests, and costs have implications for the principal-agent relationship. The implications of the changes identified are three-fold and bring important insights, requiring further discussion. Firstly, we discuss

the fact that the market for sustainable investments can currently be described as a market for lemons, possibly imposing wider market implications. Secondly, we discuss how the EU Taxonomy brings increased transparency and how this relates to the occurrence of moral hazard. Thirdly, we discuss the effect of a standardized definition on the prevalence of greenwashing.

6.4.1 Market "Lemons" in Sustainable Investments

The interviewees express that, up until now, it has been difficult to differentiate truly environmentally sustainable equity funds from greenwashed funds. This may be because it may be difficult to distinguish truly sustainable funds from greenwashed funds masquerading as "'plain vanilla'" funds (MacMaster, 2019 p. 3), thus preventing sustainable funds from being rewarded (Karpilow and Etsy, 2019). Because good exchange of information regarding qualities of a product is required for the market to function properly (Akerlof, 1970) it should be problematic that there has not been a unified definition of sustainable investments before. The market for sustainable investments is a market for lemons, as lack of information dissolves the trust in the market according to Karpilow and Etsy (2019). If it is not possible to differentiate sustainability leaders from laggards, "the market for corporate sustainability becomes a market for lemons" and dishonest sustainability information damages the credibility of the issuer (Etsy and Karpilow, 2019, p. 665). Trust and uncertainty are important elements in business transactions as proposed by Akerlof (1970) which seems to be the case also in this study. The difficulty of comparing funds and distinguishing those that do consider environmental sustainability from those that don't was confirmed as a problem by the interviewees.

Apart from the trust between the actors, information asymmetries may have wider market implications. However, an interesting aspect is that of market collapse. Akerlof (1970) argues that when a buyer cannot differentiate products due to low information quality, the buyer will not want to pay more for that product. Also, both Akerlof (1970) and Delmas and Burbano (2011) argue that dishonesty risks dissolving an entire market. However, the function and stability of the financial market lays outside the scope of this study. Researching this would also be important as it would give us more knowledge on the factors driving the financial flows, depicted in Figure 1, towards achieving the SDGs.

6.4.1.1 Signaling an Equity Fund's EU Taxonomy Alignment

Several of the interviewees stated that the communication process of a fund's EU Taxonomy alignment will be of importance. This is partly because the numbers of sectors covered will

initially be low-numbered, confirming what was initially communicated by the European Commission (2020). The interviewees thought these low numbers might bring customer reactions, and also expressed that different forms of marketing can be used to communicate with their customers about sustainability qualities of an equity fund. This communication effort can be seen as signaling, which is a classic control mechanism in principal-agent relationships to manage adverse selection (Pijanowski, 2014).

The interviewees' express that they notice a demand for sustainability information from their customers, and their communication efforts can be seen as a response to this demand. In which case, it confirms the proposals of Connelly et al. (2011) and Spence (1973) that agents' communication efforts as signaling are carried out to satisfy the principal. In addition, as agents signal, they communicate some qualities of a product that is of interest to the principal (Spence, 1973). Principals will therefore most likely be more prone to shift their capital in accordance with their interest in sustainability and allocate this to fund managers as trust is obtained. Filling the information deficit enables the capital to be allocated from retail customers to portfolio companies. These companies perform environmentally sustainable economic activities, thus increasing the share of sustainable investments and facilitating the achievement of the SDGs.

6.4.2 Occurrence of Moral Hazard Under a Classification System

The empirical results illustrate that fund managers think that the EU Taxonomy will bring clarity to definitions and thus comparability between funds. They express that this will increase transparency on the financial market. The belief of increased transparency is in line with Peterson (2019) who states that increased transparency will follow from the EU Taxonomy. Transparency in the context of the principal-agent relationship can be constructed as the principal being able to control the agent. As Holmström (1979) and Guesnerie et al. (1989) argue, moral hazard is a problem related to information asymmetry that arises when the principal cannot control the agent. Also, moral hazard arises when the principal has little insight (Thomsen and Conyon, 2012), characterized by low quality- and quantity of information. This is currently the case considering the information deficit on the financial market. If increased transparency because of the EU Taxonomy leads to a situation where the principal can control the agent to a greater extent, the problem of moral hazard would be likely to decrease. If the occurrence of moral hazard would become less prevalent, then it can also confirm that the information asymmetry has decreased considering it is the basis of the problem. Therefore, combined with the previous discussion regarding moral hazard and fees, moral hazard can be an indicator of both costs and

information asymmetries in a principal-agent relationship, although it is difficult to measure with the qualitative method used in this thesis.

6.4.3 Greenwashing

The interviewed fund managers imply that the implementation of a common definition of sustainable activities would decrease greenwashing, because retail customers are able to compare funds based on unified definitions of environmentally sustainable economic activities. In agreement with the claims of Peterson (2019), it will become more difficult to greenwash as the EU Taxonomy introduces standardized screening criteria. These criteria are used to assess and compare the environmental sustainability of funds. Peterson (2019) further states that absence of a definition of sustainability may increase the risk of greenwashing. We interpret the implementation of unified definitions in the EU Taxonomy, coupled with increased information, to give higher transparency on the financial market. Transparency and greenwashing are highly related as proposed by Peterson (2019) which therefore supports the fund managers claim.

6.4.3.1 Absence of External Verification and Implications for Greenwashing

When asked about their opinions regarding external verification, almost half of the interviewees thought it was positive with third party verification of disclosures, while the rest of the interviewees thought otherwise. Considering there currently are no external verifications of the EU Taxonomy disclosures, the principal cannot be sure the alignment percentage is true. Figure 2 illustrates the complex process in which the fund managers calculate a funds EU Taxonomy alignment and is based on technical data that fund managers convert to a percentage that is communicated to the customers. However, the retail customer may not be able to verify the underlying data that feeds into the calculation, and therefore, they cannot verify the EU Taxonomy alignment percentage. The assumption that the principal can't verify the underlying data of the EU Taxonomy alignment is in accordance with the theory of bounded rationality, as the information may be too complex (Tversky and Kahneman, 1974). This might mean that some greenwashing may continue, as fund managers may still falsely claim that their equity fund is aligned with the EU Taxonomy, when it's not. As the results are ambiguous on the opinion on whether or not verification can be a problem, it is insufficient to say that this can confirm how lack of external verification leads to increased greenwashing (Laufer, 2003; Olatubosun and Nyazenga, 2019). In this sense, an implementation of external verification in the future may lead to a decrease in greenwashing. However, currently the decrease in greenwashing can be accrued

to the implementation of a standardized classification system for environmentally sustainable economic activities rather than external verification.

On a final note, we want to highlight the effect of the spread of Covid-19 on this study. The circumstances around the spread of Covid-19 consistently permeated the results in that there was an uncertainty regarding the prioritization of the EU Taxonomy under the current economic turbulence and it was also questioned whether the EU Taxonomy was developed under different economic circumstances and if it will function as intended now as the economic outlook has drastically changed. So, in the short-term the pandemic may have negative effects on the adaptation of the EU Taxonomy. In the long-term however, the EU Taxonomy is expected to have been implemented successfully. We also conclude that holding the interviews over phone did not negatively affect the result to any significant degree, as the results were quite unified, and as we thought that the topics of discussion did not warrant contextual data, as proposed by (Farooq & de Villiers, 2017). Despite the uncertainties, this study has brought valuable insights into several aspects of the principal-agent relationship, which is concluded below.

7. Conclusion

The market for sustainable investments is characterized by asymmetric information, which has implications for the practice of greenwashing and the capital allocation towards the SDGs. Therefore, to facilitate sustainable investments, this thesis aimed to examine how the principal-agent relationship between retail customers and fund managers is expected to change because of the EU Taxonomy. Semi-structured interviews were held to gain more knowledge on the factors that contribute to the reallocation of capital required to fulfill the SDGs, as the finance sector has an important role in maintaining financial stability. By interviewing Swedish fund managers, we were able to achieve an in-depth understanding of how they expect this relationship to change. The relationship is expected to change in a few ways related to decreased information asymmetry, more aligned interests, increased comprehensibility and limited greenwashing, as summarized in Figure 5.

7.1 Decreased Information Asymmetry & More Aligned Interests

Our study of fund managers shows that the information asymmetry will decrease between fund managers and retail customers as a result of the EU Taxonomy. It was also found that this

decrease in asymmetrical information will change the principal-agent relationship. As the EU Taxonomy will provide unified definitions, the definition of sustainable investments will be more aligned, and the conflicting interests will be more relaxed between principal and agent. This implies that utility is affected, which gives further reason to believe that the principal-agent relationship will be changed in terms of less conflicting interests.

Although the conflicting interests between the principal and agent are more aligned, they are not fully so, as this study finds that there are costs associated with the implementation of the EU Taxonomy, notably related to which of the actors in Figure 1 that bears the costs. If the implementation costs are borne by the agents, this may lead to an increased moral hazard which then contrasts to what is argued regarding the decrease in information asymmetry.

However, because costs is one assumption of Agency Theory and information asymmetry is another, the two assumptions influence the relationship in different ways. Regarding the costs, it affects the attractiveness of sustainable investments in the sense it may affect fees, and regarding the information asymmetry, it leads to an improved position for the principal.

7.2 Decreased Greenwashing & Increased Comprehensibility

As the EU Taxonomy introduces standardized criteria for sustainable investments, it will become more difficult for fund managers to greenwash. More and better information may lead to a decrease in greenwashing which benefits the retail customer as well. Retail customers will also have increased ability to compare funds. This means the EU Taxonomy will bring transparency to the market. Increased transparency means the retail customer can now control the fund manager to a greater extent, implying that the information asymmetry should decrease further as a result of this. Considering that hidden actions become visible, moral hazard is also likely to decrease. For the principal, the changed relationship would lead to a better situation as they get access to more comprehensible information.

Comprehensible information gives the principal the opportunity to act on this and make well-informed decisions. The fund managers' signaling of comprehensible information may lead retail customers to become more prone to shift their capital in accordance with their interest in sustainability, resulting in a reallocation of capital to sustainable economic activities which is required for the fulfillment of the SDGs.

7.3 Limited Initial Change due to Narrow Sector Coverage

Although it is argued that the information asymmetry decreases and there is evidence from fund managers that suggest that the principal's position to be improved, this decrease is limited by the narrow sector coverage and the maturity of the EU Taxonomy, considering it is not yet statutory. The net effect of the narrow sector coverage may be that the agent's information advantage is maintained although it is slightly decreased. In the short run, the change in information asymmetry between the principal and agent is limited, meaning that the change in the principal-agent relationship is also initially limited. To summarize, Figure 5 illustrates the findings of this thesis.

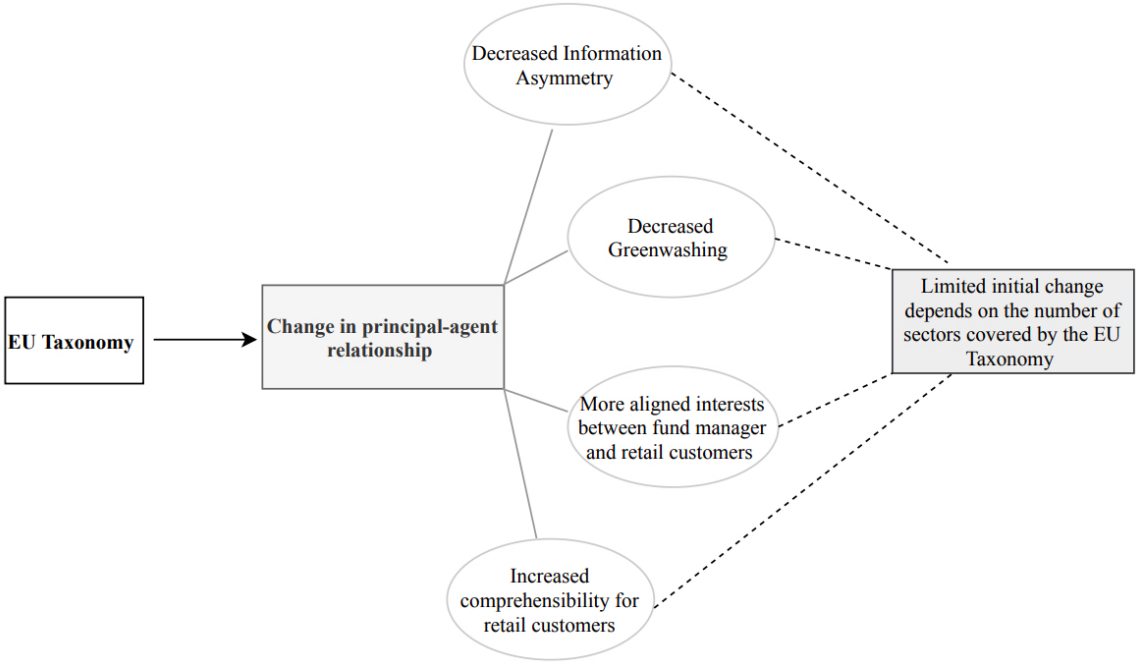

Figure 5. The Expected Changes in the Principal-Agent Relationship between Fund Managers and Retail Customers because of the EU Taxonomy

7.4 Contribution to Practitioners and Literature

Despite the narrow sector coverage, the EU Taxonomy is already of instrumental value to the fund managers who use it to prepare disclosures, which was indicated by their receptivity towards the EU Taxonomy. As this thesis contributes to increased knowledge of how fund managers perceive the EU Taxonomy, a mandatory environmental disclosure regulation, to change the relationship with their retail customers, it provides unique practitioner input. Furthermore, because this thesis utilizes Agency Theory to contextualize its insights, it is of theoretical importance regarding both the contributions to previous literature and the recommendations for further research.

8. Proposals for Further Research

The findings and contributions of this thesis has identified areas for further research to expand the understanding of sustainable investments. There is a need to examine how more information affects the total market for sustainable investments. Because if the market for sustainable investments would increase as retail customers allocate their capital to sustainable investments, the capital reallocation towards the SDGs might be fulfilled. The market implications in relation to greenwashing and the absence of external verification of disclosures, can also be researched further. In addition to this, the empirical results of this study leave room for further research on establishing a relationship between the costs and aligned interests in a principal-agent relationship under the EU Taxonomy. A final recommendation for future studies is to examine how higher fees and an increase in size of the market for sustainable investments are related, and also how the principal would need to incentivize the agent to act in their interest. To further expand the understanding for sustainable investments is an important step towards achieving a more sustainable economy and is therefore emphasized here as it marks the end to this study, which has provided an understanding for one aspect towards achieving the Sustainable Development Goals Agenda.

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Appendix A. Definitions

• Climate change adaptation – Adjusting to life affected by climate change and taking measures to adapt to a changing climate in the future (NASA, 2020).

• Climate change mitigation – Taking measures to reduce global greenhouse gases in order to limit global warming (NASA, 2020)

• Do No Significant Harm – This criterion posed in the EU Taxonomy implies that for an economic activity to be environmentally sustainable according to and be aligned with the EU taxonomy, it should "not do significant harm to any of the other five environmental objectives". (TEG, 2020a p. 2)

• Environmental consideration – reference to environmental aspects of the three dimensions of sustainability such as climate change mitigation and adaptation as well as circular economy and pollution prevention etc (European Commission, n.d.-b)

• ESG – Environmental Social Governmental

• EU Action Plan on Sustainable Finance – A plan for connecting susatianbility and finance in the European Union. Adopted in March 2018. Has three main objectives: 1) Reallocate capital to sustainable investments, 2) manage financial risks related to climate change, and 3) enhance transparency and promote long-termism in finance (European Commission, 2018b).

• EU Taxonomy Regulation – A framework for defining what an environmentally sustainable investment is. The framework is focused on climate change as one aspect of the environmental dimension within the three pillars of sustainability; social, environmental and economic.

• EU Taxonomy Technical Annex – Supplementary report to the EU Taxonomy Final Report containing technical screening criteria for 70 climate change mitigation and 68 climate change adaptation activities, including the do no significant harm criteria (TEG, 2020b)

• EU Taxonomy Final Report – A report developed and published by the Technical Expert Group (TEG) on Sustainable Finance in March 2020, containing recommendations and guidance on how to use the EU Taxonomy and how to prepare disclosures in accordance with the Taxonomy requirements (TEG, 2020a).

• EU Taxonomy Technical Report – A report developed and published by TEG in June 2019, containing the initial work of the TEG in developing the EU classification system (The EU Taxonomy). It contains an explanation of the importance of the EU taxonomy, practical user guides, recommended methodology and also the economic impacts the EU Taxonomy is likely to bring. (TEG, 2019).

• Financial market participants - Defined in the EU Taxonomy as:

1. "An insurance undertaking which makes available an insurance-based investment product (IBIP);
2. Alternative investment fund manager (AIFM);
3. An investment firm which provides portfolio management; investment firm which provides portfolio management;
4. An institution for occupational retirement provision (IORP) or a provider of a pension product;
5. A manager of a qualifying venture capital fund;
6. A manager of a qualifying social entrepreneurship fund;
7. Or a UCITS management company"

(TEG Technical Report, 2019 p.58).

• Fund manager – asset managers of a fund company, pension fund or bank. These actors handle retail customers' capital and use these to invest in portfolio companies.

• Greenwashing - The practice of intentionally communicating misleading information about environmental performance (Olatubosun and Nyazenga 2019; Laufer, 2003).

• Management fee – A fee that is charged by the fund manager for managing the retail customers capital in the equity fund.

• Morningstar – An investment research firm that provides statistics on the stock market, analysis of funds and general market data though databases, enabling investors to access large amounts of data (Morningstar, 2020).

• Portfolio companies – Those companies in which fund managers hold equity. These portfolio companies can compose the assets of an equity fund product e.g. a fund or pension scheme product, offered by the fund manager to the retail consumer.

• Retail customers – Private actors who contract fund managers to manage their capital for example for retirement savings.

• SDGs – Sustainable Development Goals adopted the the member states of the United Nations in 2015 to set out a plan for tackling the global political, environmental and economic challenges (UNDP, n.d.).

• Sector Coverage – The EU Taxonomy covers the following sectors; Agriculture and forestry; Manufacturing; Electricity, gas, stream and air conditioning supply; Water, sewage, waste and remediation; Transport; Information and Communication Technologies (ICT); Buildings.

• Social consideration – reference to social aspects of the three dimensions of sustainability such as inequality, terms of labor, inclusion, human rights etc.

• Social Safeguards – In order for an economic activity to be environmentally sustainable according to and aligned with the EU Taxonomy it must also be carried out according to "the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises, including the principles and rights set out in the eight fundamental conventions identified in the International Labour Organization's declaration on Fundamental Rights and Principles at Work and the International Bill of Human Rights."(TEG, 2020a, p. 10)

• SRI – Socially Responsible Investing or Sustainable, Responsible, Impact investing refers to investments that consider ESG criteria in investment process (US SIF, 2019).

• Sustainalytics – Provider of ESG data, research and rating for investors to integrate in their investment process (Sustainalytics, 2020).

• Sustainable economic activities – those activities performed by the portfolio companies that are considered to be aligned with the EU Taxonomy.

• Sustainable investments – Investments that finance environmentally sustainable activities while not jeopardizing social dimensions.

• Svanen – A certification funds can have if they invest in companies that contribute to sustainable development. The objective of these certifications is to make it easier to find and invest in funds that are sustainable for customers aiming to allocate capital. (Svanen, 2020).

• Regulators – The European Union Commission proposes regulations, and the European Parliament and Council of the EU review and adopt the proposed regulation (European Commission, n.d.-a).

Appendix B. Interview List

Date	Institution	Position / Title	Years in Industry
Fund Managers in Figure 1 of investment chain:			
2020-03-26	Venture Capital Fund	Head of Sustainability	> 20 years
2020-04-08	Investment Company	Sustainability Specialist	< 3 years
2020-03-30	Swedish universal bank Investment Management division	ESG specialist	> 15 years
2020-04-15	Private Asset Management Company	Head of Sustainability	> 15 years
2020-04-01	Commercial Bank	Group interview: ESG Specialist; External Manag Selection; Portfolio Manag European Equities Assistant	> 15 years; > 10 years
2020-04-02	Equity Research	Investment Bank	< 5 years
2020-04-02	Universal Bank	Chief Strategist Sustainab	>20 years
2020-04-03	Universal Bank	Group Interview: Global Head of ESG Research and Analytics; Debt Capital Market - Sustainable origins; Sustainability strategist	> 10 years; > 5 years; > 25 years;
2020-04-14	Swedish Universal Bank	Project leader Sustainable Finance	> 20 years
2020-04-03	Asset management fund company	CEO	> 20 years
2020-04-07	Private Asset Management Company	CEO	> 20 years

2020-04-14	Private Asset Management Company	Portfolio Manager	>15 years
Extended actors in Figure 1 of the investment chain:			
2020-04-17	Swedish public pension fund	Head of Strategy and Sustainability	< 30 years
2020-04-03	Swedish public pension fund	Sustainability Manager	< 5 years
2020-04-17	Swedish public pension fund	Project leader sustainable investments	> 10 years
2020-03-30	Swedish public pension fund	Group interview: Senior Sustainability Anal Quantitative Portfolio Manager	> 15 years; < 15 years
2020-03-26	Swedish Occupational Pension company	Head of ESG Analytics	< 5 years
Interviewees absent in Figure 1 of the investment chain:			
2020-03-13	Industry Association	CEO	> 25 years
2020-03-13	Industry Association Analytical Division	Economist Investment advice	> 10 years
2020-03-27	Industry association	CEO	> 20 years
2020-04-03	Consultant Firm	Consultant within Financial Services and Regulations	<5 years

Appendix C. Interview Questions

NOTE: The questions were asked in Swedish.

1. The company's relationship with the EU-Taxonomy
   (a) How do you prepare for the taxonomy?
   (b) Which factors do you think are important to meet the requirements set by the taxonomy?
2. How the company currently calculates how environmentally sustainable their equity fund financial products are.
3. Do you believe that the EU-Taxonomy will reduce the information asymmetry between fund managers and retail customers?
   (a) If yes, how do you think this link works?
   (b) What's your opinion on the lack of external verification of the disclosures that are done in accordance with the taxonomy?
   (c) What else can (company) do to ensure retail customers that your equity funds are environmentally sustainable?
4. The connection between the EU-Taxonomy and information asymmetry:
   (a) Can the EU-taxonomy lead to changed behavior among your customers, for example an increased demand for environmentally sustainable equity funds?
   (b) How can the EU-Taxonomy influence the development of environmentally sustainable equity funds?
5. Costs of the EU-Taxonomy
   (a) What do you consider are the main costs of the EU-Taxonomy?
   (b) How will these costs impact the financial equity fund products you offer?