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**DO PRIVATE INVESTORS FROM DIFFERENT AGE GROUPS  
REGARD THE IMPORTANCE OF ESG REPORTING  
DIFFERENTLY?**

Bachelor's thesis

Programme International Business Administration, specialisation Finance

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Tallinn 2022

I hereby declare that I have compiled the thesis independently and all works, important standpoints and data by other authors have been properly referenced and the same paper has not been previously presented for grading.

The document length is 8385 words from the introduction to the end of conclusion.

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## **ABSTRACT**

This thesis is constructed to test whether there are differences in opinions of Finnish private investors about the importance of ESG reporting to investors. Additionally, the thesis aims to recognize what kind of ESG considerations the participants have included in their investment decision-making process. This thesis uses an online questionnaire to gather data from Finnish private investors of various ages to measure for differences in opinions.

The thesis tested under 30 years olds' opinions against 30 years and older participants' opinions about the importance of ESG reporting using a nonparametric Mann-Whitney U test. Questionnaire results suggest that Finnish private investors have not yet integrated ESG considerations into their decision-making process widely. The participants' most frequent reason for incorporating ESG considerations into their decision making in future is the want to keep up with the current market thinking and trends, suggesting that the importance of ESG will grow as the standards are getting universalized. The thesis could not rule out the possibility of having any difference between younger and older participants' opinions about the importance of ESG reporting. The result contradicts the common belief that younger people would be more sustainable with their choices, at least in investing.

Keywords: ESG, Sustainability, Private investor, Questionnaire

## INTRODUCTION

Sustainability is one of the most impactful frameworks surrounding the financial world. Its importance grows as the ongoing climate crisis does not slow down. Sustainability will define the future rather than any other economic paradigm. Considering the impact of current inefficiently constructed value chains and wasteful production processes may help overcome the problem of a sustainable world. Financial markets have a vital role in allocating capital to companies that perform well on traditional ratios and in environmental, social, and governance (ESG) factors. Previous studies have proven that institutionalized investors use ESG data as it is financially material (Amel-Zadeh, Serafeim 2018). Still, the private investors' usage of ESG factors in investment decision-making is unclear. The ESG reporting is getting increasingly standardized, and likely more private investors will demand environmentally sound instruments and better, more standardized ESG reporting methods.

This thesis studies how the Finnish private investors have included sustainability in their portfolios using ESG factors. The aim is to test for differences in opinion mean rank scores regarding the importance of ESG reporting to Finnish private investors using a nonparametric Mann-Whitney U test. Additionally, this thesis aims to recognize how Finnish private investors have included non-regulated environmental, social and governance factors into their investment decision-making process using nominal questions. The study participants were divided into two groups according to their age, using 30 years as the cut-off value, and the groups will be referred to as group 1 (<30 years old) and group 2 ( $\geq 30$  years old).

The hypothesis for the research is constructed on previous research made by others.

H0: Group 1 mean rank score for Annex 1 Q11 = Group 2 mean rank score for Annex 1 Q11

H1: Group 1 mean rank score for Annex 1 Q11 > Group 2 mean rank score for Annex 1 Q11

To test the hypothesis, a nonparametric Mann Whitney U test (also known as Wilcoxon Rank Sum Test) was used to see whether the null hypothesis could be rejected.

The data was collected from Finnish private investors, some of whom work in the financial sector. However, the prerequisite to participating in the survey was that the person filling had stated that they invest in financial instruments such as stocks, bonds, indices, commodities, or derivatives.

To gather data, a questionnaire was constructed using two types of questions. First demographic questions were asked to assess the participants' age, sex, employment- and household situation. The second part of the questionnaire consisted of questions validated in previous research by Deutsche Bank research from 2021. The Deutsche Bank Research communications manager gave permission to use the questions in the research. The second part of the questionnaire consisted of 11 multiple-choice, single-choice, and ordinal scale questions to assess how private investors use the ESG framework in their decision-making process. Templeman et al. (2021) surveyed both investors and corporate issuers globally, with most participants from Europe. However, the questions aimed at corporate issuers were excluded from the questionnaire due to their irrelevancy toward private investors' investment decision-making process.

The thesis starts with a theoretical framework section where the theories and concepts used in the research are explained using previous researchers' work. After the theoretical framework, the methods used in the research are presented. The hypothesis for the research is also formulated on previous research made by others. After the methods and hypothesis formulation results of the overall questionnaire, and the Mann Whitney U test results are described. Then in the final section of the research, conclusions regarding the study results are given, and a suggestion for further research.

# **1. THEORETICAL FRAMEWORK**

The theoretical framework provides definitions that are required to be described since those can be interpreted differently. After the definitions and concepts relevant to this thesis are introduced and the critique, the ESG framework has received.

## **1.1. Definitions**

In this section, essential definitions for understanding the thesis will be presented. The ESG framework concepts are crucial to discuss before moving on to the results as there are differences in explanations and their applicability.

### **1.1.1. Corporate social responsibility (CSR)**

Corporate social responsibility (CSR) can be viewed as a self-regulating business model in which a company conscientiously takes its impact on the environment, economy and society into consideration when planning activities. Sheehy (2015) pointed out that defining CSR has multiple issues relating to its definition and suggested defining CSR as a form of private self-regulation on reducing and mitigating industrial harms.

The goal of CSR is to enhance the well-being of society by taking responsibility for the company's activities and their effects. Corporate social responsibility (CSR) can be viewed as a precursor of ESG. CSR's main idea is to make companies accountable for their actions. ESG adds to the CSR by making the different variables measurable and comparable.

### **1.1.2. Socially responsible investing (SRI)**

Socially responsible investing has been characterized usually by the activity itself (Berry, Junkus 2013). There is no consensus among the research community regarding the definition of socially responsible investing. SRI can be viewed as a practice of investing capital in companies with positive social impact. The SRI methodology is like the modern-day exclusionary investing

strategy where the key idea is to rule out poorly performing companies from entering the portfolio. Berry and Junkus (2013) noted that SRI does not consider religious values themselves as a critical factor of SRI. Socially responsible investing has received criticism from investors and academics as SRI screening restricts the investing possibilities and therefore causes a loss of efficiency due to lower returns and higher idiosyncratic risk when compared to non-SRI investments. (Giese et al. 2019).

### **1.1.3. Sustainable development goals (SDGs)**

The United Nations introduced the big 17 sustainable development goals in 2015. The goal of the big 17 is to create a better future globally by ending poverty and world hunger. The goals set by the UN are broad and may not be as crucial to one country as to another. For example, in Finland, the availability of clean water and sustainable management of water and sanitation is already at an elevated level compared to the clean water management and availability in Qatar, where the water crisis is at its worst.

Regardless the goals include bettering the environment at sea, air, and land and for each living being. The UN recognizes that by setting the goals, countries can better align their actions and priorities to reach the Big 17 in just eight years what is left to reach the ambitious goals.

### **1.1.4. ESG reporting standards**

The Global Reporting Initiative (GRI) is an organization helping companies report their sustainability and ESG-related statistics by using the GRI Standards. The standards divide into three categories: universal standards, sector standards, and topic standards (GRI).

The universal standards are universal for all companies that apply GRI standards in their reporting. The universal standards consist of three different packages that must be applied correctly. First are the requirements and principles for using the GRI standards, Then disclosures about the reporting organization. And finally, the disclosures and guidance about the material topics.

Companies choose the standards that apply to their company in the sector standards. The different sectors are designed to highlight the most significant impacts of a particular sector. Different sectors are created in their importance order. The most impactful sectors include agriculture, fishing, oil, gas, and coal. As the list of most essential sectors cannot be completely objective, the

standards division also considers feedback from stakeholders. The GRI mentions in their report that many of the sectors share interconnected values and are used together to assess the impact of a certain sector.

The third set of standards is the topic standards. The topic standards provide information regarding topics such as waste management, occupational health and safety and taxes. Each of the standards is specific to the topic and regards how the company manages the associated impacts.

Kotsantonis and Serafeim (2019) pointed out that current ESG data holds multiple complications and highlighted four main points:

1. The variety of ESG data leads to inconsistencies in interpreting the results.
2. Lack of transparency in benchmarking creates inconsistencies and undermines the reliability of results.
3. The differences in how data gaps are regarded cause considerable disagreements among the ESG data providers.
4. ESG data providers disagree that the quantity of ESG data increases which leads to a need for a clearer understanding of what the metrics measure and how can they be implemented in the decision-making process.

ISSB The international sustainability standards board was founded on the 3<sup>rd</sup> of November 2021 at COP26 held in Glasgow. ISSB is a part of IFRS, a non-profit organization serving the global markets. The point of ISSB is to provide a worldwide set of sustainability-related disclosure standards that provide investors and other capital market participants with information about the company's sustainability-related risks and opportunities.

MSCI is the single largest ESG related index provider in the world. MSCI aims to assist institutionalized investors in benchmarking their ESG performance, managing and measuring and assist in reporting the relevant statistics. MSCI provides over 1500 ESG indexes for investors to choose from.

### **1.1.5. Green bonds**

The researchers have no consensus on how green bonds are priced compared to plain vanilla bond counterparts. Karpf and Mandel (2018) suggest that green bonds are priced at a discount compared to plain vanilla bonds. Partridge and Medda (2020) tried to find evidence of green premium (greenium), but their study could not conclude a clear pattern. Karpf and Mandel (2018) have developed models that show that the price of green bonds can be as much as 10% lower than that of their traditional counterparts, depending on an issuer's credit rating and the amount it pays in carbon fees, but they acknowledge this difference has not yet been fully quantified or even measured in practice and may vary significantly by country, jurisdiction, and sector; for example, while the price of green corporate bonds might be higher, green mortgage-backed securities could be more expensive to issue because of additional capital requirements.

### **1.1.6. Use-of-proceeds bonds**

Use of proceeds bonds are bonds that use the proceeds to contribute to sustainable or social projects. This thesis distinguishes green use-of-proceeds and social/environmental use-of-proceeds bonds as they are meant to result in different societal outcomes. Also, the thesis considers green use-of-proceeds and social/environmental use-of-proceeds as different ESG products.

## **1.2. Dimensions of ESG**

ESG is a useful framework for comparing companies or investment opportunities through three dimensions environment, social, and governance. The environmental dimensions of the framework consider the company's environmental impact, such as water usage, waste management, and carbon emissions. The social dimension includes matters such as human resources matters, and governance is all about how the company is taken care of and how does the management works. ESG framework itself does not give any answers to what is considered a proficient level of certain factors such as emissions. However, the benefit of the framework comes from its usability in comparison, assuming the data is comparable. ESG factors can be compared to other companies working in the same industry. Investors use ESG factors in company valuation to identify and compare investment opportunities to find risks that financial analysis could have missed.

The Environmental, Social and governance framework was first presented in United Nations Global Compact report in 2004. The report gives broad guidelines and recommendations about

how to integrate better environmental, social and governance aspects in the finance industry. The recommendations given by the report rely on the possibility of companies incorporating ESG factors into their research regarding companies' activities. The original report was ambiguous about the definition of the ESG and its implementation. Therefore, there are no actual definitions of what it means in concrete terms. The global compact report highlighted several issues impacting the company and investment value.

Companies' performance on different ESG dimensions has been in the interest of multiple stakeholders such as employees, customers, government regulators, and other public interest groups for an extended period. Therefore, companies have started increasingly providing ESG metrics that are material to the company. The ESG factors are material if they influence the company's financial performance.

The ESG issues highlighted by this thesis are by no means an exhaustive list of issues that are being considered when measuring ESG performance but examples of what kind of issues the ESG framework considers.

### **1.2.1. Environmental dimension**

E in ESG stands for the environment. Environmental risks are measurable and comparable metrics that illustrate the risk associated with operating in the ever-changing environment. The United Nations Global Compact from 2004 introduced environmental issues that include conservation of the natural world by focusing on factors such as:

- Deforestation
- Biodiversity
- Energy efficiency
- Water management
- Waste management
- Pollution

Many of the factors are interconnected to multiple dimensions of the ESG framework. Environmental factors such as water usage, greenhouse emissions and waste management are acting in a crucial role when comparing the companies with the available information. Environment factors consider a company's effect on the environment that it is playing in across the whole value chain. Global compact report from 2004 stated that companies that have embedded

their environmental goals in their growth strategies do not suffer statistically significant performance disadvantages and may even outperform their peers. Companies that consider their effect on the environment face smaller environmental and financial risk (Clark et al. 2015).

The risks related to neglecting the environmental factors vary from reputational risks to criminal prosecution. History has shown multiple times what kind of consequences there are if the environmental risks are neglected. In 2010 BP oil caused the largest marine oil spill ever (Deepwater Horizon) as a direct consequence of neglecting the environmental factors in their daily business (Matos 2020). Volkswagen emissions scandal between 2008 and 2015 laid evidence that greenwashing was embedded into the whole value chain of a global auto manufacturer (Matos 2020).

### **1.2.2. Social dimension**

The social dimension of ESG is hard to quantify. Out of the three dimensions, the social dimension has been described as the most difficult to measure and embed in the investment strategy. According to the UN global compact report from 2004 social dimension of the framework focuses on issues such as:

- Community relations
- Gender and privacy
- Labour standards
- Human rights
- Employee engagement
- Data privacy

Companies' actions directly affect people's lives, and the social impact can be either positive or negative. There are ready frameworks that already create constraints for companies. For example, the law restricts companies from human rights violations such as using child labour.

The social dimension has been a part of the investment decision-making process for a long time. It developed from socially responsible investing (SRI), which screened investment opportunities and excluded unwanted industries or companies based on the values that the investor has set. Traditionally SRI screening has been used to exclude sin industries such as gambling, alcohol, weapons, or oil companies. Hong and Kacperczyk (2009) studied sin stocks and found a significant price effect created by institutionalized investors who do not allocate capital to sin stocks. The

aforementioned industries create massive social and environmental costs that others regard as more important than others. As a subjective matter, the social dimension of ESG reflects the investor's own values and agenda.

Reporting the metrics provided by the three different dimensions in the ESG framework does not automatically result in better returns but rather signals to the markets that the company is considering their impact and responsibility, which may result in superior returns. Therefore, the metrics provided by the ESG framework need to be comparable and relevant to create meaningful comparisons from where conclusions can be drawn. For example, a social media company should not report its water usage if its water usage is limited to the water needed for the coffee machine.

Investors can affect the company's decision-making process, for example by demanding short-term profits at the cost of a negative social impact. The social dimension of ESG has been used in the past by corporates to polish their reputation and attract responsible investors. Investors have a key role in investing in companies that provide the best return in monetary terms as well as in terms of the company producing good social outcomes. According to Porter et al. (2019), the responsibility for social outcomes has been imposed on companies rather than investors, even if the investors would carry social responsibility.

### **1.2.3. Governance dimension**

Giese et al. (2020) found that the governance dimension is the most significant in a short period (one year) in terms of profitability, idiosyncratic risk, and systematic risk. In the long period, environmental and social dimensions are more relevant (Barber et al. 2020). On the contrary, Larcker et al. (2021) questioned whether the governance dimension should be included in ESG at all since companies that want to better their ESG scores need to consider governance as much as companies that care little or not at all about ESG.

The governance dimension of the ESG framework focuses on setting standards for corporate governance. According to the UN global compact from 2004, factors that are considered to go under the governance dimension include:

- Lobbying
- Board composition
- Auditing
- Executive compensation

- Political contributions

A sound corporate governance system is an essential element in optimizing the interest of shareholders (Khan 2019). Corporate governance is characterized as the procedure and structure used to coordinate and deal with the business to upgrade the business while acknowledging the goal of long-term shareholder value while taking into account the interest of various stakeholders. (OECD 2021). The board of directors has been highlighted as one of the essential elements of corporate governance.

The governance dimension of ESG has had a significant impact on past corporate scandals, such as the emissions scandal at Volkswagen. Companies that rank low on governance have a higher risk of not utilizing capital as efficiently as the companies which rank higher on the governance dimension. Similarly to social and environmental dimensions, governance metrics are compared to other companies in the industry with the available data. In addition, governance can affect multiple issues faced by the companies such as gender equality on the board and in high paying positions.

### **1.3. Different ESG investment strategies**

In 2016 Kumar et al. identified five different ESG investing methods. Their study recognized exclusionary screening, positive screening, ESG integration, impact investing and active ownership. The different investment strategies portray a wide range of considerations that can be included in the investment decision-making process (Kumar et al. 2016). In their study Kumar et al. (2016) also created a timeline stating the evolvement of ESG investing practices. The modern ESG investment methods have started evolving in the 20<sup>th</sup> century, starting from socially responsible investing (SRI) to responsible investing (RI) to sustainable investing (SI) and finally into its latest iteration of ESG.

Impact investing has been characterized as a way of tying financial returns and positive social and environmental impact. SRI and ESG are the two most common approaches to impact investing. The term was coined in 2007 by the Rockefeller foundation. Their method of approaching investment decisions compares the United Nations Sustainable Development Goals (SDGs) to the companies to generate impact by investing. Kumar et al. (2016) characterized the objectives of

impact investing as generating and measuring specific environmental and or social benefits that align with a specific purpose.

The global impact investing network (GIIN) has defined impact investing as investments made with an intention to generate positive, measurable social and environmental impact together with financial return. Impact investments can be made in emerging markets as well as developed markets.

According to GIIN, core characteristics of impact investing include

1. Intentionality
2. Use of evidence and impact data in investment design
3. Manage impact performance
4. Contribute to the growth of the industry

Intentionality refers to investors' intentional preference to contribute to the measurable environmental and social outcomes. The second core characteristic refers to the fact that investments cannot be designed out of thin air, and embedding the measurable impact data into the decision-making process is necessary to gain financial and impact results. After the investment has been made active management of the investment is needed to stay in touch with the progression of results. Final characteristic guides investors to share and contribute to the impact investing community. Returns using impact investing vary according to investors' own goals. Returns range from a below-market return to a market return. Barber et al. (2021) studied impact investing through the willingness to pay (WTP) and concluded their research by stating that investors are willing to pay for nonpecuniary investment characteristics. Gutsche and Ziegler (2019) highlighted that people who have a personal interest in bettering the environment and people who identify as "left-wingers" have a significantly higher mean willingness to sacrifice returns for sustainability gains. Winegarden (2019) pointed out that all investors do not prioritize investment returns, and lower financial returns are not relevant for those who do not.

Best in class investing refers to investment decision making where the investments go through a variety of ESG criteria. If the investment performs better than its competitors, it can be considered as an option. The Best in class investing method is considered to go under the primary strategy of positive screening. Other positive screening methods include ESG momentum, which focuses on improving a company's ESG measures faster than others and Thematic investing, which focuses

on solving a specified ESG challenge. The best-in-class method criteria factors are subjective and can be modified to respond to the valuator's values.

ESG integration refers to an investment strategy where ESG dimensions are included in the investment decision-making process to find risks and opportunities that would otherwise not be available. The process of integrating ESG into the investment process is a subtle action, and many investors are performing integration techniques informally. The analysis ties together all material factors in investment analysis and investment decision-making process that include environmental, social and governance factors. An important part of ESG integration is lowering the risks associated with the investment process while generating returns. The greatest challenge in integrating investing obtaining high-quality ESG data so that conclusions can be made regarding the cause-and-effect relationship of the result of negative ESG occurrence.

The exclusion method targets to align the investors' own moral and ethical values into the portfolio. The exclusion method purposefully excludes unwanted or problematic industries and countries that do not align with investors' values. The model has received critique as if one does not own company shares. One cannot affect the company's operations. Still, exclusionary investing can be a powerful way to convey values, especially if the general population has accepted the values. Serafeim (2021) pointed out a dangerous possible outcome regarding the divestment strategy, that may even worsen societal outcomes. Public companies need to provide extensive information regarding how the company fares, and by using a divestment strategy the companies may even go private as a consequence of divestment since private companies do not need to provide as much information (Serafeim 2021).

Active ownership has also been included in different ESG strategies as it is a way to affect a company's decision-making directly. Active ownership usually requires substantial amounts of capital as the only way to make sure that the decision-making goes as planned is to own the majority of the company's shares. Active ownership is a way to influence long-term value creation by creating beneficial policies and practices and embedding them into the company's everyday activities. It is an important part of the sustainable strategy but also can be used as a means to create short-term shareholder value, such as increasing share price during periods when financial markets are down or when investors are nervous about the future. Amel-Zadeh & Serafeim defined active ownership as a way of using shareholder power to influence corporate behaviour through direct corporate engagement (2018).

## 1.4. ESG reporting

Serafeim (2021) argued that investors' consideration of ESG information in their investment decision is a hyperbole because even though an increasing number of investors have included ESG in their considerations, there has not been evidence that the investors would adjust their investment for the sake of ESG news. This refers to the passive nature of ESG investments. However, a later study from Serafeim and Yoon (2022) found positive market reaction to positive news as well as negative market reaction to negative news. In addition, their study found that companies with high ESG score have a smaller market reaction to positive news compared to low ESG rated companies because the news in highly ESG rated companies are already reflected in the stock price (Serafeim, Yoon 2022).

Matos (2020) pointed out that ESG metrics are hard to combine in quantitative ways, although there are exceptions such as carbon emissions. Also, Amaeshi and Grayson also pointed out that one of the main obstacles to tackle before mainstreaming ESG is the quality of the data (2009). The reporting quality is an obstacle to mainstreaming the ESG also according to Sangiorgi and Schopohl (2021). The comparability of the data adds to the data quality (Amaeshi, Grayson 2009). In 2015 Friede, Busch and Bassen studied over 2000 empirical studies from the 1970s onwards and found that approximately 90% of the studies concluded a nonnegative ESG-CFP (corporate financial performance) relation.

Some investors are trying to derive alpha using the ESG framework. For an institutionalized investor currently, regular ESG reports are not sufficiently detailed and highly regulated, and as such deriving alpha from such reports is not feasible (Bose,2020). The standardized reporting frameworks are to be introduced in the second half of the year 2022. Clark et al. (2015) study suggests that companies with strong ESG practices perform better than companies that do not have the same dedication to ESG matters. The lack of standardized reporting methods regarding ESG is crippling the usability of the ESG framework for private investors' as comparisons are not simple to conduct. Extensive and expensive information mining is required to gain reliable ESG scores. At the UN global climate conference COP26, the international financial reporting standards foundation announced the first set of globally aligned ESG standards is expected to be published in the autumn of 2022. The initiative is supposed to ease the ESG reporting and remove the need for companies to report on multiple different ESG frameworks such as SASB, GRI and TCFD.

## 1.5. ESG framework critique

ESG has received its fair share of criticism from academics and corporate businesspeople. The criticism focuses on systemic greenwashing and the temporary nature of possible. Greenwashing refers to a process where a company conveys misleading information regarding the company's environmental effects. The reason for companies to greenwash themselves relates to the growing demand for environmentally sound products and service providers.

The environmental aspect has become an important part of the company's competitive edge. Unfortunately, simultaneously greenwashing has become a barrier to integrating ESG factors into the investment decision making process. Yu et al. (2020) described "greenwashers" as large companies that provide massive amounts of unaudited ESG data but still perform poorly in ESG metrics.

Hvidkjær (2017) gave out reasons for outperformance as well as for underperformance of ESG investing relative to conventional investing. According to the literature review main reason for outperformance is that ESG underreacts ESG information. For the reason of underperformance, Hvidkjær (2017) argued that by ignoring certain stocks, they could become undervalued. Hvidkjær (2017) stated that ESG investing outperformance compared to conventional investment strategies could not be sustained in the long run due to three main reasons:

1. Underreaction to intangible ESG is likely going to disappear as more investors pursue similar strategies.
2. The popularity argument is based on growth in demand, thus temporary by nature.
3. The larger the group of investors who engage in ESG strategies likelier it is that the investment is going to underperform.

The effect of negative reporting must be taken into consideration when creating the ESG investment reporting standards as no company wants to provide information, especially regarding their negative impact on the environment or bad working environment. The negative competitive impact that the negative report results in creates a situation where companies have an incentive to greenwash themselves to look more sustainable. If the competitors align their activities to perform well on ESG metrics, the competition eventually starts to take ESG metrics as a barrier to entering the market.

The other main critique the ESG framework receives comes from the markets. The criticism points out that the dimensions used in ESG are fundamental to the company and that the market will price the environmental, social, and governance factors to the company valuation without a need for extra frameworks or reporting standards. The ESG framework's unregulated nature also raises questions regarding the reliability of the ratings. Different ESG service providers may give drastically different ratings for the same company as Chatterj et al. (2016). The unregulated nature of ESG reports allows companies to select the most suitable ESG reporting method, which can be viewed as greenwashing.

Winegarden (2019) noted that ESG investments usually create artificial restrictions to limit investment options, thus creating higher risks simultaneously also, ESG investments tend to cost more in terms of expense ratios and earn lower returns.

## **1.6. Use of ESG**

The cost of capital can be separated as the cost of weighted debt plus the cost of weighted equity. The cost of capital is commonly used to evaluate different investment opportunities, and it represents the minimum return that the investor seeks when providing capital. El Ghouli et al. (2011) have shown that ESG factors' effect can be broken down and viewed from discounted cash flow (DCF method). ESG affects the company's beta and therefore is a part of lowering the cost of capital. A lower cost of capital raises the value of the company. Bauer and Hann (2010) suggest that companies that have embedded superior environmental management systems have significantly lower credit spread, thus lowering the cost of debt which is a part of the cost of capital. Klock et al. (2005) concluded that weak anti-takeover provisions increase the cost of capital, whereas strong anti-takeover provisions lower the cost of capital. Clark et al. (2015) point out that good corporate governance practices such as anti-takeover measures lower the credit spread significantly. Skaife et al. (2004) proved their hypothesis that well-governed firms exhibit a lower cost of equity compared to poorly governed firms. El Ghouli et al. (2011) demonstrated that a company's environmental management has an impact on the cost of equity.

Due to the variety of investment strategies surrounding ESG, the exact ways how and why an investor includes ESG in their decision making is not concludable (Amel-Zadeh & Serafeim, 2018). Regardless, the different investment strategies can apply different ESG approaches

differently. According to Amel-Zadeh and Serafeim (2018), developing measures to account for different investment styles should be the first crucial step toward understanding the effects of that particular investment style and its investment performance.

## **2. METHODS AND HYPOTHESIS**

In this section, the methods used in the thesis are explained, and the hypothesis is constructed using previous researchers' work.

The thesis used a survey method to gather data from Finnish private investors. The survey method was considered to be an effective way to collect data from large amounts of people at a relatively low cost. The author was permitted by the Deutsche Bank Research Communications Manager to use their research survey questions with the authors' own selection of survey participants and analysis.

The data was collected using a Google Forms survey with 15 research questions. The survey Appendix 1 consists of two parts. The first was the demographic part, where the goal was to get to know the participant and the second part contained the research questions. The demographic questions include questions regarding the age, sex, employment, and household situation of the participant.

All the participants were Finnish private investors. The distribution of answers from different sources ended up as 93% (40 respondents) direct contact, and 6.976% (3 respondents) of respondents came through recommendations from other research participants.

The second part of Appendix 1 consists of questions used by Deutsche Bank research ESG Survey-What corporates and investors think (Templeman et al. 2021). The survey also includes multiple explanations of the concepts, such as different ESG investing methods, as the target group may not be professionals in the area of ESG investing but rather private investors who are interested in ESG matters. The questions in the second part of the survey consist of various question types, such as ordinal 10 point scaled questions regarding the importance of ESG reporting communication with investors. Most of the questions were multiple-choice questions that had ready answer options where the respondent could choose the most suitable answer. After the data collection, the answers

were transferred into an excel application where data is researched using quantitative descriptive methods.

Amel-Zadeh & Serafeim conducted an ESG survey focusing on investors' opinions, and their sample suggests that ESG information is mainly used with financial motives rather than ethical motives (2018). Their study also pointed out that ethical motives are likely considered more in Europe compared to the United States (Amel-Zadeh & Serafeim, 2018). As this research is conducted with Finnish private investors, different geographical regions may see different trends in their responses. The sample was constructed out of convenience. All respondents answered all the questions in the survey. There was a question regarding why a person does not invest in ESG. Among the answer option was “something else” that was to be chosen by those who stated in earlier question one of the ESG investing methods, so the fact that every question was answered by every participant was not an issue.

## **2.1. Hypothesis formulation**

Lans & Söderqvist (2021) found out that under 30 years old, individuals who invest are not ready to put sustainability before the profits. Their study results suggest that investing is still mainly profit, and if one can gain the sustainability with the same money, they might do that, but if there is a trade-off between profits and social outcomes, the younger investors choose profits. Prioritizing profits is expected as private investors do not have any pressure from other stakeholders to include sustainability in their portfolios. Also, young private investors tend to have less capital to invest when compared to institutionalized investors, which results in a smaller impact; thus, prioritizing sustainability via investment portfolio can be substituted by other more impactful methods. Matos (2020) recognized that even if some of the ESG factors can be objectively measured, many ESG factors require subjective decisions, such as the tick-the-box approach.

Tucker and Jones (2020) stated that gender is not a viable variable to use when comparing a person's interest in ESG investing. Their study compared the age groups of gen X and Millennials, and Baby boomers and found that younger investors show a slightly stronger interest in ESG investing compared to Baby boomers. (Tucker, Jones 2020). With previous research in mind, the

hypothesis for this research was constructed. This research tries to test whether private investors have similar interest differences in ESG reporting.

Mann Whitney U test is a nonparametric statistical test (Mann & Whitney 1947; Wilcoxon, 1945). Mann Whitney U test is used to test for differences between two groups. In this thesis group 1 and group 2 are being tested. Test provides results based on a single ordinal variable assuming nothing about the normality of the distribution of the sample. In this research, the single ordinal variable is Annex 1, question 15. Before testing the Mann-Whitney U test, data ranks were calculated in SPSS. The cut-off age of 30 was applied to divide the respondents according to age. Then, the cut-off age value was set to 30 based on Lans & Söderqvist (2021) research to test whether there would be a difference between the two groups. Their study divided the age groups as young adults between the ages of 18-29 are being viewed as the most sustainable generation (Lans & Söderqvist 2021). After calculating the relevant test statistics, the ranks for each group were summed up as well as for the overall U test statistic. The last calculation of the data before the Mann Whitney U test was to calculate the Z test statistics and their corresponding p-values to determine whether the test should reject or fail to reject the null hypothesis.

H0: Group 1 mean rank score for Annex 1 Q11 = Group 2 mean rank score for Annex 1 Q11

H1: Group 1 mean rank score for Annex 1 Q11 > Group 2 mean rank score for Annex 1 Q11

The nought hypothesis argues no difference in attitudes towards ESG investment methods with different age groups. H0: There are no differences in different age groups' opinions regarding communication with investors about ESG investing. The first hypothesis argues that younger people tend to be more aware of their impact, and thus younger people are more likely to include ESG dimensions in their portfolios. H1: There is a statistically significant difference with 95% confidence between those over the cut-off age of 30 and younger populations regarding their opinions about ESG investing.

### **3. RESULTS**

In this section, the results of the questionnaire are presented with their descriptive statistics as well as the tests that were used to interpret the results.

#### **3.1. Demographics**

The respondents to the survey were gathered in multiple different ways. Social media was used to gain contact with private investors who also shared the survey with their relatives who also invested. Also, the researcher directly contacted numerous people with the prerequisite question, “do you practice investing?” if the person responded confirming the question to be accurate, they were asked to take part in the survey. In total, the sample consisted of 43 people.

Table 1. Demographics of the respondents

Household situation	Frequency	Percentage
Single household	17	39.55%
Shared household (no kids)	17	39.55%
Family household	9	20.90%
Total	43	100.00%
Distribution by sex	Frequency	Percentage
Man	30	69.80%
Woman	12	27.90%
Non-binary	0	0.00%
Prefer not to say	1	2.30%
Total	43	100.00%
Distribution by age	Frequency	Percentage
<18	0	0.00%
18-29	19	44.20%
30-39	1	2.30%
40-49	6	14.00%
50-59	15	34.90%
≥ 60	2	4.70%
Total	43	100.00%
Employment status	Frequency	Percentage
Unemployed	0	0.00%
Employed	21	48.80%
Student	15	34.90%
Retired	1	2.30%
Entrepreneur	6	14.00%
Total	43	100.00%

Source: author's calculations

Table 1. visualizes demographic question results. The distribution of respondents by sex ended up with 27.9% women and 69.8% men, while 2.3% of respondents claimed to be non-binary or did not want to bring it out. The largest age groups among the respondents were between the ages of 18-29 (44.2%) and 50-59 (34.9%). Most of the respondents claimed to be employed (48.8%), while younger participants (34.9%) tended to be students. 39.5 % of the respondents stated to be from single households. The second most common household situation was a shared household with no kids with the same 39.5%. 20.9% of the respondents stated to live in a family household.

### 3.2. Research questions

65.1% of the respondents stated that they do not have a current investment strategy. Out of the given other ESG investment strategies, the most common was the exclusion of sensitive sectors.

This result also suggests that other responses may be affected because private investors who do not have ESG investment strategies are most of the respondents. 15 of the respondents or 34.9 % of respondents recognized one of the ESG investment strategies as their own. Out of the recognized ESG investment strategies exclusion of sensitive sectors was the most popular. The least of the investment strategies best in class ESG investing was used.

The majority, 44.2% of respondents chose the option that ESG criteria have no impact at all on their investment process. The second most common answer to the question of what impact ESG criteria have on one's investment process was that it is considered during the overall investment process (34.9%). The study was not able to gain any respondents who have completely integrated the ESG criteria into their overall investment process. Also, 20.9% of respondents stated that ESG criteria are thought in dedicated mandates.

The most common response to why investors do not use ESG instruments was none of the given answers. Even those who use ESG instruments responded to the question, and only 20 respondents found a reason why. In addition, 5.1% thought that they do not need to convey their sustainability strategy via an ESG instrument from the given answers. Respondents also stated that there is a lack of pricing benefits and the fact that the ESG market is unregulated.

Regarding the respondents' answers to how their ESG investments have performed against their non-ESG investments, most respondents (76.7%) stated that their investments have neither underperformed nor overperformed. Strong responses regarding the performance of ESG compared to normal investments could not be detected as nobody answered that. However, slight over or underperformance was managed to capture in the responses. 11.6% of respondents stated outperformance, whereas 11.6% stated that their ESG investments have underperformance.

25.6% of respondents stated that they are currently planning decarbonization targets for their portfolio which suggests that the progression towards applying ESG factors to investment decision-making is ongoing but not yet in a stage where it has become a norm for private investors as well. 4.7% of respondents have defined yearly sectoral targets for their portfolios. Still, most of the respondents, 69.8%, stated that they do not have any planned or defined commitments or targets regarding decarbonization in their investment portfolios.

Private investors regard ESG ratings as a mainly minor input factor in their investment decision-making process. Out of the 43 respondents, only one answer stated that ESG ratings are a major input in their investment decision-making process. 20.9% stated that they use only proprietary ratings, and 44.2% say that they do not have a rating approach.

Private investors see that European Green Bonds are most promising in near to mid-term ESG instruments, with a response rate of 41.9%. The second most promising ESG instrument was Sustainability linked bonds, with an answer rate of 30.2%. A total of 27.9 % of respondents stated that use-of-proceeds bonds are most promising. The difference between social/sustainable use of proceeds and green use of proceeds was 9.3%.

Most of the study participants regarded emerging markets as their choice of ESG products. Although synthetic instruments are usually created for large investors, 20.9 % of respondents chose synthetic instruments as the product they would invest in.

To gain information regarding the sustainability profile, roadmap and targets, investors mainly rely on the company’s non-financial reporting. Direct interaction with issuers and aggregated perspectives through ESG ratings were also mentioned. Least out of the available options, bulk data from information vendors was used to gain information regarding the sustainability of a company. As with all the questions, as most do not regard ESG very highly yet the option something else was most chosen.

Table 2. Annex1 Question 15 results

Which, if any, of the following reasons motivate you to incorporate ESG criteria into your investment strategy?	Frequency	Percentage
Want to keep up with the current market thinking & trends	20	46.50%
For benefit of society	18	41.90%
For public perception	6	14%
Strong believe ESG investments will outperform the market over the investment horizon	9	20.90%
Client demand	2	4.70%
None of these	7	16.30%

Source: author’s calculations

Table 2 illustrates that the most frequent reason for Finnish private investors incorporating ESG criteria in investment decision-making was the want to keep up with current market thinking and trends with a response rate of 46.5%. The want to keep up with the current trends of the market is

likely the reason for most to incorporate ESG into their investment methodology in the future, as sustainability-related investing has not reached its peak yet. The second most common reason for investors incorporating ESG criteria into their investment decision-making process was for the benefit of society, with a response rate of 41.9%. 20.9 % of the replies believe that ESG investments will outperform the market over the investment horizon. Only 14% chose that they would choose ESG investing for public perception.

In the raw results of the study, younger participants (18-29 years) answered higher total count of the score compared to other groups. Still, the outcome of the test changed as the remaining age groups were set together to gain a collective idea of older participants' opinions on the importance of ESG reporting.

The raw data was tested using the Mann Whitney U test. The study separated over and under 30 years olds into two different groups. The groups were then ranked according to their answers to Annex 1 question 11. The question asked the respondents to estimate the importance of ESG reporting highlighting the investors as receiving partners in the information transferring. The two groups were sized differently and were named group 1 for the under 30-year-olds and group 2 for 30 years old and older. Group 1 had 19 respondents, whereas group 2 were represented by 24 participants. The rank score sum for group 1 was 515, and respectively the group 2 group rank score was 431.

The U score for group 1 was 241, and group 2 had 215. The total U score for the test was 210.5. The Z value for the test ended up being -0.431, and its P-value (0.666) > 0.05 significance level. As such the study could not reject the null hypothesis stating that Group 1 mean rank score = Group 2. mean rank score.

Table 3. Mann-Whitney U test

Mann-Whitney U test			
Age	N	Mean Rank	Sum of Ranks
Group1	19	22.92	435.5
Group2	24	21.27	510.5
Total	43	–	946
Test statistics			
Mann-Whitney U			210.5
Wilcoxon W			510.5
Z			-0.431
Asymp. Sig (2-tailed)			0.666

Source: author’s calculations

Table 3. visualizes the Mann-Whitney u test results. The Mann Whitney U test started categorizing the groups and their respective responses to appendix 1 question 11. After the data was organized, marking the age as a scale variable and appendix 1 question 11 as an ordinal question, the nonparametric Mann Whitney U test was applied using age as a grouping variable and answer to question 11 as the test variable. The under 30 years olds group had N= 19, and the over 30 years olds had a group size of N = 24, totalling 43 respondents. Mann Whitney U test does not assume normality of the distribution of answers. In SPSS, the outcome of the test was not significant, with a 95% confidence as the p-value of  $0.66 > 0.05$ .

## 2.2. Interpretation of the research questions results

It was anticipated that if private investors use the ESG criteria that it would be during the overall process out of convenience. The results were unable to show that there are any private investors who have fully integrated ESG criteria into the overall investment process. These results are in accordance with Lans & Söderqvist (2021) results as in their questionnaire, most of their respondents also stated that they do not consider ESG criteria while making the investment decision.

The questionnaire results suggest that private investors have not yet embedded ESG into their decision-making process similar to Amel-Zadeh and Serafeim (2018). Out of the reasons why investors do not use ESG instruments, most respondents chose the option “do not need to convey my sustainability strategy via an ESG instrument. Reasons why include the fact that the other available options assumed extensive knowledge regarding the regulation surrounding ESG and

knowledge about the pricing of the ESG products. In the question regarding the performance of ESG versus non ESG investments, the study could not catch any strong performance either way. The exclusion of sensitive sectors was chosen as the most used ESG investment strategy. Exclusion of sensitive sectors may be most popular due to the simplicity of the strategy as it only requires subjective preferences on which sectors to rule out from the portfolio. The upcoming globally aligned ESG reporting standards will likely increase the private investors' interest in including ESG in their investment decision-making process.

Out of the given answer options, respondents tended to highlight the “want to keep up with the current market thinking & trends, which suggests that private investors recognize ESG as a current trend in the financial markets. Similarly, the option “for the benefit of society” was commonly chosen in the questionnaire. The reason why respondents show such a high level of altruistic response could relate to the fact that they did not have to put any money in front of their responses.

## CONCLUSION

In this section, the conclusions regarding the results are made, and further research suggestion is given.

The study sample reflects a heterogeneous group, although not proportionally when distribution by demographics is looked at. The age distribution of the sample ranged from 18 to over 60, which was also expected as those under 18 years old do not necessarily have the required language skills to answer the survey as it was only available in English.

This thesis studied how the Finnish private investors have included sustainability in their portfolios using ESG factors. The aim was to test for differences in rank means of opinions regarding the importance of ESG reporting to Finnish private investors using a nonparametric Mann-Whitney U test. Additionally, this thesis aimed to recognize how Finnish private investors have included non-regulated environmental, social and governance factors into their investment decision-making process using nominal questions.

The results suggest that Finnish private investors have yet to embed ESG factors in their investment decision-making process. This result is in line with various other studies surrounding the ESG framework. As the reporting standards are not yet globally aligned and standardized investing in using ESG factors in the decision-making process is difficult as the real signals are lost in the masses of different non-comparable ESG data.

This thesis could not find a difference in mean ranks with 95% confidence between Group 1 and Group 2 opinions regarding the importance of ESG rating communication. This result suggests that investors, regardless of their ages are not putting sustainability in front of the profits. Also, there is no evidence that younger Finnish private investors would regard ESG reporting as more important than older Finnish private investors.

For future researchers, it would be beneficial to conduct research regarding the private investor use of the ESG factors in the investment decision-making process after the globally aligned standards are introduced in the second half of the year 2022.

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# APPENDICES

## Appendix 1. Private investor ESG survey

Survey data will only be used in my (Niklas Vesanen) Bachelor's thesis. Data will be anonymized, and a respondent has the right to withdraw from the survey at any point.

Question 1. I am a (Single choice)

- Man
- Woman
- Non-Binary
- Prefer not to say

Question 2. Aged: (Single choice)

- Under 18
- 18-29
- 30-39
- 40-49
- 50-59
- 60 years and above

Question 3. Which of the following best describes your household situation? (Single choice)

- Single household
- Shared household
- Family household

Question 4. Which of the following best describes your employment status? (Single choice)

- Unemployed
- Employed
- Student
- Retired
- Entrepreneur

Environmental, Social and Governance (ESG) is a framework used to evaluate and compare the ethical and sustainable impact of company or business.

ESG is a framework for comparing companies or investment opportunities through three dimensions environment, social, and governance. The environmental aspect of the framework can deal with matters such as the company's water usage, waste management or carbon emissions. The social factor could include matters such as human resources matters and governance is all about how the company is taken care of and how does the management work.

Question 5. What impact do ESG criteria have on your investment process? (Templeman, Cotaga, Reid, 2021). (Single choice)

- Only considered in dedicated mandates
- Has no impact at all
- Considered during the overall investment process
- Completely integrated into the overall investment process

Impact investing has been characterized as a way of tying financial returns and positive social and environmental impact. The term was coined in 2007 by the Rockefeller foundation. Their method of approaching investment decisions is to compare the United Nations Sustainable Development Goals (SDGs) to the companies to generate impact by investing.

Best in class investing refers to investment decision making where the investments go through a variety of criteria and if the investment performs better in the ESG rating compared to x% of the competing investment possibilities, it can be considered as an option. The criteria factors are subjective and can be modified to respond to the evaluator's own values.

ESG integration refers to an investment strategy where ESG dimensions are systemically included in the investment decision-making process in order to find risks and opportunities that would otherwise not be available.

Exclusion of sensitive sectors is a process where a subjective framework of restrictions is used to exclude certain industries from entering a portfolio. Typically, these excluded industries include Oil, weapons, alcohol, tobacco, or gambling.

Question 6. How would you define your ESG investment strategy? (Templeman, Cotaga, Reid, 2021). (Single choice)

- I do not have a current ESG investment strategy
- Impact ESG investing
- Best in class ESG investing

- Integrate ESG factors
- Exclusion of sensitive sectors

Question 7. If you do not use ESG instruments, why not? (Templeman, Cotaga, Reid, 2021). (Single choice)

- None of these
- Do not need to convey my sustainability strategy via an ESG instrument
- The market is unregulated
- There is a lack of pricing benefit

Question 8. Thinking about your OVERALL ESG investments ... In the last 24 months, how have they performed in comparison to non-ESG investments? (Templeman, Cotaga, Reid, 2021). (Single choice)

- Strongly underperformed
- Underperformed
- Neither underperformed nor outperformed
- Outperformed
- Strongly outperformed

Question 9. Which of the following statements best reflects your approach to self-defined, specific decarbonization targets for your investment portfolio? (Templeman, Cotaga, Reid, 2021). (Single choice)

- I don't have any planned / defined commitments or targets
- My evaluation process regarding these commitments / targets is ongoing
- I have defined yearly sectoral targets
- I have defined yearly decarbonization target

Question 10. With your investment process in mind, which of the following statements best describes your reliance on public ESG ratings? (Templeman, Cotaga, Reid, 2021). (Single choice)

- Public ESG ratings are NOT an input factor as I don't have ratings approach
- Public ESG ratings are NOT an input factor as I only use proprietary ratings
- Public ESG ratings are major input factor into my investment process

- Public ESG ratings are minor input factor into my investment process

Question 11. Using a scale of 0 to 10, how important do you think ESG ratings are in communication with stakeholders \*especially investors (Templeman, Cotaga, Reid, 2021).

Question 12. What is your main source of information to assess an issuer's sustainability profile, roadmap and targets? (Templeman, Cotaga, Reid, 2021). (Checkbox question)

- Company non-financial reporting
- Bulk data from information vendors
- Aggregated perspective through ESG rating
- Direct interaction with issuers
- Something else

European green bonds are financing investments, projects, expenditures or assets helping to address climate or environmental issues. Green Bonds tend to be more liquid option when compared to other options below. Compared to social or sustainability bonds green bonds are also considered to be more diverse in terms of all criteria (country, sector, currency and credit rating)

Sustainability-linked bonds aim to encourage companies that contribute to sustainability

Generally use-of-proceeds bonds fund projects with dedicated social, environmental benefits.

Social / sustainable use-of-proceeds bonds differ from green use-of-proceeds by adding the social project dimensions into the use-of-proceeds gain from bonds.

Green use-of-proceeds bonds aim to direct the proceeds gain from bond into "green projects".

Question 13. What ESG instruments do you consider to be most promising in the near to mid-term? (Templeman, Cotaga, Reid, 2021). (Single choice)

- European Green Bond
- Sustainability-linked Bond
- Non-regulated (ICMA) Social / Sustainable use-of-proceeds bonds
- Non-regulated (ICMA) Green use-of-proceeds bonds

Synthetic instruments refer to financial instruments that are engineered to simulate other instruments while altering key characteristics. Synthetic instruments can be custom designed and are typically created for large investors

Sustainability linked loans are used to nudge the borrower to meet ESG performance-related goals.

Asset-backed securities (ABS) are financial securities backed by income-generating assets such as home equity loans. Collateralized loan obligations (CLO) are commonly corporate loans with low credit ratings that are below investment grade that need to be bundled together and are actively managed. Commercial mortgage-backed securities (CMBS) are fixed-income investment products that are backed by mortgages on commercial properties rather than residential real estate.

Emerging markets are countries that have some characteristics of a developed market but are not yet fully developed market.

Question 14. Which, if any, of the following ESG investment products would you invest in? (Templeman, Cotaga, Reid, 2021). (Checkbox question)

- Synthetic instruments
- Loans
- ABS, CLOs, CMBS and others
- Emerging markets
- None of these

Question 15. Which, if any, of the following reasons motivate you to incorporate ESG criteria into your investment strategy? (Templeman, Cotaga, Reid, 2021). (Checkbox question)

- Want to keep up with current market thinking & trends
- For the benefit of society
- For public perception
- Strong believe ESG investments will outperform the market over the investment horizon
- Client demand
- None of these

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