SUSTAINABLE INVESTMENT

DUTCH PENSION FUNDS AND THE ROLE OF ESG RATINGS

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Preface

This thesis marks the end of my study programme at the Radboud University of Nijmegen and concludes a very interesting and eventful year of my life. There are a lot of people that helped me achieve this milestone. First of all, I want to thank my study advisor Jackie van der Walle for the support in organizing the study program around my maternity leave where needed, and the student dean Sofie van Breemen, that helped (amongst others) with the application for the RU Fund that allowed me financial support. I am grateful towards the Radboud University for this aid and for the support and willingness of the Examination Committee and the teachers to allow for the necessary timeline adjustments due to my pregnancy.

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Without question there are two grandmothers, that need to be thanked here too. Dear Philine and Coleta, thank you so much for lovingly taking care of Mosa so that I could work. And of course, thank you sweet Mosa for always brightening up my day by interrupting long hours of typing out transcripts. I hope this research will contribute, if only a tiny bit, to help build your future in a world that is full of green, swaying treetops. And, dearest Menno, without your loving mental and practical support at home there would be no thesis at all. Thank you!

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Summary

This thesis investigates the role of ESG ratings and ESG indices in the investment decisions of Dutch pension funds. How do they influence investment behavior in order to choose for sustainable investment? An historical perspective is given on the development of 'ESG' in the context of sustainable investing. In the results asset managers, rating agencies and experts provide insight into the use and usefulness of these financial tools and share their expectations for future developments. The theoretical framework provides a basis to analyze sustainable investment behavior of Dutch pension funds into the different stages of Sustainable Finance, as explained by Schoenmaker & Schramade (2019). The findings suggest that ESG ratings and ESG indices influence the investment behavior of regular Dutch pension funds, in order to choose for sustainable investments, by determining what companies are included into their sustainable portfolios. And, that the largest Dutch pension funds do not lean on ESG ratings or ESG indices in decision making for sustainable investment. The theory is proposed that for Dutch pension funds, ESG ratings and ESG indices are currently perceived (by experts and users) to be of inadequate quality to measure the sustainable quality of companies, to base sustainable investment decisions on.

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1. Introduction

This thesis is written within the MSc program 'Environment and Society studies', following the 'Corporate Sustainability track' at the Management Faculty of the Radboud University Nijmegen. The research is conducted for the Dutch Association of Investors for Sustainable Development (further referred to as VBDO), through a research internship.

The grim truth is that the destruction of nature in terms of economic benefit from resources is starting to cost more in lost economic growth than it is contributing, amongst others in terms of biodiversity loss and climate change (Responsible Investor Magazine, 2020). The summer of 2018 was the hottest Dutch summer in three centuries according to Royal Dutch Meteorological Institute (KNMI, 2018). Mitigating the effects of the accompanied drought are estimated at 450 to 2.080 million euros in the Netherlands alone (Rijksoverheid, 2019). Meteorologists estimate a 50-75% chance that this year is on track to be the world's hottest since measurements began (Watts, 2020).

Climate change issues show the need to accelerate the transformations in our society towards a more sustainable model. However, the definition of what is sustainable, continues to be an academic discussion (Dobson, 1996). An often referred to approach is that of the Doughnut Economy, proposed by Raworth (2017), that explains that economic growth and social welfare should stay within the safety of the planetary boundaries, or the carrying capacity of the earth, to ensure that the needs of humans (now and in the future) can be met. In this thesis the UN Sustainable Development Goals (SDGs) are leading in defining actions that result in sustainable development, because they help normalize much needed social and environmental change and have the potential to become a powerful political vision (Camilleri & Camilleri, 2020; Hajer et al., 2015; Mawdsley, 2018). According to Pederson (2018) they can provide long-term guidance for investments and new business opportunities. The latter is key for this research, as it focusses on the financial industry, and the role of investors.

The Intergovernmental Panel for Climate Change (IPCC, 2018) stresses the decisive role of finance and professional investors in achieving the goals set in the Paris Agreement (SDG number 13 - Take urgent action to combat climate change and its impacts). This requires a major shift in investment patterns to limit temperature increase from pre-industrial level to no more than 2°C (IPCC, 2020). Yet, the current impact of climate change is already becoming a motivating force for investors today, who are learning to identify companies that are most prone to risk in terms of their impact on nature and their reliance on natural resources for their regular business activity (Responsible Investor, 2020).

Investors are increasingly seeking 'exposure' to sustainable strategies (OECD Observer, 2020), which means that they are trying to invest more in companies that have a sustainable strategy. The global increase of sustainable assets by 34%, since 2016, is illustrative of that. Interestingly in 2018, 46% of these assets were managed in Europe (OECD Observer, 2020). This means a lot of sustainable investment examples close to home. However promising, according to the UN (2019) the money available "is not yet channeled towards sustainable development at the scale and speed required to achieve the SDGs and the goals of the Paris Agreement." All countries that signed the Paris Agreement, legally bind themselves to fulfill their specific promise to reduce their emissions within a specific period of time (UN SDGs, 2020). The Dutch government has decided that in 2030 the emission of greenhouse gasses in the Netherlands needs to be reduces 49% (as compared to emissions emitted in 1990) (Klimaatakkoord.nl, 2020).

For defining the sustainability of their investments, investors increasingly look at how they align with the SDGs. Because, although the SDGs are not legally binding, countries do have the primary responsibility for follow-up and review of the progress made in implementing the 17 Goals, which will require quality, accessible and timely data collection (UN SDGs, 2020). The Dutch government facilitates multi-stakeholder partnerships that can tackle sector wide problems related to the SDGs, that no individual business can tackle on its own (SDGNederland.nl, 2020). As a result of this, the Dutch pension sector agreed on a covenant: the ‘Convenant Internationaal Maatschappelijk Verantwoord Beleggen Pensioenfondsen’ (Covenant for international societal responsible investment pension funds- or IMVB-Covenant). A promising development regarding their efforts for sustainable investing.

According to Mawdsley (2018) and the UN (2020), “financing for sustainable development is available, given the size, scale and level of sophistication of the global financial system.” The United Nations Principles for Responsible Investment (UNPRI) sees a responsibility for institutional investors to use their influence to foster long-term sustainable economic growth. In their own interest also, whilst pension funds themselves depend on the prosperity of the economy in the long-term (UNPRI, 2017). This thesis zooms in on Dutch Pension Funds. The Dutch pension sector is responsible for over € 1598 billion euro’s in assets under management (AUM) (Consultancy.nl, Global Pension Assets Study, 2017). These AUM could finance enormous sustainability opportunities. In addition, supplementing environmental, social and governance (ESG) information to the traditional risk analysis could enhance performance (VBDO, 2017). Dutch pension funds are well aware of the urgency, because they are expected and obliged by European law to map the climate risks in their portfolio (FD, 19). Also, Pension funds are responsible for securing the income of a large number of members who are increasingly expecting responsible behavior regarding the societal impact of the investments made with their money (Sievänen, Rita & Scholtens, 2013; Holtland & Höften, 2018).

When an investor wants to know if a business is sustainable in order to decide whether or not to invest in it, the trend is to look at ‘ESG factors.’ This can be done for example, by checking the ‘ESG rating’ of a company. This is an assessment on a wide range of criteria (more explanation about ESG ratings, in the next chapters). Sustainability ratings are developed because an increasing amount of investors want to invest in companies that conduct their business in a way that is aligned with principles of sustainable development, and it enables them to make well-informed investment decisions based on environmental and social aspects as well as economic performance (Balensiefer, 2019). The ratings are considered influential: “ESG data and ratings are a huge industry, as everyone will be needing it. So, it’s becoming mainstream” (Accounting Today, 2019). Considering this increasing importance of ESG performance, this thesis investigates the influence of ESG ratings on investment behavior. Because if you can influence these kinds of frameworks and add the right sustainability criteria, then you might be able to influence sustainable investment on a large (Petry, Fichtner & Heemskerk, 2019).

1.1 Problem definition

Fund rating agency Morningstar is tightening its ESG filters as it seeks to avoid a repeat of misclassifications last year (Cowie, 2020). They gave a high ESG score to a business with a lot of ‘exposure’ to controversial products, and thus that business should not have had such a high ESG rating. This incident is not a hiccup, as people in the financial industry as well as scholars formulate their worries about the misclassification of companies by ESG rating agencies (ETF Stream, 2019; Doyle, 2018). There is more criticism in the field. For example, Rob Stewart, head of responsible investment at Newton Investment Management (a large UK based asset manager), writes that ESG ratings suggest exactness, but in reality, look more like a black box (FD, 2019). Mooij (2018) explains that there is no consensus among practitioners on what ESG actually means. Berg, Koelbel and Rigobon (2019) find that ESG-scores diverge hugely between different rating agencies which is confusing for investors. They see that this divergence poses a challenge for empirical research too and also forms an obstacle for “prudent decision-making that would contribute to an environmentally sustainable and socially just economy” (Mayor, 2019). Schoenmaker & Schramade (2019) write in their book ‘Principles of Sustainable Investment’ that ESG ratings have a number of limitations in their design and that they require improvement. According to them, ESG ratings should not even be used as a definitive assessment of a company's sustainability qualities, but rather as a starting point for such an assessment. These findings are worrisome because ESG rating providers like Morgan Stanley Capital International (MSCI) and Sustainalytics, have become influential institutions that inform a wide range of decisions in business and finance (Berg, Koelbel and Rigobon, 2019; Boyle, 2018). Accounting Today, a professional magazine that deals with the accounting profession, also confirms that ESG scores can "play a key role in determining whether fund managers buy a stock, how much companies pay on loans and even if a supplier bids for a contract" (Accounting Today, 2019).

Implausible ESG ratings also pose a serious problem for VBDO, who strives to endorse investors to integrate ESG in their investment strategy to invest for sustainable development (VBDO, 2017). They too, signal doubt amongst their members about the credibility of these ratings. On top of that, an increase in passive investment is at hand (Petry, Fichtner & Heemskerk, 2019). Unreliable ESG scores are an even bigger issue there. Because passive investing means that investors merely influence which companies enter their portfolio or not. They just follow a prefabricated list: an index. An example of this is the MSCI Europe ESG Leaders Index, which provides a set list of companies with high ESG performance relative to their sector peers (MSCI, 2020). But if the ESG ratings, on which such a list is based, are not fully reliable regarding actually indicating sustainability performance, then the whole index is unreliable.

1.2 Research aim and research questions

VBDO endorses financial institutions and listed companies to improve their performance in areas of sustainable investment, for example by advising on implementing ESG policies. The aim of this research is to develop insight in the character and use of ESG ratings by Dutch pension funds. This could help understand how ESG ratings influence their decision making when they try to make sustainable investments choices. And thus, to what degree flaws in ESG design define and might compromise their sustainable investment efforts.

The main research question is: **How do ESG ratings and ESG indices influence the investment behavior of Dutch Pension Funds, in order to choose for sustainable investment?**

The main research question is broken down into four sub-questions:

1. **Why and how are ESG ratings and ESG indices used in the decision-making process by institutional investors?**
2. **If so, how do institutional investors and ESG data providers mutually influence each other?**
3. **How do ESG ratings and ESG indices influence the path and development of sustainable investments in the short-term?**
4. **How do ESG ratings and ESG indices influence the path and development of sustainable investment in the long-term, and what improvements are needed in the ESG field (in order for it to contribute to sustainable investment)?**

1.3 Scope

The scope of this research is the investment behavior in the European context by Dutch institutional investors, and primarily pension funds. The time horizon starts from the rising popularity of the abbreviation 'ESG', around the year 2000, in order to provide a historical perspective. The scope of the time horizon also includes recent developments in the ESG field worldwide. To get an idea how the industry might develop, respondents are asked about their thoughts on, and expectations of the development in sustainable investing.

To demarcate the subject so that it is feasible within the set time and meets the requirements of the study program, the research is limited to ESG ratings and ESG indices. Another reason to choose for these specific financial tools is that ESG ratings and ESG indices are widely used, accepted and described in both the financial field and in academic writing. This does limit the research by excluding other types of sustainability measuring tools and assessments available to investors.

There are three types of respondents selected: experts, asset managers and (ESG) rating agencies. There is only one asset owner amongst the respondents because asset owners generally outsource the execution of their sustainable investment policies to asset managers. Further explanation about this dynamic will follow in chapter 3 (Theoretical framework).

1.4 Scientific and societal relevance

Schoenmaker & Schramade (2019) say that the financial system is instrumental in achieving the much-needed transition to a sustainable economy. Steckel et al. (2017) emphasize that to tackle the societal issues, academics should focus on better understanding the spending side of finance for sustainable development. More specifically, there is a gap in understanding how sustainability indices are used in corporations (Searcy and Elkhawas, 2012). Regarding ESG ratings and ESG indices, there is no umbrella organization that monitors the use and to discuss what variables should be used to determine ESG. Searcy and Elkhawas (2012) note that, while there is a growing body of literature that focuses on sustainability indices, relatively little is known about how they are used in practice. This research is an effort to investigate the use and by this, hopes to make a humble contribution to closing a small part of this gap in the scientific literature.

The societal relevance of this topic is that the research tries to gain understanding how ESG issues can be tackled by large investors like pension funds through their investments. And that is necessary because, “conventional pension fund investment strategies usually fail to bring ESG issues sufficiently into account in making investment decisions” (Woods and Urwin, 2010). Lastly, the UNPRI finds that institutional investors, and thus pension funds, have a specific interest and responsibility for safeguarding economic and social wellbeing in the future (Slebos & MacKenzie, 2017).

2. Historical perspective

This chapter explains the historical context of ESG issues and of investment efforts for sustainability in general. On top of the academic literature and grey literature, relevant remarks of respondents are included to connect to the current developments in the investment world. A few relevant initiatives are introduced, and examples are provided of sustainable investments up to recent times.

2.1 Historical development sustainable investment

Sustainable investment is relatively new. However, its origins go as far back as 1688, when the Quakers decided to exclude companies that were involved in slavery, because they found it unethical to profit from slavery (Harkema & Tros, 2019). Churches also adopted this approach early on, excluding companies on the basis of their belief system, for example excluding companies that were producing or selling alcohol.

Exclusion based on normative and ethical values, is still a widely used investment strategy. It is the most basic form of sustainability integration and it is seen as the traditional approach (Schoenmaker & Schramade, (2019). Today, it is mainstream practice for funds and asset managers to exclude typical 'sin stocks.' For example, controversial weapons, tobacco, companies that have a record of UN Global Compact violations, human rights violations, whaling and environmental pollution (Schoenmaker & Schramade, 2019). This means, at the very least, that their sustainable investment strategy involves the 'exclusion' of these stocks. Not only on ethical grounds, but also to avoid the risk of reputation damage that comes with being associated with these controversies.

An illustrative contemporary example of this approach is the exclusion list of PGGM (2020), that (amongst many others) excludes the company Poongsan Corp (South Korea) from its portfolio, because they produce cluster bombs. Here Table 1. Shows the first 9 items of their exclusion list, to give the reader an idea of what sort of companies nowadays are being excluded from a portfolio. Some exclusions are based on prohibitions by law, others are on the basis of exclusion criteria set by PGGM (Interview 14).

TABLE 1 EXCLUSIONLIST EXAMPLE, PGGM (2020)

Company	Country	Reason for exclusion	Exclusion date
22nd Century Group Inc	USA	Tobacco	1 January 2019
AECOM Technology Corporation	USA	nuclear weapons	1 January 2015
Aerojet Rocketdyne Holdings	USA	Munitions with depleted uranium and nuclear weapons	1 July 2015
Airbus Group	Netherlands	Nuclear weapons	1 January 2008
Aleqbal Investment Co PLC	Jordan	Tobacco	1 July 2013
Altria Group Inc	USA	Tobacco	1 July 2013
Babcock International	United Kingdom	Nuclear weapons	1 July 2010
BAE Systems	United Kingdom	Nuclear weapons	1 January 2008
Bharat Dynamics Limited	India	nuclear weapons	1 March 2020
…			

From the 1970's onward, Corporate Social Responsibility (CSR) gained high priority, due to societal pressure and legislation (Harkema & Tros, 2019). Because only avoiding investment in companies that had a bad reputation was no longer enough. More attention was drawn towards the environmental risks posed by companies due to several environmental pollution scandals. For example, in the US investors and environmentalists mobilized in response to the Exxon Valdez oil spill in 1989 (Harkema & Tros 2019). This group started to re-evaluate the role of enterprises and their responsibilities towards the environment under the name Ceres (Ceres, 2020). They are the first of many initiatives to promote sustainable investment practices in reaction to societal issues.

2.2 More recent developments in sustainable investment

The reality of what sustainable investment behavior is evolves. Today we see a growing number of sustainable and responsible investment (SRI) initiatives that are triggered by (amongst others) the Paris Climate Agreement and the UN's 2030 Agenda for Sustainable Development (which includes the SDGs), as well as a growing public concern about climate change, that altogether drive financial flows towards ESG oriented investment strategies (OECDObserver.org, 2020).

Relevant sustainable investment initiatives for this study, are for example the UNPRI on the European level (UNPRI, 2020), VBDO on the (Dutch) institutional level (VBDO, 2020) and the IMVB-Covenant for Dutch pension funds on the sector level (SER, 2018). These initiatives are relevant because in this research all of the respondents are signatories or members of at least one of these three initiatives. To understand what this means for their sustainable investment behavior and motives, the three initiatives are introduced in more detail. It is good to keep in mind that all the initiatives are on a voluntary basis, which means that there are hardly any consequences for the members or signatories, if their goals are not met.

2.2.1 The UNPRI on institutional investment

The UNPRI has launched multiple initiatives of great value for fostering sustainable finance. Here, a few will be discussed that particularly concern ESG factors and pension funds. In 2005, the UN defined what responsible investment by institutional investors should look like, accompanied with action plans. A set of six principles was formulated (see Table 6). It was the first time that the UN engaged with institutional investors at all and it was perceived to be a big step towards reaching the SDGs (UNPRI, 2020). These principles were further developed. Around the year 2007, a database of information on responsible investment and best practice examples was set up to help UNPRI signatories to implement the principles into practice. After the financial crisis in 2008, the UNPRI's board published a statement towards institutional investors. They wanted them to help restore the trust and confidence in the financial markets by embracing responsible investment (UNPRI, 2020). In 2013 the UNPRI focused on improving the alignment between asset owners and asset managers. A report was written on, a.o., how pension funds were incorporating ESG factors into their selection, appointment and monitoring of asset managers (UNPRI, 2020). It showed that pension funds and other asset owners were advanced in making sure that their asset managers met the set ESG expectations (UNPRI, 2020).

Another relevant initiative of the UN was that in 2015 the UNPRI's board launched a report on the fiduciary duty of institutional investors. The reason was that asset managers often used outdated arguments to not take into account ESG factors into their decision-making process. They claimed that it was no factor, because it was a non-financial indicator that was therefore not consistent with their fiduciary duty (UNPRI, 2020). Investors have a long track record of disregarding social factors and environmental factors as negative externalities which can be ignored for purposes of investment decisions (Hawdley and Williams, 2002). The new report however, found that the fiduciary duty is not an obstacle to asset owners' action on ESG factors (UNPRI, 2020). The UNPRI was convinced that, and recommended that, asset managers and asset owners plus other players in the field, all need to take action on ESG issues, to really implement it on a global scale and move towards a sustainable financial and economic system (UNPRI, 2020). More about the 'fiduciary duty' of pension funds in chapter 3 (Theoretical framework), section 3.1.2.

TABLE 2 UN PRINCIPLES OF RESPONSIBLE INVESTMENT (UNPRI, 2020)

Number	Principle
Principle 1	We will incorporate ESG issues into investment analysis and decision-making processes.
Principle 2	We will be active owners and incorporate ESG issues into our ownership policies and practices.
Principle 3	We will seek appropriate disclosure on ESG issues by the entities in which we invest.
Principle 4	We will promote acceptance and implementation of the Principles within the investment industry.
Principle 5	We will work together to enhance our effectiveness in implementing the Principles.
Principle 6	We will each report on our activities and progress towards implementing the Principles.

2.2.2 VBDO

VBDO is the Dutch Association of Investors for Sustainable Development. The association exists for 25 years in 2020 with the sole purpose to make the capital markets more sustainable. It's member-network represents almost 80 institutional members, including the largest Dutch pension funds, insurance companies and asset managers. It is part of a global network of sustainable investment initiatives. It for example affiliated with the European Responsible Investment Network (a network of European NGOs), the European Organization of Sustainable investment (for promoting a sustainable European financial market), and the Global Sustainable Investment Alliance (EUROSIF) (VBDO, 2020). VBDO publishes benchmarks regarding for example the sustainable investment of Dutch pension funds and insurance companies. Also, it offers engagement, knowledge sharing, testimonials and information about sustainable investment. It is a driver for knowledge building on sustainable and responsible investment themes, certainly also regarding ESG practices.

2.3 Current developments in sustainable investment

The development of sustainable investment practices is, next to the ethical and risk associated reasons described above, also influenced by the debate on the business case for sustainable investment.
The 'Algemeen Burgerlijk Pensioenfonds' (ABP), the largest Dutch pension fund, says that it "is convinced that sustainable and responsible investment and good returns can go hand in hand" (ABP, 2018). But earlier days, there was a lot of skepticism towards sustainability and financial performance. Friede, Busch & Bassen (2015) show in the largest meta-study in the field "that the business case for ESG investing is empirically well founded," and that ESG investments have a stable, positive return.[1] Today, for an increasing number of investors, the skepticism has gone. Actually, regarding professional investment by companies in general, sustainability has gained a lot of momentum and companies change their behavior accordingly, because they don't want their shareholders to stop financing them (Interview 12). This does not count for all investors though. In the 'investment world' there is a dominant corporate culture of 'finance as usual', that accepts and encourages unsustainable investments as long as you 'can get away with it', and still frames sustainable investment overall as 'too much of a hassle' and only deal with it once it is mandatory (Interview 6).

Twenty years ago, companies could get away with oil spills and fraud, and so did their investors (Interview 12). According to Schoenmaker & Schramade (2019), nowadays the asset owners and the public no longer have any tolerance for controversies to be linked to their portfolio. This is because

1"Research has shown that companies with higher ESG-ratings tend to be more profitable and they have less incidents of risks. In the past a lot of investors thought that incorporating ESG meant a sacrifice in performance but overall ESG indices have performed in line with market cap indices (Interview 2)."

when controversies happen, they are so mediatized that there is no escape from the public opinion that strongly holds investors accountable (Interview 2). Association with controversies can seriously harm the reputation of a firm, driving investors away. Here ESG-rating agencies play a meaningful role. For example, if Shell causes an oil spill, a so-called controversy screening done by for example Sustainalytics, picks up on all the messages about it in the media, and adjusts ESG-scores of Shell accordingly (Interview 12). From 2000 onwards, companies have increasingly integrated ESG aspects in their investment policies as part of Corporate Social Responsibility (CSR) behavior (Boubaker, Cumming and Khuong Nguyen, 2018). Investors and the public now realize that "from an investment perspective, oil firms can be a good investment (great safety and governance, even high ESG-scores) but from a normative point of view it might be a bad idea" (Interview 17). That is an interesting observation because how is it possible that on normative basis, one would assume that oil firms are not a sustainable investment, but in reality, these firms can get a high ESG scores?

This chapter showed how the sustainable investment field is maturing, it is becoming a commodity for a growing number of institutional investors to take into account sustainability factors in evaluating what companies will be part of their portfolio. Taking into account environmental, social and governance factors is a popular approach to do this. The next chapter, chapter 3 (Theoretical framework), discusses in more detail how these ESG factors are taken into account in practice and how this relates to the academic discussion of what sustainable investment entails.

3. Theoretical Framework

In this chapter we build on the context provided in the historical perspective. The background of this study is 'Environmental sciences.' The subject, however, requires more in-depth knowledge about some financial topics. As much as possible, relevant knowledge was obtained during the literature research beforehand and also later in the process during the interviews. To help the reader who is not familiar with some of the financial aspects of the study as well, this theoretical framework also includes explanations and commentaries by respondents for clarification.

3.1 Relevant concepts

In this section, relevant topics are explained like 'ESG ratings', 'ESG indices' and 'sustainable finance'. This also functions as the operationalization of these topics for the research. For starters 'ESG factors' are explained, then the role and function of both the Dutch pension fund as an asset owner, and the role of the asset manager as the financial expert, are discussed. This section ends with the Conceptual framework, to discuss the variables and to visualize the relations between the relevant actors.

3.1.1 ESG - Environment, Social and Governance

The term 'ESG' gained momentum in 2004, when former UN Secretary General Kofi Annan wrote fifty CEO's of major financial institutions, to join the UN Global Compact. The goal was to integrate ESG factors into capital markets. This led to the founding of for example the initiative we now know as the UNPRI. Fast forwards in 2008, a quarter of all professionally managed assets around the world consist of ESG investments (Kell, 2018). This rapid increase can be explained by the fact that after the financial crisis the financial sector started to use ESG analysis more to win back the trust of the consumer. ESG investments provide more transparency. The investors who did not know about ESG analysis asked intermediaries to quantify their ESG performance: the ESG rating agencies. These could for example say, "this company is A+, and that company is C- compared to other companies in the sector" (Interview 9, Interview 17).

Relevant ESG issues that are taken into account on the company level are (Schoenmaker & Schramade, 2019):

- Environmental issues: climate strategy, greenhouse gas emissions, water, land use, reuse of raw materials, environmental management, and product stewardship.
- Social issues: human capital (employees), health and safety, management, culture, management of local stakeholders, social issues in the supply chain, brands, and trust.
- Governance issues: ownership structure, management compensation, voting structure and rules, business ethics and a supervisory board.

The reason for investors to take into account ESG factors is broken down by MSCI Inc. as follows:

1. "Values-based investing: where the investor seeks to align his portfolio with his norms and beliefs.
2. ESG integration: where the key objective is to improve risk-return characteristics of a portfolio.
3. Impact investing: where investors want to use their capital to trigger change for social or environmental purposes, e.g. to accelerate the decarbonization of the economy" (Giese et al., 2017).

ESG investing is based on the assumption that ESG factors have financial relevance and that it is vital in understanding companies in a portfolio regarding their purpose, strategy and management qualities (Viviers, Suzette & Eccles, 2012; Kell 2018). This is widely acknowledged, shows the prediction of the Deutsche Bank, that in the coming 10 years more money will flow towards businesses with high ESG scores (Interview 18).

ESG ratings

There is a difference between a credit rating, an ESG index and an ESG rating. A credit rating is necessary for a company that issues bonds. An index is ‘a selected group of shares.’ And lastly, ESG ratings rate a company and influence the content of ESG indices. ESG ratings are different from ‘normal’ credit ratings, that make an estimate of the creditworthiness of a company or a listed investable instrument. Listed businesses (beursgenoteerde bedrijven) are in some cases obliged to get a credit rating (if they want to issue bonds for example), this is not the case with ESG ratings, they are done on a voluntarily basis (Interview 6; Interview 17). When an investor or ‘an assessor’ applies ‘ESG’ variables to an investment portfolio, this can be of influence on the creditworthiness the companies that are in that portfolio. In that manner ESG ratings can influence the investment behavior of a company, because companies need capital of lenders and investors. A pension fund can be both a lender and an investor.

There are various ESG related products on the market, such as those that screen out companies based on international ethical norms or on the basis of ESG scores, or those that take a ‘best-in-class’ or thematic ESG approach (Interview 10, Interview 12). In short, ESG rating agencies analyze the risk of investing in a company on the long-term from an investor’s perspective, assessing the exposure of companies to material ESG factors, these factors are sector specific (material ESG factors are explained on page 20) (Interview 12, Interview 17). The Senior Manager Business Development & Investor Relations at Triodos Investment Management, explains that an ESG assessment can give additional information on an investment, giving a heads-up about a non-financial risk that could become a financial risk, with negative influence on the value of the investment (Interview 6).

There are multiple ways to measure the ESG performance of a company. Each ESG rating agency uses a different methodology, different criteria and different weighting- and scoring systems (Berg, Koelbel and Rigobon, 2019; Schoenmaker & Schramade, 2019). It can for example differ, to what extent subcontractors are included in the calculations, or what weight is assigned to the different criteria. These differences originate in the diverse starting points and historical developments of the rating agencies. For example, Sustainalytics is a combined research office of Dutch and Canadian origin, traditionally focusses on company assessments regarding ESG-risks and controversial behavior (Sustainalytics, 2020). MSCI is a US based rating bureau that bought ‘KLD Sustainability Research’ to provide ESG ratings and ESG related indices, it focusses on climate change-solutions (Harkema & Tros, 2019).

The assessments of the largest agencies that provide ESG and/or sustainability ratings and ranking reach companies all over the world. Here the most recognized ESG rating agencies are introduced, to give the reader an idea of what is on the market, and how it is marketed.

TABLE 3 RELEVANT SUSTAINABILITY- AND ESG DATA PROVIDERS

Name	Information
Ethifinance	This rating bureau assists with the implementation phase of ESG management and sustainability goals. It focusses on both investors and companies (Ethifinance, 2019). Another product that they offer is an analysis on the ESG performance of small- and medium sized businesses (Harkema & Tros, 2019).
FTSE Russell	FTSE Russell is the organization behind the London Stock Exchange. On their website however, they profile themselves as a global provider of benchmarks, data solutions and analytics (FTSE Russell, 2019). For sustainable investors, they also offer ESG products and data about the revenue of 'green' products (Harkema & Tros, 2019).
Inrate	Inrate provides ESG Impact ratings. Up to 3500 companies are checked by them regarding their sustainability policies and also regarding the sustainability of the products or services the company offers (Inrate 2019; Harkema & Tros, 2019).
ISS (Institutional Shareholder Services Inc)	ISS offers a combination of both sustainability ratings and active ownership activities like voting and engagement with the companies in the portfolio. Additionally, they offer a service module for professional investors and asset owners that ranges from the design of sustainability policies and for reporting about governance recommendations (ISS, 2019; Harkema & Tros, 2019). They are the most frequently used of all by institutional investors (Interview 6).
MSCI	MSCI is a rating agency that primarily makes ESG ratings, ESG indices and climate change risk assessments (MSCI, 2019). Their purpose is, so they say, to strive for an increase of transparency in the financial market, to foster better decisions-making by investors (Harkema & Tros, 2019).
RobecoSAM	RobecoSAM offers ESG assessments, indices and active ownership and engagement products. They are also asset managers with which they have an approach to integrate ESG factors (RobecoSAM, 2020).
Sustainalytics	Sustainalytics is a research bureau that analysis businesses on ESG risks. It checks for controversial products and controversial behavior by corporates (Sustainalytics, 2019). Because of their Dutch roots, a lot of Dutch investors make use of the business information on sustainability provided by Sustainalytics (Harkema & Tros, 2019).
Thomson Reuters	Thomson Reuters is a well-known data providing company. It collects and sells sustainability data from 2002 onwards (Harkema & Tros, 2019). Their core business is assisting companies regarding law, tax, compliance, government and media (Thomson Reuters, 2019).
Vigeo Eiris	This rating agency originally began as a research desk that excluded businesses on behalf of their business activities. Now, they offer ESG products and ratings for companies with a focus that lies primarily on ethics and responsible behavior (Vigeo Eiris, 2019). To give an idea about the size of this rating agency: they employ 150 analysts that following 4500 companies (Harkema & Tros, 2019).

Data collection for ESG ratings

ESG scores are based on public disclosure. Most information is collected through AI and Natural Language Processing. Key words are identified to search the internet and collect the most up to date information on companies from for example in year reports, various news sources and policy documents (Interview 12). This can no longer be done manually simply because there is too much data available. Some agencies send out (extensive) surveys to collect extra information on companies ESG-performance too (Interview 2, Interview 3, Interview 12). Data can be outdated or otherwise incorrect, that is why there are feedback opportunities for companies. For example, if a company has a low score, but can publish an updated report with additional ESG data, the rating can be adjusted accordingly (Interview 12, Interview 17). These feedback opportunities are valuable because in some cases it could prevent exclusion. It is important that everyone has access to the same and correct data, because asset managers make decisions with the clients' money, based on these data (Interview 12, Interview 17).

ESG indices

Index builders often buy their data from ESG rating agencies to build their ESG benchmark(s). For example, the MSCI ESG Leaders Index is a selection of companies within each sector, but only the top 50% of these companies with the highest ESG ratings are included in the index (Interview 2). Investors can choose to follow such a list instead of selecting all the companies for their portfolio themselves.
Over 90% of asset managers (active fund managers) are not able to 'beat' an (ESG) index against which their funds are benchmarked over a longer period of time (Interview 5, Interview 7). This means that by manually picking out the companies to invest in, they never have the same financial return as they would, following an index (Interview 2, Interview 5, Interview 6, Interview 18, Interview 19). In relation to passive investments institutional investors are increasingly drawn to following indices from a costs point of view – it is simply much cheaper (Interview 5, Interview 6). The most used providers to help construct ESG indices are: MSCI, S&P and ISS. MSCI is the world's largest ESG Index provider (MSCI, 2020). They have their own ESG ratings to base these indices on. S&P (Standard and Poor) is the organization behind the Dow Jones Index. They offer the 'S&P 500 ESG Index'. They use third party data that is offered by RobecoSAM to make the index (S&P, 2020). Only recently ISS also started offering ESG indices, they do this to "allow investors to identify, benchmark, and track portfolio companies with superior environmental, social, and governance performance" (ISS, 2020). Lastly, Morningstar Inc. is also an influential financial service provider, they too offer sustainability indices based on the ESG data provided by Sustainalytics (Morningstar Inc., 2019).

Material ESG factors

Rating agencies focus on material ESG factors. Material ESG factors are ESG factors that are of financial relevance to the company. For example, ExxonMobil could stop printing on paper but that would not have a big effect on them financially. What would have a financial effect is when they would stop extracting coal. In more detail, how much of their energy mix is coal driven will determine the size of the material impact. Institutional investors are obliged to take into account the material ESG factors (European Commission, 2017).

3.1.2 How Dutch pension funds invest, and the role of asset managers

Pension funds are institutional investors that have to answer to specific regulation, that differ from regulations for regular investors. This has an influence on their investment behavior and in some cases limits their investment options. To begin with, pension funds are liability driven investors. This means that they are steered by their obligations to pay out pensions. 'De Nederlandse Bank' (DNB), the financial supervisor of Dutch pension funds, obliges that they need to have a large reserve of money available at all times and must meet minimum return criteria for their investments to secure they can pay out pensions at all times (DNB, 2020). Also, they are obliged by law to restrict their investments within a range of credit rating scores, investments need to have a score of AAA to BBB-, given by approved credit rating agencies (Pensions Europe, 2016).

All pension funds in the European Union need to answer to the Institutions for Occupational Retirement Provision (IORP-II) (Pensions Europe, 2016). This directive requires them to be transparent and explicitly about whether and how ESG factors, and the long-term impact of investment decisions on ESG, are taken into account. This could also mean, that they provide the information that ESG factors are not taken into account. The risk assessments also have to include risks on climate change (Pensions Europe, 2016). Regulations from the EU regarding investments directly influence the investment behavior of Dutch pension funds. The EU proposed the EU Green taxonomy, a taxonomy for sustainable economic activities. They are in the process of "developing recommendations for technical screening criteria for economic activities that can make a substantial contribution to climate change mitigation or adaptation, while avoiding significant harm to the four other environmental objectives: sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention control, and protection and restoration of biodiversity and ecosystems" (EU, 2020). How this taxonomy will influence the sustainable investment behavior of Dutch pension funds, is not yet clear.

All institutional investors operate under rules for fiduciary management, including pension funds. This means for example that asset managers must be transparent to their stakeholders about their fees, all third-party costs and what incentives they use, and they must explicitly report their investment beliefs to their fiduciary manager, according to the Dutch Fund and Asset Management Association (DUFAS, 2015). Investors do this through their investment policies. According to a Responsible Investment & Governance Specialist at the asset management of one of the largest Dutch pension funds (Interview 13), a sustainable investment policy could include rather vague phrasing like 'investments need to be done with the human rights lens'. It is the job of the asset manager, to translate these kinds of objectives into practical solutions for the investment portfolio and when approved, to implement that on behalf of the asset owner. The asset managers have the financial 'know how'. They are the ones proposing and selecting appropriate financial tools (like for example ESG ratings) to implement in the sustainable investment procedure.

The Dutch pension funds that are part of this study, are all affiliated with the 'Pensioenfederatie'. The 'Pensioenfederatie', together with the Economical Council of the Dutch government (SER) and multiple NGOs, wrote the "Convenant Internationaal Maatschappelijk Verantwoord Beleggen Pensioenfondsen" (Covenant for International Societal Responsible Investment Pension funds). Here they agree to, a.o., follow the definition of ESG policies and ESG risks that is described by the SER (2018). Which states that ESG policies are policies in which responsibilities, commitments and expectations regarding environmental, social and governance factors are described. It also includes good corporate governance. ESG risks are explained as risks that have unfavorable effects on society and the environment. Also, by affiliating with this covenant, pension funds agree to include the SDGs into their policies (SER, 2018).

Lastly, the Dutch pension-fund system is obligatory for most occupational sectors: if you work in healthcare, you have to have your pension at 'Pensioenfonds Zorg en Welzijn' (PFZW). Nurses for example, cannot choose to go for another pension fund. This underlines the responsibility of in this case PFZW, to prioritize paying out pensions over for example sustainable investment. On the other hand, it also offers security for asset managers because they always know how much money there is to manage and all that money can be managed under the same agreement, explains a Senior Advisor Responsible Investment at PGGM Investments (the asset manager of amongst others PFZW) (Interview 14). So, pension funds as large as PFZW, have a predictable amount of resources whereas a commercial asset manager has different agreements for each portfolio he manages (Interview 14). This shows that the factor 'size' might be of influence for the (sustainable) investment behavior.

3.1.3 Defining sustainable finance and sustainable investment

In order to know what a future proof investment is, investors need to have an idea of what sustainable business behavior looks like for themselves. Or at least that they have an idea of what controversial behavior of companies looks like. "A very direct and straightforward determination of controversial behavior, of a moral compass, is if you would tell your mother you were involved in something, and you already know she would disapprove" (Interview 6). Unfortunately, not all investors have their moral compass switched on. This section discusses what sustainable investment looks like according to the literature. Starting off with explaining the broad context of Sustainable finance. The framework that is presented, is used in the methodology to help analyze the data obtained through the interviews.

Sustainable Finance includes the idea that finance (investing and lending) interacts with economic, social, and environmental issues (Schoenmaker, 2019). This is crucial "because at a very basic level, the competitiveness of a company and the health of the communities around it are closely intertwined" (Porter & Kramer, 2011). A selection from academic literature on sustainable investment and what terminology is used to describe it, shows a variety of terms to refer to sustainable investment: Socially Responsible Investment (SRI), Responsible investment (RI), Sustainable investment (SI) and ESG investments (ESG). There is an extensive terminological debate on the definition and name for sustainable investment practices (Woods and Urwin, 2010). 'SRI' has become the 'umbrella concept' according to Sethi (2005), in Woods and Urwin, (2010). SRI includes persuading investors to align ethical and financial concerns and to improve a company's ESG performance (Renneboog et al. 2008; de Colle and York 2009; in Trinks and Scholtens, 2017).

This research will primarily use 'sustainable investment' or 'responsible investment', not following on the consensus in the academic discussion. The reason for this is that 'sustainable investment' and/or 'responsible investment' are used most often in the financial professional literature to describe SRI. And thus, that term is also widely represented in the data obtained via the interviews. Therefore, it contributes to the overall understandability of the thesis to use these terms as well.

In literature, various frameworks are proposed to define sustainable finance and sustainable investment. Woods and Urwin (2010) for example, put forward a sustainable investing framework for Anglo-American pension funds that is based on the UNPRI. The framework is presented in Table 4. Here you see that they identify 3 strategies of successfully implementing a sustainable investment strategy. Strategy A is characterized by investment with short-term targets that fail to take ESG issues into account and for example following indices. Strategy B is a focus on longer-term investments, with the integration of ESG issues into the analysis of the portfolio, in decision-making and possibly also in engagement activities. Woods and Urwin (2010) say that strategy B outlines the current sustainable investment strategy of pension funds. They also illustrate a third strategy: Strategy C, which builds on strategy B and additionally involves investments specifically targeted on sustainability themed products. It is a form of 'inclusion' where sustainable companies are selected for the investment portfolio instead of the investor only excluding unwanted companies.

The framework of Woods and Urwin (2010) is similar to a more recent framework that is proposed by Schoenmaker & Schramade (2019). They too describe three stages of sustainable finance. In fact, they also include the 'Finance-as-usual' stage, and then 3 stages of Sustainable finance follow: Sustainable Finance 1.0 (SF 1.0), Sustainable Finance 2.0 (SF 2.0) and Sustainable Finance 3.0 (SF 3.0) (see Table 5). Further along in this section, the typologies will be explained in depth.

TABLE 4 COMPARISON OF CONVENTIONAL AND SUSTAINABLE INVESTMENT - PENSION FUND INVESTMENT STRATEGIES BY WOODS AND ULWIN (2010)

Conventional investment strategy (Strategy A)	• Performance benchmark and therefore investment focus based on short-term time horizons • High degree of delegation of ownership interests to managers
SI strategy (Strategy B)	• ESG issues integrated into investment decision-making and analysis including active ownership • Managers given specific instructions with respect to ESG integration and the exercise of ownership interests • Performance benchmarks and therefore investment focus based on longer-term time horizons
SI extended strategy with targeted investments in sustainable areas (Strategy C)	• Strategy B components, plus: • Investment in environmentally targeted investment, such as clean technology ventures and other sustainable themes

TABLE 5 FRAMEWORK FOR SUSTAINABLE FINANCE (SCHOENMAKER & SCHRAMADE, 2019)

Sustainable Finance Typology	Value created	Ranking of factors	Optimisation	Horizon
Finance-as-usual	Shareholder value	F	Max F	Short term
Sustainable Finance 1.0	Refined shareholder value	F >> S and E	Max F subject to S and E	Short term
Sustainable Finance 2.0	Stakeholder value (triple bottom line)	I = F + S + E	Optimise I	Medium term
Sustainable Finance 3.0	Common good value	S and E > F	Optimise S and E subject to F	Long term

Note: F = financial value; S = social impact; E = environmental impact; I = integrated value. At Sustainable Finance 1.0, the maximisation of F is subject to minor S and E constraints.
Source: Schoenmaker (2017).

The framework of Schoenmaker & Schramade (2019) seems most fitting to determine whether investment behavior adds to sustainable development. Whilst the above two frameworks overlap in some areas, there are some relevant differences too. Strategy A of Woods and Urwin (2010) corresponds with SF 1.0 on various point like Exclusion, a Short-term horizon and the sole priority on Financial value. Also, SF 2.0 and Strategy B overlap partly. However, Schoenmaker and Schramade (2019) incorporate Social impact to the equation, because they argue social issues can be material.

Woods and Urwin (2010) focus on pension funds that are Anglo-American, whereas Schoenmaker & Schramade (2019) write from a Eurocentric perspective, which is also the perspective of this study. Also, Schoenmaker & Schramade (2019) take a much broader approach to the context of sustainable finance which fits better with the background of this research within the educational program 'Environment and Society Studies'. Another argument to choose Schoenmaker & Schramade over Woods and Urwin (2010) is, that the latter is more dated and therefor might not take into account new developments in the field. Lastly, the clear determination of tools for the different sustainable finance stages of the framework proposed by Schoenmaker & Schramade (2019) provide a helpful guide for this research to analyze the data. These financial instruments are presented in Table 6 and will be discussed in chapter 4 (Methodology).

3.1.3.1 SF Typologies

Here the four typologies of SF are discussed more in-depth. Also, relevant financial tools or strategies that fit with these typologies is included.

Finance-as-usual

'Finance-as-usual' is the traditional approach in finance where "the business of a business is business and the only social responsibility of corporates is to increase profit by staying within the rules of the game" (Friedman, 1970; Porter & Kramer, 2011).

Sustainable Finance 1.0

SF 1.0 is slightly different. "Business success is still evaluated from a purely economic point of view and remains focused on serving the business itself and its economic goals" (Dyllick and Muff, 2016; in Schoenmaker, 2019). It focusses on the short-term perspective and return maximization, at the cost of S (social) and E (environmental) while avoiding 'sin' stocks (see Table 6) (Schoenmaker & Schramade, 2019). Dutch pension funds partly use this approach too. Institutional investors as large as for example APG (the asset manager of the largest Dutch pension fund ABP) invest in such a vast number of companies that they inevitably are confronted with 'every problem of the world' represented in their portfolio. What they do to avoid investing in the worst companies is, they exclude predetermined types of companies from their 'investment universe' (the pool of companies they will choose from for in their portfolio). In this way they try to avoid investing in companies with a negative impact. How does this work in practice? To help investors determine companies to exclude (ESG) rating agencies offer specific indices or screening. They check to what extent companies are, via their activities or via ownership relations linked to controversial activities (UN Global Compact, 2020). As discussed before, Exclusion is the most basic form of sustainability integration in investment and is widely used nowadays to avoid financial risks (Schoenmaker & Schramade, 2019).

Sustainable Finance 2.0

SF 2.0 comes in different shapes and forms. Financial institutions explicitly incorporate the negative externalities regarding social and environmental issues in decision-making by for example using the triple bottom line (Schoenmaker & Schramade, 2019). It is often referred to as 'ESG integration'. Another aspect of investment behavior in the SF 2.0 typology is the use of engagement or being an 'active owner'. These two topics will be explained here, because the result show that they are of importance and are linked to ESG ratings and ESG rating agencies.

ESG integration means expanding the value creation by integrating environmental, social and financial stakeholders. The motivation is to analyze the risk of investing in a company on the long-term from an investor's perspective. Many asset managers use this approach because it does not have negative financial consequences and at best even provides some positive financial consequences. There is not one method for ESG integration, different solutions, measurements and methods are used. "Ideally, the business model, product strategy, distribution system, R&D, and human resources policies of a company are analyzed, attending to those issues the institutional investor and asset manager deem most relevant. The form and quality of the analysis fully depends on the skills and motivations of the analysts, there is no prescribed standard" (Cambridge Institute for Sustainable Leadership, 2020).

A popular approach for institutional investors is to become an active owner. They 'engage' with the companies in their portfolio on ESG issues to push companies they are already invested in, towards a more ESG aligned strategy or performance (Interview 3, Interview 9, Interview 11, Interview 14, Interview 15, Interview 17). For example: "With engagement at AEGON Investment manager the UN Global Compact is an important theme. If companies are non-compliant with that or have a risk to become non-compliant, it is a reason to engage. Other topics are human rights, business ethics and disclosure on sustainability or ESG targets of companies, if these are ambitious enough. Also, there is more thematical engagement on for example animal welfare, the opioid crisis, access to medicine etcetera. There are numerous themes that are of importance, certain ones for our clients, others are a strategic priority for us" (Interview 9).

In extreme cases engagement activities can result in asset managers excluding companies from their portfolios when the company in question does not improve its practice. But how much this the actually impacts the business in question is debatable. Large firms have many investors, if only one withdraws, that does not have to have any consequences for them. However, the ambition is that at some point the results of the engagement will be reflected by the ESG scores. Because the belief is that companies that have better ESG performance, perform better in the long-term, also financially, that is why the ESG issues are taken into consideration (Interview 3). Increasingly, in the sustainable investment field, you see more activism from shareholders who want to put their own proposals on the agenda that can be related to environmental or social issues (Schoenmaker & Schramade, 2019).

Sustainable Finance 3.0

In SF 3.0 the idea is, that rather than avoiding companies that are unsustainable, investors change perspective and select sustainable companies and projects to invest in. They should shift their focus from avoiding ESG risks towards using ESG opportunities. Finance is seen as 'a means to' foster long term value creation. Schoenmaker & Schramade (2019) suggest that the SDGs can be used as a guide for that. The investment tools that support SF 3.0 are: Impact investment, Green- or Social Bonds, Impact lending, Microfinance and Microinsurance (see Table 6). In the results only Impact investment and Green bonds were discussed. So, only these will be discussed here.

Impact investment is an upcoming trend and popular amongst millennials, women and pension funds (Emerson & Norcott, 2016). Impact investment is for example funding green buildings, wind farms, electric car manufacturers, health care and land-reuse projects (Schoenmaker & Schramade, 2019). It involves making a positive selection of companies to include in the portfolio, so the investments serve the societal agenda for sustainable development. Asset managers and rating agencies start offering various SDG related products and impact funds. For impact investment we look at Green Bonds too, explains a Sustainability Reporting and Sustainable Finance specialist. That means that we do not only look for financial return but also for social- and environmental return (Interview 11). "Green bonds are fixed-income instruments designed to support environmentally friendly technology, whilst mitigating climate change and environmental projects aimed at energy efficiency, pollution prevention, sustainable agriculture, fishery and forestry, the protection of aquatic and terrestrial ecosystems, clean transportation, clean water, and sustainable water management" (Investopedia, 2019). They often come with tax benefits to make them more attractive for investors too. Green Bonds are meant to finance project that contribute to a better environment. For example, "DSM (a Dutch chemicals company) can give out Green Bonds to finance the build of a windmill park to supply their factories with green energy. There are a lot of criteria for that, it is a whole process (…)" (Interview 17).

"Pension funds are being asked to get an interest in certain green projects. For example, if green projects are proposed by utility companies. These are eminently suitable for pension funds to finance. PGGM and APG are leading examples in this, they are so large that they can operate in a businesslike way, as if they are entrepreneurs themselves, financing infrastructural projects. Their investments are more in the line of EUR 200 million per transaction" (Interview 6; APG, 2020).

With SF 3.0, investments need to be financially viable as well, they need to generate "a fair financial return which at minimum preserves capital" (Schoenmaker & Schramade, 2019). If not, projects might need to be canceled because of financial deficit. But, to foster sustainable development, sustainable investors (and future pensioners too) seem to be willing to sacrifice some financial return for social- and environmental returns (Schoenmaker & Schramade, 2019). If that sacrifice is a necessary consequence of sustainable investments is debatable, because it is difficult to forecast what the effect of for example ‘impact investment’ is on financial return. According to Schoenmaker & Schramade (2019) this effect depends on if a sufficient number of investors move to sustainable finance practices.

A last remark is, that, Schoenmaker (2019) and Schoenmaker & Schramade (2019), suggest that only a small group of investors currently adopt SF 3.0 comprising less than 1% of the overall financial system. The vast majority operates at SF 1.0, a third starts to move towards SF 2.0. They conclude that finance can contribute to a fast transition to a low-carbon economy by speeding up mitigation from SF 1.0, to SF 2.0 towards SF 3.0**.** How the Dutch pension funds align with their suggestions will be discussed in chapter 7 (Discussion).

The above section discussed all the relevant concepts and topics regarding sustainable investment by Dutch pension funds. In the next section, the conceptual framework is presented.

3.2 Conceptual framework

In this section, the conceptual framework that shows the interrelations between the relevant actors and variables in this research is presented.

Within the context of Sustainable Finance this research investigates the role of ESG ratings and/or ESG indices in achieving sustainable investment. The researcher is interested in how these influence the sustainable investment decisions of Dutch pension funds and in the consequences of the decisions for society. If and how are ESG ratings used to make investments more sustainable? If pension funds use ESG ratings, do they find it a helpful financial ‘tool’ when it comes to sustainable investment? And subsequentially, do experts think that if ESG ratings are used, this does actually lead to sustainable investment behavior? Do ESG ratings fit within their idea of sustainable investment, and if so, does this lead to a more sustainable financial sector? Is indeed the portfolio of the Dutch pension funds more sustainable if they invest in the companies with the highest ESG ratings?

Within the context of Sustainable finance, Sustainable investment and ESG ratings, as shown in Figure 2, the following relationships between the main actors are looked into: The first actor is the asset owner, the one who wants to do sustainable investing and might, as a result of that, use ESG ratings and/or ESG indices. The second actor is the ESG rating agency or the ESG data provider, the one that actually does the ESG assessment on the companies selected for the portfolio. The third actor is the asset manager, who implements sustainability goals in the actual investment process on behalf of the asset owner and might chose ESG ratings as a tool to do that.

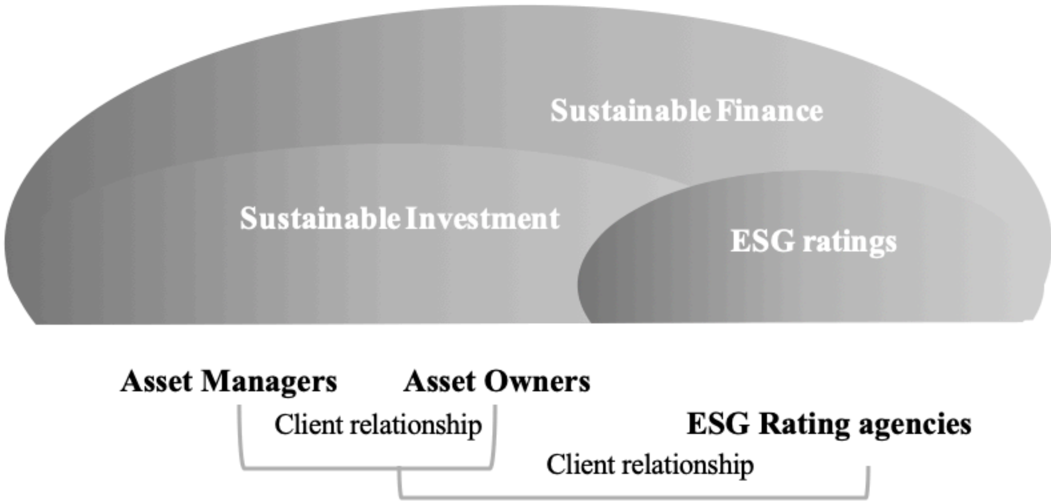

FIGURE 1 CONCEPTUAL MODEL

Factors that are at play in influencing the use and usefulness of ESG ratings for these actors are most likely related to the *quality and price ratio* of ESG ratings or indices, offered by different rating agencies. What might also be a factor of relevance is the *size and available resources* of the pension funds. Size could be a factor in determining whether, and to what extent, a pension fund develops a sustainable investment practice. The largest pension funds for example, will probably have more resources available than the smaller pension funds do. Figure 2 shows (in Dutch) the top 10 of the largest Dutch pension funds and their assets (in trillions). Amongst the respondents of this research are ABP, the 5th largest pension fund in the world, and PFZW, the 10th largest pension fund in the world (Willis Towers Watson (2019), in Consultancy.nl, 2019). Does their size affect their sustainable investment behavior compared to smaller pension fund in this research?

Another dependent variable is the *motivation* of a pension fund, to make an ambitious sustainable investment strategy. If there is for example an internal motivation like a tradition in sustainable investment or of members actively asking for sustainable investment policies, are ESG rating used to facilitate to this? Another factor could be that the board is motivated by external pressure to go for a sustainable investment strategy. For example, due to external pressure from NGOs, naming-and-shaming practices or best-practice examples of other pension funds. In that case, do they go for ESG ratings to make their investments more sustainable? An independent variable is the influence of *regulation*. Dutch pension funds are all subject to the same regulatory obligations. So, the degree of sustainable investment is expected to be similar regarding the alignment with the regulatory requirements. Do the data indeed show this, and if so, do all pension funds show similarities in the degree that they use ESG ratings?

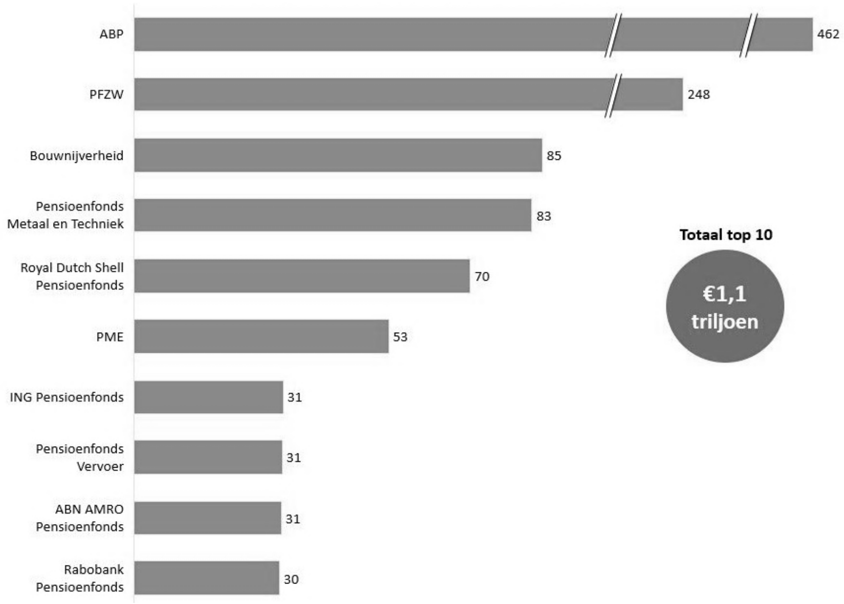

FIGURE 2 THE 10 LARGEST DUTCH PENSION FUNDS (WILLIS TOWERS WATSON (2019), IN CONSULTANCY.NL, 2019)

4. Methodology

This section describes the methodology that is used to execute this research project. First, the research strategy is discussed followed by the research paradigm and the research methods on data collection and analysis. Lastly, the validity and reliability of the research is discussed.

4.1 Research strategy

For this qualitative research, data is collected through a literature study and through expert interviews. The last by using a narrative inquiry (Bryman, 2016). An inductive approach to the relationship between theory and research is taken. This means that, if possible, a theory will be formulated after all data is collected as an outcome of the research about the role of ESG ratings and indices on the investment behavior of institutions in order to choose for sustainable investment (Bryman, 2016).

The epistemological orientation is 'interpretivism', respecting the differences between people (the experts interviewed) regarding their formulation and language about the same topic. This will require interpretation by the researcher so that data of the interviews can be compared with one another (Bryman, 2016). The ontological orientation is 'constructionism' while the social construct that is researched (behavior of institutional investors) is in a constant state of revision, and socially constructed (Bryman, 2016). Which is also discussed in chapter 2 (Historical perspective).

The research will investigate the use of ESG ratings by institutional investors in the Netherlands, mainly focused on pension funds. After explorative interviews with both employees at VBDO and with Don Gerritsen (Head of the Benelux department of the UNPRI), it became apparent that the role of ESG ratings might be leading in a lot of investment decisions. To investigate, these different stakeholders are interviewed; asset managers and an asset owner, (ESG) rating agencies and experts. The direction of the empirical choices for the research are led by the results and data acquired through the interviews.

4.2 Research paradigm

The paradigm used for this research is 'Critical theory', this means that the nature of knowledge is seen as structural and based on historical insights that will transform when time passes because misapprehensions and ignorance give way to more informed insights, through a dialectical process (Guba & Lincoln 1994). This is why the thesis includes a chapter on the historical perspective of sustainable investment and a critical review of the results in the discussion. The inquiry is critical and striving for transformation with the author as activist or advocate (Guba & Lincoln, 1994).

For this paradigm, the method Critical Discourse Analysis (CDA) is used, with an engaged attitude towards the larger movements and changes in society (Fairclough, 2013). In this case regarding sustainable investment. Intrinsic to the paradigm is that ethics and values are seen as includable in shaping the research project (Guba & Lincoln, 1994). The author looks at sustainable investment opportunities for institutions, from the point of view that investing in a sustainable future is the 'right thing to do' and is thus seen as desirable behavior in the capitalist construct of our society and that it should be encouraged. Climate change for example, should be seen as societal problem because "recent scientific evidence shows that major and widespread climate changes have occurred with startling speed. (…) Climate models typically underestimate the size, speed, and extent of those changes. Thus, climate surprises are to be expected" (U.S. National Research Council 2002, in Gardiner, 2004).

4.3 Research methods, data collection and data analysis

For the research, data collection is done through expert interviews and a literature study. The time horizon determined the scope of this research and 19 expert interviews are done, for data collection. Additionally, a relevant presentation by ABP and a researcher of the IPCC is documented and used as a source. Amongst the respondents for the interviews are 7 asset managers, 1 asset owner, 8 experts and 3 rating agencies. For the further details of these respondents see Appendix 1.

4.3.1 Method for Literature research

Academic literature is acquired through the Search Engines RUQuest, Google Scholar and via VBDO. The following key words are used a.o.:

- ESG ratings and rankings
- ESG index
- Sustainable finance
- Sustainable investment/ Responsible investment
- Institutional investment
- Investment strategies
- ESG integration
- Green investment
- Impact investment
- SDGs and investment

Regarding grey literature, several articles and reports by relevant institutions are included in de literature review such as from: VBDO, (Dutch) Pension funds, OECD, the EU, UNPRI, Eumedion and other (semi) governmental organizations. Also, relevant press releases and articles from professional literature are included to provide context for SF and the role of ESG-ratings. For example, from the Responsible Investor, De Nederlandse Bank, Het Financieel Dagblad/ Financial Times, etc.

4.3.2 Method for semi-structured interviews

For this type of research, semi-structured interviews leave enough room to ask further questions in response to what are seen as significant replies. By using this method in-depth data is collected while it provides enough room for the interviewees point of view (Bryman, 2012). Experts are selected starting at the expertise available at VBDO. With the snowball sampling method other relevant interviewees are identified (Bryman, 2012). For each expert the framing needs to be taken into account. Their occupation is seen as leading for their outlook on sustainable investment.

The semi-structured interviews are structured using an interview guide (see Appendix 2). This guide is structured by the research sub questions and the theoretical framework and aims to improve the understanding of the use and usefulness of ESG ratings. The interviews are transcribed, coded and analyzed using *Atlas.ti*, a software tool for text interpretation, that fits research with a theory building strategy (Muhr, 1991; Friese, 2019). Because a few respondents wish to be anonymous, the reference to all interviews are anonymized.

This research started out by investigating institutional investors, this later on specified to pension funds. In the respondent list, there is still one other institutional investor included, Triodos Investment Management, and two asset managers that not only manage the assets of pension funds but also of other institutional investors. These data are included because they prove relevant for this research. For example, Triodos is seen as a pioneer in the field of sustainable finance and sustainable investment. Its investment behavior functions as a beacon for sustainable investment behavior. And the asset managers in question (AEGON and Robeco) are equally relevant as the other asset managers in the respondent pool because they are experienced with institutional investors as clients, amongst which are pension funds.

4.3.3 Analysis and coding schema Atlas.ti

In *Atlas.ti* all accepted transcripts and a summary of the presentation have been coded per sub question, using relevant key words per sub question (see Figure 3). Additionally, engagement & active ownership, impact, standardization and reporting were coded as they proved relevant too, according to many respondents. To link the data to the theoretical framework a separate coding schema is used as a screen on all transcripts, using specific tag words that are based on the findings of Schoenmaker & Schramade (2019). In Table 6 they identify financial tools that are telling for each SF stage. To assess whether investment behavior is one typology or the other, the use of these financial instruments by the investor is leading.

TABLE 6 INTEGRATION OF SUSTAINABILITY IN FINANCIAL INSTRUMENTS (SCHOENMAKER & SCHRAMADE, 2019)

Sustainable Finance Typology	Equity (Chapter 8)	Bonds (Chapter 9)	Banking (Chapter 10)	Insurance (Chapter 11)
Sustainable Finance 1.0	Exclusion			
Sustainable Finance 2.0	ESG integration			
Sustainable Finance 3.0	Impact investing	Green bonds Social bonds	Impact lending Microfinance	Microinsurance

Analyzing process of the coded transcripts

First, the coded answers on the sub questions are summarized by the researcher. Second, the similar answers are merged together formulating the core message (with reference to all respondents in question). This resulted in various relevant topics that together form an answer to the sub-questions.
To see how the data fit in the theoretical framework the coded data on the use of financial instruments (Table 6), are put together and assimilated in a similar manner as was used with answering the sub questions. These assimilations are the basis to understand how the investment decisions fit in the SF theory of Schoenmaker & Schramade (2019).

The findings on the sub questions in connection to the theoretical framework, together answer the main research question. The link to the SF theory shows how sustainable investment is approached in a different way by the different investors, uncovering how they relate to the larger movements that institutional investors make to contribute to sustainable development in society.

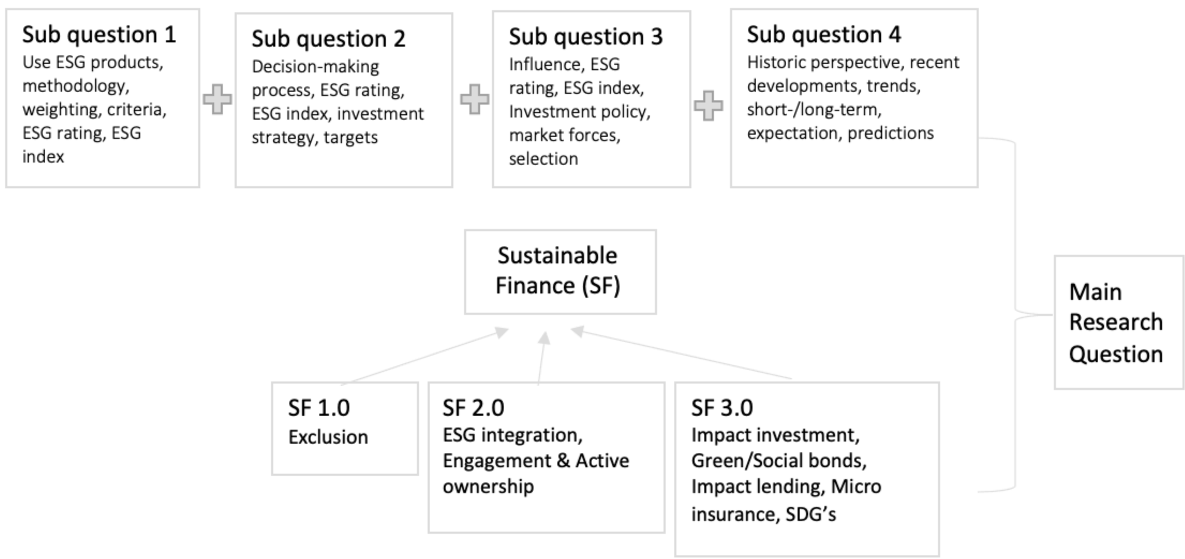

FIGURE 3 CODING SCHEMA ATLAS.TI - TAG WORDS PER SUB QUESTION

4.4 Validity and reliability of the research

The credibility of the research will be ensured by performing 'good practice'. The transcribed interviews are sent back to the interviewees for respondent validation (Bryman, 2016). Regarding the transferability of the research, a 'thick description' of the context of the respondent groups (asset managers, rating agencies and experts) and about the 'object' that is studied (Dutch pension fund investment behavior), provide others with the relevant information for making judgements about the possible transferability of the findings into another context (Guba & Lincoln, 1984 in Bryman, 2016).

To deal with issues revolving ethical principles the researcher works to avoid discrepancies regarding the four ethical issues that often revolve around social research, presented by Diener and Crandall (1978) in Bryman (2016). These are applied as follows: the data that is collected via the interviews, is displayed anonymously in the thesis unless there is respondent consent to use the quotation. This is to ensure that sensitive information cannot be tracked back to the respondent in question and to prevent any invasion of privacy or harm done to the respondents. Also, the respondents are offered multiple feedback opportunities to comment on how the data from their interview is interpreted by the researcher. By offering these opportunities, a reasonable deadline is provided, to make sure feedback is received in time for the researcher to be able to process it and to ensure consent. Also, these feedback opportunities make sure that the respondents see the draft of the research and therefore will not feel decepted to think the research is something else then represented by the researcher before and during the interview. Respondents that do not react on the feedback opportunities are informed that the data of their interviews is used (anonymously) in the research, unless they timely communicate to object to that.

To ensure the dependability of this research, the research project is supervised by an employee of VBDO (X. Urbach) and by the thesis supervisor (Dr. M.A. Wiering) of the Radboud University Nijmegen. This too helps to establish confirmability whilst it should stay apparent to these both parties, throughout the whole research project, that the researcher has not allowed personal values or theoretical inclinations to alter the findings of the thesis.

5. Results

This chapter presents the results. The results are obtained through the interviews and are clarified and explained by using academic references and, where deemed relevant, a personal reflection of the researcher. The latter is to help frame the results in the context of this study and is not to be confused with the actual academic findings. In the interviews was discussed how ESG ratings play a role in the investment process of the respondents by making sustainable investment decisions (for the full interview guide, see Appendix 2). In line with the conceptual model the role of the asset manager and the ESG rating agency (or 'the ones doing the ESG assessment') is investigated to find out how ESG ratings and ESG indices influence the investment behavior of Dutch pension funds, in order to choose for sustainable investment.

5.1 Findings on the implementation of 'ESG factors' by Dutch pension funds

What motivates the respondents to use ESG criteria in their investment process to begin with? What then, is available on the market and what do experts have to say about the market dynamics? We start off with answering Sub question 1 of the research: **Why and how are ESG ratings and ESG indices used in the decision-making process by institutional investors?**

5.1.1 Motivations for sustainable investment

In general, Institutional investors have the following motivations to choose their investment strategies. In order of importance these are: Financial return, Compliance with regulation, Repetitional risk management (or hazard control), Positive impact/ Decreasing negative impact and Reputation (Interview 3, Interview 5, Interview 7, Interview 12). These motivations require some further explanation.

Financial return is the core business of investors as they need to achieve a return on investment with their portfolio. Therefore, credit ratings are often primarily leading in the decision-making of pension funds (and other institutional investors). However, considering ESG factors can actually improve financial return as ESG performance is associated with better financial performance in the long-term (Interview 3).

Compliance with regulation is often referred to as a reason to perform an ESG analysis (Interview 9, Interview 11, Interview 12, Interview 15, Interview 17). As explained in chapter 3 (Theoretical framework), there are a number of rules pension funds need to follow. This includes transparency on material ESG factors (Interview 11, Interview 12, Interview 13, Interview 18). Also, asset managers keep a close watch on the regulatory developments from the European Union. Some expect that the EU Green Taxonomy will have a big influence on their sustainable investment strategies (Interview 3, Interview 14, Interview 15, Interview 17).

Repetitional risk management (hazard control). Pension funds use ESG as a filter on their investments to avoid controversies and abuses in their investment chain (Interview 12). When controversies are not filtered out, investors are at risk of reputational damage (Interview 5, Interview 7). PGGM for example, uses ESG ratings to check if their portfolio does not contain unwanted risks (Interview 14). Experts amongst the respondents say that it is questionable if these ESG filters suffice, because asset managers of institutional investors are managing large portfolios and consequently controversies are bound to slip through (Interview 5, Interview 7). Another way to detect companies that could cause controversies is by 'exclusion'. MSCI for example, built an index based on the commonalities of what most of their clients want to exclude. "So, for most clients, just following this index is good enough regarding sustainable investment, and because it is a standard index it is also cheap" (Interview 2).

Positive impact/Decreasing negative impact. In general, pension funds and active owners want to make a difference by taking into account ESG factors (Interview 7, Interview 12). Because Dutch pension funds have the capacity to do so, they want to do something additional besides ESG integration, like engagement, exclusion and making a change (Interview 12). However, ABP realized a few years ago that the standard solutions that are available on the market (with regards to ESG ratings or ESG indices) do not align or cover their vision on sustainable and responsible investment and started off with a different approach (Interview 8). An approach that will be discussed in more detail later in this chapter.

Reputation. As was discussed in chapter 3 (Theoretical framework), the results show that some investors need the expertise of intermediaries like rating agencies, to provide clear communication on their ESG performance with scores (Interview 9). ESG indices are in high demand by institutional investors because they clearly communicate their investment objectives and are cost effective (Interview 2, Interview 10, Interview 14). "Therefore, the name of an index is important, they want to be able to say: 'we invest in (for example) the MSCI ESG Low Carbon index', this communicates well" (Interview 6).

5.1.2 The use and usefulness of ESG ratings and ESG indices

During the interviews, respondents expressed different perspectives on 'taking into account ESG factors.' For example, by using a variety of different ESG products offered by ESG rating agencies or made by asset managers. For example, using ESG rating 'end scores' plus some additional assessment on ESG performance by the asset manager (Interview 15). But the most discussed approach by the respondents was, to following a relevant index for passive investment (Interview 14) and using a different approach to active investments. This is done by either carrying out an ESG assessment 'in house' and using the raw data behind ESG scores, or by performing additional assessments on for example SDG alignment, controversy screenings, and engagement activities on specific ESG issues (Interview 3, Interview 9, Interview 11, Interview 14, Interview 15, Interview 17). The Senior Manager Business Development & Investor Relations at Triodos Investment Management mentions that she notices that Engagement is often the only part of ESG that institutional investors do (Interview 6). How Dutch pension funds in this research use ESG ratings and ESG indices in decision making is as follows:

ESG ratings

In deciding on what businesses will enter an actively managed portfolio, ESG ratings are indeed often used by regular Dutch pension funds (according to: Interview 8, Interview 15, Interview 18, Interview 19). The higher the ESG rating, the more likely it becomes that a company is selected for this portfolio (Interview 14). If a rating is changed, often investors modify their investments accordingly (Interview 12). Investors sometimes exclude companies based on the ratings. ESG rating agencies notice a huge influence of their ratings on decision-making of institutional investors regarding the selection of companies for their portfolio (Interview 12, Interview 14, Interview 17).

Contradicting, the largest Dutch pension funds in the study say that they are hardly influenced by, and never fully lean on a single ESG scores of an ESG data provider for their investment decisions (Interview 8, Interview 9, Interview 13, Interview 14, Interview 16, Interview 17, Interview 19). The asset manager of ABP, even wants "to stay far from relying on ESG ratings" (Interview 13). A Responsible Investment & Governance Specialist at a large asset manager explains: "To steer towards sustainable investment, the ESG ratings are not something to base your decision on, I just don't think that we should give that much power to a single rating" (Interview 13).

However, APG for example, makes use of the raw ESG data that is provided by different ESG rating agencies. They do not use the end ratings, not with the reason that the agencies do a bad job, but because APG needs more detailed information on topics that these data providers do not offer in their 'standard product.' And that 'standard product' does not suffice in covering all relevant topics regarding ESG investment (Interview 8). Also, NN Investment, AEGON, APG and Triodos Investment Management are interested in the research behind the data. These organizations all differ significantly in size. For example, APG, Aegon and NNIP, are giants. Triodos however, has a different position and is a small house by comparison. Yet, it presents itself as a 100% impact investor and aims for intentional positive change through its investments (Interview 6). Also, Sustainalytics was founded by Triodos many years ago, which explains why they still make use of some of their data.

With using 'raw' ESG data, investors feed the ESG information into their own assessment system and take investment decisions based on their own weighting and choices. Thus, for their decision-making process, the end scores of ESG data providers are not used but still play a minor role as a sanity check, a good double-check, or an early warning signal (Interview 6, Interview 8, Interview 9, Interview 11, Interview 13; APG, 2020).

It is noteworthy that these large pension funds expressed that they have the resources to buy ESG data and set up their own dashboards to analyze them. However, that this does not have to apply to asset owners worldwide or to the smaller, regular pension funds in the Netherlands (Interview 8, Interview 19). Another finding was that Sustainalytics and MSCI were popular ESG rating agencies. There are more providers that make use of the fact that the interpretation of ESG is changing, for example, now that the SDGs are trending, a lot of providers offer SDG data (Interview 9).

ESG indices

Pension funds have active and passive investment strategies. At the moment you can invest in more indices than in stocks, that is how many indices are available (Interview 19). Smaller pension funds in the Netherlands (together good for about 11.00 billion of invested euros) just follow the market, they are dependent on the ESG ratings of MSCI, Sustainalytics, Vigeo Eiris, FTSE Russell etc. (Interview 19). These regular Dutch pension funds need ESG indices to do sustainable or 'ESG' investments (Interview 5, Interview 7, Interview 14, Interview 15). The reason being that, if you are not in a 'luxury position' like the largest pension funds that can afford a whole team dedicated to ESG investment, an additional assessment is most likely too expensive. Smaller pension funds can mostly just afford to follow an index that is based on ESG ratings. The alternative is 'doing nothing' and invest in regular funds of which a large proportion are laggards that do not contribute to a sustainable world (Interview 8).

To sum up: For regular Dutch pension funds, ESG integration by using ESG ratings or following an ESG based index, is often good enough when it comes to sustainable investments (Interview 3, Interview 8, Interview 9). The largest Dutch pension funds use their resources to do extensive ESG analysis themselves. Smaller investors lack the resources for such an additional ESG assessment of their portfolio and use the 'standard products' like ESG ratings and ESG indices, offered by ESG data providers. You find however, certainly amongst Dutch pension funds, that more and more investors have knowledge of ESG and understand that ESG ratings are not a 'holy grail', to measure the sustainability of their portfolio (Interview 9, Interview 11).

5.2 A dynamic ESG field: how institutional investors and rating agencies mutually influence each other

In the interviews the influence of market forces was a topic that came up regarding the recent developments in the ESG field. When the results refer to institutional investors in general this applies also to pension funds. This section contains the results on the mutual influence of institutional investors and rating agencies, thereby answering sub question 2: **If so, how do institutional investors and ESG data providers mutually influence each other?**

A relevant aspect where institutional investors and ESG rating agencies influence each other is through market forces. The choice for a particular ESG rating agency is partly price based. Also, there is a lot of competition going on in the market. Each asset manager and rating agency has its own unique ESG rating and approach regarding ESG analysis (Interview 5, Interview 6, Interview 7, Interview 12, Interview 14, Interview 17). The (ESG) rating industry benefits greatly of this complexity (Interview 5, Interview 7, Interview 10).

5.2.1 Competition

For data providers, what counts is: the more companies you can cover, the better it is for the brand and their position in the market (Interview 5, Interview 7, Interview 16, Interview 18). Sustainalytics for example, covers 22.000 companies via news sources and the annual reports of 12.000 companies (Interview 12).

How the dynamics in the field play out, is explained nicely by two respondents “If you are a data provider, a rating agency or an index provider, somebody who is doing the assessment, you don’t only want to get it right, depending on what you believe or define as being right, you also want that your product is the one that is being bought. So, if you create a very strict and solid sustainability rating with lots of data, which excludes a lot of firms, then the institutional investors might not like that product, they just want a track towards sustainable finance for example and find it too complex. If you create such a product, you want big investors to buy it because that creates credibility. You want to become big right, one of the household brands?” (Interview 5, Interview 7). This is also true for the construction of an (ESG) index because if you built an index which excludes half of the investment ‘universe’, of course that will underperform compared to other indices on the market which will make it unattractive for investors (Interview 2).

5.2.2 Choice for an agency

Another way Dutch pension funds and institutional investors in general, influence the ESG rating agencies is with the selection procedure of an (ESG) rating agency. Various aspects are relevant here: First as mentioned before, is the budget. Institutional investors look for the most attractive risk-return and cost-ratio. Second, some data providers might not be eligible because they do not offer added value to what an asset manager already has (Interview 11). Third, the selection takes place on what methodology a data provider uses. However, as the Senior Advisor Responsible Investment at PGGM Investments explains: “once chosen, you do not easily change from one data provider to the other because of transaction costs, and because its scores are integrated in the whole process of the investment system of the asset manager” (Interview 14). So, you only change if there is a good reason for that. What does happen is that investors try and modify their portfolio slightly or ask for a more customized approach (Interview 9, Interview 11, Interview 14, Interview 15, Interview 18).

5.2.3 Mergers

There is consolidation taking place in the ESG field. More and more mergers are happening where large credit rating agencies and index builders buy ESG rating agencies because ESG is good business and because agencies need to scale up to cover as many companies as possible (Interview 8, Interview 9, Interview 11, Interview 14, Interview 17, Interview 18). Also, you see more often that funds are ranked on the basis of sustainability, “in that case, a rating from Sustainalytics can be very important,” explains an Executive director and Head of Credit research at a large asset management. “What if Sustainalytics thinks your business is not sustainable? The outcomes of these ratings are influential on their own, and even more now Morningstar fully acquired Sustainalytics, which means they too take into account these ESG scores" (Interview 17). Because Morningstar uses Sustainalytics scores to power its sustainability funds and its sustainability ratings (Interview 10). The Director of Sustainability Research Europe at Morningstar, explains Morningstar's sustainability rating system (also known as 'Globes') as follows: "The Globe rating is a peer group-relative assessment of funds' ESG risk. Five Globes, for example, are assigned to funds that exhibit lower ESG risks relative to their peers. The globes are assigned based on a normal distribution in each Morningstar global category. Many asset managers and fund platforms in the US and European license the Globe rating as well as other metrics such as the Low Carbon Designation, to make them available on their websites and thus help clients select funds" (Interview 10).

5.2.4 The influence of Dutch pension funds on ESG rating agencies

It seems that the influence of institutional investors on rating agencies is twofold, with their market behavior but also in a more active way. A Senior Policy Advisor Investment of one of the largest Dutch pension funds explains: "we ask rating agencies for new data to collect or propose and show to them our new ways and methodologies in analyzing the ESG data" (Interview 8). In this way asset managers push data providers to develop further, with their demand for for example real time data and data on impact, climate change scenario's and circular economy (Interview 14, Interview 16). Rating agencies, however, have a slow response to these new demands (Interview 14, Interview 18; APG, 2020). This is why a lot of asset managers that want to have more information than ESG scores alone, create their own assessments.

It is also partly the reason that PGGM and APG launched the Asset Owner Platform for Sustainable Development[2] that works to think about a standard for rating agencies about sustainability topics and how to collect data on that. For example, regarding the positive impact of businesses and real time data on ESG performance, using AI and machine learning tools.

In general, the influence of ESG rating agencies on investment behavior of Dutch pension funds is declining more than that it is growing (Interview 16). If the topics that are deemed relevant by asset managers could get covered in the year reporting of companies, then the ESG agencies will probably include it in their analysis too. Maybe then the ESG ratings become more useful for the larges Dutch pension funds too (Interview 16).

5.2.5 ESG ratings and their influence on companies

Disclosure, so reporting on ESG issues, is one of the key areas where ESG scores plays a meaningful role into pushing companies to do more. This is because better ESG scores make companies more attractive to a broader range of investors, which is of course motivational for companies (Interview 3). "One of the better arguments to put forward to companies that are reluctant to make any change and do not really see the point of why they should make an effort to start reporting on ESG issues for example, is that their low ESG scores have to do precisely with their lack of disclosure" (Interview 3).

This is also a role for ESG ratings that is acknowledged by a Responsible Investment & Governance Specialist at the asset manager of one of the largest Dutch pension funds, although she is critical of ESG ratings: "I think at the very least, that ratings are useful as a sense check to have a kind of agency with credit scores, you want credit ratings. These have a huge impact on someone's ability to raise capital. And an ESG score is a similar type of trigger, (…) it is a start to have an ESG rating at least to trigger to look more closely" (Interview 13).

So, to sum up: institutional investors and rating agencies influence each other through market forces,

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2 This is one of many initiatives on the topic of standardization/harmonization of SRI, ESG and reporting.

due to competition in the ESG field. Also, the largest Dutch pension funds push rating agencies to include new or other information into their ESG analysis. Companies are influenced by the rating agencies in their disclosure practices.

5.3 How ESG ratings influence sustainable investment behavior. Current trends and a lot of criticism.

ESG ratings are widely used but also widely criticized. In this section the recent developments in the ESG field are discussed, accompanied by this criticism from both experts and users of ESG ratings and ESG indices. This section answers sub question 3: **How do ESG ratings and ESG indices influence the path and development of sustainable investments in the short-term?**

5.3.1 Recent changes and trends in the ESG field

ESG ratings have become a point of attention partly because of the (upcoming) European regulations (Interview 3). They play a bigger role in the investment process now than they used to have, also notices a Client Relations Associate at a renowned ESG rating agency. She also sees a different approach of interest: before it was only relevant if companies had ESG relevant policies in place, now that has shifted towards an interest on the actual activities of a business, if they are implementing the policies, looking further than the financial level and putting up additional rules (Interview 12). This shift is partly due to societal pressure, according to an Executive director at a large asset manager for a pension fund, you do not want to be associated with human rights violations for example (Interview 17).

Two researchers amongst the respondents, see how pension funds want to have an amount of sustainability, or that they want to at least ‘nod’ at ESG issues (Interview 5, Interview 7). Another respondent sees an explicit role for the largest Dutch pension funds to push rating agencies to improve their ESG analysis (Interview 8). And, for asset managers there are two development at play: one, they feel that they have a responsibility too, looking at the long-term value creation, they actually want their clients to invest more in sustainable businesses. On the other hand, ESG is good business, it is a new market and it makes a lot of sense to boost this (Interview 5, Interview 7).

Another big change in the ESG field is the way rating agencies collect information about companies. “Maybe 10 years ago rating agencies had ESG analysts spend most of their time collecting information. Now this moves towards collection data via AI and NLP, simply because there is so much data to analyze. ESG analysts can now spend more time analyzing these data” (Interview 2). It was not explained how this influenced the ESG analysis of companies, but it is clear that it results in more companies that can be covered by one rating agency.

5.3.2 Requirements by the regulator and an awareness shift regarding climate change

At the moment major transformations take place in the sustainable investment field. For example, the tendency towards passive investment strategies, institutional investors themselves hardly actively buy and sell anymore (Interview 5, Interview 6, Interview 7, Interview 18). This is because more and more institutional (and private) investors have realized that they cannot outperform indices and shift away from active investment also because then costs are significantly lower (Interview 5, Interview 7, Interview 18). The popularity of ESG indices grows, the short-term expectation at MSCI and Sustainalytics is that this will only accelerate (Interview 2, Interview 12).

The tendency for passive investment is also noticed by regulators. The Dutch Bank now wants to reduce the amount of pension funds, according to the Senior Manager Business Development & Investor Relations at Triodos Investment Management. She suggests that “this is partly because what is the use of so many organizations doing exactly the same thing: to passively invest in the same kind of indices? You do not need so many players for that. The intention is that you can have more influence on the (sustainable) investment strategy by setting rules, when it comes to one big player" (Interview 6).

The Dutch Bank started asking Dutch pension funds questions about the management of climate risks. To their own surprise, they did not really have an answer to that (Interview 16). The director of the University of Utrecht Sustainable Finance Lab notices that, as a result of that request, since about 2-4 years the largest pension funds formulate goals about lowering the carbon footprint of their portfolio (Interview 16). First purely to lower the financial risks, but increasingly also to make a positive impact on the world. According to him this is also due to external pressure from policy makers about the integration of the Paris Agreement. And also because of pressure from the members of the pension funds, that are no longer interested in the highest financial return alone but increasingly expect that their money is used to make a positive change (Interview 16). "Pension funds know that the Paris Agreement is a necessary agreement to keep all people live relatively safe on this world, they want to be a part of that" (Interview 16). Another regulatory development is that the OECD wants that pension funds start to report and justify their negative impact, as part of soft law requirements (APG, 2020).

Overall it seems that in recent years the awareness on climate change issues has increased, more specific methods are used to calculate scenario's and risks regarding climate change and the circular economy (Interview 16). Indicative of this is that between 2010-2014, ESG was just a small product line at MSCI, which grew rapidly in 2015 after the Paris Agreement, due to investors actively trying to commit to reducing the carbon risk in their portfolios (Interview 2).

5.3.3 Developments in Sustainable Investment field in the short-term

The two biggest new trends in the near future are scenario development (certainly with climate change issues) and impact (where investment is not a purpose on its own, but a means to good pensions, but also to a better world). That is why we need to be able to measure 'impact' (Interview 9, Interview 13, Interview 14, Interview 16, Interview 17). For now, these new trends give a lot of opportunities to asset managers and data providers to distinguish themselves and make money out of it by offering niche products on scenario's or impact measurements (Interview 14). However, most institutional investors find it too much of a hassle at all (Interview 6, Interview 14). In general, the emphasis shifts from ESG issues towards assessing if a portfolio is 'climate change proof'. This requires different methodologies and more specific measurements than mainstream ESG ratings can offer (Interview 16).

According to a Responsible Investment & Governance Specialist at the asset manager of one of the largest Dutch pension funds, people are starting to see the value and the risk of passive investment behavior, the awareness is becoming greater (Interview 13). She thinks that the industry is going to be moving into two directions. It is maturing. What is happening is that ESG rating agencies form an oligopoly that is dominating the market. But simultaneously, the users of the data have more options to get their own data from raw sources. "There is no way of telling yet, how this will play out" (Interview 13).

5.3.4 Critique on ESG ratings

Most interviewees had a lot of critique on the use and quality of ESG ratings, ESG indices and other ESG assessments. In this section these critiques are presented. "Sustainalytics, MSCI, Vigeo Eiris, all of these parties have the best of intentions with the ratings, and it is important that their ratings are accurate," stresses the Executive Director of VBDO, "on the one side at VBDO, we hear that the rating agencies are working hard to improve, but also, we hear that our members find that rating agencies are not doing their work well enough, that they question if ESG ratings are measuring sustainability well enough."

All respondents (except for the ESG rating agencies themselves) expressed that an ESG score alone, is not enough to assess the sustainability performance of the companies in their portfolio due to various reasons. For example: ESG ratings and filters are not exhaustive and each rating agency has its own methodology, criteria and weighting system (Interview 18). And because Dutch pension funds are managing large portfolios, they do not know all the details of the companies that they are invested in because their portfolios are too large to manually check (Interview 5). Also, the companies in their portfolio are selected by the index provider and they mostly depend on them for extra information. If asset managers suspect a large risk, like involvement in child labor, they need to ask the research provider for more information (Interview 13, Interview 14). A Responsible Investment & Governance Specialist at a large asset manager, describes an ESG rating as a black box, "it gives the impression that you know what is in your portfolio, but I don't think that is true" (Interview 13). More respondents share the opinion that investors don't have a true idea of which risks they are cutting out or risks they are willing to accept unless they would look at the underlying data of how that is being determined by the rating agencies. In terms of actually driving passive investment decisions they believe that an ESG rating is unsuitable and should not be used for that (Interview 9, Interview 11, Interview 13, Interview 18).

A risk of relying solely on the end scores to define the degree of sustainability of a portfolio is also a reputational risk: it can backfire when the public finds out about investments in controversies. And the risk for society is that investors might for example not find out about child labor, because they do not look for it (Interview 5, Interview 7). A recent example is that Dutch pension funds 'happened to be invested' in Saudi Aramco, although they do not think that invested in a company of a totalitarian state is a responsible investment (FD, 2020).

The worry is, that ESG ratings lead to greenwashing (Palmer & Maanen, 2019). "Sure, all investors use ESG, follow indices like the MSCI ESG, JP Morgan Sustainable index etcetera, but if you actually look at the top 10 of those indices, they are often directly related to fossil fuels. And the composition of such Low Carbon indices does not differ much from unscreened mainstream indices. You see that many investors who specifically select an ESG or Low Carbon index are unaware of the actual content of such passive investment vehicles. And then it becomes an ineffective choice, somewhere between box-ticking and green-washing" (Interview 6).

Added by the researcher for reference and comparison:
See below the top 10 of a mainstream non-ESG index, the Dow Jones top 30 companies of the US in 2020 (Dow Jones, 2020) (Table 7). Although in a different order, the list of companies is almost identical (except for 2 companies), compared to the Sustainability and ESG indices in the slide of the BrightTALK webinar (Image 1). These do not prove anything, but it raises the question what exactly is done differently with the selection of companies for the 'sustainable- and ESG' indices.

TABLE 7 DOW JONES TOP 30 COMPANIES OF THE US IN 2020 (DOW JONES, 2020)

Top 10 Dow Jones top 30 companies of the US in 2020
1. Microsoft Corp
2. Apple Inc.
3. Visa
4. JPMorgan Chase & Co
5. Johnson & Johnson
6. Walmart
7. Procter & Gamble
8. Intel Corp
9. UnitedHealth
10. ExxonMobil

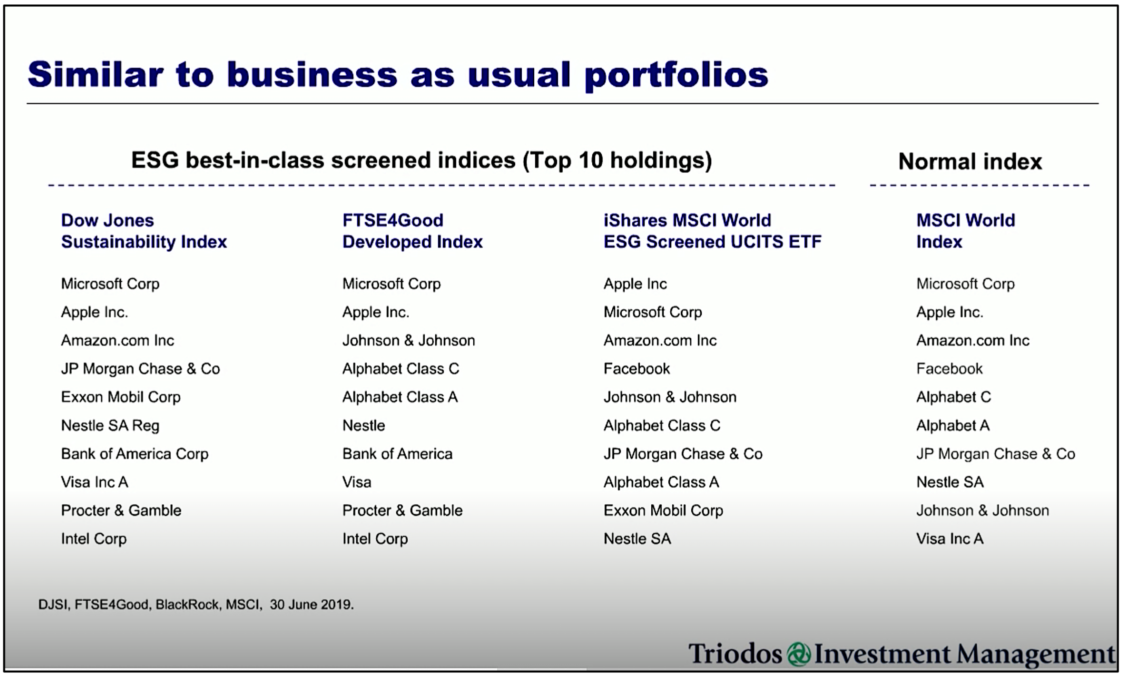

IMAGE 1 SUSTAINABLE INVESTING: TOOLS TO SPOT THE DIFFERENT SHADES OF GREEN - TRIODOS INVESTMENT MANAGEMENT (PALMER & MAANEN, 2019)

“Asset managers are aware of the fact that ‘doing the thing right’ - having a high ESG score- is not the same as ‘doing the right thing’, as can be illustrated by large oil and gas companies that always end up in the high ranks of ESG ratings,” says a Senior Advisor Responsible Investment at PGGM Investments, “or for example of the celebrated company ‘Ben & Jerry’s’, they indeed do an excellent job regarding ESG issues, but ice cream is still no solution for any of the SDGs. So, although ESG ratings have developed into credible ratings, as long as we do not define ESG, that is an empty statement” (Interview 14). What do those ESG funds do different (than regular funds) in reality? “There is an increasing amount of funds that claim to be sustainable or ‘ESG based’. The inflow of money in those funds is huge, that has to be responsible, but this is often hardly made credible using ESG ratings” (Interview 14).

Most respondents share the critique that ESG ratings and ESG indices lack definition. On top of that, asset managers signal that although ESG ratings can be high it can happen that issues are at play in the same business. On paper all ESG issues are managed but in reality, policies are violated. Or the other way around, that old controversies still lower the ESG rating whilst that controversy is properly dealt with. So, that is why, to establish a proper ESG assessment, it is necessary to look into the research behind ESG ratings which is available at the rating agencies as well (Interview 9, Interview 17).

Another criticism about ESG ratings is centered around their subjective nature. Different data and methodologies are used to come to an end score, which inevitably results in different views of the "ESGness" of companies (Interview 10). In addition, third-party ratings agencies and asset managers are not always transparent about how they have arrived at ratings. They do not necessarily want to reveal their "secret sauce". They also have to estimate most of the data that is not disclosed by companies (Interview 10).

Because there is no objective standard everyone follows, the dominant players in the ESG field have the power to define ESG, if it includes subcontractors or not, for example (Interview 5, Interview 7). A common methodology to measure ESG is: "to put quantitative weights on indicators that are not comparable, that are not quantitative in their nature, they're ranked, they're ordinal, you have ordinal data, and then you are putting quantitative weights to it and aggregating in a way that is just not appropriate for the data that they're looking at" (Interview 13).

Yet another critique is that most available ESG data is strongly 'backwards looking'. ESG ratings at Sustainalytics for example, are reassessed every 3 years, unless a big change happens that is in the news, only than a reassessment is done earlier (Interview 12). This is a problem for asset managers because they need more 'real time data' to judge the current ESG performance of companies, but now need to consult specialized groups like for example risk-rating agencies such as Ortec and Cardano and/or need to develop their own assessment process (Interview 6, Interview 9, Interview 11). So, "we have to just be careful (with following ESG scores) because it is so subjective, and there is so many factors that are being grouped into one number" (Interview 13).

From the perspective of Dutch pension funds, the director at Sustainable Finance Lab UU thinks that ESG rating agencies miss the boat on including various relevant subjects like impact, circular economy and hard data on carbon footprints (Interview 16). The rating agencies that are part of this study expressed that they see these new and growing demands for data on the impact of business activities and gave the impression to work on meeting these demands (Interview 12, Interview 10).

ESG rating agencies are dependent on a company's disclosure and thus reporting on ESG issues. This should reflect clearly on how a business operates regarding its policies and procedures, "how the shop is furnished", as a Senior Advisor Responsible Investment at PGGM Investments puts it (Interview 14). But it does not show the actual ESG performance and what the impact is of the products or services that are sold (Interview 6, Interview 14, Interview 18). This is a big reason for front running institutional investors and experts to be a bit skeptical towards ESG ratings. They find that rating agencies fall short because often externalities are caused by the product, not the internal corporate behavior (Interview 5, Interview 6, Interview 7, Interview 9, Interview 11, Interview 14, Interview 18).

Another relevant aspect of reporting is, that the numbers on ESG in reporting are not always verified by an accountant, this should happen so investors know it is correct information: assurance by an accountant is necessary (Interview 1).

5.3.5 The need for standardization

The above critiques all lead up to the one main problem expressed by almost all respondents: the lack of and the need for standardization (Interview 2, Interview 5, Interview 7, Interview 9, Interview 10, Interview 11, Interview 13, Interview 14, Interview 17, Interview 18; Palmer & Maanen, 2019).

Berg, Koelbel and Rigobon (2019) found “that in a dataset of five ESG rating agencies, correlations between scores on 823 companies were on average 0.61 (a correlation of 1.0 would equal 100%). For comparison, credit ratings from Moody’s Investors Service and S&P Global Ratings are correlated at 0.99.” So, that shows a big divergence between different ESG rating agencies. This is confusing for investors that are no ‘ESG expert,’ that might assume that ESG scores are of caliber as for example credit ratings scores.

There is no emerging standard in how you should measure, weight or assess ESG issues, each firm has their own methodology with customized ESG-scores (Interview 7, Interview 9, Interview 11, Interview 17, Interview 18). There are more reasons why they are not uniform. A practical reason is, because the underlying data disclosed by companies (the reporting) is not harmonized or standardized, it just simply cannot be compared. This means that many rating agencies have to estimate some of the data, for some of the indicators that they use in their models (Interview 2).

The respondents of this research were not uniform in their opinion on who should be leading in creating such a standard. Every stakeholder wants to influence this process (Interview 10). “The initiatives, that do the real thinking about standardization, are the large market parties like Reuters, Bloomberg, and the large credit rating agencies,” according to a Senior Advisor Responsible Investment at PGGM Investments, “but the asset owners have the money and thus the power to decide” (Interview 14). How this might develop and expectations about the other long-term developments in the ESG field, is discussed in the next section.

5.4 Future prospects and how the ESG field can improve to contribute to sustainable investment.

During the interviews, respondents discussed their expectations on how the ESG field, or the sustainable investment field in general, will develop in the long run and what improvements are needed. These topics will be presented below, answering sub question 4: **How do ESG ratings and ESG indices influence the path and development of sustainable investment in the long-term, and what improvements are needed in the ESG field (in order for it to contribute to sustainable investment)?**

5.4.1 Hopes and expectations for the future of Sustainable investment

“There are two contradicting developments going to play part in the long term,” according to two researchers amongst the respondents: “one is the development of standardization enforced by governments, the EU, these parties are very fond of standardization, asset owners too as a matter of fact. The second is that asset managers have a different interest, they want to stand out because that is profitable, the same mechanism that causes there to be 50 types of peanut butter in the supermarket. If ESG ratings are standardized, you can only ‘win’ by having the lowest price, because in essence everyone provides the same product. That is something asset managers do not want. The EU is done with the restraints put up by these financial parties, change is necessary regarding standardization” (Interview 5, Interview 7).

The majority of the respondent think that in a few years’ time there will be one dominant rating agency for sustainability or ESG, that is accepted by the market. ESG factors that are financially relevant, will be fully integrated in investment decision making, reporting and understanding impact (Interview 2, Interview 16, Interview 17). Two researchers amongst the respondents expect that “this may lead to a bit more sustainable finance” but see that many of the incentives are about making a market and a business model, and not per se creating the best measures of sustainability (Interview 5, Interview 7).

Pension funds have a public profile and thus an incentive to change (Interview 5, Interview 7). “There is a role for pension funds, to challenge and engage with ESG data providers to improve their analysis. Especially the pension funds with enough resources to do so. In this way they can improve the market standard for smaller investors that do not have that capacity, and that are dependent on the status quo" (Interview 8). A Senior Advisor Responsible Investment at PGGM Investments also notices that, "there is a sense of urgency felt by asset owners too. However, not every day. If you just lost 30% of your capital, there are other issues on your mind" (Interview 14).

Some respondents see a role for the regulators. Pension funds have minimum requirements for return, to make sure they can pay out the amount that pensioners expect to receive. These minimum return criteria constrain their investment possibilities, two respondents think that these requirements should be lower and that pension funds should look more for societal return instead (Interview 14, Interview 18). Because, according to a Sustainable Finance Consultant & Researcher, "they have no clue whatsoever on the societal return" (Interview 18).

The overall expectation seems to be that sustainability ratings will stay influential, if only for compliance with regulation. A lot of measurements are coming up to ask investors to be clear to what extent their investments are aligned with the upcoming EU Green Taxonomy, these regulations will have implications for the way we assess businesses (Interview 3, Interview 17). It is also expected that regulations regarding ESG rating agencies themselves will become stricter because it becomes more and more clear that these ratings have an influence on investment (Interview 11). And, investors will become smarter and no longer blindly trust on the judgement of certain rating agencies (Interview 9).

The following topics are relevant regarding sustainable investment practices and the role of ESG ratings: Reporting, Impact, Climate change and the Normative aspect.

5.4.2 Reporting

Requirements for reporting on sustainable investment, will determine how investors will approach sustainable investment, so it matters how a reporting system is set up (Interview 1). This is an ongoing discussion. A move towards better year reporting on ESG issues, as serious as is now happening with financial reporting, would be a promising development according to a Sustainable Finance Consultant & Researcher (Interview 18). This requires rules for reporting that make sure stakeholders are taken into account adequately, for example "with the ABN AMRO-Case by Schramade (2020), you see that they (the bank) writes an impact statement. There they outline a way how you can report on social- and financial information as thorough as on financial information. With loss and profit balances. That is how it should look like, the reports. Those ratings are a side issue then, the rating agencies can help if they focus on acquiring more of these kinds of reports" (Interview 18).

The upcoming EU Green taxonomy is mentioned as a promising development for setting the stage for a uniform way of reporting (Interview 14). When disclosure by companies becomes more harmonized, for example everybody using the same reporting system, this will likely lead to more uniformity across the ESG ratings and agencies (Interview 11, Interview 12, Interview 14, Interview 16). But that "harmonization is not going to be enough because rating agencies still use different methodologies" (Interview 10).

The expectancy is that "in 10 years we will have a standard approach to reporting. Then off course there is the academic discussion on what sustainable investment is, and what 'impact' is" (Interview 1). The data show that in defining ESG and what sustainable finance is, it proves to be not only an academic discussion, but a political discussion too.

5.4.3 The normative and political aspect

Two respondents suggest that an ESG rating is not something you get 'right' with enough expertise, it is something that is fundamentally political and that there are trade-offs there. They think it is a good development that the EU Green taxonomy adds the element of the public interest and that standardization is not left to the private parties by establishing an authoritative taxonomy, “it proves that one fundamentally accepts the fact that it is normative and political, not just a matter of accounting” (Interview 5, Interview 7). We do have to consider that the private parties in the field are influential in this process. For example, BlackRock, one of the largest investors of the world, has a lobby in Brussels and has now gained a big say in deciding what ‘sustainable banking’ is (Jolly, 2020). “It is a worrisome development because BlackRock does not have a tradition of sustainable investment at all” (Interview 1).

5.4.4 Impact

To define Impact investment, so really trying to make the world better place, the SDGs are a nice indicator (Interview 18). As such, asset managers often connect impact investment to SDG alignment and now start offering assessments to see how portfolios align with the SDGs (Interview 9, Interview 11, Interview 14, Interview 17, Interview 18). “It seems that ESG is a bit yesterday’s news, although it still needs standardization, people have embraced the ideas and it is hard to still distinguish yourself with ESG” (Interview 14). “Therefore, as an asset manager or rating-agency, you have to catch the next wave, the following two trends mentioned before: scenario development and impact. If investors really find investing a ‘means to’, and not a purpose on itself, then they have to be able to measure the effectiveness” (Interview 14).

Asset managers want that ESG scores include the impact component. So that it shows how they can have an impact, via their investments, on the benefit of predetermined themes or for example groups of people (Interview 11). A Senior Advisor Responsible Investment at PGGM Investments adds the critical notion that, “everyone uses terms like ‘sustainability’, ‘SDGs’, ‘impact’ etc. but that is really easy if you never have to prove that you actually make a physical difference in tons of CO^2, liters water, numbers of people etcetera” (Interview 14). He argues that what applies to ESG ratings, that scores are relative and that it is difficult to see what scores actually mean, also applies to ‘impact’. Because at the moment asset managers can create their own rules for impact funds to distinguish themselves from competition.

5.4.5 Climate change

There is a need for climate change data for investors because they want that the money of their clients is invested in those categories that are future proof (Interview 11). And if you look at long-term issues this means that they want to see that businesses have a strategy to deal with climate change to make the same financial return (Interview 11).

According to the director at Sustainable Finance Lab UU, the credit rating agencies will be incorporating climate change in the future (Interview 16). Today, the large credit rating agencies such as Standard & Poors, Moody’s and BlackRock get blamed for inaction on climate change. The central banks are discussing how to deal with this, because they themselves exclusively follow these credit ratings in their purchase policy and find it unacceptable that climate change is not incorporated, should they force credit rating agencies or do that analysis (Interview 16)?

6. Conclusions

This chapter summarizes the results to answer the main research question: ***How do ESG ratings and ESG indices influence the investment behavior of institutional investors, in order to choose for sustainable investment?***

Why and how are ESG ratings and ESG indices used in the decision-making process by institutional investors? Pension funds have the following motivations regarding their investment strategies, in order of importance: Financial return; Compliance with regulation; Repetitional risk management (or hazard control); Positive impact/ Decreasing negative impact; and Reputation. Their investments can be managed actively and passively. Respondents have a different perspective on what 'taking into account ESG factors' looks like in a portfolio. The largest Dutch pension funds use their resources to do extensive ESG analysis themselves. Hence, most large Dutch pension funds hardly make any use of available ESG ratings or ESG indices for their active investments. For regular and smaller Dutch pension funds, experts see that using 'standard products' that are offered by ESG data providers like ESG ratings and ESG indices, are a reasonable choice when it comes to sustainable investment decisions. Due to their size and their available resources a more extensive assessment is often no option. All respondents' funds apply various exclusion filters to avoid involvement in controversial businesses. Amongst Dutch pension funds more and more investors have knowledge of ESG and understand that ESG ratings are not a 'holy grail' for sustainable investment.

If so, how do institutional investors and ESG data providers mutually influence each other? A primary aspect where pension funds and ESG rating agencies influence each other is through market forces. Pension funds influence the ESG rating agencies with the selection procedure for choosing an agency. Additionally, consolidation is taking place in the ESG field: more and more mergers are happening where large credit rating agencies buy ESG rating agencies because 'ESG' is good business, and because they need to scale up to cover as many companies as possible to keep up with the competition.

It seems that the influence of institutional investors on rating agencies is twofold. For example, with market behavior. And also, in the form of asset managers pushing data providers to develop with their demand for amongst others, real time data and data on impact, climate change scenario's and circular economy.

For most pension funds, the influence of ESG rating agencies on their investment behavior is declining more than that it is growing. Lastly, ESG rating agencies also have an influence on the behavior of the companies they rate. Disclosure, reporting on ESG issues, is one of the key areas where ESG scores plays a meaningful role into pushing companies to do more regarding ESG performance.

How do ESG ratings and ESG indices influence the path and development of sustainable investments in the short-term? ESG ratings are used with a different approach of interest than they were used to. Before it was only of relevance if companies had ESG relevant policies in place. Now, that has shifted towards an interest into the actual activities of a business and son the implementation of policies. This shift is partly due to societal pressure. Another big change in the ESG field, is the way rating agencies collect information about companies, this used to be done manually and now is collected by using AI and NLP. This allows ESG data providers to be much faster in term of collecting up to date information on more companies.

It seems that in recent years the awareness on climate change issues has increased. Dutch pension funds now formulate goals about lowering the carbon footprint of their portfolio, due to external pressure from policy makers about the integration of the Paris Agreement, and pressure from the members of the pension funds, that are no longer interested in the highest financial return, but increasingly expect that their money is used to make a positive change.

The two biggest new trends in the near future are: scenario development (certainly with regards to climate change issues) and impact investing (where investment is not a purpose on its own, but a means to). The ESG rating industry is going to be moving into two directions. It is maturing, ESG rating agencies are forming an oligopoly, where only a few are dominating the market. But simultaneously, the users of the data have more options to get their own data from raw sources. A huge transformation that is of influence as well is the tendency towards passive investment strategies.

ESG scores alone are not deemed sufficient to signal the sustainability performance of the companies in their portfolio according to all asset managers interviewed for this research. There is a lot of critique on ESG ratings and ESG indices: The main critique is the lack of and the need for standardization of ESG ratings. ESG ratings are not uniform, they lack definition: each rating agency has its own methodology, criteria, weighting system and uses different indicators to arrive to the ratings. This is confusing for investors. A reason for this might be that underlying data disclosed by companies (the reporting) is not harmonized or standardized either and simply cannot be compared.

The concern is that leaning on ESG ratings or ESG indices for investment decisions, leads to green washing. The risk for society is that investors might for example not find out about child labor, because they do not look for it. A risk of relying solely on the ESG end scores is also a reputational one: it can backfire when the public finds out about investments in controversies. Respondents feel that investors do not have a true idea of which risks they are cutting out or risks they are willing to accept unless they would look at the underlying data of how an ESG score is being determined by the rating agencies.

ESG rating agencies are dependent on a company's disclosure and thus reporting on ESG issues. These reports reflect on how a business operates, its policies and procedures. Which is a reason for front running institutional investors and experts to be a bit skeptical towards ESG ratings and find that rating agencies fall short because often externalities are caused by the product, not the internal corporate behavior that is being measured with ESG scores.

How do ESG ratings and ESG indices influence the path and development of sustainable investment in the long-term, and what improvements are needed in the ESG field (in order for it to contribute to sustainable investment)? In defining ESG and sustainable finance, the results show that it is not only an academic discussion, but also a political discussion. Change can be expected of institutional investors like pension funds because they have a public profile and thus an incentive to change. There is a role for the largest Dutch pension funds to push ESG rating agencies to improve their practice.

There are two contradicting developments going to have an influence on the long term. The first is the development of standardization enforced by the EU. The second is that asset managers want to stand out because that is profitable. For asset managers it seems that ESG is are generally accepted but still needs standardization. A lot of asset managers have embraced the ideas of ESG investing and it is becoming more difficult to still distinguish yourself with ESG. Therefore, an asset manager or rating-agency has to 'catch the next wave', the following two trends: scenario development and impact. However, ESG ratings will stay influential, if only for compliance.

A move towards better year reporting on ESG issues, as serious as is now happening with financial reporting, would be a promising development. This could lead to better informed decisions from investors who will no longer blindly trust the judgment of certain rating agencies. The majority of the respondents think that in a few years' time there will be a few dominant rating agencies for sustainability or ESG that are accepted by the market.

Dutch pension funds need climate change data, because pension funds want that money of their clients is invested in future proof categories. This means they want to see that businesses have a strategy to deal with climate change to make the same financial return.

To answer the main research question, this research suggests that ***ESG ratings and ESG indices influence the investment behavior of*** small and regular sized ***Dutch pension funds, in order to choose for sustainable investments*** by determining what companies fit their sustainable investment portfolios. The largest Dutch pension funds do not lean on ESG ratings and ESG indices in decision making for sustainable investment.

Lastly, leaning on the empirical findings of this study, the following theory is formulated: For Dutch pension funds, ESG ratings and ESG indices are currently perceived of insufficient quality (by experts and users) to be able to fully measure the ESG quality of companies and to base sustainable investment decisions on. This theory will be further discussed in chapter 7 (Discussion).

7. Discussion

This section discusses the implications of the results that are presented in chapter 6 (Conclusions). Further, it discusses the limitations of the research and proposes directions and considerations for further research.

This research, as intended, measured in what way ESG ratings and ESG indices influence the sustainable investment behavior of Dutch pension funds. There are some limitations that could have influenced the results. Small and medium sized pension funds are underrepresented in the interviews. Most results about this group are collected indirectly via sources like expert interviews and professional and academic literature. A better representation of this group in the interviews could add a more in-depth insight into their thoughts on ESG ratings and ESG indices. This would prevent a bias and provide a more balanced look on the investment behavior of Dutch pension funds in general. Now, predominantly the frontrunners are interviewed. This might cause a bit of a 'rosy outlook' on the degree in which Dutch pension funds are aware of, and are working on, sustainable investment solutions. Also, the underrepresentation of small- and medium sized pension funds may have led to a hyper focus on the shortcomings of ESG rating due to the responses of ambitious frontrunners and critical experts. It is plausible to think that small and medium sized pension funds are quite pleased with the quality of ESG ratings and other ESG products, because it helps them navigate their sustainable investment strategies and meet regulatory requirements, in a cost-effective way.

The use of the snowball sampling method has led to an interesting respondent pool with a lot of experts. This was helpful and influences the quality of the data for the better. However, it also resulted in that the distribution of experts, rating agencies and asset managers is not even (see Appendix 1). This might cause limited insight in the (development of the) methods used by rating agencies for ESG-assessments. Therefore, future research on this topic could be improved by working with a more balanced respondent pool.

As was expected after the literature study that already revealed criticism on ESG ratings, most respondents see many shortcomings in ESG ratings and in the use of ESG indices. A more unexpected outcome is that the raw ESG data, the research behind the ratings, are useful for the largest Dutch pension funds in order to perform their own extensive ESG analysis. Also unexpected is that they advised against leaning on the ESG end-scores in the decision making for sustainable investments. Experts were skeptical too about the use of ESG ratings by Dutch pension funds to steer their sustainable investment decisions. This is due to the shortcomings they see in the standard 'ESG' products that are on the market. Nevertheless, the general idea of an ESG rating, or of ESG integration, seems to be useful: it can function as a sanity-check and a starting point for investigating the sustainability performance of companies. Experts see that the small- and regular Dutch pension funds make more and more use of ESG ratings and ESG indices. But what are the consequences of these decisions? Because at the same time, experts and frontrunners are skeptical about using ESG ratings and ESG indices to measure the sustainability of companies. From the perspective of small- and regular sized Dutch pension funds, following the end-scores of EGS ratings or and ESG index is a responsible and sustainable investment decision. Because doing that is a more sustainable choice than doing 'nothing' and invest in regular funds that are more likely to contain companies that may be extreme laggards regarding sustainability. How the small and regular Dutch pension funds handle the growing critique on ESG ratings is not clear.

The data suggests that predominantly the size of a pension fund has an influence on the sustainable investment behavior. The researcher suspects that the motivation for the largest pension funds is high, because they are strongly held responsible for environmental, social and governance issues that occur in their portfolio by their members and by the public. They are in effect so big that 'no move goes unnoticed.' The smaller pension funds are motivated for sustainable investment both by regulation and by expectations from their members. For their asset managers ESG ratings and ESG indices are a helpful tool in communicating the sustainability of their portfolio and to at least do the minimum regarding sustainable investment.

A contrasting finding of this study is the popularity of ESG ratings, which might be clarified by linking this contradiction to the theoretical framework. The theory of Schoenmaker & Schramade (2019) shows that different stages of sustainable finance and sustainable investment behavior can coexist. The data of this research indeed show that amongst Dutch pension funds different stages of SF are played out simultaneously. Dutch pension funds in general fit with the SF 1.0 typology, by using exclusion strategies and strive towards an SF 2.0 approach. They work on ESG integration by following ESG ratings or ESG indices because it is a reasonable and cost effective first step in sustainable investment. Also, the regulator expects that they incorporate ESG factors in their investment decisions. Particularly motivating seems the growing regulators expectations on ESG integration and the expected influence of the upcoming EU Green Taxonomy.

The frontrunners, the largest pension funds in the Netherlands, invest with a SF 2.0 approach. They and are motivated to integrate the value of the triple bottom line and are active owners that do engagement activities. They are also aware of the fact that ESG ratings are not the 'holy grail' to identify the sustainability of their portfolio and only use the raw data. With these data, the largest Dutch pension funds work on the frontlines to find solutions to measure the impact of investments, aiming for a more ambitious investment approach that fits SF 3.0. Such an approach is not available for smaller pension funds due to their limited resources.

It is of societal relevance that investments that qualify as SF 3.0 are endorsed over less ambitious sustainable investment strategies. Because with ambitious sustainability strategies investors can create shared value by contributing to the SDGs and to achieving the goals set by the Paris Agreement. A meaningful role for the largest Dutch pension funds is to engage with ESG data providers and challenge them to keep improving their assessments to ameliorate the status quo of 'ESG'. The goal should be that ESG ratings select what, and how much, companies contribute to reaching shared value for society at large.

The theory presented at the end of the chapter 6 (Conclusion), (that the ESG ratings and indices are currently perceived (by experts and users) of insufficiently quality to be able to fully measure the sustainable quality of companies to base sustainable investment decisions on), needs to be tested by further research. Do indeed all Dutch pension funds think that ESG ratings are of insufficient quality? Another angle for future research is, to research if the discrepancy between small and large pension funds also applies to other countries. It is necessary to know how much impact this has on sustainable investment behavior, because it could be counteracting sustainable investments. Large Dutch pension funds only use raw ESG data and thereby hardly influence the ESG interpretation of the rating agencies. The smaller Dutch pension funds have less influence on rating agencies because they are smaller clients.

The majority of the respondents discussed the active investment approaches, when asked about sustainable investment. However, the data show that most of the assets are invested by using a passive strategy. In retrospect, the differences between active and passive investment strategies was underestimated in the preparation of this research. Future research could be improved by making a clear distinction between the integration of ESG in passive- and in active investment strategies, also in the interview guide.

Although the data suggest that it is relevant for the improvement of ESG ratings, this study could not fully include all relevant data on reporting, impact and impact investment because it was beyond the purpose of the study to do so. The data that is included on these topics indicate that standardization in reporting is a crucial next step to improve ESG ratings and sustainable investment in general. What steps need to be taken to accelerate better reporting would be an interesting follow-up of this research.

Lastly, respondents warn that if the situation does not change, similar shortcomings like the lack of definition and standardization will be identified regarding the trends ‘impact investment’ and ‘SDG investments.’ These types of investments are increasingly being used by many Dutch pension funds and other institutional investors. These investors probably adopt such funds with the best of intentions, aiming to be part of the solution. However, to see if they help create shared value, the actual contribution of these funds to the SDGs needs to be measurable in a conform and credible way. Ambiguous measuring techniques to check sustainability performance are counterproductive for reaching the SDGs. As with sustainability or quality marks on products in the supermarkets, also ESG ratings should be held accountable by an independent supervisor.

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