

The S of ESG

Measuring the S of ESG and its impact on risk and return of a real estate portfolio

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Author

Daniël Johannes van den Beukel

Supervisors University of Twente

Laura Spierdijk & Berend Roorda

Supervisors Syntrus Achmea real estate & finance

Daan Tettero & Onno Hoff

syntrus | **achmea**
real estate & finance

UNIVERSITY OF TWENTE.

Management summary

Introduction and research objective

Syntrus Achmea is an asset manager in real estate. Sustainability is becoming more important for companies in real estate and companies in other industries. The European Union is introducing the Taxonomy and the SFDR (Sustainable Finance Disclosure Regulation) to force companies to be more transparent on their sustainability and to introduce some standards to measure ESG (Environmental Social Governance). Currently, there is no taxonomy for the S.

ESG is a tool to measure the sustainability of a company, which will be the focus of this thesis. The focus of regulators and investors was on the E (Environmental) part of ESG but there is an indication that they want to include the S (Social) part. The S of ESG is getting more important for investors. For Syntrus Achmea, it is an opportunity to go beyond the market standard and exceed the investor's expectations for sustainability. Additionally, Syntrus Achmea wants to comply with the new rules and regulations that are inevitably coming.

The focus of this research is on the S of ESG. The objective is to make S measurable and find the impact of S on risk and return. Different rating agencies use different frameworks to measure the ESG of a company. Different rating agencies do not always agree on the ESG score of a company. Based on research done in the literature, most of the deviation originates from the indicators used to measure the different aspects of the S. The aspects used to measure the S score in the frameworks are less important for the deviation than the used indicators. Whereas the weighting of the different aspect is of least importance for the deviation in S scores. This research focusses on finding the basic components to measure the S of ESG and find information about the potential impact the S of ESG can have on risk and return.

Approach

In the literature, we found limited information on how the S should be measured and what the impact was on the risk and return in real estate. The lack of data made qualitative research the best option. We choose expert opinion to find answers to our research questions. A shortened version of the Delpi method was used with one round of interviews and a panel meeting to validate the data.

We build an initial framework to measure the S based on the literature study. We used the paper of Berg et al. (2019) to find a base set of attributes that we trimmed down to a list of attributes relevant on asset level in real estate. For these attributes, we searched for indicators to measure them, this resulted in an initial framework. We wanted to use the opinion of the experts to improve the framework and to determine which aspect of S are the most important. However, prior to the interviews, only three out of the total of five questionnaires were returned, which was not enough data to rank the attributes and indicators.

Six out of the eleven selected experts participated in the interview and five questionnaires were returned in total. The panel meeting had to be cancelled because of the unavailability of experts. Instead, we used annual reports of companies similar to Syntrus Achmea to validate the results from the literature and expert opinion.

Conclusion

We conclude that there is no standard method available to measure the S of ESG. Some pressure is applied from the regulators via the SFDR and taxonomy to establish a standard. However, their

progress is slow. It is up to the industry and investors to determine what will be the standard. This research found some aspects of S that have a high probability of being part of this standard. These aspects are Access to Basic services, Community and Society, Health and Safety, Health and Wellbeing, Tenant's satisfaction and Tenant engagement.

Companies like Syntrus Achmea can try to influence what will be the standard for the S of ESG. They can share information with investors and rating agencies to increase the awareness for a certain aspect of the S of ESG. Working together with other companies could also be an option to set up a standard.

Currently, the impact of S on risk and return in real estate is unclear. Therefore, we see no direct reason for Syntrus Achmea to alter their risk and return models based on the S of ESG. We found two reasons for the impact of S on risk and return to be unclear in real estate; there is a housings shortage and there is no standard method to measure the S of ESG.

Preface

In front of you lies my master thesis. With this thesis, I report on my findings about the S of ESG. This thesis will conclude my master Industrial Engineering & Management. I really enjoyed my time at Syntrus Achmea with the open and good ambience. However, I did not do all the work myself and I would like to thank everyone that helped me to complete this thesis. I would like to thank some people in particular:

I would like to thank Daan Tettero and Onno Hoff, my supervisors at Syntrus Achmea. They played a very active role in supervising me during my thesis. I could always ask for their help for information and advise. They also introduced me to their connections for my expert opinion. I know at one point, I needed approval of the ethics committee of the University of Twente and Daan said: “Do we need to call someone to make them react to your request faster.”

Also, a special thanks to Laura Spierdijk en Berend Roorda, my supervisors from the University of Twente. Their feedback helped me to improve my thesis. Especially Laura Spierdijk with whom I had most of my meetings. Every meeting I had with Laura, she told me about the new articles she had been reading about my thesis subject.

List of abbreviations

CSR = Corporate Social Responsibility

ESG = Environmental Social Governance

E = Environmental

EU = European Union

G = Governance

IRR = Internal Rate of Return

ROI = Return on Investment

S = Social

SDG = Sustainable Development Goals

SFDR = Sustainable Financial Disclosure Regulation

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1. Introduction

This chapter introduces the company and the assignment. Section 1.1 will introduce the company Syntrus Achmea. In section 1.2, we motivate the reason this research was conducted. In section 1.3, we bundle the given information in a problem cluster. In section 1.4, we state the objective and the scope of the research. In chapter 1.5, we convert the research objective into a main research question and we introduce and motivate the supporting questions.

1.1 Introduction of Syntrus Achmea

Syntrus Achmea Real Estate & Finance, which in this document will be referred to as Syntrus Achmea, is an investment manager in real estate and mortgages for institutional investors. Syntrus Achmea is a subsidiary company to Achmea and is used to make investments on behalf of pension funds, insurance companies and charity organisations. Syntrus Achmea specialises in real estate and mortgages. In total, Syntrus Achmea manages around 39 billion euros for 70 customers.

Syntrus Achmea manages several portfolios. Every portfolio is managed by a portfolio manager or fund manager. A portfolio manager manages one portfolio and a fund manager manages multiple portfolios. For example, Syntrus Achmea has a housing fund, healthcare fund and retail fund. The final responsibility for the portfolio lies with the fund/ portfolio manager. The portfolios are owned by the customers of Syntrus Achmea. This means that Syntrus Achmea does not have this money on their balance sheet. With all investments, the risk is for the customer. Syntrus Achmea invests the money of their investors within an agreed mandate. This is laid down in fund terms and conditions and the portfolio plan. Syntrus Achmea gets paid via a fee based on the value of the portfolios they manage.

1.2 Research motivation

Before we motivate the research, we need to introduce ESG which stands for Environmental Social and Governance. I will from now on be named ESG. The term ESG was invented in 2005 and stems from the Responsible Investment movement. The term was first published in a report from the United Nations (UN) titled: "Who Cares Wins: Connecting Financial Markets to a Changing World." This report got the endorsement of 20 financial institutes that are regarded as influential institutes. ESG is used to assess and report on non-financial behaviour of the company. The E (Environmental) of ESG has seen a lot of research and some hard metrics are available to assess and report on E. However, the S (Social) of ESG is much softer and less research has been done to find ways to access and report on S (Brounen et al., 2021; Eccles, 2020; GRESB; Kell, 2018). No specific information was found about the progress of measuring the G (governance).

Syntrus Achmea is altering their portfolios to meet their ESG goals. One of the ESG goals is to be carbon neutral before 2050 for example. Their motivation to alter their portfolios is twofold. Firstly, it is an opportunity for Syntrus Achmea to go beyond the market standard and exceed the investor's expectations and secondly Syntrus Achmea wants to comply with the new rules and regulations that are inevitable coming. However, this may come at a Return on Investment (ROI) cost. So, Syntrus Achmea must balance the will to change with the obligation to maximize profits for its customers. At first, Syntrus Achmea's focus was on the environment part of the ESG but this shifted to include the social part as well. Syntrus Achmea wants to know what factors influence the social goal of ESG and how this influences the return and the risk of their portfolios. In Appendix A, an image is added that visualises the different levels of ESG integration.

Syntrus Achmea wants to be a frontrunner. However, investing in S could mean less profit for the investor. Investment decisions for this reason need to be substantiated for the investor to get their approval. Investors can more easily be persuaded to invest extra in ESG when the impact on ESG can be measured and proven.

The last reason to investigate the S is the obligation to report on ESG by Syntrus Achmea. Stakeholders and regulators are demanding more information about ESG, which gives a need for data. Syntrus Achmea wants insight in future data requirements and how to acquire this data. The awareness for businesses on their impact started far earlier than ESG with the concept of Corporate Social Responsibility (CSR). CSR tries to measure the outcomes resulting from the behaviour of companies (Moir, 2001). This was a different view from the common perspective that a company had only a responsibility to its stakeholders (Eccles, 2020).

Stakeholders are demanding more transparency on issues concerning environment and social aspects. This demand for information increases the reporting about environment and social issues by corporations. These tools are collectively referred to as sustainable reporting tools (SRTs) by most. Examples of these tools are corporate social responsibility reporting, sustainable development reporting, triple bottom line and Environment Social Governance (ESG) used by Syntrus Achmea. (Siew, 2015)

To emphasize the relevance of this research, we use a series of articles in the FD (Financieel Dagblad), which is a Dutch newspaper, that gives a good presentation of the current status of the financial market. The CEO of DWS (Deutsche Asset Management) resigned after a raid by detectives and regulators. DWS is suspected of greenwashing, which means that the investors got misleading information in the prospectus about the ESG performance of their investment. DWS and other asset managers attracted investors with their ESG labels because investors want to invest in sustainable investments. Before the raid, DWS stated that 459 billion euro were ESG integrated investments, which after the raid was reduced to 115 billion euro (Baurichter, 2022; Marel, 2022a, 2022b, 2022c; Rotteveel, 2022).

1.3 Problem identification

Syntrus Achmea makes investments for their investors, this gives them a responsibility to their investors. These investment decisions are based on the risk and return of an object. High risk investments need to have a high return possibility to be acceptable in a portfolio. The risk is profiled by labels on the investments. These labels, among others, report on aspects of the ESG and at this point mainly report on the E of ESG. An example for this is the energy label of an object.

Specifically for real estate, rating systems for ESG do exist but they are mainly focused on the environmental aspects and energy optimization because these are clearly measurable. Rating agencies are including more social aspects but the real soft topics are not included because measurement is not standardized and information is harder to acquire (Kempeneer et al., 2021).

An object for investment by Syntrus Achmea is assessed based on tactical research and strategical research. The tactical research is mostly based on the energy labels, or the CO₂ emission measured in kilogram per square meter per year. These are the facts and specs of the object. The strategic research is more subjective. It lays more emphasis on the vision of Syntrus Achmea. Because the social pillar of the ESG rating is not complete, social aspects are considered within the strategic research, which makes it more based on instinct than a standardized measurement instrument.

As mentioned before, Syntrus Achmea is investigating how to alter their portfolios based on ESG. At this point, Syntrus Achmea has no clear way of evaluating the S of the ESG. S is a soft metric at this point, which makes it hard to evaluate even with existing rating systems. To the best knowledge of Syntrus Achmea no standard framework is available on the market. A hard metric makes comparing alternatives easier, which in turn helps convincing an investor to invest in an object. The investor gets a better understanding of the investment decision when these are substantiated with hard metrics.

This results in the following problem cluster. In Appendix B, an enlarge version can be found of the cluster. In red (right side) are the reasons for this assignment. In green (left side) are the core problems.

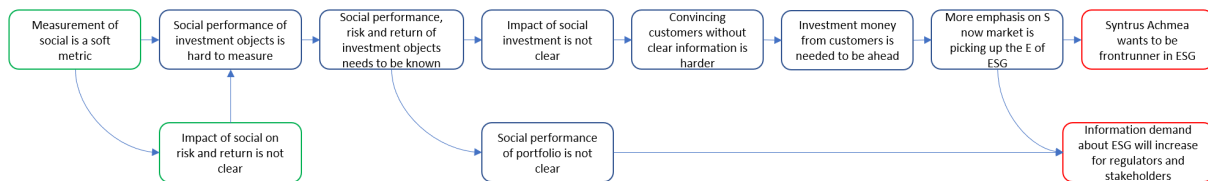


Figure 1 Problem Cluster (see appendix B for an enlarged version)

1.4 Research objective and scope

Before we give the research objective and scope, we elaborate on two terms we use in the thesis. The first term is asset level, with this term we mean the objects Syntrus Achmea manages. The second term is entity level, with this term we mean Syntrus Achmea itself. This research is about the asset level part of Syntrus Achmea. For example, board diversity as a measure for S is not relevant on asset level.

The objective of this research is to make S measurable and find the impact of S on risk and return. In short, to make the soft metric for S harder. Out of the scope are the E and the G of the ESG. They are important to measure a complete ESG score but will be excluded in this study. The best outcome would be a hard metric for S with which choices could be made between investment opportunities.

The measurement of the S and the impact on risk and return will be determined for a specific portfolio of Syntrus Achmea. A generalized solution is preferred by Syntrus Achmea but will not be the main objective of the research. Recommendations will be made with respect to a general framework. This thesis tries to contribute by helping to find a framework to assess and report on ESG and make the soft metrics of S harder for real estate.

1.5 Research questions and approach

To achieve the research objection, we formulated the main question of this research as follows:

How can we measure/ quantify the S from ESG and how does it impact the risk and return of a portfolio at Syntrus Achmea?

To find the answer on the main question, the research is divided into five supporting questions:

1. *Why is there no standard measurement for the S of ESG available for Syntrus Achmea and the market?*

The current progress of Syntrus Achmea and the market needs to be investigated. This gives the basis from where this research starts. The current progress of Syntrus Achmea will be based on conversations with my supervisors and other personnel at Syntrus Achmea. The information from the market will come from literature.

2. *What is a definition/ description for the S of ESG in the relevant context?*

Before an attempt is made to measure S, a definition or description for S is needed. There may be multiple interpretations for the S in ESG, so a clear definition or interpretation for S is needed to determine which measurements of ESG are placed under the social pillar of ESG. This will be done via a literature study.

3. *What are the best practices in measuring S in the market?*

- a. Are there good frameworks?
- b. What indicators are used?
- c. Is there a method or framework to quantify or even monetize S?
- d. What information is needed to use the framework or the indicators?
- e. What indicators are missing?

After a definition is found for S, ways to measure S need to be sought. Existing frameworks to measure ESG can be used to find some of these indicators for S and how to measure them. This will give a good overview of the indicators most used in the market. However, there are indicators that may not have been adopted by the market. These must be found using the expertise of Syntrus Achmea and other experts. Interviews with experts could help filling in the blanks. Additionally, knowledge from different sectors could be used, for example, with ways to determine the value of medicine in the healthcare sector. The result should be a list of indicators that measures the ESG based on consensus in the market and opinion of experts.

4. *What is a good framework for Syntrus Achmea?*

The framework should fit the needs of Syntrus Achmea, an asset manager in real estate. The framework needs to apply for relevant objects in real estate. We will use literature review and expert opinion to answer this question.

5. *What influence has S of ESG on risk and return in a real estate portfolio?*

The object to be invested in, needs to have an acceptable risk for the return. All investment decisions need adequate substantiation for the customers to make them accept the investment. The customer wants a certain return for the risk even if the investment is more social. Literature and expert opinion will be used and later tested with the expertise of Syntrus Achmea. Syntrus Achmea has simulation software available to model different compositions of a portfolio.

2. Context Analysis

This Chapter discusses the current approach of the market and Syntrus Achmea for ESG and the S in ESG. This chapter will give an answer to the first supporting question. In section 2.1, we touch on the current methods Syntrus Achmea uses to measure the S of ESG. In section 2.2, we discuss the methods used by other companies to measure the S of ESG. We state how Syntrus Achmea incorporates risk and return in section 2.3. Section 2.4 gives a conclusion on the current way S is measured and incorporated in the risk and return analyses.

2.1 Current situation to measure ESG at Syntrus Achmea

Syntrus Achmea has methods to measure the E of ESG. Those measures are also common for the market. Performance on the E can be compared with other players in the market. In practice, Syntrus Achmea is investing in objects that should improve the S without being able to measure the improvement on S. For example, Syntrus Achmea invested in electric cars that can be shared by tenants. Such an initiative could increase the satisfaction of the tenant. However, there is no standard to measure how much it impacts the satisfaction of a tenant. This makes it hard to justify different investment opportunities because the extra money spend should make a clear impact.

Syntrus Achmea has a team that examines the strategic relevance of an object. This judgement is based on experience and clear thinking. This team for example introduced a quality-of-life monitor to help making decisions about S. They also introduced a CO₂ roadmap to help the transition to CO₂ neutrality.

2.2 Methods used by similar companies

There is no standard method or framework to rate the ESG of a company. The three aspects of ESG are mostly evaluated separately, which makes it hard to compare financial return in combination with ESG scores. A lot of research has been done to develop a rating system for the environmental part of the ESG. However, the social part has seen limited research. For real estate, the literature is scarce (Brounen et al., 2021). There are ESG metrics but those have an idiosyncratic characteristics linked to their methodological decisions which means that they represent the methodological view of the user and the maker of the metric and data that comes from it (Eccles, 2020).

KPMG has published a report on their website from the International Regulatory Strategy Group (IRSG) in which they discuss the difficulties and challenges that come with measuring the S of ESG. The report emphasizes the difficulty of defining and framing the S of ESG and the missing consistency between methods to measure the S of ESG (IRSG, 2021).

Companies closely related to Syntrus Achmea are: APG, PGGM and MN. They use several methods to rate their own ESG performance. Their websites were searched for information about the used methods. The actual selection of used methods by these companies could be larger. The methods below can be found on their websites.

APG has a sustainability report on their website. A quick search revealed that they use GRESB as one of the frameworks to rate themselves (ABP, 2020).

PGGM uses different rating frameworks to rate their own ESG performance. The used rating frameworks are the Materiality Map from SASB (Sustainable Accounting Standard Boards), GRESB and Bloomberg (PGGM, 2021b).

MN uses the following data providers about ESG: GRESB, MSCI, Bloomberg, Sustainalytics, ISS (Institutional Shareholder Services), Moody's, Transparency International, Economist Intelligence, ND-GAIN (Notre Dame Global Adaptation Initiative), United Nations Development Programme, Heritage Foundation, Wereldbank, Carbon Disclosure Project and Science Based Targets Initiative (MN, 2021a).

In this section, we mentioned frameworks that are used to measure the ESG of a company. However, we were not able to find detailed information for most of these frameworks.

2.3 Current method of measuring the Risk and return of an investment object

Syntrus Achmea uses two programs to compare the return to the risk. The first program can best be described as a spreadsheet that contains the expected cashflows of a real estate object. The program allows alteration of the cashflows manually to find the sensitivity of an object. This program calculates the IRR (Internal Rate of Return) based on the cashflows put in. For example, the expected rent from a building is inputted manually and via manual changes the IRR can be recalculated for the scenarios that the rent is 10% lower. The input are the cashflows and the output is the IRR per object, so no simulation is done by the program.

The second program Syntrus Achmea uses, is Excel. In Excel, the minimum acceptable IRR is calculated per investment object by adding the cost of capital with the different returns needed per risk category. This minimal acceptable IRR is better known as the hurdle rate. The risk categories and the adjustment to the minimum IRR were determined by expert opinion and standards in the market.

Based on conversations we had with a fund manager and an investment analyst at Syntrus Achmea, the value of an object for Syntrus Achmea depends on different factors. The building has a vacant value and a value when rented out. The most important factors for the value of the object are the competitive position, rent, vacancy, purchase price, selling price, maintenance costs and service costs. Some of these factors are influenced by each other. A building that has a good competitive position can influence the selling price, rent and vacancy. The competitive position covers the alternative options for the chosen target/ tenant group of the building. The service costs can under normal circumstances be fully recovered from the tenant.

Factors, that can negatively influence the value of an object, are risks. Some important future events that can influence the value of an object.

- There is political risk. For example, the government introduces regulation to cap the rent increase.
- Energy label has a big influence especially for office buildings. Office buildings with energy labels below a certain threshold cannot be rented out.
- Changes in the surroundings of the object can have a positive or negative effect. For example, a supermarket is built in the surroundings of the object, which could positively affect the value of the object.

2.4 Conclusion about context analysis

Syntrus Achmea and related companies do not have a standard method to measure the S of ESG for their portfolios. It is unclear for Syntrus Achmea what the impact of the S of ESG is on the risk and return in their portfolios, this means that S may be insufficiently considered in their risk and return analyses.

3. Literature review

In this chapter, we find information to answer research question 1 to 5. We start by finding the reason there is no standard framework available for Syntus Achmea in section 3.1 to help answer research question 1. In section 3.2, we discuss different definitions/ descriptions for the S to answer research question 2. Section 3.3 describes different frameworks/ methods to measure the S of ESG to help answer research question 3. The impact of S on risk and return is discussed in section 4 to help answer research question 5. Section 3.5 states the main results from the literature study.

3.1 Why is there no standard measure for ESG?

No standard available

Getting solid information about the ESG performance of a company is difficult because there is not a consensus on which framework to use. There are a lot of frameworks out there with their own way of measuring the performance. The frameworks use different indicators and weigh the different pillars and indicators differently. The scores also vary because of the varying importance of the different indicators per company, dependent on the industry and subindustry the company is part of (Chen, 2020; Giese, 2021). Billio et al. (2021) researched the consensus between different rating agencies. The research shows the disagreement between the agencies. There is an example of Nissan motor that got excellent scores from some agencies while another found that Nissan was one of the worst scoring companies.

In the paper of Drempetic (2020) the relationship between ESG and the size of the firm is investigated. This study finds a positive relation between the size of the researched companies and the ESG score. The most convincing reason is that smaller companies have less resources to spend on collecting data and writing reports about ESG. Frameworks that measure ESG, for example Bloomberg, grade missing information with a lower score. Therefore we need a standard way of measuring ESG that does not favour bigger sized companies (Actiam, 2020).

Based on the previous paragraph, we can conclude that there is no standard way of measuring the ESG of a company or a portfolio yet. The sets of indicators used to measure the ESG in several frameworks are different but may give a good basis to make a new framework to measure the ESG. The ability to report on ESG is important for companies to get a good ESG score. This makes the existing frameworks sensitive to company size which should be unrelated to the actual ESG performance of a company.

Main reason for different ESG scores

A study from Berg et al. (2019) researched the main cause for divergence between different rating frameworks/ agencies. The compared frameworks from different raters are: KLD (MSCI Stats), Sustainalytics, Vigeo Eiris (Moody's), RobecoSAM (S&P Global), Asset4 (Refinitiv) and MSCI. This study compared three elements of the different frameworks: First, the scope; the full set of attributes covered by the framework. Second, the measurement; difference in indicators used to measure the different attributes. Third, the weight; the difference in importance between the different attributes. To compare the different rating frameworks, Berg et al. (2019) made their own framework based on the data from the different frameworks.

The framework was built as follows: attributes were created based on the indicators used by the different frameworks. Indicators were classified to attributes. In case the attribute was not yet created, an attribute would be created when two different frameworks used an indicator that was based on a certain attribute. This method resulted in a list of 65 categories and every category contains one or

more indicators. The left-over indicators were classified as unclassified indicators. This method allows comparing which frameworks measures a certain category and how many of the indicators are measured inside a category (Berg et al., 2019).

The research of Berg et al. (2019) concludes that the biggest difference between rating agencies is found within the same categories; the way the score is determined within a category. There is a difference in the indicators used and the way they are scored. The scope seems to have less influence and weighting the least. Rating agencies are also sensitive to the, as they call it, “rater effect”, which implies that correlation exists across different categories. This means that a good or bad score on one category influences the score on another category.

Regulator’s role in creating standard

The European Commission is writing regulation on sustainability-related disclosure for the financial sector. The goal is to force companies to be more transparent on the sustainability aspects of their products and by doing so stimulate that more money is diverted to sustainable financial products. The current regulation is about disclosure of financial activities. Funds, financial products and portfolios can be classified according to different articles in the SFDR (Sustainable Financial Disclosure Regulation). The SFDR prescribes which information needs to be disclosed based on the chosen level. (European-Commission, 2019).

The lowest level in the SFDR is the article 6 funds; they do not incorporate sustainability in their process of investing. These funds can invest in controversial companies like tobacco but will be labelled as non-sustainable. Article 7 financial products disclose about adverse sustainable impact consideration and whether they occur. The funds/ financial products only report on sustainable impact but do not aim at improved sustainability. Article 8 funds/ financial products are promoting sustainability, but sustainability is not the objective of the investment. Article 9 funds/ financial products have sustainability as their objective. It may even come at a loss of return (European-Commission, 2019; Robeco, 2020). It is important to mention that companies are responsible to label their funds/ financial products. Choosing to label a financial product with article 9 is their own responsibility.

The EU (European Union) is building an EU taxonomy that should provide a list of economic activities that are qualified as sustainable. The actions should satisfy certain conditions before they qualify as sustainable, which should accelerate the transition and combat greenwashing. In contrast to the SFDR, the taxonomy prescribes how a company needs to report on a certain topic. Taxonomy in combination with SFDR should provide transparency and legal definitions, which should also reduce the problem of green washing (Eurosif, 2021; PGGM, 2022). The SFDR started in 2020 with only environmental activities (EU, 2022).

In the literature there is not one answer why there is no standard method to measure the ESG of a company. The difference in opinion means that there is no consensus about the matters that should be measured and their importance to the overall performance of a company. The European Union is trying to build a standard with the taxonomy and the SFDR. The SFDR is a disclosure regulation, and the taxonomy regulates how topics need to be disclosed.

3.2 What is a definition for the S of ESG in the relevant context?

In 2008, a study was done using Google search to find a definition for the umbrella term CSR (Corporate Social responsibility). It turned out that multiple definitions exist for CSR. However, there is a consensus about the five dimensions CSR covers which are: Environmental, social, economic, stakeholder and voluntariness dimension. The social dimensions is defined as: “the relationship between business and society” (Dahlsrud, 2008).

In literature many attempts have been made to measure the CSR of a company. There are multiple approaches/ frameworks and multiple databases with information about companies. There is still not one standard to measure the CSR of a company based on information from two papers. One from 2009 and one from 2020. Both papers use earlier approaches to find a new method of measuring CSR (Sancho et al., 2020; Turker, 2009).

In the report of the UN, Who Cares Wins, some ESG issues are addressed under the social issues that have a broad range of impact of companies (Compact, 2004):

- Workplace health and safety
- Community relations
- Human rights issues at company and suppliers/ contractor’s premises
- Government and community relations in the context of operations in developing countries
- Increasing pressure by civil society to improve performance, transparency, and accountability, leading to reputational risks if not managed properly

GRESB (Global Real Estate Sustainability Benchmark), the global ESG benchmark for financial markets gives a description of S in the built environment. They differentiate between the traditional social pillar of ESG and social value. *“The “Social” pillar within the traditional ESG agenda customarily focuses on organisational policies and practices regarding human rights, business ethics, supply chain management, diversity and inclusion, and social impacts resulting from corporate operations.” “Social Value comes in the context of the built environment exploring the impact that buildings and places have on people and communities. As such Social Value in the built environment is holistic in scope but inherently local to a particular area”* (GRESB).

INREV, which is an organisation that helps to form standards for the European non-listed real estate funds, gives examples of aspects that fall under the S of ESG: tenant satisfaction, gender and diversity, employee engagement, community relations, human rights and labour standards (INREV, 2021).

With the definitions and the topics that are mentioned, the S of ESG covers a wide range of policies and practices. There is not a singular definition for the S of ESG but topics are classified to be E, S or the G. The topics covered by S do not impact the company or portfolio itself directly but everyone and everything around it like, Health and Safety, Community relations, Human rights, Business ethics, Diversity, Tenant Satisfaction and Employee engagement.

3.3 What are the best practices in measuring the S of ESG?

Dorfleitner (2015) evaluates the consensus between three frameworks that measure Corporate Social performance and concludes that there is little consensus in the different models. The models are used by investors to evaluate the ESG performance of different companies. The compared models are: ASSET4, KLD and Bloomberg. Other frameworks mentioned are Ethical Investment Research Service (EIRIS) and Sustainable Asset Management Group (SAM).

Both Asset4 and KLD use binary outcomes for their performance indicators but differ on the number of indicators used and what indicators are used. ASSET4 uses its 850 binary points to find data points for 250 KPI's that are assigned to 18 category scores. Those category scores are sub-components of the four pillars of company's social performance. ASSET4 gives an overall ESG score and a score per pillar. The pillars have equal weights in the overall score. In 2009 KLD used 80 indicators to score the ESG performance of a company (Dorfleitner, 2015).

Bloomberg does not score the ESG performance of a company directly. Bloomberg checks non-financial information shared by a company. The content itself is not important but the availability of the information is (Dorfleitner, 2015). There is a relationship between sharing non-financial information about a topic and good performance on that ESG topic, which is logical because a company that scores bad on an indicator will most likely not share information about this indicator (Clarkson et al., 2008).

Morgan Stanley Capital International (MSCI) has its own ESG rating framework that uses 35 key issues or indicators. MSCI uses this ESG framework to evaluate the material industry ESG risk and opportunities. Only ESG measurements that impact the profitability of a company are considered. The score is based on the best and worst performing company in the industry. This means that all scores are relative to the industry the company stems from. So, companies that stem from a polluting industry still can get a good score if their pollution is low relative to other companies in the industry. The best scoring company gets a AAA rating and the worst scoring company a CCC rating. An overview of the ESG indicators can be found in In Appendix C (MSCI, 2020).

Another framework that is emerging to measure the impact of an investment is SDG: the United Nations supported Sustainable Development Goals (Chen, 2020). Syntrus Achmea selected five Sustainable Development Goals (SDG) of the United Nations to focus on (Syntrus, 2019).

- 1) Good Health and well-being: Ensure healthy lives and promote well-being for all at all age.
- 2) Affordable and clean energy: Ensure access to affordable, reliable, sustainable and modern energy for all.
- 3) Sustainable cities and communities: Make cities and human settlements inclusive, safe, resilient and sustainable.
- 4) Responsible consumption and production: Ensure sustainable consumption and production patterns.
- 5) Partnership for the goals: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Appendix I states the explanation and indicators used by the United Nations belonging to the different SDGs. Most of these indicators are relevant for countries and not companies.

Brounen et al. (2021) refers to EPRA (European Public Real estate Association) who documented guidelines for reporting on ESG. For the social aspect of ESG they use nine performance measures. The only performance measure that is S and is on asset level is: "Asset Health and Safety assessment." The nine performance measures for S can be found in Table 1 below.

Performance measure	Unit of measure
Employee gender diversity	Percentage of employees
Gender pay ratio	Ratio
Employee training and development	Average hours
Employee performance appraisals	Percentage of employees
New hires and turnover	Total number and rate
Employee health and safety	Injury rate, absence rate, number of work-related fatalities
Asset health and safety assessment	Percentage of assets
Asset health and safety compliance	Number of incidents
Community engagement, impact investment, development programs	Percentage of assets

Table 1 Social performance measures by EPRA (EPRA, 2017)

There are many rating agencies with their own framework with some frameworks being specialized for certain sectors. The frameworks use different indicators, have different scoring methods and use different weightings, what means that there is not one standard practice to evaluate a company and determine a ESG score. To use multiple frameworks to get some measure of the ESG performance like some of the similar companies to Syntrus Achmea do, is one method to overcome the problem of not having one standard.

Based on the information gathered in the literature and market, there is no standard way of measuring the S of ESG. However, there are multiple frameworks that measure ESG. An indicator that is used multiple times in a range of frameworks now gives a strong signal that it might become standard in the future. The framework from the paper of MIT (Berg et al., 2019) gives a list of attributes to measure the ESG of a company, which can be found in appendix D, will therefore be the base to start from. The precise indicators underlying each attribute are not added unfortunately. The number of indicators per rating agency is added per attribute. The frameworks compared and used were: KLD, Sustainalytics, Vigeo Eiris, RobecoSAM, Asset4 and MSCI.

3.4 What is the impact of the S in ESG on risk and return?

In Chen (2020), three different approaches to creating an ESG portfolio are discussed. The first is restriction list based. This approach prohibits investment in companies related to controversial areas like tobacco, gambling and cluster munitions. This approach usually does not deliver positive alpha because the available set of companies to invest in is smaller. The second method is the integration approach. Investment choices are not only based on returns but also ESG performance. The last approach is impact investing. The investor invests in companies that are involved in making solutions for environmental and social problems. The investor invests to reach an environmental or social goal instead of establishing a maximum return for the investment made. The downside of this way of investing is the inability to measure the impact and some or all financial return may be sacrificed.

Using the paper of Pedersen et al. (2021) the last two methods are best explained using the ESG-efficient frontier. Per Sharpe ratio there is an optimum ESG score. This means that portfolios not on the efficient frontier could improve their ESG score or increase their return or decrease their risk. The line in figure one is the frontier, which gives the best return for the riskiness and the highest ESG score. Going beyond the tangency point will decrease the Sharpe ratio but still increase the ESG score. This could be identified as impact investing. The Sharpe ratio will decrease, that means that the financial

return is less for the same risk that is taken. The investor accepts a lower return to reach a certain ESG goal.

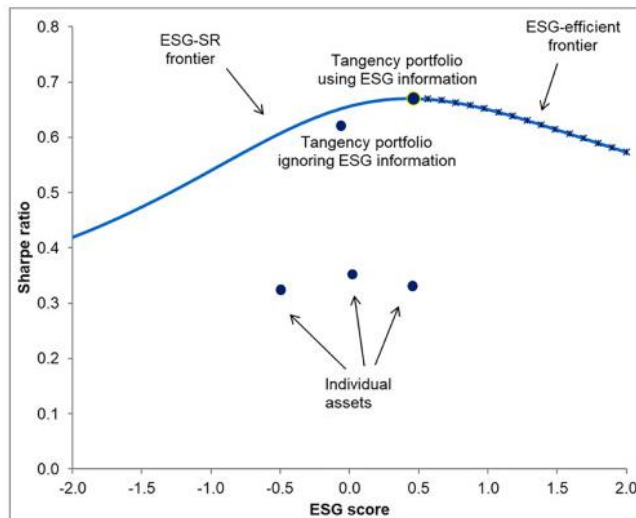


Figure 2, ESG-efficient frontier (Pedersen et al., 2021)

Following Naffa (2021), there are two ways to evaluate the impact of ESG investment in the investment literature. The first approach is to compare the performance of an ESG fund (fund with high ESG score) with the performance of a non-ESG fund. The second approach is to treat ESG performance as a risk factor. In the paper they use a combination of the two approaches.

In the literature there are attempts to link ESG to financial performance. A study of Wang and Sarkis (2017) uses Bloomberg's ESG to find the relation. Bloomberg's ESG is a database that stores certain information from companies. The study prefers Bloomberg's ESG database over KLD rating because KLD only stores information about initiatives and weaknesses for several dimensions of CSR. There is no consensus what data should be used to determine the S of ESG. The return of companies is compared with their overall ESG score.

Following Brounen et al. (2021), financial literature studies have been done to investigate the link between ESG performance and risk and financial return. Risk seems to be reduced for corporations that score well on ESG. The literature is not conclusive about the financial return. On the short-term high scoring corporations on ESG do not outperform low scoring corporations however there is some evidence that in the long run corporations with higher ESG scores will catch up.

Zanin (2021) compares the credit rating of different companies with their ESG scores. The credit rating of a company is a measure for the riskiness of a company. To measure the ESG scoring of a company the database of Refinity was used. Their research found a positive relation for real estate between a lower credit rating and better E and G scoring. The S did not significantly impact the credit ratings for real estate.

The conclusion from Zanin (2021) aligns with earlier research done by Hebb (2010). The paper of Hebb (2010) investigated the impact of RPI (Responsible Property Investment) in Canada. This paper found evidence that there is more concern for environmental and the governance aspects and less for the social aspect. The article states that rating agencies BOMA and LEEDS, which are popular building certifications systems, are including more S in their ESG metric. However, they conclude that there is no strong evidence on the link between tenancy rate, tenant satisfaction and increased rent. Another

research done in Poland by Brodowicz (2017) supports this conclusion because it is easier to convert energy efficiency and the utility bill to financial gains than social matters. The reason for the lack of impact is, following the paper, the low awareness of buyers and tenants for the benefits coming from investing in social, which leads to low pressure on investors.

Based on the above, there is no clear conclusion about the impact of the S of ESG on the risk and return of a company or a portfolio. There are two methods to determine the impact of the S on risk and return (Naffa, 2021). However, they both have the limitation that the S of ESG should be measurable. Comparing a ESG portfolio or company with a non ESG portfolio or company seems easy but without a standard method to measure the ESG score, a reliable comparison cannot be achieved in our opinion. The second method to convert the ESG score to a risk factor combats with the same problem. This means that a standard method of measuring the ESG is needed to get a reliable conclusion about the impact of S of ESG on the risk and return of a portfolio or company.

An Article from Marian Euverman, founder of Mylivi, in the Financial Investigator discusses the relation between social and the risk and return in real estate. She starts the article that most companies focus on the E of ESG because incorporating of social goals in their policies is hard. However, Euverman argues that real estate is one of the sectors that can influence the S of ESG easily by building a community. Local residents learn to know each other, which leads to trust between residents and a save feeling, which in turn leads to higher pleasure of living in the building, which in turn may lead to less vacancy. Vacancy in a building is a risk for the owner of the real estate (Euverman, 2022).

Brodowicz (2017) makes a good point why there is no clear link between the S of ESG and the risk and return of an investment. If there is no awareness of the benefits or downsides of investing in S, it will have no impact on the risk and return. However, as mentioned earlier in this thesis, the focus is shifting from the E of ESG to the S of ESG, which could make the S of ESG more important for risk and return in the future.

3.5 Conclusion of the literature study

There is no standard method to measure the S of ESG. Different rating agencies use different frameworks to measure the ESG of a company. The variables used to measure the ESG score of a company is the biggest reason raters do not agree on the ESG score of a company. The disagreement between raters of ESG is one reason why there is no clear answer what the impact of S is on risk and return. Another reason is the low awareness for buyers and tenants for the benefits of investing in S related investments.

The limited awareness from buyers and tenants could explain why there is no pressure from the industry to make the S measurable. There is no clear evidence that the value of the object is influenced by S. The European Union is using the Taxonomy and the SFDR to force companies to be more transparent on their sustainability and to introduce some standards to measure ESG. However, there is no taxonomy of the S at the moment.

Based on this conclusion this research will focus on finding the basic components to measure the S of ESG and find information about the potential impact the S of ESG can have on risk and return.

Conclusion literature	Papers
No standard framework	Billio et al. (2021), Chen (2020), Giese (2021)
No impact on risk	Chen (2020), Brounen et al. (2021), Zanin (2021), Brodowicz (2017)
Low awareness	Brodowicz (2017), Hebb (2010)

Table 2: Papers to support conclusions

4. Solution design

This chapter describes the solution design. We start by building an initial theoretical framework based on literature studies. Before we introduce the initial framework, we establish the used terminology in section 4.1. In section 4.2 we selected a base set of attributes. In section 4.3 we determine a base set of indicators per attribute. We will use expert opinion to verify this framework and find more information about the impact of S on risk and return because the available information in the literature is limited. Section 4.4 gives an initial method for Syntrus Achmea to incorporate the S in their risk models. We discuss the chosen method for the expert opinion in section 4.5. Section 4.6 gives a short conclusion on the solution design.

4.1 Terminology

In the remainder of this thesis, the terminology of Berg et al. (2019) will be used. Attributes are measured by their indicators. So multiple indicators measure an attribute. Attributes belonging to S give a measure for S. Examples of attributes can be found in appendix D.

4.2 Selection of base set of attributes for Syntrus Achmea

As mentioned before, the framework discussed in the paper of MIT is used as basis to form a list of attributes. The list of attributes is reduced to the attributes related to S of ESG, that can be found in Appendix F. Because there is not one clear definition of the S of ESG, the first selection of attributes is based on common sense with some help of the description of S found during the literature study. This list gives all the attributes related to the S of ESG without any consideration of relevance to Syntrus Achmea.

To further reduce the list, attributes are removed based on two criteria. First, the attributed needs to be rated by at least four rating agencies. Secondly, attributes not relevant to Syntrus Achmea are removed from the list. An attribute is relevant when Syntrus Achmea can influence the scoring on the attribute or when the attribute is relevant on a portfolio in real estate. The decision on relevance is based on logical thinking. For example, the attribute HIV programs is removed from the list because Syntrus Achmea has no dealings with the matter and not enough agencies measure it. The table that elaborates on the relevance for attributes that are recognized by four or more agencies can be found in Appendix G. The following table contains the relevant and recognized attributes:

Attributes	Number of agencies	Sum of indicators	Highest number of indicators
Health and safety	6	19	7
Community and society	5	21	10
Customer Relationship	5	12	7
Human rights	5	14	5
Diversity	4	15	9
Public Health	4	7	3
Access to Basic Services	4	5	2

Table 3: Selection of Attributes

The first column of the table contains the relevant attributes. The second column gives the number of agencies that had one or more indicators to measure an attribute with the highest possible total number being six. The third column gives the sum of indicators different agencies had for that

attribute. This sum does not account for duplicate indicators. Therefore, the fourth column gives the highest number of indicators between the six rating agencies. The number of indicators does not directly represent the importance of an attribute because an attribute may just need more indicators to measure it reliably.

The list of attributes does not have a specific focus for a country or sector, such as real estate. For example, access to basic services normally determines if there is access to drinking water, sanitation and education. These things are standard in the Netherlands. We transform the access to basic services to access to services. Take for example a library or a gym within reasonable distance. All the attributes will be translated to relevant attributes for real estate in the Netherlands. These descriptions can be found in appendix G.

The research will focus on the most important attributes because researching all the attributes will take too much time and we expect no extra insights from including them. A selection of two or three will be made to research in depth. A thorough research of a small selection is preferred over superficial research of all attributes. We expect the first three indicators to be the most important because they are used by most frameworks.

4.3 Selection of base set of indicators to measure the attributes

Now we have a base selection of attributes, we find a selection of indicators to measure the attributes. A study done by Greco (2019) discusses the difficulties of the usage of composite indicators. A composite indicator is a single index that gets its value based on the subcomponents it is measured with. The score for S is a composite indicator. It is based on the attributes and their relevant weighting. The attributes themselves are also composite indicators because they are again measured by different indicators with their relevant weights. The article discusses the different methods to weight and aggregate. Based on the literature review, the weighting of the different attributes and indicators influence the difference in score given by different rating frameworks the least (Berg et al., 2019). The focus of this thesis will lie in identifying the relevant indicators. When the relevant indicators are found, weighting can be done. However, this will be outside the scope of this thesis because of time constraints.

To build the base set of indicators different sources were used. In 2008 a study was done using the Delphi Method to determine the most important criteria for responsible property investment. A total of 66 criteria were evaluated on their materiality importance and public interest importance. The top criteria were: energy efficiency, level of public transport, transit-oriented development, daylight and natural ventilation (Pivo, 2008). This list of criteria and their relative relevance were compared with the rating tool LEED (Leadership in Energy and Environmental design) which is, as mentioned before, a popular rating tool. The list of the criteria can be found in appendix H.

BREEAM, LEED, and GRESB are broadly used frameworks in the Netherlands to rate Real Estate. From BREEAM and GRESB, we found indicators that are used to measure the performance of ESG. Together with the indicators found in Pivo (2008) and HTO (Huurdertevredenheidsonderzoek or tenants satisfaction questionnaire in English) of Syntrus Achmea, we made a base list of indicators to measure S. The relevant indicators were classified to the earlier chosen attributes. We did the initial classification based on common sense. The initial classification is verified with the expert opinion.

Looking at the different frameworks from rating agencies something important stands out. The ESG score does not only measure the current state of the E, S and the G but also the intent of companies. There are questions that evaluate if there is a plan or a script to improve certain aspects in the future (BREEAM, 2018; GRESB, 2021). GRESB assesses on three components: management, performance and development. Accounting for future plans or developments is understandable but it could give a distorted picture of the current situation. For this research, only measures to evaluate the current situation are used.

Some indicators were altered to better fit the purpose of measuring the current situation of S. Indicators measuring future plans were transformed to measure of the current situation. For example: “Creation of physical meeting places” was transformed to “availability of physical meeting places”. Future plans are too subjective and are used to improve the current situation in our opinion. With this reasoning the development indicators were transformed to performance indicators.

Indicators relevant for construction were removed for two reasons. Firstly, in The Netherlands we have laws about labour conditions, which should protect the employees (werkgelegenheid, 2017). Secondly, Syntrus Achmea may have some influence on the labour conditions when constructing an object, but the framework should allow for comparison between objects, already build or not. Duplicates within frameworks and the different frameworks were also removed. Appendix M contains the list of indicators per attribute that we found. In this list, we crossed out the indicators that were not relevant with an explanation why the indicator was removed.

4.4 Incorporate the S in risk and return assessment

The literature describes two methods to evaluate the impact of ESG on the performance of a portfolio. One is to compare an ESG portfolio and a non-ESG portfolio or treat ESG as a risk (Naffa, 2021). Because we want to incorporate the results in the existing methods currently used by Syntrus Achmea, we choose to treat the performance of the S of ESG as a risk factor.

One way to do so is to incorporate the risk originating from the S of ESG in their hurdle rate, which is the method currently used by Syntrus Achmea. Syntrus Achmea determines the minimum IRR an investment object needs to reach. Elements of risk are evaluated and based on the assessment the required IRR is adjusted. In case this requirement is not met, the stock is sold/ not bought. To apply this method, the S of ESG must be convertible to an increased or reduced **hurdle rate**.

A second method could be to alter some of the cashflows, based on expected effects of S, to determine the new IRR of the object. Rent or the value of the building may decline because the object and its neighbourhood have a low score on the S of ESG. Expert opinion and literature study will be used to determine which approach to evaluate the impact suits this thesis best.

4.5 Expert opinion methods

One of the first methods to consider was the Delphi method. A paper by Hemphill (2004) describes an indicator based approach to measure the Sustainability of urban regeneration approach. This paper uses hierarchical modelling, the Delphi method and multi criteria analysis. The Delphi method has two steps where the second step is repeated. The first step is to gather information in writing from the participants. The participants answer questions and respond to statements. The gathered information is analysed and is starting group opinion and therefore the basis for the second step. The second step is to let the participant react to the gathered group information. This way the participant can agree or

disagree with the group and comment on the outcomes of the gathered information. The process is repeated with participants reacting on the newly found group opinion. There is no need for group meetings, which is an important advantage of the Delphi method (Cohen, 2007).

Another method to gather information is to use focus groups. In the research of Klaver et al. (2020), different groups had a guided discussion about different topics. An observer was in the room to make notes and record the sessions. After the group discussions, the transcripts were analysed using an analyses technique from Braun and Clark (Braun et al., 2021).

For this research, a combination of the Delphi method and focus groups will be used. The Delphi method is time consuming for the participants and the researcher when implemented fully because of the repetition of rounds (Gordon, 1994). The steps we will perform are as follows: First, the participant will be asked to fill in a questionnaire. This information will be used to shape the interview. Second, the participants will be interviewed. This research will use a semi structured interview to gather the information. The university of Groningen gives tips about conducting an expert interview (Groningen, 2019) which can be found in appendix K. During this interview, the participant is invited to join in a panel meeting to reflect and discuss the conclusions drawn from the questionnaire and interviews. Third, a panel meeting will be held with the participants who are able and willing to join to discuss the conclusions drawn from the questionnaire and interviews. This last step is used as verification of the results. The profile for the participant can be found in appendix L.

4.6 Questionnaire plan

Based on Braun et al. (2021) the length of the questionnaire is important. The longer the questionnaire, the higher the chance that a participant will lose focus or even disengage. To this end, two fund managers of Syntrus Achmea did a screening of the indicators belonging to the attributes because the number of indicators is vast. They were asked to cross off indicators not relevant for real estate in the Netherlands. Indicators that were crossed off by both fund-managers were deleted from the list of indicators. The initial list of indicators can be found in appendix M. The deleted indicators are crossed out and a substantiation is added per deleted indicator.

We use the questionnaire to collect data before the interviews are held, which should help guide the interviews. The participants are asked to evaluate the initial framework. The relative importance of the seven attributes is verified by asking the participants to rank the seven attributes based on their perceived relevance for real estate, impact on risk and the amount of influence Syntrus Achmea has on an attribute. The participants need to allocate 100 points across the attributes. We chose for the allocation of 100 points because it forces the participant to indicate how much more important one attribute is compared to another.

Following the allocation to the attributes the participants are asked to identify the most important indicators per attribute. The participants are asked to rank the indicators based on their relevance to impact the S of ESG, impact on risk or return and amount of influence Syntrus Achmea has on an indicator. Because the number of indicators is vast, the participant is asked to allocate their points over maximal 5 indicators to rank per attribute per impact category. Again, the participant is asked to allocate 100 points across the indicators. The choice to let the participants only choose 5 indicators from the list is to reduce the time needed to complete the questionnaire and get a clear differentiation between the important indicators and less important indicators. Additionally, the participant can add indicators that are missing in the initial framework and add to them their perceived relevance.

4.7 Interview plan

The interview should help answer the research questions: “What is a good framework for Syntrus for Syntrus Achmea?” and “What influence has S of ESG on risk and return in a real estate portfolio?” Based on the literature study the influence of the risk and return is unclear but may change in the future. Appendix N gives an overview of the questions with explanations.

Questions about the initial framework are excluded from the interview. Questions about relevant aspects of the S were included in the interview to get some information of the most important aspect of S now and aspects that will get more important in the future. The final interview can be found in appendix O.

4.6 Conclusion of solution design.

Based on the paper of Berg et al. (2019) and different sources for indicators, a base framework was built to measure the S of ESG for real estate. We selected the attributes on the number of frameworks that used an attribute because this gives a strong indication that the attribute could be an important attribute. The seven attributes we selected are Access to basic services, community and society, Customer relationship, Diversity, Health and Safety, Human rights and Public health.

A combination of the Delphi method and focus groups will be used to test the framework and gather more information on the impact of S on risk and return in real estate. The steps are described in section 4.5.

5. Results

This chapter elaborates on the relevant framework for Syntrus Achmea. We start with the results of the questionnaire in section 5.1. We discuss the results of the interview in section 5.2. In section 5.3, we present the results of the annual reports. In section 5.4, we explain why the panel meeting was cancelled. Section 5.5 gives a conclusion of the results.

5.1 Results questionnaire

The results of the questionnaire are discussed below.

5.1.1 response rate

Unfortunately, the response on the request to fill in the questionnaire was lower than expected. Three of the 11 chosen experts returned a filled in questionnaire before the interviews started. In total 5 filled in questionnaires were returned. The questionnaire would have been used to determine the initial relative importance of the different attributes and indicators in the framework for Syntrus Achmea. This initial framework would have been validated in the interview. However, the gathered information from the questionnaires is not representing all the experts participating in the research and the outcome is not reliable. Validating the initial framework via the interviews is not a feasible option.

	Number	Response rate
Returned questionnaires before interview	3 out of 11	0.27
Returned questionnaires after interview	5 out of 11	0.45
Interview	6 out of 11	0.55

Table 4: Response rate questionnaire and interview

The questionnaire was sent via mail to the selected persons. We called the participants that did not respond if we had a telephone number. Some participants we called indicated that the questionnaire would take too much time.

5.1.2 Attributes

The questionnaire was filled in by 5 participants. Figure 3, that can be found below, gives an overview of the different attributes with their average scores on importance, risk impact and influenceability. We did no statistical analyses except for an average calculation of the scores per attribute because the sample size is too small.

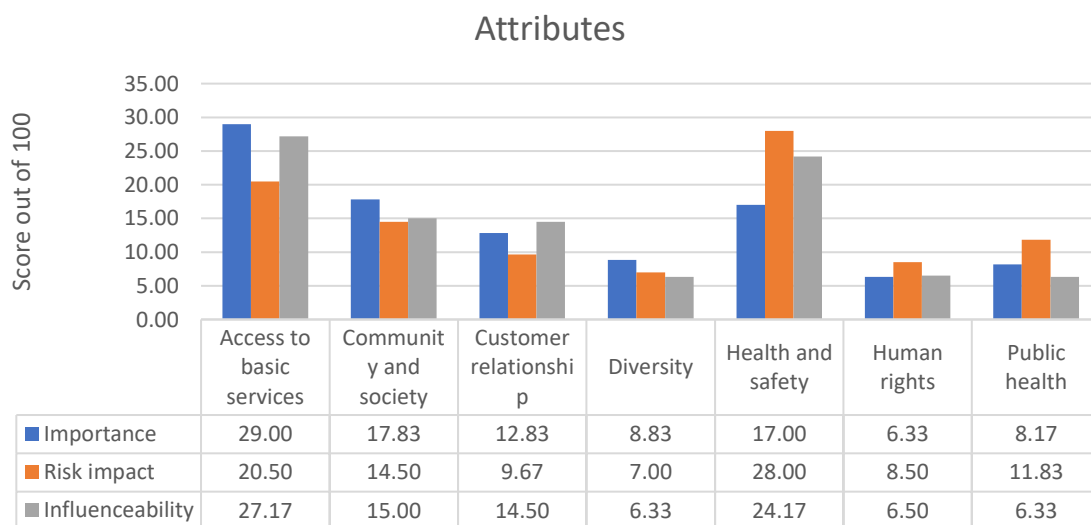


Figure 3: Scores of Attributes based on questionnaires

The three most important attributes are Access to basic services, Community and Society and Health and Safety. These three attributes also score the highest on risk impact and influenceability. The next paragraph will discuss the indicators of the three most important attributes.

5.1.3 Indicators of attributes

This section addresses the scores of the indicators for the three most important attributes. The scores of all indicators per attribute can be found in Appendix S.

Access to basic services

Based on the given scores for the indicators, there is a relatively big gap between the highest scoring indicators and the lower scoring indicators. The scores of the highest scoring indicators are close. Two of the highest scoring indicators share the same score, so we have four important indicators for Access to basic services. Three of the highest scoring indicators are related to accessibility of the object: High level of public transport, Parking spaces and Access for disabled. The last high scoring indicator is Amenities close by for working parents. The most important indicators also score the highest on risk impact. The score on Influenceability is more spread out and does not only cover the most important indicators.

The lowest scoring indicators are about recreational options around the object and financial institutes in the surroundings.

Based on these results, we can say that there is a strong indication that the participants prioritize accessibility over recreational options since these indicators are the most important and have the most impact on risk.

Community and Society

The results for Community and Society are more spread compared to Access to basic services. Central location and green space available do stand out from the rest of the indicators because they score the highest on importance and risk impact. However, central location scores the lowest on influenceability which may be explained by the fact that a building is not easily moved.

Health and safety

The most important indicator is Thermal comfort, which score the highest on all three ratings. Natural ventilation and Prevent physical degradation are the second and third most important indicators. Natural ventilation also scores high on influenceability and average on risk impact. Prevent physical degradation scores high on risk impact but low on influenceability.

5.2 Results interview

The results of the six interviews are discussed per topic. Appendix Q contains per interview the summaries per topic.

5.2.1 Role of parties involved

Influence of the SFDR and taxonomy

As mentioned before the SFDR and taxonomy are an initiative of the European Union (EU) to instigate countries and companies to become more sustainable and to attract more money to be invested in these products and industries. The overall opinion of the participants of the interview is that the SFDR and taxonomy put ESG and in this case the S of ESG on the agenda of companies. However, the SFDR

and taxonomy will not build the actual framework. Most of the participants expect that the frameworks will be built by the industries themselves.

Participants in the interview mentioned a few problems the EU faces with the SFDR and taxonomy. Firstly, the member states of the EU have a lot of power, which they use to see after their own interests. Secondly, the member states want to stay autonomous, which makes it difficult to set strict rules. Thirdly, different sectors have different social issues, which is hard to cover with a SFDR and taxonomy. A participant estimated that the best the EU could do is prescribe substantial contribution criteria for the S where every member state can adapt the framework to a framework that suits their national situation.

There is also the problem that the people at the EU responsible for the SFDR and taxonomy do not have enough in-depth knowledge of the different industries.

Influence of investors/ market

Four out of the six participants estimated that the industries themselves determine the pace of the creation of a standard framework. Three of the six participants mentioned that investors are willing to accept a lower return on their investment if this investment is ESG aligned. The problem for investors is that there is no clear definition what counts as ESG aligned especially for the S, which is a soft metric. The frameworks are used by the companies, so their experience is used to create the framework. Companies choose the framework they score best on. A participant mentioned that people look at their own interests, which can hinder the creation of a standard framework because they want a framework that suits their needs.

Influence of the public/ tenant

Most of the participants did not give a clear answer about the role of the public/ tenants to establish a standard framework. One participant mentioned that negative impact is the biggest driver for public opinion. Another participant argued that the topics are too technical to understand for the public.

Focus more on the E than S

In four interviews, the participant stated that the focus is on the E part of the ESG. In two of those four interviews, the participants stated that the E will become even more important.

Time before there is a standard method

Three participants did not actually give a time window. Three participants estimated another 5 years at least.

5.2.2 Aspects of S to be included in the framework

Most important aspects of S in real estate now

The focus of the interview was on aspects of S that are important on asset level for real estate companies. Some aspects that were mentioned in the interviews, were more relevant for companies or real estate companies in general. For example, board diversity is an aspect of S but not relevant on asset level for real estate. Aspects of S that were not relevant on asset level for real estate are discussed under “most important aspects in general”.

Table 2 gives an overview of the aspects of S mentioned during the interview and in how many interviews the aspect of S was mentioned. This table shows that the most mentioned aspect of S is Health and Wellbeing.

Aspect of S	Number of times named in interview
Health and Wellbeing	3
Tenant engagement	2
Affordability	1
Availability (Social housing)	1
Health and safety	1
Tenant's rights	1
Crime rates	1

Table 5: important aspects mentioned in five interviews

One participant stated that it is situation based what aspects are important. Other participants did not state this directly but based on what the participants said more participants would agree with the statement that S is situation based.

In the fourth interview, the participant pointed out that impact investing funds may want to use a different framework than regular investment funds.

Most important aspects in general

Three participants mentioned aspect of S that are relevant in general for real estate. The focus of the interview is on asset level. We still mention the general aspects that were mentioned during the interviews to stay complete, which can be found in table 4.

Aspect of S in general	Number of times named in interview
Human right	2
Diversity	2
Working conditions	1

Table 6: Important aspects of S in general

Most important aspects of S in the future

In two interviews, we got a clear answer to the question which aspect will be important for S in real estate on asset level in the future. Table 5 gives an overview of the aspects that were mentioned.

Important aspect of S in future	Number of times named in interview
Tenant engagement	2
Health and wellbeing	1

Table 7: Important aspect of S on asset level in the future

Following the third and fourth interview, the E of ESG will get more focus. This contradicts the assumption that the S is becoming more relevant.

In interview six, keep elder people living in their own homes will be a focus in the future. The healthcare sector cannot house all the elder people that need some medical aid because there are more elder people and they get older.

Solve different framework problem

In four out of the six interviews, the participants mentioned some form of working together that ranged from information sharing to actual collaboration by setting up an industry body. In two interviews, transparency was mentioned. This can help companies and raters but also the investors because they get some idea how the score for S was determined.

5.2.3 Impact of S on risk and return in real estate

Requirements to see impact of S on risk and return

In the interview, two reasons were given why we do not know the impact of S on the risk and return in the real estate sector. The first reason is the housing shortage, which limits the options for the tenants. The second reason is the lack of a standard method to measure the S. We cannot measure the S clearly so we cannot measure for S the impact on risk and return.

To remedy this situation, the housing shortage need to be solved. Solving the housing problem will allow tenants to look for housing that suits their demands. We can say that tenant's needs are the important aspects of the S. One participant stated that it would take a minimum of ten years before the housing shortage in the Netherlands is solved.

Isolate the E from the S

In the first interview, the participant mentioned that we cannot discuss the E without discussing the S. We investigated this statement in the rest of the interviews. Four out of six interviews agreed with the statement that the E and the S are connected.

In one interview, they agreed to an extent but not fully. They gave the example of people being pushed out of their homes because they could not pay the rent anymore. The rent was increased because the asset owner improved the object on the environmental part. This is an example where improvements on the E had a negative impact on the S.

Regulators influence on risk and return based on S

In four of the six interviews, the participants estimated that the impact of the regulators on the risk and return in real estate on asset level will be limited because fines and subsidies should be based on concrete outcomes. The S is not clearly defined, which limits the basis for regulators to audit outcomes and fine accordingly. Additionally, the participant of interview 2, commented that the available capital for local governments is limited compared to the money that goes around in the real estate sector. So, there is limited room for subsidizing.

In one interview, the participant did not give a direct answer to the question. However, the example this person gave, showed some influence from the regulators on risk and return. In one particular recent case, old office buildings could not be converted into student homes because the objects were located too close to an airport.

We determine that in specific cases, the regulators can have a big influence on the risk and return in real estate. If the reasoning was S specific, we cannot say but the example given by the participant shows influence.

Positive or negative impact on risk and return in real estate on asset level

In four out of the six interviews, the participant estimated that the S can have a positive and negative impact on risk and return. In three of those interviews, the participant argued that there is a probability of stranded assets although it is not a high probability. In two of the six interviews, participants argued that the S is already incorporated in the risk and return in real estate because there is already a price deviation between objects based on their location. This will however be more apparent when the housing shortage has been solved.

5.3 Panel meeting

The panel meeting was cancelled because the participants were unavailable. We got a tip that annual reports contain information about sustainability. Instead of validating the research with the panel meeting, we used annual report of companies similar to Syntrus Achmea to validate the research.

5.4 Results Annual report

We investigated annual reports of companies in the same industry as Syntrus Achmea to investigate how other companies in real estate measure the S and what their position is on the impact of S on risk and return. The companies checked are Alterra, Amvest, ASR, CBRE, MN, PGGM and Vesteda. We used the annual reports from 2011, 2016 and 2021 to investigate if changes were made based on ESG. The reports were checked for the following information: attributes and indicators used to measure the S of ESG, impact of S on risk, impact of S on return and general comments about S or ESG getting more important. Appendix R reports on the short summaries of the information found in the Annual reports. Not all reports from 2011 and 2021 could be found for all companies.

Based on the information found in the annual reports, there is strong evidence of a transition to be more sustainable. The attention for sustainability was limited in 2011 but grew overtime. We use the word sustainable because most of the investigated companies write about their sustainability without specifically mentioning ESG.

Most of the focus is on the E of ESG. The S related topic are mostly relevant on entity level but not on asset level. On asset level, tenant satisfaction is the most consistent mentioned aspect of S in the annual reports.

PGGM did a study to determine the impact on financial performance of integrating ESG in their investment policies, which concluded that the impact was limited. ASR stated that there could be an impact that should be investigated. The other annual reports did not report on risks originating from ESG or sustainability.

5.5 Conclusion

In this chapter, we describe three information sources. Based on these sources a few aspects of S are likely to become important. The results from the questionnaire suggest that Access to basic services, Community and Society and Health and Safety are relevant indicators. From the interviews, we got some idea what aspects of S are important for real estate. Those are Health and wellbeing followed by tenant engagement, which will both stay important in the future. The study of the annual reports suggests that tenant's satisfaction is important. None of the aspects mentioned in the different sources overlap. So, we assume that all the aspect of S mentioned are evenly relevant.

Based on the interviews, the SFDR and the taxonomy of the European Union puts ESG and the S of ESG on the agenda for companies but will not deliver the standard framework. The participants expected that the responsibility of building a framework to measure the S of ESG falls to the market and investors.

Based on the interviews and annual reports, S is not considered for risk and return analyses in real estate. Based on the interviews, the S is not considered because it cannot be measured and there is a housing shortage. This result corresponds with the earlier found information in the literature study, which states that the impact of S is unclear or non-existing.

6. Conclusion and Discussion

This chapter gives an answer to the research question in the conclusion in section 6. We discuss the limitations and recommendations for further research in the discussion in section 6.2.

6.1 Conclusion

This research started with the question: How can we measure/ quantify the S of ESG and does it impact the risk and return of a portfolio at Syntrus Achmea. This research used a shortened Delphi method to gain information from experts in combination with literature study to find an answer to the research question. This conclusion starts with the way we can measure the S of ESG. Based on the literature study, the interview and the annual reports, we can conclude that there is not one standard method to measure the S of ESG and it will take time before there will be a standard method to measure the S of ESG.

The problem starts with the lack of a clear definition of the S of ESG. Based on the literature study there is not a clear general definition of the S as far as we know and no clear definition for the S in real estate. This means no standard method to measure the S and no standard definition of actions that are classified as social.

The EU wants to remedy the problem by introducing the SFDR and taxonomy. However, their progress is slow because the different member states of the EU have different interests and want to stay autonomous. Also, there is a lack of sector specific knowledge. Based on the interviews, the European Union puts ESG and the S of ESG on the agenda for companies but will not deliver the standard framework.

This means that the responsibility of creating a standard to measure the S of ESG falls to investors and the market. There is a demand from investors for ESG aligned investments, which creates a demand for ESG information. Companies use agencies to get these ESG scores because they want to attract investors. Rating agencies use information from companies to build their frameworks. This means that the companies that are rated also have influence on the aspects they are rated on. Companies and rating agencies can determine for themselves what aspects of S are important because there is no clear definition or regulation for the S of ESG. The current frameworks have some concrete criteria but for the S, the criteria are mostly effort based. This means that companies like Syntrus Achmea can try to influence what will be the standard in the future by sharing information with rating agencies and investors to increase awareness for a certain aspect of the S of ESG.

Based on the literature study, questionnaire, interviews and annual reports, there is a selection of aspect of S that are likely to become important to measure the S of ESG. These aspects are Access to Basic services, Community and Society, Health and Safety, Health and Wellbeing, Tenant's satisfaction and Tenant engagement.

The second part of the research question is about the impact of S on the risk and return of a real estate portfolio. Based on the literature study, interviews and annual report, there is no clear impact of S on the risk and return in real estate in the current market. First, because there is a housing shortage in the Netherlands. Second, the S cannot be measured because there is not a standard method to measure the S. Without a clear framework, the connection between risk and return is hard to make.

The real estate industry is still deciding how to give substance to the S. Without a standard framework, there is uncertainty what aspects of S will be accepted by the industry. However, it also gives opportunity to move forward with improvements of S to set a standard for S. Based on the interview, to make moving forward effective for setting a standard means that information need to be shared with other companies in real estate. Investing heavily in S while the focus of the market lies with E could be a substantial risk.

This research does not conclude that there is no impact of S on risk and return in real estate. We just cannot measure this impact now. Some participants in the interview argued that most aspects of S are incorporated in the risk and return in real estate without knowing exactly what those aspects are. Based on the interviews, there is an indication that S has an impact on risk and return in real estate which can be positive or negative. There is some indication that there is a risk on stranded assets although the probability of stranded assets is small in the Netherlands.

Based on the above, we think that companies in real estate in the Netherlands do not face substantial risk originating from the S of ESG that is not already addressed in their risk and return models now. In the future, this may change when there is a solution to the housing problem or the industry starts accepting a certain standard for the S of ESG. How long it will take before one or both criteria are met, is uncertain.

6.2 Discussion

6.2.1 Limitations of this research

This research faced some limitations. The first limitation we encountered was the lack of data. In this study, we tried to build a framework to measure the S of ESG in real estate. There is limited information available in the literature. Information about the attributes and indicators used by rates was hard to find. Literature study on the S of ESG specific for real estate is scarce.

In this research, we wanted to determine the impact of S on risk and return. The literature available uses scores of existing frameworks to investigate the connection between S and risk and return. In the literature we found evidence of contradicting measurements for S between different frameworks that made the information about the connection between S and risk and return unreliable. The S could not clearly be measure so a study based on numbers was not possible.

The second limitation was encountered during the expert opinion. The number of responses from the experts used for the expert opinion was lower than expected. Only five out of eleven experts filled in the questionnaire. Three questionnaires were filled in before the interviews started. One key element in the interview was to validate the results from the questionnaire. However not enough participants had returned a filled in questionnaire before the start of the interview rounds, which meant that we could not validate the initial conceptual framework we build.

The number of experts participating in the interview was also limited. Six out of eleven experts participated in the interview about a topic that proved to be difficult. The panel meeting to validate the results could no take place because of the availability of the participants. The limited number of participating experts makes the collected data not suited to draw hard conclusions.

The questionnaire was not always filled in correctly. The questionnaire contained extensive explanation and two control fields that changed colour when the question was filled in correctly. However, not all questionnaires were filled in correctly. Some questionnaires were not filled in because the questionnaire was already time consuming enough and the experts were also asked to do the interview.

During the research, we noticed that the shortened Delphi method we used, has limitations. In the normal Delphi method, the researchers can use the newly gathered data to guide their line of questioning in the next round of interviews. We used only one round, so the line of questioning was fixed, which limited the amount of information we could collect.

We expected the mentioned limitations because the subject is relatively new. The questionnaire and the interviews yielded useful information. We found solid reasons why there is no standard framework to measure the S of ESG in real estate and to some extent in general. The literature study, questionnaire and interview yielded a selection of S aspects that are expected to be inserted in the standard framework. Lastly, we found two solid reasons why the impact of the S on risk and return is unclear.

6.2.2 Recommendations for further research

In this research, we found a few underlying problems why we could not measure the S in real estate. There is a lack of a clear definition of the S of ESG and the metrics of S are soft. We recommend further study to determine what aspects of S are important in real estate. We think this research can be done using the Delphi method. The group of participants needs to be bigger and should represent all stakeholders in real estate. The biggest challenge would be to find the enough participants for the research. This research can be used as an indication what could be important.

In this research, we were unable to determine which factors of S have influence on risk and return. We explained that the housing shortage limits the impact S has on risk and return in combination with a lack of a standard framework. In the future, research should be done to determine which aspects of S have an impact on risk and return in real estate and what this impact is.

Investors can influence what is done with their money by choosing a company to invest in. A good direction for further research would be to find out how investors can be motivated to demand a standard framework. Demand for standard information could motivate companies to start building a standard framework faster.

This research did an investigation to find the impact of regulations of the risk and return in real estate. This was aimed at finding the benefits of subsidies or monetary sanctions. However, regulation can also prescribe certain actions companies need to take. In case of social, there may come a minimum for the size of an apartment or size of shared space in a building. These options for the future were not investigated but they could have an impact on the costs for the owner of a building.

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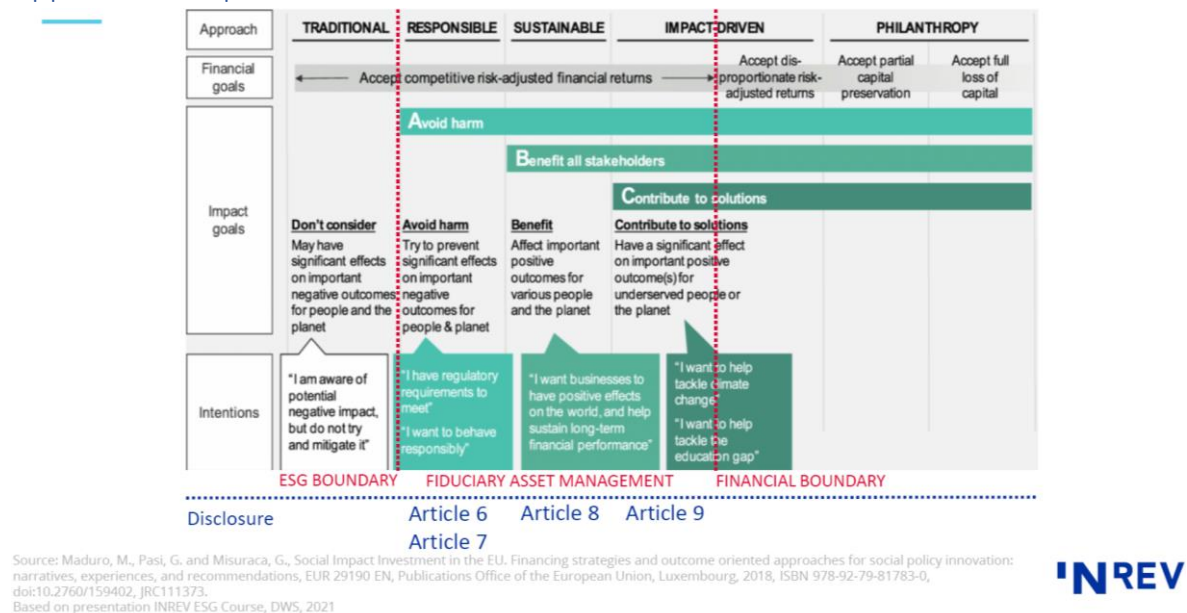
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Appendix

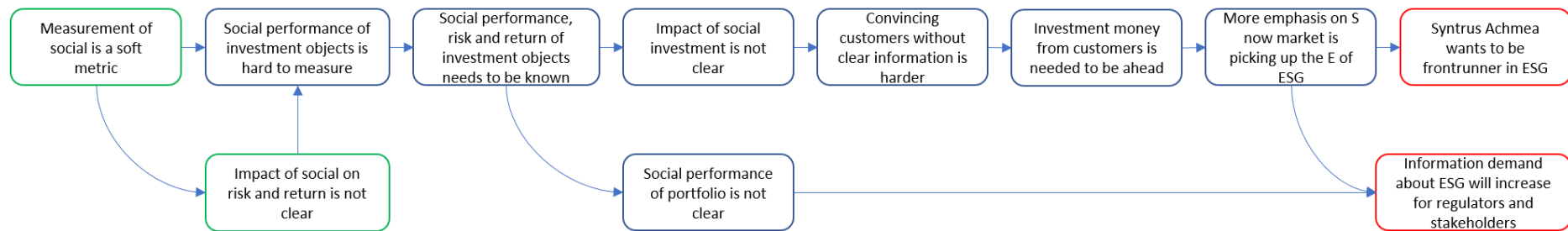
Appendix A: Impact investment INREV



This image shows the different levels of engagement to incorporate and commit to ESG from left to right. Moving to the right corresponds with more engagement to ESG. The articles in the image originate from the Paris agreement. Higher commitment to ESG could lead to more financial risk. This image shows the trade-off between commitment to ESG and the financial risks associated with this level. Syntrus Achmea wants to determine how far to the right their portfolios should be to balance their return and their ESG ambition.

Some ways of investing are mentioned in the literature, Impact investing and socially responsible investment. Impact investing differentiates itself by the clearly defined and measure impact on social matters where socially responsible investment focusses on avoiding negative social impact or scoring high on ESG (Ormiston, 2015).

Appendix B: Problem cluster



Appendix C: ESG framework MSCI

Image of the indicators used in the ESG framework of MSCI.

3 Pillars	10 Themes	35 ESG Key Issues	
Environment	Climate Change	Carbon Emissions Product Carbon Footprint	Financing Environmental Impact Climate Change Vulnerability
	Natural Capital	Water Stress Biodiversity & Land Use	Raw Material Sourcing
	Pollution & Waste	Toxic Emissions & Waste Packaging Material & Waste	Electronic Waste
	Environmental Opportunities	Opportunities in Clean Tech Opportunities in Green Building	Opportunities in Renewable Energy
Social	Human Capital	Labor Management Health & Safety	Human Capital Development Supply Chain Labor Standards
	Product Liability	Product Safety & Quality Chemical Safety Financial Product Safety	Privacy & Data Security Responsible Investment Health & Demographic Risk
	Stakeholder Opposition	Controversial Sourcing Community Relations	
	Social Opportunities	Access to Communications Access to Finance	Access to Health Care Opportunities in Nutrition & Health
Governance*	Corporate Governance	Ownership & Control Board	Pay Accounting
	Corporate Behavior	Business Ethics Tax Transparency	

Figure 4 ESG indicators MSCI (MSCI, 2020)

Appendix D: Attributes rating agencies

Overview of attributes created based on the different rating agencies.

	Sustainalytics	RobecoSAM	Asset4	Vigeo Eiris	MSCI	KLD
Access to Basic Services	2		1		1	1
Access to Healthcare	6	3	1		1	1
Animal Welfare	2		1			
Anti-competitive Practices			2	1	1	1
Audit	4		5	1		
Biodiversity	1	1	3	1	1	2
Board	6		25	1	1	
Board Diversity	2		1			3
Business Ethics	4	2	1		1	1
Chairperson-CEO Separation	1		1			
Child Labor			1	1		1
Climate Risk Mgmt.		2	1		1	2
Clinical Trials	1		1			
Collective Bargaining	2		1	1		
Community and Society	3	6	10	1		1
Corporate Governance		1			1	
Corruption	2		1	1	1	1
Customer Relationship	1	1	7	1		2
Diversity	2		9	1		3
ESG Incentives	1	1				
Electromagnetic Fields	1	1				
Employee Development	1	2	13	1	1	3
Employee Turnover	1		1			
Energy	3	6	5	1	2	1
Environmental Fines	1		1			1
Environmental Mgmt. System	2		1			1
Environmental Policy	4	2	4	2		
Environmental Reporting	2	1	1			
Financial Inclusion	1				1	1
Forests	1	1				
GHG Emissions	5		5	1		1
GHG Policies	3	2	4			
GMOs	1	1	1			
Global Compact Membership	1		1			
Green Buildings	5	2	1		1	1
Green Products	7	1	20	1	2	1
HIV Programs	1		1			
Hazardous Waste	1	1	1		1	
Health and Safety	7	1	7	1	1	2
Human Rights	2	1	5	1		5
Indigenous Rights	1		1			1
Labor Practices	3	1	16	4	1	3
Lobbying	3	1		1		
Non-GHG Air Emissions	1		2			
Ozone-Depleting Gases	1		1			
Packaging		1			1	1
Philanthropy	3	1	2	1		1
Privacy and IT	1	3			1	2
Product Safety	2	2	13	3	2	6
Public Health	1	3			1	2
Recycling					1	
Remuneration	4	1	15	2	1	4
Reporting Quality	3		5			1
Resource Efficiency	1	3	6			
Responsible Marketing	3	3	1	1		1
Shareholders			16	1		
Site Closure	1	1				
Supply Chain	21	3	4	4	3	6
Sustainable Finance	9	5	3		3	4
Systemic Risk		1			1	1
Taxes	2	1	1			
Toxic Spills	1		2			1
Unions			1			1
Waste	3	2	4	1		3
Water	2	2	3	1	1	2
Unclassified	7	7	42	1	34	2
Sum	163	80	282	38	68	78

Figure 5: Overview of attributes (Berg et al., 2019)

Appendix F: Attributes for S based on MIT paper

Attributes	Sustainalytics	RobecoSAM	Asset4	Vigco Eiris	MSCI	KLD	Number of agencies	Sum of indicators	Highest number of indicators
Labour practices	3	1	16	4	1	3	6	28	16
Employee Development	1	2	13	1	1	3	6	21	13
Product safety	2	2	13	3	2	6	6	28	13
Health and safety	7	1	7	1	1	2	6	19	7
Community and society	3	6	10	1		1	5	21	10
Customer Relationship	1	1	7	1		2	5	12	7
Access to healthcare	6	3	1		1	1	5	12	6
Human rights	2	1	5	1		5	5	14	5
Philanthropy	3	1	2	1		1	5	8	3
Responsible marketing	3	3	1	1		1	5	9	3
Diversity	2		9	1		3	4	15	9
Public Health	1	3			1	2	4	7	3
Access to Basic Services	2		1		1	1	4	5	2
Anti-competitive practices			2	1	1	1	4	5	2
Board diversity	2		1			3	3	6	3
Collective bargaining	2		1	1			3	4	2
Child labour			1	1		1	3	3	1
Financial inclusion	1				1	1	3	3	1
Indigenous rights	1		1			1	3	3	1
Shareholders			16	1			2	17	16
Clinical trials	1		1				2	2	1
Employee Turnover	1		1				2	2	1
HIV programs	1		1				2	2	1
Site Closure	1	1					2	2	1
Unions			1			1	2	2	1

Appendix G: Elaboration on relevance per attribute

Attributes	Relevant Yes/ No	Explanation Relevance
Labour practices	No	Only when building an object some influence as building owner can be applied
Employee Development	No	Maybe some influence is possible but less important on portfolio level
Product safety	No	Because there are already rules about construction strength and materials that can be used
Health and safety	Yes	The surrounding and the object safe and low risks for health.
Community and society	Yes	Syntrus Achmea aims to help building a community. Places to meet people or places for recreation will also be associated as community
Customer Relationship	Yes	Relationship between the tenant and the owner. Syntrus Achmea has influence on this relationship.
Access to healthcare	No	Is relevant for some portfolios but not for all
Human rights	Yes	The rights every person has or should have. For example: right on housing, rights as a tenant and so forth.
Philanthropy	No	The portfolio for clients is meant to deliver a return. Investing to solve a problem that does not deliver a return for the investor is not in the interest of the client.
Responsible marketing	No	Marketing business is not relevant on object/ portfolio level. For this research ignored but relevant for Syntrus Achmea in general.
Diversity	Yes	Equal access to rental homes.
Public Health	Yes	Protect the health of people and communities. Air quality, promoting physical activities and so forth.
Access to Basic Services	Yes	It relates to basic public/ common services. Access to drinking water, basic sanitation and hygiene, education, essential health care, basic mobility and so forth.
Anti-competitive practices	No	On portfolio level, Syntrus Achmea does not apply Anti-competitive practices.

Appendix H: RPI criteria Delphi Method

(1) Rank per	(2) Quartile per	(3) Rank per	(4) Rank per	(5) Criteria	(6) Materialit	(7) Public inter	(8) Differenc	(9) Mean	(10) Increment
1	4	2	1	Energy efficiency and conservation	4.55	5.00	- 0.44	4.78	
2	4	3	2	High level of public transport services	4.14	4.93	- 0.79	4.53	0.25
3	4	1	16	Central location	4.91	4.09	0.82	4.50	0.03
4	4	4	5	Transit-oriented development	4.09	4.84	- 0.75	4.47	0.03
5	4	12	4	Water conservation and recycling	3.67	4.86	- 1.19	4.27	0.20
6	4	7	10	Daylight and natural ventilation	3.95	4.35	- 0.40	4.15	0.12
7	4	9	9	Contributes to higher density, mixed-use walkable places	3.86	4.37	- 0.51	4.12	0.03
8	4	5	16	Regulatory compliance	4.07	4.12	- 0.05	4.09	0.03
9	4	10	11	Benefits urban revitalization	3.84	4.28	- 0.44	4.06	0.03
10	4	6	19	Flexibility to adapt to changing uses over time	4.00	4.07	- 0.07	4.03	0.03
11	4	8	21	Occupant worker productivity	3.88	4.02	- 0.14	3.95	0.08
12	4	12	18	Minimizes building-related absenteeism and illness	3.67	4.09	- 0.42	3.88	0.07
13	4	10	25	Aesthetics, contextual fit, visual blending, and quality public realm	3.84	3.91	- 0.07	3.87	0.01
14	4	22	6	Alternative energy sources used	2.91	4.79	- 1.88	3.85	0.02
15	4	13	13	Open space, parks or plazas nearby	3.28	4.19	- 0.91	3.73	0.12
16	4	16	10	Recycling, waste reduction, recycled materials	3.09	4.35	- 1.26	3.72	0.01
17	3	13	17	US Environmental Protection Agency Partnerships: Energy Star, Best Workplaces for the Environment	3.28	4.10	- 0.82	3.69	0.03
17	3	32	3	Low contributions to global warming	2.50	4.88	- 2.38	3.69	0.03
18	3	14	18	Catalyzes positive suburban and peripheral development or redevelopment	3.16	4.09	- 0.93	3.63	0.06
19	3	15	21	Green building certification (LEED, BREEAM, etc.)	3.12	4.02	- 0.9	3.57	0.06
19	3	21	12	Sustainability of building materials	2.93	4.21	- 1.28	3.57	0.06
20	3	17	21	Sense of community, sense of place throughout the building	3.07	4.02	- 0.95	3.55	0.02
21	3	17	22	Childcare onsite or close by	3.07	4.00	- 0.93	3.53	0.02
21	3	19	18	Accommodations for the disabled	2.98	4.09	- 1.11	3.53	0.02
22	3	30	8	Protects or provides wildlife habitat	2.63	4.42	- 1.79	3.52	0.01
23	3	15	25	Amenities close by for working parents (access to food/prepared meals, laundry, errands)	3.12	3.91	- 0.79	3.51	0.01
23	3	21	18	Brownfield and infill development	2.93	4.09	- 1.16	3.51	0.01
24	3	11	36	Property and visitor security	3.79	3.19	0.60	3.49	0.02
24	3	18	23	Engaged in community relations and development	3.00	3.98	- 0.98	3.49	0.02
25	3	23	16	Disclosure and reporting of social and environmental performance	2.84	4.12	- 1.28	3.48	0.01
26	3	21	24	Stakeholder and community engagement	2.93	3.95	- 1.02	3.44	0.04
27	3	21	25	Solicits community input during all stages of development	2.93	3.91	- 0.98	3.42	0.02
27	3	23	22	Affordable housing considerations (for housing) or access for low-income owners or tenants	2.83	4.00	- 1.17	3.42	0.02
28	2	23	24	Tree planting and protection	2.84	3.95	- 1.11	3.40	0.02
29	2	26	20	Buffering for wetlands and riparian areas	2.72	4.05	- 1.33	3.38	0.02
30	2	24	27	Engagement on issues with suppliers	2.81	3.86	- 1.05	3.34	0.04
30	2	26	24	Fair labour practices for construction and service workers	2.72	3.95	- 1.23	3.34	0.04
30	2	40	7	Use of ozone-depleting chemicals avoided	2.00	4.67	- 2.67	3.34	0.04
31	2	25	28	Minimum negative impacts on local traffic, schools, and other infrastructure/services	2.79	3.84	- 1.05	3.31	0.03
32	2	27	28	No involuntary displacement of homes and business	2.70	3.84	- 1.14	3.27	0.04
33	2	28	28	Considerate construction practices	2.67	3.84	- 1.17	3.26	0.01
33	2	30	26	Historic and landmark preservation	2.63	3.88	- 1.25	3.26	0.01
34	2	30	26	Native landscaping	2.63	3.88	- 1.25	3.25	0.01
35	2	25	31	Use of union construction and service workers	2.77	3.65	- 0.88	3.21	0.04
36	2	34	14	Reduced runoff and nutrient/pesticide discharge from buildings and landscaping	2.19	4.16	- 1.97	3.17	0.04
37	2	29	32	Protects ridge lines, view sheds	2.65	3.63	- 0.98	3.14	0.03
38	2	36	15	Environmental restoration projects	2.09	4.14	- 2.05	3.12	0.02
39	2	22	35	Low risk of injuries to workers and visitors	2.91	3.26	- 0.35	3.08	0.04
40	2	18	37	Low risk from natural hazards	3.00	3.14	- 0.14	3.07	0.01
41	1	35	24	Use of locally sourced materials	2.16	3.95	- 1.79	3.06	0.01
42	1	40	19	Not built on prime farmland	2.00	4.07	- 2.07	3.03	0.03
43	1	20	38	Gyms and showers	2.95	3.09	- 0.14	3.02	0.01
44	1	34	28	Local and low-income hiring and training	2.19	3.84	- 1.65	3.01	0.01
44	1	40	21	Carpooling services	2.00	4.02	- 2.02	3.01	0.01
45	1	34	29	Managed to promote multiracial respect and participation	2.19	3.81	- 1.62	3.00	0.01
46	1	37	30	Bicycle trails and facilities	2.07	3.79	- 1.72	2.93	0.07
47	1	33	33	No undue influence by owners in local planning and zoning	2.26	3.37	- 1.11	2.81	0.12
48	1	31	42	Insurance for property visitors	2.60	2.91	- 0.31	2.76	0.05
49	1	38	34	Respect for indigenous people's rights, beliefs and traditions	2.05	3.35	- 1.3	2.70	0.06
50	1	38	39	No 'pariah' tenants (e.g. tobacco or firearms-makers)	2.05	3.00	- 0.95	2.52	0.18
51	1	38	42	Public art	2.05	2.91	- 0.86	2.48	0.04
52	1	41	40	Evacuation and first aid training	1.95	2.98	- 1.03	2.47	0.01
53	1	39	43	Access to first aid equipment	2.02	2.88	- 0.86	2.45	0.02
54	1	40	43	Health and safety signage	2.00	2.88	- 0.88	2.44	0.01
55	1	42	41	Philanthropic endeavours and volunteering by owners and employees	1.88	2.95	- 1.07	2.42	0.02
56	1	41	44	Social Responsibility credentials of the property mortgagee	1.95	2.86	- 0.91	2.41	0.01

Figure 6: RPI criteria Delphi Method (Pivo, 2008)

Appendix I: SDG's chosen by Syntrus Achmea

3. Good health and well-being

Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Indicators:

3.9.1: Mortality rate attributed to household and ambient air pollution.

3.9.2: Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)

3.9.3: Mortality rate attributed to unintentional poisoning

4. Affordable and clean energy

Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services.

Indicators:

7.1.2: Proportion of population with primary reliance on clean fuels and technology

Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix

Indicators:

7.2.1: Renewable energy share in the total final energy consumption

7.3: By 2030, double the global rate of improvement in energy efficiency.

Indicators:

7.3.1: Energy intensity measured in terms of primary energy and GDP

11. Sustainable cities and communities

Target 11.7: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

Indicators

11.7.1: Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities.

12: Responsible consumption and production

Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

Indicators:

12.5.1: National recycling rate, tons of material recycled.

Target 12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

Indicators:

12.6.1: Number of companies publishing sustainability reports.

Target 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities

Indicators:

12.7.1: Degree of sustainable public procurement policies and action plan implementation

17 Partnerships for the goals:

(Nations, 2015)

Appendix J: Methodological approach Indicator selection

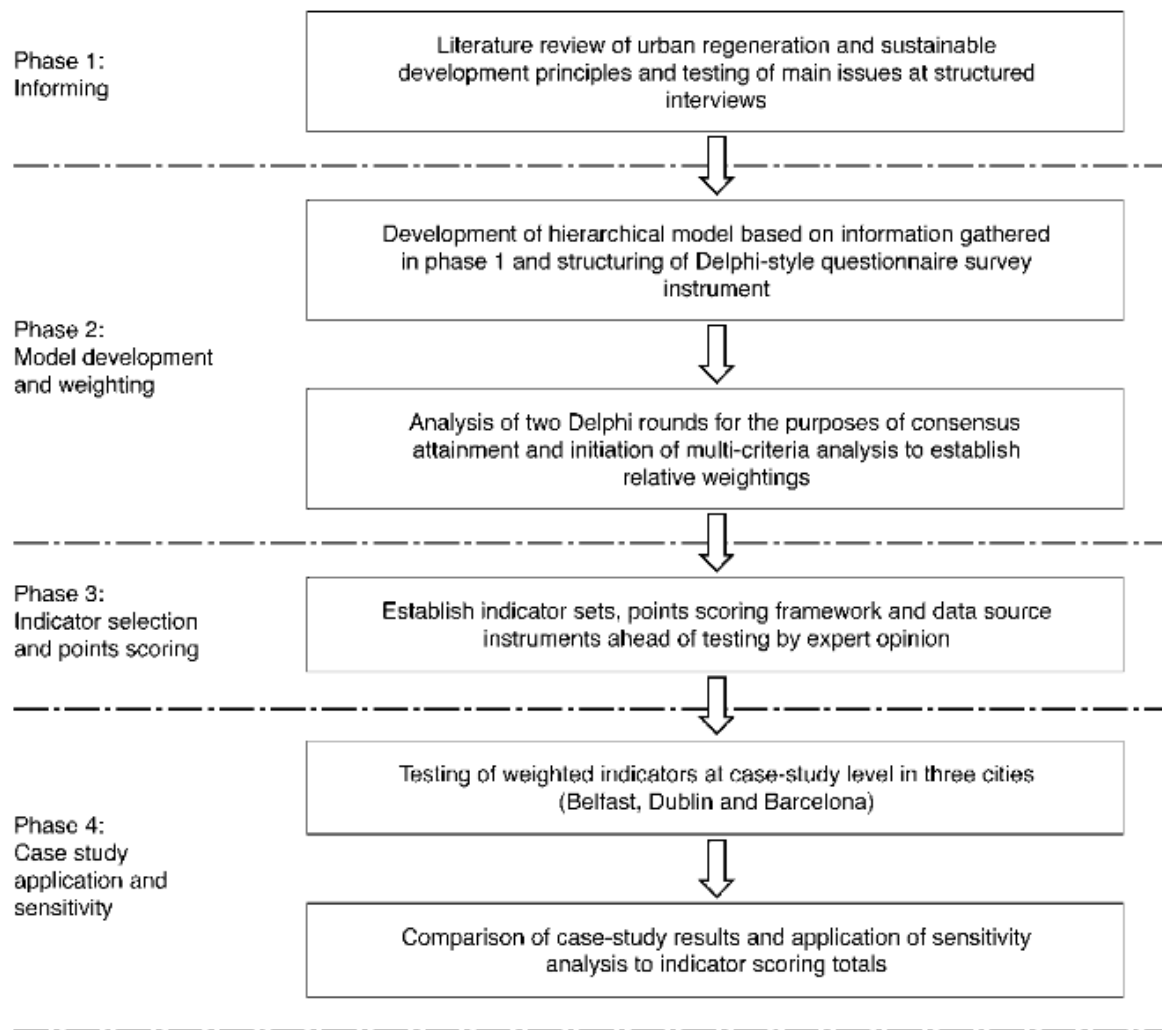


Figure 7 Methodological approach (Hemphill, 2004)

Appendix K: requirements interview

The questions need to be neutral; this means:

- No evaluative questions
- No example answers
- Do not give own opinion
- No questions which have socially desirable aspect.

Understandable questions:

- Use the active form
- Use simple sentences
- Be concrete
- Use vocabulary familiar to the participant

(Groningen, 2019)

Appendix L: Profile of participant

The goal of the interviews is to establish how the S of ESG should be measured and the impact on risk and return in real estate. This means that the participant needs to have knowledge about the S of ESG and or experience with investment in real estate. Knowledge about the impact on the risk and return is a benefit but not a requirement. All participants will be interviewed about the risk and return. Using a control question, we will determine how much weight will be given to the participants answers about risk and return in the portfolio. The participant needs at least 5 years of working experience with the relevant subjects. The participant language of communication should be Dutch or English.

Their knowledge is estimated by the participants job of research background. Relevant jobs at companies are:

- Similar companies to Syntrus Achmea
- ESG rating Agencies (BREEAM, LEED and GRESB)
- Policy maker (alderman)
- Companies that set industrial standards (INREV)
- Housing corporations
- Relevant customers at Syntrus Achmea
- Engineering firms

The participants were identified using the network of my supervisors at Syntrus Achmea and University of Twente. Searches on the internet for individuals working in the relevant fields were used to fill the gaps. The individuals were invited via email, phone or LinkedIn.

Appendix M: Attributes with their indicators

Indicator Health and Safety	Comment
Access to first aid equipment	
Access to police	Building owner has no influence and in the Netherlands, we may assume the police is accessible
Acoustic comfort	
Are there facilities for users aimed at their health	
Bicycle trails and facilities	No influence by owner of building
Crime numbers	Building owner has no influence and not really an issue in the Netherlands
Enough lighting in the area	
Health and safety signage	Is a must have so not a relevant indicator
Lighting controls and/or daylight	
Minimizes building-related absenteeism and illness	
Natural ventilation	
Prevent physical degradation	
Safe feeling after sundown on the streets	Is subjective and building owner has no influence, is also partially measured by another indicator
Thermal comfort	
Unsafe places in the surroundings	Building owner has no influence and may be subjective

Indicators Community and Society	Comment
A website dedicated to people living in a neighbourhood (with news, agenda and so forth)	
Are there vandalized walls or buildings?	Is dependent on timing and no influence of building owner
Availability of digital meeting places	Is already covered under another indicator
Availability of physical meeting places	
Availability of facilities for users aimed at sport facilities, horticulture and small office space	
Carpooling services	

Central location	
Effective communication and process to address community concerns	Is already covered under another indicator
Facilitate/ stimulate communal management and or ownership	
Facilities to share cars	
Facilities for users to organize	Is already covered under another indicator
Good ambience around the building (unrest, crowded)	Building owner has no influence, hard to measure and location specific
Green space available	
Is there nuisance from alcohol usage?	Building owner has no influence and location specific
Is there nuisance from drugs usage or trade?	Building owner has no influence and can be hard to determine
Is there nuisance of local residents?	Hard to influence and hard to measure and does not influence the hole building
Is there traffic disturbance?	Building owner has no influence and location specific
Organise gatherings for all users	Is already covered under another indicator
Possibility to recreate and relax	Is already covered under another indicator
Public art	
Sense of community, sense of place throughout the building	Hard to measure and covered under another indicator
Stakeholder and community engagement	Hard to measure and covered under another indicator
Support and motivation of self-initiative and activities of users for users	
Support of initiatives from users aimed at improvement of their own surroundings	
Supporting charities and community groups	

Indicators Customer Relationship	Comment
Acceptance of housing costs (Rent, energy bill, service costs)	Is covered under other indicators
Are the service costs clear	
Energy bill lower because owner of building invested in energy saving above the required minimum	

Fast detection and repair of broken street furniture	
Good contact with the property manager	
Good customers services contact (Complaints, repair requests and so forth)	Is covered under another indicator
Handling of customer complains adequate and on time	
Livability	There are minimum requirements and could be situation specific
Local resident's well-being	
Philanthropic endeavours and volunteering by owners and employees	Is not relevant for owners of real estate object
Repair request done adequate and within reasonable time	

Indicators Human rights	Comment
Affordable housing considerations (for housing) or access for low-income owners or minority-owned businesses for commercial property	
Fair labour practices for construction and service workers	
Respect for indigenous people's rights, beliefs and traditions	
Use of union construction and service workers	Focus was not on building an object and is covered under another indicator

Indicators Diversity	Comment
Inclusive design	Subjective and hard to measure
Managed to promote multiracial respect and participation	

Indicators Public Health	Comment
Air quality	
Gyms and showers	
Is there nuisance from dog dirt piling up	Building owner has no influence and subjective
No waste on the streets	
Open space, parks or plazas nearby	

Indicators Access to Basic Services	Comment
Accessible to disabled/ Accommodations for the disabled	
Amenities close by for working parents (access to food/prepared meals, laundry, errands, childcare, basic stores and so forth)	
Basic stores	Covered under another indicator
Childcare onsite or close by	Covered under another indicator
Educational facilities in the surroundings (Schools, library and so forth)	Covered under another indicator
Financial institutes in the surroundings (ATM)	
Good and enough facilities for the users	Syntrus Achmea has no influence and is a vague indicator to measure
Good and enough playgrounds for children in the neighbourhood	
High level of public transport	
More niche stores	Are not a basic service but extra
Parking space around the building	
Recreational facilities (pool, gym etc)	
Religious buildings/ facilities (Church or Mosque)	Is person dependent of someone is religious and which religion

Indicator Not Added to an attribute	Comment
Aesthetics, contextual fit, visual blending, and quality public realm	
Biophilic design	Syntrus Achmea has no influence and hard to measure
Community program to Employment creation in local communities	
Contributes to higher density, mixed-use walkable places	Only applicable in cities
Evacuation and first aid training	
Green and exciting surroundings	Already measured by another indicator
Healthy eating	Owner has no influence and has no responsibility
Adequate infrastructure in areas surrounding assets	Owner of object has no influence

Insurance for property visitors	
Is the area surrounding the object fit for housing	Is already measure by other indicators and is more relevant when the building has not yet been built.
Local and low-income hiring and training	
Low risk of injuries to workers and visitors	
Occupant worker productivity	Not relevant and not responsibility building owner
Physical activity	No influence and no responsibility building owner
Presence of separate lanes for walking	
Safe surroundings for children	
Solar panels	Is already measure with E and acceptance of costs
Walkability	Measured by another indicator

Appendix N: initial interview

The initial interview was based on the research questions. In the ideal situation this was the interview we wanted to conduct. However, due to time constraints from the participants the interview was shortened.

Introduction

To verify that the participant is fitting for the research we question the knowledge base of the participant. The knowledge base will be based on their studies and their work experience. This is to establish credibility for the information given by the participant of the research.

- 1) Could you give a short introduction of yourself with emphasis on your studies, work experience, experience with real estate and experience with sustainability and ESG?
 - a. What is your experience with the different frameworks to measure the S of ESG?

~~To determine their opinion about the S of ESG we ask what their description or definition is of S. This question also helps to answer the question what the definition/ description of S is in the relevant context.~~

- ~~2) How would you describe the S of ESG?
 - a. What aspects do you classify under the S of ESG?~~

Questions no standard framework

Based on the literature study we can conclude that there is no standard method to measure the S of ESG. We want to know why there is no standard framework for ESG and when that will come.

- ~~3) What would you say is the reason that there is no standard method/ framework to measure the S of ESG?~~
- ~~4) What could be done to establish a standard?~~

We want to continue this line of questioning. Based on the literature study, the European Union is working on taxonomy to establish standards and the introduction of the SFDR (Sustainable Finance Disclosure Regulation). There may also be players in the market that want to use ESG as a selling point for their products.

- 5) What influence will the taxonomy and SFDR (Sustainable Finance Disclosure Regulation) have on setting up a standard method to measure the S of ESG?
- 6) What influence will the market have on setting up a standard to measure the S of ESG?

S is hard to measure and is inferior to the E of ESG which results in a lower pressure to build a standard to measure the S of ESG.

- 7) How many years do you think it will take before one standardised method to measure the S of ESG is made?
 - ~~a. Should the method be sector specific or provide a more general framework?~~

Questions about the framework

During the literature study a framework for the S of ESG was made. People filled in a questionnaire to determine the relevance of the different attributes and indicators. We want to discuss these results why the experts agree or do not agree with the results. The initial framework is based on literature review and the opinion of the participants participating in the expert opinion. This will answer if the framework we build, is a good framework. **The questions will be based on the results of the questionnaire.**

We want to know what should or will be important measures for S now and in the future.

- 8) What aspect of S are now the most important ones and why?
- 9) What aspects will be the most important factors for S in the future and why?

Impact of S on risk and return in real estate

The next line of questions needs the help answer the research question: What influence has the S of ESG on risk and return in a portfolio? Based on the literature study, the impact is unclear or non-existing at this point in time. We want to know if this would change, when this change would happen and what the impact will be on risk and return.

- 10) What do you think will the impact of S of ESG be on the risk and return in real estate?
 - a. Will the value of objects be influenced by the S of ESG and why?
 - b. Will the rent be influenced by the S of ESG and why?
 - c. When do you think this impact would be effectively measurable?
 - d. How long will it take before S will have an impact on the risk and return in real estate?

- ~~11) Could the S of ESG be as important as the E of ESG in the future?~~

We want to know what the best method is of incorporating the S in the risk and return assessment especially for Syntrus Achmea. We need to steer a bit in this line of questioning because we want to incorporate this method in the existing methods Syntrus Achmea uses.

- 12) What would be the best method to incorporate the S of ESG in the risk and return models of Syntrus Achmea?
 - a. Should the S be a risk measure in the hurdle rate or should the S influence some cashflows?
 - b. Does a good score for S give a lower risk or should a bad score give a higher hurdle rate?

- 13) Is there a better method to incorporate the risk of the S of ESG?

Appendix O: Interview S of ESG

Introduction

My research is about the S of ESG. The goal is to build a framework to measure the S of ESG in real estate. I also want to determine what the impact will be of the S on the risk and return in real estate. In the literature, the information is limited and non consistent.

Researcher asks permission to record the interview and in case the consent form was not filled in, the researcher requests the participant to fill it in.

- 1) Do you give permission to record this interview and to use the given information for my master thesis project? I want to emphasise that you can stop your participation in this research at any moment.
- 2) Could you give a short introduction of yourself with emphasis on your studies, work experience, experience with real estate and experience with sustainability and ESG?
 - a. What is your experience with the different frameworks to measure the S of ESG?

Questions no standard framework

Based on the literature study, I concluded that there is no standard method to measure the S of ESG. The European Union is working on taxonomy to establish standards and the introduction of the SFDR (Sustainable Finance Disclosure Regulation). There may also be factors that could influence the creation of a standard method to measure the S of ESG.

- 3) What influence will the taxonomy and SFDR (Sustainable Finance Disclosure Regulation) have on setting up a standard method to measure the S of ESG?
 - a. Will this move up the timeline?
- 4) What influence will the market/ investors have on setting up a standard to measure the S of ESG?
- 5) What influence will the public/ tenant's opinion have?
- 6) Are the other factors/ organizations that could contribute to the creation of a standard method?

S is hard to measure and is inferior to the E of ESG which results in a lower pressure to build a standard to measure the S of ESG.

- 7) How many years do you think it will take before one standardised method to measure the S of ESG is made?

Questions about the framework

We want to know what should or will be important measures for S now and in the future.

- 8) What aspect of S are now the most important ones in real estate and why?
- 9) What aspects will be the most important factors for S in the future for real estate and why?
- 10) Different frameworks measure the S of ESG but do not come to the same conclusion, why is this? What can be done to change this?

Impact of S on risk and return in real estate

Based on the literature study, the impact of S on the risk and return in real estate is unclear or non-existing at this point in time. We want to know if this would change, when this change would happen and what the impact will be on risk and return in real estate.

- 11) It is one thing to measure S but it is another for S to have influence on the risk and return in real estate. Under which circumstances will S have influence on the risk & return in real estate?
- a. Regulations? Local and European
 - b. Change in attitude of tenants and investors?
 - c. Competition of other asset managers?
 - d. When do you think this change will come and what would initiate this change?

12) Do you already measure S and do you use it to evaluate your risk and return?

13) What influence will the local and European government have on the S related risk and return? What actions can be expected?

- 14) What do you think, will the impact of S of ESG be on the risk and return in real estate in the future?
- e. Will the value of objects be influenced by the S of ESG and why?
 - f. Will the rent be influenced by the S of ESG and why?
 - g. Could some objects become stranded assets when S is not considered?
 - h. When do you think this impact would be effectively measurable?
 - i. Can the government put penalties/ fines on bad performance of S?

15) When will S have an impact on the risk and return in real estate if it would have an impact?

Syntrus Achmea uses two methods to evaluate the risk and return of an object. The first method is making changes in the cash flows. The second method is to alter the Internal Rate of Return in their risk model.

- 16) What would be the best method to incorporate the S of ESG in the risk and return models of Syntrus Achmea?
- a. Should the S be a risk measure in the hurdle rate or should the S influence some cashflows? For example, an outgoing cashflow to improve the building or an incoming cashflow in relation to a higher rent people are willing to pay?
 - b. Does a good score for S give a lower risk or should a bad score give a higher hurdle rate?
 - c. Is there a risk of stranded assets or changes in the value of the building when S is not taken into account?

17) Is there a better method to incorporate the risk of the S of ESG?

Appendix P: Interview S of ESG translated to Dutch

Introductie

De onderzoeker geeft een introductie van hemzelf en het onderzoek.

De onderzoeker vraagt toestemming om het interview op te nemen wanneer het toestemmingsformulier nog niet getekend is aangeleverd.

1. Ik wil benadrukken dat u op elk moment uw deelname aan dit onderzoek kan stopzetten. Geeft u toestemming om dit interview op te nemen en het gebruik van de gegeven informatie voor mijn master thesis?
2. Kunt u een korte introductie geven van uzelf waarbij het vooral gaat om uw studie achtergrond, werkervaring en uw ervaring met duurzaamheid en ESG.

Vragen gebrek standaard raamwerk

Gebaseerd op de informatie gevonden tijdens de literatuurstudie bestaat er geen standaard manier waarop de S van ESG gemeten wordt/ moet worden. De Europese unie werkt aan een taxonomie om standaarden te creëren. Daarbij is er de introductie van de SFDR (Sustainable Finance Disclosure regulation) en andere spelers die invloed kunnen hebben op het creëren van een standaard methode om de S van ESG te meten.

3. Welke invloed heeft de taxonomie en SFDR (Sustainable Financial Disclosure Regulation) bij het creëren van een standaardmethode om de S van ESG te meten?
 - a. Zal dit de ontwikkeling versnellen?
4. Welke invloed zal de markt/ investeerders hebben op het creëren van een standaard om de S van ESG te meten.
5. Welke invloed kan de mening van het publiek/ de huurder hebben?
6. Zijn er andere factoren/ organisaties die bij kunnen dragen aan het creëren van een standaardmethode om de S van ESG te meten?

De S is op dit moment moeilijk te meten en staat een beetje op de achtergrond doordat E zoveel aandacht krijgt.

7. Hoeveel jaar denkt u dat het gaat duren voordat er een standaardmethode is om de S van ESG te meten.

Vragen over het raamwerk

Er is niet een eenduidig antwoord op de vraag wat precies belangrijk is voor S op dit moment.

8. Welke aspecten van S zijn volgens u het meest belangrijk nu en waarom?
9. Welke aspecten van S zullen volgens u in de toekomst het meest belangrijk zijn en waarom?
10. Verschillende raamwerken meten de S van ESG maar komen niet altijd tot dezelfde resultaten, waarom is dit? En hoe kan dat worden veranderd?

Impact van de S van ESG op het risico en de return in vastgoed

The impact van de S van ESG op het risico en de return is onduidelijk of niet aanwezig volgens de gevonden literatuur. Een mogelijk deel van deze reden is dat de voordelen van beter S score nog niet op waarde worden geschat

11. Wanneer S meetbaar is betekend het nog niet direct dat het ook invloed heeft op het risico en de return in vastgoed. Onder welke omstandigheden zal S invloed hebben op de het risico en de return in vastgoed?
 - a. Moet de regelgeving veranderen zowel lokaal als Europees?
 - b. Verandering van de houding van investeerders, het publiek of huurders?
 - c. Concurrentie vanuit andere bedrijven die vermogen beheren?
 - d. Wanneer zal deze verandering beginnen en hoe kan deze worden gestart?
12. Wordt bij jullie al de S gemeten en gebruikt om risico en return te evalueren en op welke manier doen jullie dit?
13. Over welke tijdsperiode praten we wanneer de S van ESG-impact gaat/ kan hebben op het risico en de return in vastgoed?
14. Wat denkt u, zal de daadwerkelijke invloed van S zijn op het risico en de return in vastgoed?
 - a. Zal de waarde van objecten (gebouwen) veranderen?
 - b. Zal de huur veranderen gebaseerd op de S score?
 - c. Kunnen objecten stranded assets worden wanneer geen rekening gehouden wordt met S?
 - d. Kan de overheid straffen of boetes gaan uitdelen voor slechte resultaten op gebied van S?
 - e. Wanneer zal deze invloed merkbaar worden?
15. Op welke manier kan de potentiële invloed van de S op risico en return het beste worden opgenomen voor Syntrus Achmea? Bij de risicoanalyse of de cashflow analyse?
 - a. Wordt de S een risico variabele in de hurdle rate of kan de invloed beter verwerkt worden in potentiële geldstromen? Bijvoorbeeld: uitgaven toevoegen om gebouwen in de toekomst te verbeteren of inkomsten omdat de huur verhoogd kan worden vanwege een goed S score?
 - b. Geeft een goede score op S een verlaging van het risico of zou een slechte score juist een verhoging van het risico betekenen? Kan het dus alleen positieve impact hebben of ook negatieve impact?
 - c. Zou er mogelijk een risico zijn dat objecten stranded assets worden wanneer geen rekening gehouden wordt met de S?
16. Weet u een beter methode om de S op te nemen?

Appendix Q: Summery per interview

Interview 1

How to get a standard framework?

Influence of SFDR and taxonomy

S is far behind the E because there is a focus of reaching net zero. The SFDR is a good initiative but gets deluded because there are too many stakeholders and so many industries in the framework. It is hard to align all interests.

The SFDR and taxonomy of the EU will help move S forward but will not lead to a convergence for S for all industries. It is important for the people responsible for the SFDR and taxonomy that they understand the industry like real estate. People that need to report on SFDR get frustrated because they do not get clarity.

Influence of investors/ market

Investors have a bigger impact than the EU; they see the potential S has for risk and opportunity. Some investors start prioritizing S specific matters in their investment choices. Companies are experimenting with initiatives on a small scale to find out what works and what not.

Influence of the public/ tenants

We got an answer about the asset owner and the relation with the tenant of the object.

Time before there is a standard method

Person 1 estimates a duration of five years before there is some sort of a standard framework to measure S. However, every year there will be updates based on what is material. Currently, the focus is on efforts where we want to move forward to outcomes. It will be more difficult and takes longer to build a framework with clear metrics or outcomes that determine what is good and bad for real estate companies throughout the S pillar. The problem with the effort-based measurement is the green washing that comes with it.

Important aspects of S

Most important aspects of S real estate now

Based on a questionnaire held in light of the stakeholder engagement process three important issues came out: human rights, diversity (equality and inclusion) and health and well being. These will be prioritized.

The largest social issue is health and wellbeing. Health and safety is more the traditional way of looking at the tenant. Tenant engagement is very important. If the tenant gets more savvy, they will ask for different and better things which will force the asset managers to tune to what the market is asking to get the premium rents.

Most important aspects of S in general

Human rights because companies are now looking further than their tier one supplier.

Most important aspects of S real estate in the future

On entity level: Human capital, strong focus on the development and happiness of the employees.

On Asset level: Tenant engagement will continue to be important.

Solve different framework problem

Dealing with people is harder because there is always a variety of opinions. The most important aspect is to collaborate and align interests. Trial and error would probably be the way the industry will accept standard metrics. The taxonomy of the EU will probably not help because they do not understand the underlying industry.

The E has metrics based on easy calculations. The S, which deals with people is more complicated. Person 1 thinks that more standard metrics that are accepted by the industry come via trial and error.

Impact on risk and return

Requirements to see impact S on risk and return

Person 1 thinks it is easier to use cashflows to evaluate the risk and return and not the IRR. S can have a positive and negative effect on the risk and return.

Person 1 thinks that we first need to clean up the data set to establish a clear way of looking at the S which will help to determine what factors will have influence on the financial side. We need to look at issues within S and prioritize them. Once they are prioritized, you can identify one or two issues within S that may impact the risk and return.

In real estate, we need to look what data can be grouped and what not. An office building is different from an apartment complex. Person 1 thinks we need a bottom-up approach.

There are different reasons to use the ESG data. Investors want the data to find investment opportunities that match their preferences. The asset owners want to benchmark themselves against their peers to persuade investors to invest in their fund. Investors base their decisions on the data which pushes asset owners to improve on the S.

Isolate the E of ESG from the S of ESG

We need to look how S factors impact E factors because person 1 thinks that is the link between the S and risk and return. We should not look at the E and S in isolation.

Regulators influence on risk and return based on S

The government will not have a big influence with fines or subsidies because the performance on S is not clearly defined so hard to regulate upon. There is a housing shortage in the Netherlands which is partial the fault of the government because they did not allow for more houses to be built.

Impact of S on risk and return

There is an impact of S on the risk and return in real estate. We should determine how S factors impact E factors and that impacts the risk and return profiles.

A happy tenant is more likely to extend their lease. The more occupied the building is, the lower the risk. Rent or other incentives can be used to get it occupied.

The tenant will negotiate tough because they want something better up do not want to pay more.

Interview 2

How to get a standard framework?

Influence of the SFDR and taxonomy

The local government pays more attention to S in the last 5 to 10 years ago. However, it is difficult to get a standard because S is situational; based on the circumstances, different aspects of S are important. For real estate, local governments pay more attention to facilities that are located in a district. However, there is no standardized method to evaluate the S score of a district. The government is always a step behind on the market.

The local government tries to play a more active role the improvement of the S in the different districts.

Influence of investors/ market

There are some initiatives in practise from different companies to improve the S

Influence of the public/ tenants

We did not get a clear answer on this topic

Time before there is a standard framework

We did not get an answer on this topic

Important aspects of S

Most important aspect of S in real estate now

Person 2 cannot really state what the most important aspects of S are because they are dependant on the situation. Person 2 thinks that the local government knows what different districts require to improve the liveability of the district. Collaboration between the local government and companies that are present in the area can be a good way to start. Some districts need more playgrounds for kids while others need more stores or facilities for older people.

It is important to look from the perspective of the tenant. Be aware of the needs of the tenants. This helps to improve on the S because you know what the tenant wants.

Person 2 named equal chance for everyone as important.

Most important aspects in general

We did not get a clear answer on this topic

Most important aspects of S real estate in the future

We did not get a clear answer on this topic

Solve different framework problem

The difficulty of building the framework gets harder when the metrics get harder/ more specific. A framework that works for one city or district may not work for another city or district. A district with a poorer population needs different facilities than a district with a richer population. The rules from the government should not be too strict because it could limit the options.

Impact on risk and return

Requirements to see impact of S on risk and return

It is important to determine what the goal is to determine the yield of something.

There is a housing shortage in the Netherlands which means that owners of building do not really face risks. The impact of S on risk and return may become apparent when the housing market in the Netherlands crashes. Person 2 gives an example of houses in the centrum of the city that are neglected and still sell for high prices.

Isolate the E from the S

We did not get a clear answer on this topic

Regulators influence on risk and return based on S

Person 2 does not believe in sanctions based on the S scores of a company from the government because the government needs a solid reason to sanction on. Because the S is subjective, person 2 believes more in a higher best effort obligation.

The government may start to give some subsidies to companies to improve the S but the money of the local governments is limited compared to the amount of money that goes around in the real estate sector. Person 2 thinks we cannot expect big changes based on subsidies.

Impact of risk and return

In the business case, investments that benefit the S will not in all cases yield a profit. It gives companies to faces because on the one hand they are discussing how to improve their social impact but on the other hand they negotiate though about the needed investments to improve the S.

Some of the S is already incorporated in the value of object and rents. However, person 2 doubts if tenants what to pay more for improvements.

The risk of standed asserts in the Netherlands is small.

Interview 3

(2 people were interviewed together)

How to get a standard framework?

Influence of the SFDR and taxonomy

It is hard to get a standard framework. The EU let an independent party do research to find a taxonomy, but the EU does not have its own position in it. The different member states of the EU have different opinions of what they want from the taxonomy which makes it hard to come up with one taxonomy/framework. The member states have a lot of power and often choose to use that power to not move quickly.

It is expected that instead of a taxonomy based on hard metrics, the taxonomy will have substantial contribution criteria for the S and every state can adapt the framework to a framework that works best for their national situation. The EU wants to use standards that are already there. But it still will take long because the member states take long to agree upon these matters.

The availability of data is also limited and there is discussion how the data should be gathered. The example given was about the average rental price in a city. There may be option to collect some rental prices but there will be a debate about the methodology.

The two persons that I interviewed, were careful about their answer if the taxonomy could contribute to building a standard. It has the potential but there are some problems because it would mean that member states should change their national legislation based on the taxonomy which does not respect the autonomy of the member states.

Influence of investors/ public

There is a huge appetite from investors to invest in ESG aligned investments. There is a significant number of investors that accept a low return from their investment for ESG compliant activities. However, letting the market dictate what is ESG aligned and what is not can lead to problems. There is a need for an agreed upon framework to measure the ESG to avoid misunderstandings about what ESG aligned is and what not. So people want the

People look at their own interests first which can hinder the creation of a standard framework. There are “ESG investments” which, when researched more closely, are not ESG aligned by any reasonable definition.

Social housing providers in the Netherlands already report on social performance because they need to justify how they spend their money. Some other countries like Belgium and Ireland are also increasing their role in regulating the social housing.

So they conclude that the investors want to move forward but are hindered by the lack of a standard method to measure the S of ESG. But creating a standard is hard because of the different interest of member states and corporations. The E is a hard metric but the S is soft because it talks about human beings.

Influence of the tenants/ public.

In the Netherlands with have methods to measure some aspects of the S. There is awareness from tenants.

Time before we have a standard method

They did not give a direct answer to this. They only said that they do not know if the EU is moving forward with the social taxonomy.

Important aspects of S

Important aspects of S in real estate now

For social housing the most important aspect is affordability, then availability, followed by sustainability which is E and last liveability.

Most important aspects in general

We did not get a clear answer on this topic

Important aspect of S in the future

The two people I interviewed thought that the E will be more important. Within social housing the E is getting more relevant.

Create one standard method to measure the S

Something should regulate the market because at the moment the market is self regulating what S is in ESG.

Impact on risk and return

What is needed to see the impact

The interviewed people were convinced it was dependant on the demand for housing. The impact of S is small or non existent when there is an imbalance between supply and demand for housing. The Netherlands has a housing shortage which will reduce the impact of S on the risk and return for real estate. The housing shortage will take at least 10 years to solve.

The lack of a clear framework can also limit the impact of the S of ESG on the risk and return in real estate.

The people I interviewed gave an example of green washing where social aspects are used to advertise for an apartment in a building but in reality, there just methods to cut corners or increase the return. They advertise for the shared space in the building where occupants can spend their free time but on the other hand, they reduce the room size to the bare minimum. They sell the smaller rooms with the availability of pool table or a bar in the building.

Isolate the E from the S

Some people make the assumption that the E and the S cannot be separated from each other. In some cases, this assumption can be false. For example the fake assumption that improvements on the E will help the occupants of a building. Adding isolation to a building can lower the energy bill and improve the affordability which is social. However, some improvements ask such a high amount of investment that the rents need to go up which in some cases forces the occupants out. The reduction of the energy bill will not compensate the increase in rent.

Regulators influence on the risk and return based on S

It will be though for regulators to keep companies accountable for bad S scores because we cannot measure them at the moment. So their impact will be small or even not existing.

Impact of S on risk and return

S can have a positive and negative impact on risk and return.

Improving on S to gain a higher return contradict each other because increasing the rent is not social.

With the current housing shortage, there is not a real risk of stranded assets. This may become a factor when the housing shortages is solved for the Netherlands.

Time before we see the impact of S

It takes a minimum of 10 years to solve the housing shortage, so at least 10 years.

Interview 4

How to get a standard framework?

Influence of SFDR and taxonomy

For person 4 it is not clear what will be the driving factor for creating a standard to measure the S of ESG but there seems to be more discussion about it from the regulatory side than from the corporate side. They are adding social aspects to the SFDR. How it stands now, the change of emphasis will come from the regulatory side. We can speak of a regulatory push.

Influence of the investors/ market

It is less on the agenda at companies. Their focus is on the E.

It is hard to determine what the material topics are. The frameworks are used by companies, so their experience is used to create the framework. On the other hand, framework providers try to educate their customers about the importance of the framework and how to adapt on it. Raters communicate a lot with their members to gather information themselves but also to educate their members.

The S of ESG is seen by companies as the soft side; nice to have but not a hard requirement. Companies are not always aware of the risk and opportunities coming from S.

Influence of public/ tenants

The impact of public opinion will be mostly driven by negative impact of a company. There is a growing market for impact investing. A main driver for social aspect is the need for affordable housing. Also, for middle income that needs to live in the centre of cities.

Time before there is a standard method

Person 4 thinks it will take another four or five years before we really have a standard for S. Person 4 thinks that the S will not take that much time because we already have experience because of the E.

Important aspects of S

Most important aspects of S in real estate now

Person 4 started by saying that impact investing funds may want to use another framework to measure their ESG than regular investment funds because of the difference in focus. Impact investor use for example GIIN plus while regular investment funds will use GRESB.

For real estate, the most important aspects are health and safety, tenant engagement, health and wellbeing. The social part will be more engaged with the environmental aspects as well.

Most important aspects in general

On company level, in Europe diversity is important and in the US racial diversity is more important.

Most important aspects of S real estate in the future

The focus on Health and Wellbeing and tenant or stakeholder engagement will increase. Person 4 also mentions improvement of employee development and efficiency because having a more effective work environment. This is only relevant for the office subsector of real estate.

E will get more focus because of climate change.

Solve different framework problem

The indicators from the regulator do not match the needs of the industry. They give a push but the creation of the frameworks is down to the industry itself. This problem is not limited to the S of ESG

but also for the E. There is information sharing with the regulators to help and educate the regulators about the important ESG metrics in specific sectors.

Impact on risk and return

Requirements to see impact of S on risk and return

To let S have an impact on the risk and return the valuers of a object should have ESG on their agenda's which in person 4 opinion is not at the moment. Social impact is location and case based. The objects should be evaluated one by one what their social needs are.

Isolate the E from the S

We cannot discuss the E without discussing the S because they are connected. They started with the E because that seemed to be the more urgent aspect. It started with voluntary reporting for companies. However, the definitions for S are not clear. It is not clear what is important in real estate.

Regulators influence on risk and return based on real estate

The government can fine companies.

Impact of S on risk and return

S may have positive and negative impact. Person 4 thinks it is mostly related to brand management. Positive impact will be known in the market and could eventually lead to higher rents because people may want to pay extra for your services. It will not directly lead to higher rents.

There may even be situations were a building can become a stranded asset. However, this is dependant on the location of the building.

The needs of the tenants can have in influence. Person 4 gives the example of a company that is looking for an office building. They will look for a building that fits their environmental and social requirements which may come from a social perspective based on a holistic view.

There is a need to determine indicators for all the metrics involved for S but their importance may change from company to company. Companies could be able to explain why some topics are not material and they will not report on them.

The most important aspect of S on the risk and return may be tenant engagement, customer relationship.

Competition may become a factor, but first people need to understand the thing they are competing over. There is now competition about reaching net zero. Businesses need to see the opportunities for social.

Time before we see the impact of S

Person 4 estimates that it will take another 7 or 8 years before the S has really an impact on the risk and return in real estate.

Interview 5

How to get a standard framework?

Influence of SFDR and taxonomy

SFDR and taxonomy will put the S of ESG more on the map for companies but will not really set the standards because it is only an obligation to report and the covered topics are not specific enough/ open to interpretation. There are no clear guidelines how to operationalize different indicators for S. They also do not obligate a company to take certain specific actions, they only need to report on some social aspects.

There is lack of data is also hindering the standardisation. Because of regulation, there will come benchmarks which in the long run will lead to a standard set of indicators. However, we should temper our expectations of reaching an absolute standard.

Influence of investors/ market

The investors will determine which information for S is important. Their demand for information will motivate data providers which in turn will stir on companies to share more data and improve on the S of ESG because investors are willing to pay for investment opportunities that score higher on ESG.

Aedes benchmark seems to be an important benchmark for corporations in building houses. This for example measures the satisfaction of the tenant.

Influence of the public/ tenants

The topics are too technical for the public, so person five estimates that their influence will be limited.

Tenants will not specifically communicate what their wants and needs are.

Time before there is standard method

Person five thinks it will take a minimal of five years before there is some sort of standard method to measure the S of ESG.

Important aspects of S

Most important aspects of S in real estate now

Tenant's rights or crime rate are the most important aspect of S. These are two examples person 5 gave. Person 5 said it comes down to for the tenant to be able to improve their living situation by requesting their landlord. Person 5 means requests that go further than the legal minimum.

Most important aspects in general

This topic was not discussed during the interview.

Most important aspects of S real estate in the future

We did not get a clear answer on this topic.

What is needed to get a standard framework

The main reason for different outcomes for the different frameworks following person 5 is the way they operationalize the indicator. Person 5 gives the example of measuring the safety of a neighbourhood. One may measure this with the amount lighting on the street while another measures it by checking the locks of the houses. Both have measured the safety, but they can come to different conclusions.

Person 5 estimates that more transparency about the research methodologies by ESG raters, is the fastest way to move to a more standardized way of measuring ESG and S specific. More regulation could lead to more control but enforce the regulation costs a lot of energy and time. The users of the ESG data should be more critical. Users of the data being more critical will have a bigger impact on creating a standard that regulation.

Impact on risk and return.

Requirements to see impact of S on risk and return

There are a lot of things that determine the value of a building or the height of the rent like location, availability of housing or availability of employment nearby. It is not clear how the S part stack up against the other factors that determine risk and return in real estate.

Isolate the E from the S

Person 5 thinks that the E and the S are linked together, so it is hard to measure one without measuring the other. Because of the climate change, tenants will be more demanding because houses need to be warm in the winter and cold in the summer.

Regulators influence on risk and return based on S

Person 5 answered that he/ she was not familiar enough with this topic to give an educated answer.

Impact of S on risk and return

S can have a positive or negative impact on the risk and return in real estate. The risk of stranded assets is very low in the Netherlands. For the right price, every piece of real estate can be sold.

Person 5 also estimates that many aspects of S are already incorporated in the risk and return for real estate without being aware of it. Person 5 gave the example of a building located in a place with a high crime level. This building will be less interesting to own than a building at a location with a lower crime rate. This perspective can be traced back to the value of the object.

People have a sense for this without actually quantifying it.

Time before we see the impact of S

This topic was not discussed during the interview.

Interview 6

How to get a standard framework?

Influence of SFDR and taxonomy

The focus is on the E and maybe on the G and the S gets less attention. Person 6 thinks that the actions taken by the EU will not have a big effect on the establishment of a standard framework for S because the focus of the EU is more on the E and the G. Some influence may come from the Dutch government but not the local government.

The ESG challenges are location specific. The housing market in the Netherlands is different from the housing market in Germany or Greece.

Influence of investors/ market

Investors will mostly determine the pace. Companies use the frameworks where they get the best scores. Transparency may help.

Influence of the tenants/ public

Tenants in real estate should be more vocal about the needs and wishes to push asset owners to improve. People are getting more outspoken about these topics.

The S is situational. In the EU other aspects are important that for example in China. The housing market in the Netherlands or Germany is different from the housing market in Greece or Italy.

Time before standard methods

It will go faster than we expect. It is important to have good stakeholder management.

Important aspects of S

Most important aspects of S in real estate now

There are two axis: the working conditions for the working when building an object and wellbeing of the tenant. Their relevance is based on the circumstances. Wellbeing is important for older people because living in their own homes is the norm. The Netherlands does not have enough space in the healthcare sector to house older people. In the Netherlands we may even be somewhat overregulated.

There is a trend to move to mix use buildings. These buildings have parts of the building their share with the other tenants in the building. This could solve loneliness for older people or students.

Fast response to complains from the tenants can help turn a negative experience in a positive one. The tenant may recommend the owner of the building to others.

Most important aspects in general

This topic was not discussed during this interview

Most important aspect of S real estate in the future

We will get more older people and these older people will live longer. The healthcare sector cannot house all those elder people. So keeping them in their own homes will be important.

Social networks will also be more important. This could improve the service for tenants.

Solve different framework problem

The industry and investors need to organize themselves to solve the problem of having too many frameworks. They can solve the problem by choosing one framework as the standard framework of the industry.

Competition between companies can slow down the creation of a standard framework. To solve this problem, companies could come together in an industry body, every company needs to put in money. Companies should think outside their own interests.

Impact on risk and return

Requirements to see impact of S on risk and return

There is an impact of the S on risk and return. However, this will be hard to detect because we cannot measure the S. There are examples of measurable impact. S can clearly be measurable like accidents on a construction site. Accidents can cause delays which costs money.

The housing shortage in the Netherlands also makes it hard to determine the impact of the S.

A few years ago, the important aspects of the E were not known to companies. Now buildings may become stranded assets because of a low E score. The S may come to this level of importance. However, person 4 gives the example of shared open space in a building. How social is that open space, person 4 does not know which means that the added value is also not known.

Isolate the E from the S

Everything that is done on E has indirect influence on the S. Improving the environment is on itself social.

Positive or negative impact on risk and return

Person 6 did not give direct information about this. However, there is the possibility of stranded assets. Person 6 gave an example of the impact of S maybe E for stranded assets. There are office buildings near Schiphol they want to convert to student homes. However, this is not allowed because it is too close to Schiphol. The location is not suited enough for housing.

I asked the question if the influence of the S is already included in the return profiles in real estate because people accept to pay a certain price to rent in a specific place. Person 6 did not know if this was the case because we have a housing shortage. It might be but it is unclear because of the shortage. The housing shortage should be solved before we will see the real impact of the S on risk and return. Tenants make fewer specific choices because of the housing shortage.

Time before we see the impact of S

This topic was not discussed during the interview

Appendix R: Annual report

Altera

2011

The term ESG is not mentioned in the annual report of 2011. There are some remarks about sustainability: GPR, improvements on energy label and rental contract with durability paragraph. There is some writing about customer orientated and far-reaching customer service.

There is a remark about the upcoming benchmarks for sustainability. Altera took part in a GRESB questionnaire.

In the annual report environmental risk is mentioned.

The annual report of Altera mentions that the government is an important tenant of office building which increase the attention for sustainability. Sustainability is together with location a differentiating element. A sustainable building has a better competitive position.

As far as this research could find, almost all remarks about sustainability are about the E of ESG. Some remarks are made about the increasing attention to sustainability(Altera, 2011).

2016

The term ESG is mentioned in this report together with CSR. Altera uses some benchmarkers to determine their building performance like: energy label, GPR gebouw and GRESB. They also underwrite the UNPRI principles (Principles for Responsible Investment).

Altera actively engages with it's tenants to find sustainable improvement where the saving for the tenant are higher than the increase in rent. Altera participates in the annual customers satisfaction research from Benchmark Institutionele Beleggers Woningen which does measurements on the building, maintenance, living environment and the service.

In the discussion of their operational risks, they mention the risk of make existing object sustainable(Altera, 2016).

There is more focus on ESG but most of this focus is still on the E of ESG.

2021

In the annual report of Altera, a ESG report is added. The E is still the most prominent but there are aspects of the S discussed. In the report, they speak about high tenant satisfaction and increased focus on tenant engagement. On entity level, they also include the S but this is outside the scope of this thesis. The tenant satisfaction is measured by means of a tenant satisfaction questionnaire. The tenant engagement is about getting information from the tenant about their consumption (electricity, water and gas) and helping tenants who face liquidity problems.

Altera also choose six SDG's (Sustainable Development Goals) to focus on. On the S part, they choose Health and wellbeing with the target: Reduce mortality from non-communicable diseases and promote mental health. The measure this with the coverage of AED (Automated external defibrillator)

There is also a short mentioning of affordable housing (Altera, 2021).

There is more emphasis on the ESG but almost all is E related. The ESG risks discussed are all E related. They follow the requirement of the SFDR for environmental risk.

MN

2011

Annual report of 2011 was not found online.

2016

In the annual report, changes on the ecological level are discussed where companies in the past only needed to have policies for socially responsible investment and now every investment category needs to comply with certain ESG- criteria.

MN want to incorporate socially responsible investment in their policies and want to measure itself on ESG guidelines. MN is rated by PRI.

On asset level, all sustainability criteria are E based as far as we know. On the entity level, some aspects of S are discussed. The S is not mentioned as a risk factor (MN, 2016).

The image below was found in the annual report of 2016. A similar image was found in the report of 2021. The biggest difference will be discussed below the second image.

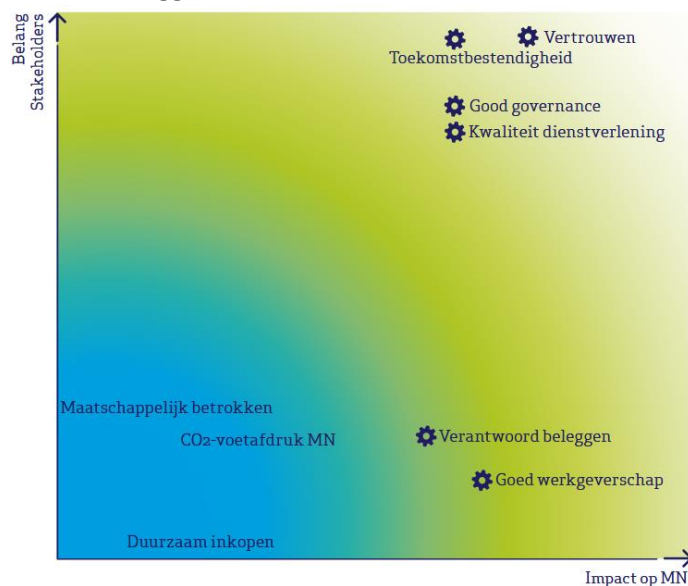


Figure 8: Materiality Matrix MN 2016 (MN, 2016)

2021

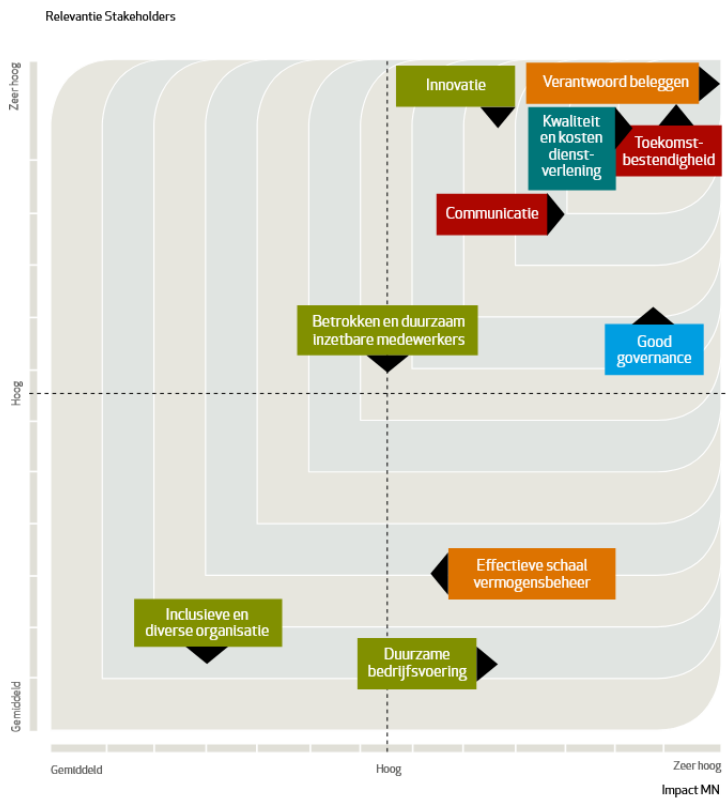


Figure 9: Materiality matrix 2021 MN 2021 (MN, 2021b)

Figures 7 and 8 give a clear impression what has changed for responsible investing in the eyes of stakeholders. It moved from low relevance for stakeholders to high relevance.

The annual report mentions the SFDR. On asset level customer satisfaction is mentioned for S, the rest of the improvements are E related. The annual report discusses some aspects of S for the entity level like inclusion and diversity.

MN helps her customers with the integration of ESG in their investment strategies.

As far as we know, MN does not take S into account in their policies for risk (MN, 2021b).

PGGM

2011

In this annual report, PGGM is intergrading ESG factors in their investments. They use the benchmarks of GRESB and PRI Farmland. For one of their portfolios, they used targeted ESG investments. They also excluded some investments based on controversial weapons and violation of human rights. The term cooperation is mentioned in the report but there is no elaboration on what this really means in practice. On entity level, aspects of S are mentioned. On asset level, only the E is mentioned depending on the practical meaning of cooperation (PGGM, 2011).

Conclusion: No focus on aspects of S on asset level.

2016

In the annual report, two S related topics were mentioned: Health and human rights. Together with APG Asset Management, PGGM tried to standardise some of the definitions and approaches for investments with impact on the SDG's which were named SDI's (Sustainable Development Investments). PGGM invested 3.7 billion to improve the accessibility to healthcare. They wrote a policy how PGGM deals with human rights in their company and in their investments. Their funds were rated using GRESB.

For economic, social and environmental reasons, PGGM requires suppliers to undersign their MVI (Maatschappelijk verantwoord inkopen, in English: social responsible procurement). PGGM introduced health bonds where investors could help to reach certain health goals which is unrelated to real estate directly, but it is an aspect of S.

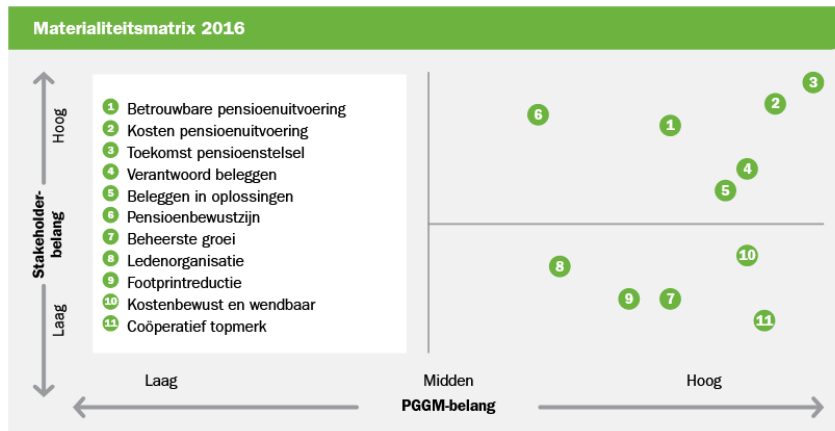


Figure 10: Materiality matrix PGGM 2016

In the Annual Responsible Investment report, PGGM states they see risks and opportunities in sustainable investment. In the report, how to select sustainability and impact indicators and make them comparable and how to report on them are some of the challenges mentioned for responsible investment.

PGGM states that they need to find out what ESG related factors are material to determine the risks. In the report, PGGM only mentions their scores on GRESB for their real estate fund (PGGM, 2017).

2021

In the report, PGGM states that increasing the sustainability of their investment portfolio is one of their points of attention. Investors, regulators and supervisors have it high on their agenda's. The example discussed are all about the E of ESG. PGGM states that it does not want to stop investing in certain companies but wants to use their position in the company to help it increase their sustainability.

PGGM made a materiality matrix on certain themes. The scale is a bit odd because it goes from important to real important. Comparing this to the materiality matrix of MN, impact investing is less important for the stakeholders of PGGM than MN. The materiality matrix can be found below. In the annual report of 2016 of PGGM there was also a materiality matrix, this matrix does not have ESG integration inserted.

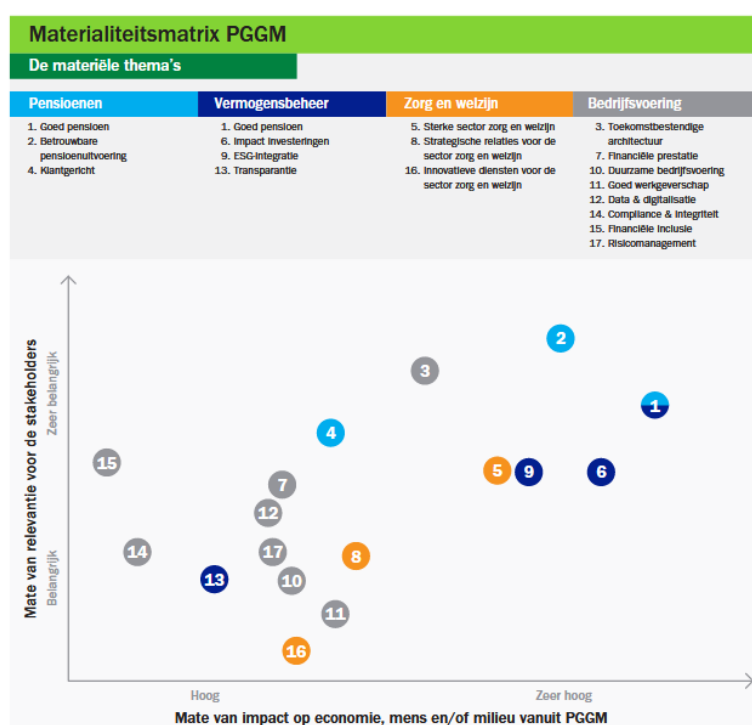


Figure 11: Materiality Matrix PGGM 2021 (PGGM, 2021a)

There is not concrete mentioning of S aspect in real estate. PGGM mentions some SDG's that are social related but not connected to real estate.

PGGM states that ESG factors can influence financial results directly or indirectly. The examples they give are all E related.

The annual report refers to the SFDR and the taxonomy which demand more information about the product of PGGM. They state the face two (level 1) of the implementation of SFDR has been postponed. Level one required publication of mainly quantitative results.

Following MiFID II (Markets in Financial Instruments Directive II), PGGM needs to report on sustainability risks in their risk management policy.

In the integrated report of PGGM asset management, PGGM states that the first step to intergrade ESG is to gather ESG related data which they state is limited due to subjectiveness, estimations and modelling of the data (PGGM, 2022).

PGGM (2022) states that they tried to intergrade ESG in their numbers. Based on their research, they state that the ESG integration policies do not have a significant impact on financial performance.

CBRE

2011

In the report, different risks are discussed. As far as we can tell, none of these risks are S related. The term ESG is not mentioned (CBRE, 2012).

2016

In the report, different risks are discussed. As far as we can tell, none of these risks are S related. The term ESG is not mentioned (CBRE, 2017).

2021

In the report, different risks are discussed. As far as we can tell, none of these risks are S related. The term ESG is mentioned and we are directed to another document to find more information about this topic (CBRE, 2022).

Amvest residential core fund

2011

No report was found

2016

In the annual report, sustainability is one of the topics that is discussed. As far as we can tell, this is all E based. They participated in the GRESB questionnaire.

Social & sustainable is mentioned as qualitative focus, this is as far as we can tell only E based.

There is mentioning of tenant's associations and tenant's platforms which can give advice to Amvest about daily management and services levels. It is not presented as a S factor, but it allows communication about the needs of the tenants. They use the tenant satisfaction questionnaire to measure the tenant satisfaction

There is no mentioning of sustainability as a risk factor (Amvest, 2017).

2021

Could not be found. We use the report of 2020 instead.

In the report of 2020, the real estate of Amvest is rated with GRESB.

In the report, the introduction of the SFDR is discussed.

The sustainability indicators that are S related for Amvest are Tenant Satisfaction, Health and Safety for inhabitants, flexibility during building and living and Fire Safety (Amvest, 2021).

ASR

2011

In the report, ASR states that they follow MVB (Maatschappelijk verantwoord beleggen, in English: social responsible investing) which means that they emphasises positive selection of best practises and best products based on ESG criteria. The examples given for their targeted investments are all E related. Also, they exclude some products based on strict exclusion criteria some of these criteria are S related.

ASR has signed the UNPRI and UNGC (Nations Global Compact Principles).

On entity level, ASR gives example of S related aspects.

No ESG related issues are discussed for risk and return in the annual report as far as we can tell (ASR, 2012).

2016

In the report, sustainable business and sustainable products are seen as opportunities for ASR. For their sustainable strategy, ASR has five focus areas: Insurance, People, Investments, Environment and Society. People and society are both aspects of S. The explanation in the report about people makes it more relevant for Entity level than Asset level. Society is combination of asset and entity level but it is mostly about communicating and reporting.

Materiality matrix

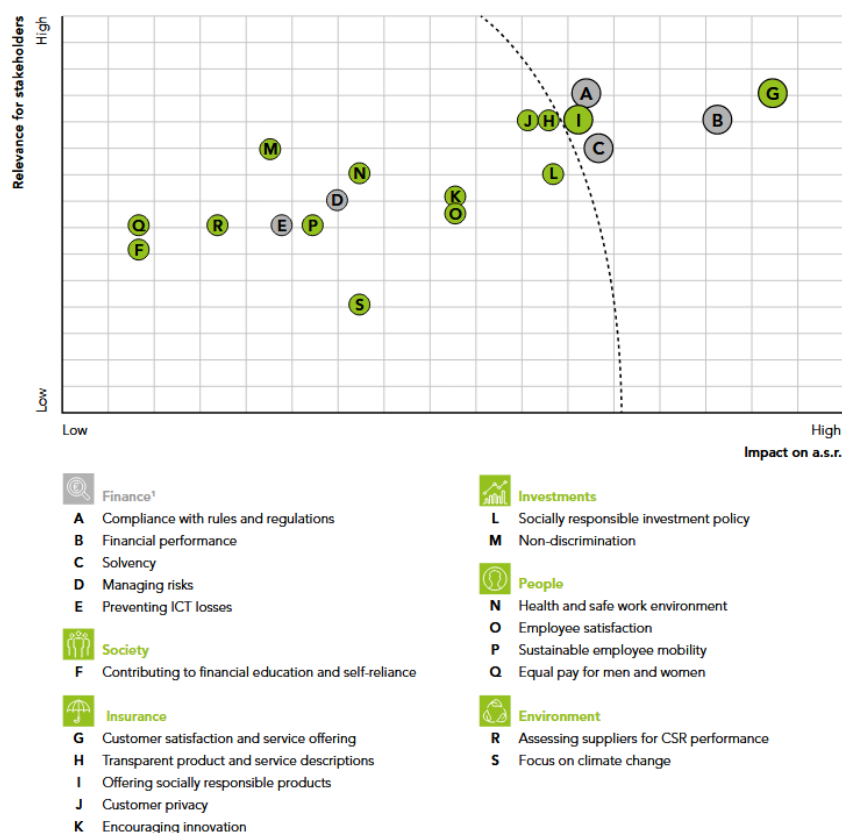


Figure 12: Materiality matrix ASR 2016 (ASR, 2017)

In their value creation model on the social level, they want tenant satisfaction as one of the outcomes. On entity level, aspects of S are mentioned like diversity, health and vitality and training and development.

One of their KPI's for their investments is the Tenant satisfaction rating.

ASR mentions to be aware of CSR and sustainability which can be seen from their investment policy, selecting social products to participate in and their investment and banking products. They renovated a building and proved the environmental improvement with BREEAM.

Sustainability, ESG or social aspects are not mentioned in the annual report for risk or return as far as we know.

2021

In the report, the residential fund is rated by GRESB and BREEAM. For 2022, they want to focus on affordable housing, sustainability and customer focus. Customer focus is about property management and tenant contact system. Sustainability is beneficial for the tenant because of lower energy costs and healthier indoor climate.

In the report, ASP speaks of an increased awareness of Health and Wellbeing.

ASR classified their fund as an article 8 fund for SFDR level 1. The themes discussed in their CSR policy are still not specific like create a sustainable portfolio. The concrete points mentioned for improvement are all E related.

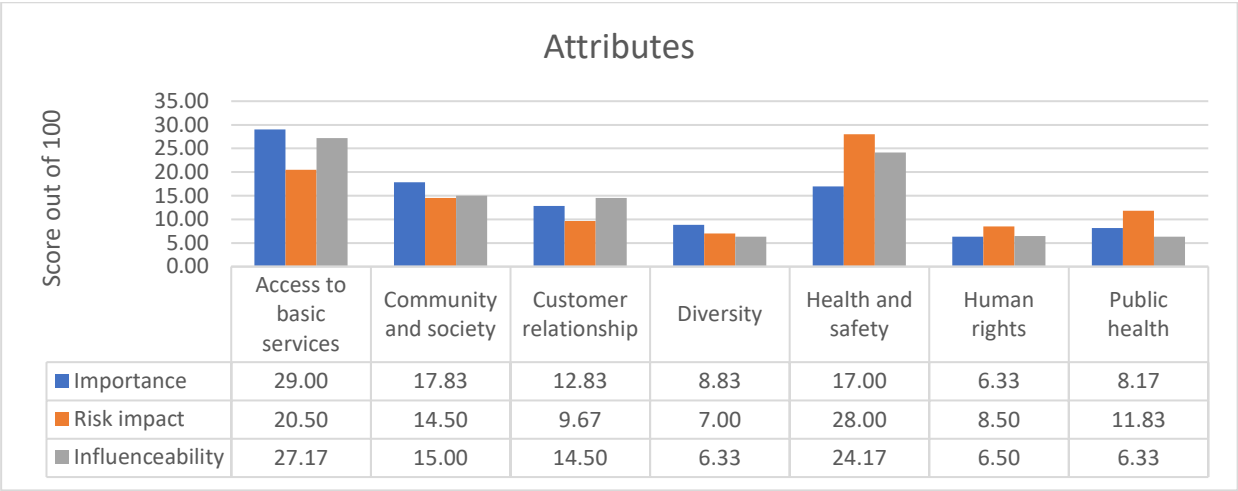
Some tenant participation projects are set up: Tenants associations, Information and community and city gardens all related to the S.

Under strategic risks and compliance risks, the risk of sustainability is mentioned. *"Sustainability risks arise in relation to general market conditions that are changing and could have a negative impact on the future letting potential and marketability of buildings in the portfolio if no action is taken."*(ASR, 2022)

Appendix S: Result Questionnaire

Appendix S contains the results of the questionnaire. The attributes and indicators got a score for their relative importance. Appendix S starts with average score for the attributes and continues with the indicators per attribute. The attributes and indicators were scored based on their importance, risk impact and Influenceability on asset level in real estate.

Attributes Score



Indicators score per attribute

Access to Basic Services

	Importance	Risk Impact	Influenceability
Accessible to disabled/ Accommodations for the disabled	19.16666667	21.66666667	29.16666667
Amenities close by for working parents (access to food/prepared meals, laundry, errands, childcare, basic stores and so forth)	19.16666667	20.83333333	15
Financial institutes in the surroundings (ATM)	5	5	10
Good and enough playgrounds for children in the neighbourhood	12.5	13.33333333	10
High level of public transport	23.33333333	24.16666667	12.5
Parking space around the building	20.83333333	21.66666667	21.66666667
Recreational facilities (pool, gym etc)	10	8.333333333	15.83333333

Community and society

	Importance	Risk Impact	Influenceability
A website dedicated to people living in a neighbourhood (with news, agenda and so forth)	8.333333333	7.75	16.8
Availability of physical meeting places	15.75	17.75	17.5
Availability of facilities for users aimed at sport facilities, horticulture and small office space	13.6	13.83333333	18
Carpooling services	12.5	14	13.75
Central location	18.6	25.6	10.75
Facilitate/ stimulate communal management and or ownership	16.6	14.5	15
Facilities to share cars	11	9.666666667	12.4
Green space available	17	17.4	11.25
Public art	6.5	4.5	12
Support and motivation of self-initiative and activities of users for users	7.666666667		
Support of initiatives from users aimed at improvement of their own surroundings	11.33333333		
Supporting charities and community groups	6.5		

Customer relationship

	Importance	Risk Impact	Influenceability
Are the service costs clear	21.66666667	25.83333333	29.16666667
Energy bill lower because owner of building invested in energy saving above the required minimum	24.16666667	25.5	19
Fast detection and repair of broken street furniture	10	8.33333333	12
Handling of customer complains adequate and on time	25.83333333	22.83333333	21.66666667
Local residents well-being	12.5	7.5	8.33333333
Repair request done aduquate and within reasonable time	15.83333333	16.66666667	19.16666667

Health and safety

	Importance	Risk Impact	Influenceability
Access to first aid equipment	9	11.25	15.83333333
Acoustic comfort	15	12.5	11.66666667
Are there facilities for users aimed at their health	7.5	10	9
Enough lighting in the area	11	13	14
Lighting controls and/or daylight	10	5	16
Minimizes building-related absenteeism and illness	13	15	6.25
Natural ventilation	17.5	11	17
Prevent physical degradation	15.83333333	17.5	9
Thermal comfort	20	17	17

Human Rights

	Importance	Risk Impact	Influenceability
Affordable housing considerations (for housing) or access for low-income owners or minority-owned businesses for commercial property	47.5	38.33333333	46.66666667
Fair labour practices for construction and service workers	32.5	40	35.83333333
Respect for indigenous people's rights, beliefs and traditions	20	21.66666667	17.5

Public Health

	Importance	Risk Impact	Influenceability
Air quality	35.83333333	42.5	26.66666667
Gyms and showers	17.5	13.33333333	26.66666667
No waste on the streets	19.16666667	19.16666667	26.66666667
Open space, parks or plazas nearby	27.5	25	20