

Socially Responsible Investing: How sustainability can be used as an opportunity to achieve higher returns

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ABSTRACT

The purpose of this paper is to investigate the relationship between environmental, social and governance (ESG) work and financial performance. Swedish companies listed on large cap and mid cap at the Nasdaq OMX Stockholm are classified into two different portfolios based on their ESG performance. The classification method is developed for the purpose of this study. One portfolio, the strength portfolio, consists of companies that have included sustainability in their business model, while the other portfolio, the concern portfolio, consists of companies that work with sustainability as philanthropy. To investigate if the portfolios deliver excess return, respectively, they are tested in a Cahart four-factor model. Also, several key-metrics are compared between the portfolios in order to investigate how sustainability work is valued in the market. The results obtained are compared by performing exactly the same tests when the strength and concern portfolios are constructed based on an already existing ESG ranking system, Thomson Reuters Asset4 ESG index. The findings from the study show that companies, which have included sustainability in their business model outperform companies that work with sustainability as philanthropy.

J-classifications: G11, G18, M14, M48

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1. INTRODUCTION

Socially responsible investing (SRI) has become a central topic for many investors. SRI, which often is called sustainable investments or ethical investments, could be explained as "an investment process that considers the social and environmental consequences of investments, both positive and negative, within the context of rigorous financial analysis" (Social Investment Forum, 2001:4). The purpose is to consider both financial return and social good when making investment decisions. The subject has also drawn attention to customers, suppliers, employees and other stakeholders, who put pressure on the companies to act responsible. Companies have for long been under pressure to meet certain sustainability requirements and a majority of all companies perform extensive work within the field.

There have also been more requirements from governments when it comes to transparency of the companies' sustainability work. In December 2014, the European Union Council accepted a directive which requires large companies within the EU to report annually on environment, social and employee-related matters, respect for human rights, anticorruption and bribery matters (2013/34/EU). The directive aims to strengthen the transparency and accountability within the companies. Furthermore, in the end of 2015, United Nation's Climate Change Conference was held in Paris, where 196 ministers from all around the world agreed upon a climate agreement stating that the global temperature is not allowed to increase more than 2°C during this century. As a result of a greater focus on sustainability from governments, intergovernmental organizations, customers, suppliers and other stakeholders, it has also become central for investors to consider sustainability aspects in investment decisions. Hence, it is of interest to study the relationship between a company's social responsibility work and financial performance.

In this study several aspects of sustainability will be analysed. Corporate Social Responsibility (CSR), Socially Responsible Investing (SRI) and Environmental Social Governance (ESG) are all different aspects of sustainability, used by different actors in the financial market. Companies often use CSR as their definition of sustainability work, where the three different parameters in ESG are considered. Socially responsible investors often evaluate companies' sustainability work based on the ESG factors.

Previous studies on the relationship between sustainability and financial performance has shown various results. Most existing studies performed on SRI stocks focus on financial performance and show that socially screened assets do not perform significantly different compared to conventional assets (Schröder (2004), Statman (2000), Geczy et al (2003), Kreander et al (2005) and Galema et al. (2008)). However, other renowned authors within the field, Renneboog et al (2007), find that SRI funds strongly underperform domestic benchmark portfolios. They argue for that investors are willing to pay a premium for companies meeting certain social or ethical standards. Hence, these companies should be priced above their fundamental value and result in underperformance by SRI funds. A third view is presented by Tirole (2010), who argues for a vision called *win-win*, where sustainable business goes hand in hand with financial performance since it makes companies, to a greater extent, focused on long-term profitability.

Evidently, sustainability has become central for investors' investment decisions. Goldman Sachs has recently developed the concept *The New Bottom Line*, where the ESG parameters are added and should be considered alongside the financial results. Also, a large flow of capital to the SRI market can be observed. To be more precise, the assets invested in the U.S. SRI market, has increased from USD 6.5 trillion in 2006 to USD 59 trillion in 2015, according to the Principle for Responsible Investments (PRI)¹. In line with changed capital allocation towards the SRI market, the field has become more important for companies. Also, customers demand sustainable products. This has led to a greater emphasize on the ESG actions within the companies. In addition, a growing SRI market has led to a greater focus on ranking systems of companies' sustainability work. The ranking systems are usually based on the companies' ESG factors. One example of a ranking system is Morningstar, which during March 2016 introduced sustainability rating of funds based on how well the companies in the funds manage the ESG factors. Every fund in the index gets a score between one and five. Another example of a ranking system is the Thomson Reuters ESG Asset4 index, which scores companies' sustainability work on a scale between 0 and 100.

¹ PRI is the world's leading proponent of responsible investments, supported by the United Nations, which has developed a framework for the implications of environmental, social and governance (ESG) factors.

The existing ranking systems consider a broad range of aspects within the field of ESG and the importance of the different aspects varies between both individual companies and industries. This means that the ranking systems suit some industries and companies better than other. Hence, this could result in difficulties when interpreting the scores. In extent, this could lead to mixed results when evaluating financial performance of SRI investments and could be one explanation of the mixed findings in previous studies. To get more consistent results, this study aims to find an alternative approach of classifying socially responsible stocks based on the companies' product offerings and business models. The alternative measure developed for this study, SSCI (Sustainability Strategy Classification Index), is then compared to a traditional ESG ranking system (Thomson Reuters Asset4 ESG index) by studying financial performance of Swedish listed companies. The two measures are then compared using the same methodology as Galema et al but using Swedish data for the years 2012-2015.

2. HYPOTHESIS

Previous literature within the field of SRI and financial performance could be divided into two areas. The first area includes quantitative studies that investigate the relationship between CSR and financial performance. The second area includes qualitative research that can be used to explain potential differences in return between SRI assets and conventional assets. Following, the two different areas will be further explained.

2.1. Relationship between CSR and corporate financial performance

The relation between CSR and corporate financial performance has been studied intensively the past decade and resulted in various conclusions. The most common result of previous studies is that SRI portfolios do not perform differently compared to conventional portfolios. These findings are based on studies from several renowned authors within the field of SRI (Schröder (2004), Statman (2000), Geczy et al (2003) and Kreander et al (2005)). More specifically, Schröder (2004) studies the German, Swiss and the U.S. SRI markets and finds that SRI investments do not significantly underperform conventional peers. Statman investigates the performance of U.S. SRI funds between 1990-1998 and compare Jensen's alpha against the S&P 500 Index and the Domini 400 Social Index. Statman concludes that the performance of SRI funds is not significantly different from zero. Geczy et al argue for differences in basic characteristics and risk exposures between SRI and non-SRI funds. These results are obtained by performing regressions using the Cahart four-factor model, where no significant difference in alpha is observed. The results imply that there is no excess return since the difference is captured by the model. Kreander et al find no significant difference in Jensen's alpha when comparing 40 European SRI funds with an equal number of European non-SRI funds. The results are in line with Geczy et al's findings, where the difference in returns between the two portfolios is captured by different risk profiles.

Another view regarding the difference in return between SRI portfolios and non-SRI portfolios is taken by Renneboog et al, who find evidence of underperformance of SRI portfolios compared to conventional peers. Their findings are based on European and Asian SRI Funds. As an explanation of the difference in return between the portfolios, Renneboog et al introduce the theory of that investors are willing to pay a premium for SRI stocks to meet certain social and ethical criteria. Consequently, Renneboog et al conclude that SRI stocks are overvalued in general.

Tirole (2010) argues for a view called *win-win*, which states that CSR can make a company more profitable since it enhances a long-term view that may conflict with short-term profits, but generates better profitability over time. The long-term view is difficult to achieve since companies generally are short-term biased. The short-term bias can be derived from monetary incentives and career concerns for the management (i.e. reducing the workforce increases profitability instantly but might erode the remaining workforce's motivation in the long-run). If the efficient market hypothesis holds, a more profitable company should not outperform the market since the profitability is incorporated in the price. However, like Tirole argues, the market might underestimate the agency costs.

Galema et al (2008) use U.S. data for the period June 1992 to July 2006 to study excess returns for two portfolios with different dimensions of socially responsible performance, classified based on the KLD ESG index². The Cahart four-factor model is used to calculate market excess returns for the different SRI portfolios. The strength portfolio contains stocks that receive high scores on the KLD ESG index and the concern portfolio consists of stocks that receive low scores. Gelema et al do not find any evidence of market excess returns generated by the strength portfolio.

A study of SRI stocks was performed by Moskowitz (1972) in the early 1970s, where he argued for a positive relationship between CSR and financial performance. His portfolio of socially responsible stocks outperformed the Dow Jones Index during the six months in 1972, when the study was performed. On the contrary, Stanley Vance (1975) argues for a negative relationship between social responsibility and financial performance. Vance used the same portfolio as Moskowitz, but studied the return over a longer time period, between 1972 and 1975. He proved that the portfolio underperformed the Dow Jones Index during the period. Vance performed further studies within the field to strengthen his argument of a negative relationship between social responsibility and financial performance. He identified companies with high and low level of social responsibility, in order to compare the financial performance of the companies between the two groups. Vance concluded that the group of companies with lower

² The KLD score is based on the three main segments environmental, social, governance. These segments are then analyzed through several different aspects according to a framework described in *Table 2 (appendix)*, where each company is scored on a scale ranging from AAA-CCC relative to its industry peers.

level of corporate social responsibility outperformed the other group. His findings are in line with Renneboog et al, who also find evidence of underperformance of SRI stocks compared to conventional peers.

Other previous studies confirm Moskowitz view of a positive correlation between CSR and profitability. Kurtz (1997) shows that socially responsible stocks do not underperform the market and that they have higher expected return than conventional stocks. Also, two renowned authors within the field, Hong and Kacperczyk (2007), investigate the financial performance of sin-stocks³ and conclude that sin-stocks report lower returns than stocks excluded from a sin-portfolio.

Evidently, previous studies have different views on whether there is a positive or negative relation between a company's sustainability work and financial performance. However, previous literature share one common view; there is a difference in terms of both characteristics and return between a SRI portfolio and a non-SRI portfolio. Hence, these differences should be reflected in the market value of the company.

2.2. The relationship between sustainability performance and company valuation

The most common approach to value a company is to discount its expected future cash flows (DCF valuation), which is used widely both in the academic and the professional world. Hence, the DCF valuation is also the correct measure to value sustainability work. Hong and Kacperczyk use the traditional DCF valuation when comparing the financial performance of a portfolio including sin-stocks and a portfolio where sin-stocks are excluded. They find lower returns and thereby lower enterprise value for sin-stocks, which could be explained by fundamental aspects. Some common findings are that sin-companies are exposed to greater risks for significant expenses, such as fees. Also, it could be harder and more expensive for a sin-company to attract good employees, which will erode the company's potential to deliver strong cash flows over time. Hence, according to Hong and Kacperczyk, stocks that are excluded from a sin-portfolio generally generate higher returns than sin-stocks, *ceteris paribus*.

However, Merton (1987) explains that the price-discrepancies between SRI stocks and non-SRI stocks are a result of demand differences. To be more precise, excess demand for

³ Publicly traded companies that are involved in alcohol, tobacco and gaming

socially responsible stocks and a shortage of demand for irresponsible stocks lead to a higher price of responsible stocks and a lower price of irresponsible stocks. Consequently, Merton's view contradicts with the traditional DCF valuation.

Hong, Kacperczyk and Merton, all conclude that sin-companies face a higher risk of additional expenses, which lowers their market value. However, sin-stocks may report higher return in a short-term perspective, but they will eventually be affected by additional expenses related to their unsustainable business. This is one reason for considering risk when comparing returns between SRI stocks and conventional stocks.

The potential consequences from a negative event on a company's stock price were clearly monitored by the recent events in Volkswagen. The company was caught manipulating with engine management, in order to lower emissions and reduce fuel consumption, while the car was in a test environment. The discovery forced Volkswagen to make a reservation in the results of \$18 billion to cover future legal proceedings (Reuters, 22 April 2016). Furthermore, the day that the cheating was admitted, the share dropped 28% (Bloomberg, 21 September 2015).

Related to the additional risk of potential revenue shortfall and fees, is information asymmetry. Since companies are valued based on public information, there is always a risk associated with incomplete information. The view presented by Merton, shows that the value of a company will always be lower with incomplete information. In the extent, this should result in lower excess returns for companies with higher information asymmetry. This should also results in a higher book-to-market ratio.

Galema et al perform regressions on companies' book-to-market ratios to study whether there exist a difference in valuation between the strength portfolio and the concern portfolio. They find that the concern portfolio reports a higher book-to-market ratio than the strength portfolio. Galema et al use Merton's view of differences in demand as an explanation of the difference in book-to-market ratio.

Renneboog et al argue for two different views regarding the effects of CSR investments on financial performance; the *shareholder expense view* and the *stakeholder maximization view*. The *shareholder expense view* states that CSR investments are made at the expense of the shareholders, while the stakeholder maximization view means that investing in CSR creates

value for the stakeholders. The two views give different perspectives on how CSR investment could affect shareholder value.

Based on the discussions of previous studies, the different views and findings can be summarized into three different hypotheses:

1) There is no relationship between a company's sustainability work and its financial performance.

This hypothesis is in line with the findings from Schröder, Statman, Geczy et al, and Kreander et al. One implication is that the market is efficient and the difference in financial performance between a SRI portfolio and a conventional portfolio is already priced in the market. Another explanation is that there is no financial difference between a SRI stock and a conventional stock.

2) There is a negative relationship between a company's sustainability work and its financial performance.

The hypothesis is derived from the shareholder expense view, as presented by Renneboog et al, where financial performance will be poor as a result from lower profitability. This hypothesis is also in line with Vance's results.

3) There is a positive relationship between a company's sustainability work and its financial performance.

The third hypothesis is in line with Tirole's findings. Also, it aligns with Renneboog et al's stakeholder maximization view, where companies that are on the forefront within SRI, maximizes long-term value creation in terms of both financial performance and profitability.

3. METHODOLOGY

As a framework of the method used in this study, Galema et al's paper "*The stocks at stake: Return and risk in socially responsible investment*" is replicated. Galema et al form one strength and one concern portfolio based on scores on six SRI dimensions on U.S. stocks tracked by KLD Research and Analytics. The strength portfolio includes the stocks obtaining the highest scores, while the concern portfolio includes the stocks with the lowest scores. To be clear, for each of the six SRI dimensions, they form one strength and one concern portfolio, resulting in twelve portfolios. Then they investigate if the SRI portfolios could deliver excess return, respectively, by running regressions using the Cahart four-factor model. Secondly, they perform pooled book-to-market regressions to investigate the relationship between the KLD ESG index and the value of the company.

Other renowned authors that have studied the relationship between SRI stocks and financial performance have used similar methods as Galema et al in their studies. To be more precise, Geczy et al, who study the differences in basic characteristics and risk exposure between SRI funds and conventional funds, use the Cahart four-factor model for their regressions.

As mentioned before, the method used in Galema et al's study has to a great extent been replicated in this study, but using Swedish data instead of U.S. data. Consequently, the method performed in this study includes the following steps. Firstly, one strength portfolio and one concern portfolio are generated based on the Sustainability Strategy Classification Index (SSCI), which is developed for purpose of this study. The method of generating the SSCI will be further explained in section 3.1. When the strength and concern portfolios are generated, a difference portfolio is also constructed, based on a long-short strategy. The difference portfolio goes long in the strength portfolio and short in the concern portfolio. Descriptive statistics of the strength, concern and difference portfolio are reported and analysed. Secondly, the monthly excess returns of the different portfolios are investigated by running regressions using the Cahart four-factor model. To increase the robustness of the results, a Generalized Method of Moments (GMM) approach is applied on the regression on monthly excess return for the difference portfolio. Thirdly, the strength and concern portfolios are compared using book-to-market value, EBIT/Market value and the P/E-ratio. The key-metrics are used to analyse the valuation of the strength and concern portfolio, respectively.

To compare the results obtained by the SSCI, a parallel test is performed based on when the companies are classified by the Asset4 ESG index. To make it clear, the same methodology as describe above is used for an identical test, where the only difference is that the strength and concern portfolio are constructed based on the Asset4 ESG index. The Swedish companies covered by the Asset4 ESG index are divided into one strength and one concern portfolio, based on the score obtained on the Asset4 ESG index. Since the Asset4 ESG index classifies the companies based on other measures than the SSCI does, same companies could potentially be included in different groups depending on which ranking system that is used. One company could for instance be included in the strength portfolio in the SSCI, while it is included in the concern portfolio in the Asset4 ESG index. Finally, the results from the Asset4 ESG index and the SSCI are compared. A more detailed description of the Asset4 ESG index is given in *Table 3 (appendix)*.

3.1. Generation of the Sustainability Strategy Classification Index (SSCI)

3.1.1. Motivation of the SSCI

The main idea behind generating an alternative classification index of companies' sustainability work is to use an universal methodology that is close to what investors use on a daily basis. In the concept of *The New Bottom Line*, companies' sustainability work is evaluated as an integrated part in the strategic analysis. This implies that a company's sustainability work rather should be analysed subjectively. Conventional indices, like the Asset4 ESG index and the KLD ESG index, rather help investors exclude companies that scores below a certain level. Moreover, the existing ESG indices do not evaluate the companies' sustainability work as an integrated part of their business strategy. Therefore, it is hard to determine if the sustainability work that a specific company performs brings any favour to the actual business. To state it in another way, it is difficult to determine, based on the conventional ESG indices whether it is the stakeholder maximization view or the shareholder expense view that prevails. Furthermore, the conventional indices only cover a limited number of companies in each market. More specifically, the Asset4 ESG index covers only 52 Swedish companies.

Compared to the SSCI, the KLD ESG index is more exhaustive and covers several areas in more detailed. However, it is hard to determine the individual importance of each area, since all companies are different. This implies that the results might get skewed, especially since all companies spend different amount of effort to report their progress in the different areas of their

sustainability work. With the SSCI, the sustainability rating is simplified as it only observes how sustainability work is integrated in the business model. In extent, this means that the results are not affected by the company's ability to communicate its progress within the field of sustainability. The aim with the SSCI is to identify the *win-win* companies, as discussed by Tirole, where financial performance comes as a result of sustainability work. This is also in line with Renneboog et al's stakeholder maximization view.

Another difference between the KLD ESG index and the SSCI is that the latter targets the customer's perspective to a greater extent. The SSCI focuses on the company's products and the customer's needs. The assumption is that a sustainable product offering, which target customer needs, will drive and steer the company towards sustainable revenues and good results in the long-term. High profitability and stable, or even growing, revenues is what creates long-term value for the shareholders.

3.1.2. Classifying companies' sustainability strategy using the SSCI

The data used to evaluate the companies' sustainability strategy is annual reports. Data has been collected for each company, respectively, in order to classify the companies into three different groups. The classification is based on how well each company has integrated sustainability in their business. To be more precise, the first group, which is called the strength portfolio, includes companies that have integrated sustainability in their business model. That requires sustainability to be a unique selling point (USP) for the company and in extent, it will result in new and more business. Another requirement for being included in this group is that the sustainability work drives innovation within the company, in order to maintain their advantage within sustainability. The second group, which is called the concern portfolio, includes companies that work with sustainability, which is not related to the core business. These companies rather work with sustainability as philanthropy (i.e. according to Boliden's annual report, the company try to improve habitat protection and biodiversity in their exploration and mining business). The third group includes companies that do not work with sustainability at all. This group is excluded from the dataset.

The sustainability strategy classification has been made using data from annual reports between 2011-2014, with emphasis on 2014 since it is the most recent annual report with complete information for all companies. Sustainability information from the years before 2014

has mostly been used to confirm consistency in the different companies work. Additionally, the reports' emphases on sustainability have clearly evolved over time, especially for mid cap companies, which further explain the emphasis on data from 2014. The sustainability strategy has been considered to be stable over the studied time period for each company, which means that all companies have the same classification through the entire studied period. To make it clear, a company will either be included in the strength or concern portfolio between 2012 and 2015. Another reason for considering the sustainability strategy classification to be stable over the studied period is that the core business in large companies (mid cap and large cap) changes gradually. This implies that there are no instant changes in the companies' strategy of sustainability work, which means that sustainability will not suddenly become an USP.

The sustainable strategy classification starts by a clear definition of the three different strategies. The three different strategies have partly been based on previous literature and the webinar *The New Bottom Line: ESG as a driver of investment strategy and performance* by Goldman Sachs (2016). The conclusion is that three different sustainability strategies seem to exist, which are essential when evaluating the sustainability work within a company. These three different strategies are used as a base when classifying companies' sustainability work.

1. Sustainability integrated in the business model: Companies that *win* new business as a result of their sustainability work. Sustainability is one of their major unique selling points. As a consequence, sustainability drives innovations in order to maintain the advantage within sustainability. The aim is to create a portfolio of companies that are consistent with the stakeholder maximization view as discussed by Renneboog et al.
2. Sustainability work that is not related to the core business: Companies work actively with sustainability in their organization; however this work is not integrated in the business. Sustainability is not an USP for these companies. Hence, they do not win business as a result of their sustainability activities. The aim is to create a portfolio of companies that are consistent with the shareholder expense view as discussed by Renneboog et al.
3. No sustainability work: Companies that do not work with sustainability.

Based on the three different strategies described above, three questions have been developed in order to classify the companies according to the different strategies. For each company, the answer of each question decides which sustainability strategy has implemented.

Question 1: What kind of sustainability work does the company currently make, and to what extent?

Question 2: Does the sustainability work offer an unique selling point?

Question 3: Does the sustainability work leads to innovation that enhances the unique selling point?

All companies that allocate a significant amount of resources to their sustainability work are classified as working actively with sustainability and could therefore either work with strategy 1 or strategy 2. On top of that, those companies that work with strategy 1 have to report satisfying and convincing results on question 2 and question 3. This implies that they sell products with sustainability as one of the major unique selling points (USP) and that sustainability is one part of their product development and drives innovation.

When answering the questions, the majority of customers have been considered. The customer's perception of the company's products has been used as a proxy for what all other stakeholders perceive. According to Schröder, leading companies within CSR attract better employees, face a lower risk of default and have a lower cost for financing. Schröder's findings indicate that leading companies within CSR benefits from several advantages which make them more successful in general. This is the idea behind the importance of the customers' perspective.

A classification of all the companies, respectively, included in the strength and concern portfolios have been made based on the three questions described above. For each company, the three questions are answered based on the information in each company's annual report. The answers, for each company, are summarised in *Table 20 (appendix)*.

Table 4 presents the name of each company included in the strength and concern portfolio per industry. The allocation of companies between strength and concern portfolio varies between the industries; for some industries, a greater share of companies are included in the strength portfolio, or the other way around. In addition, the name of the companies that have

been excluded due to 1) no sustainability work 2) financial companies 3) companies with fewer observations than 48 months.

Table 4: Classification of the companies' sustainability work based on the SSCI (classification method developed for this study)

| Industry* | Strength portfolio | Concern portfolio | No sustainability work (excluded) | Excluded (financial companies) | Observations <48 months (excluded) |
|------------------------|--|---|-----------------------------------|--------------------------------|---|
| Food production | Cloetta | Aarhus Karlshamn Swedish Match | | | |
| Manufacturing | ABB Active Biotech Arcam Astra Zeneca Atlas Copco Autoliv Electrolux Elekta Ericsson Fagerhult Holmen Husqvarna Lindab Nederman Nibe Sandvik SCA SKF SOBI SSAB Stora Enso Trelleborg Volvo | Alfa Laval Assa Abloy Boliden Lundin Mining Lundin Petroleum Nobia Nolato VBG | Fingerprint Cards ITAB SAAB | | Alimak Group Bufab Bulten Cavotec Gränges Inwido Munksjö Recipharm Sanitec Thule Group Tobi |
| Real estate | | Atrium Ljungberg Balder Byggmax Castellum Catena Diös Faberge Fastpartner Heba Hufvudstaden Kungsleden Wallenstam Wihlborgs | | Lundbergsföretagen | Concentric Besqab Bravida Corem Property D. Carnegie Hemfosa Klövern Platzer Fastigheter NP3 Sagax |
| Consumer goods | Axfood BioGaia Duni Haldex IcaGruppen Meda Mycronic New Wave | Addtech Axis B&B Tools Getinge Hexagon Hexpol Indutrade Mekonomen OEM | | Beijer Alma | Bufab Fenix Outdoor Lifco OEM Scandi Standard *Beijer preferred (excluded due to) |
| Leisure | | Ski Star | Betsson | | |
| Service | Billerud Korsnäs Opus Oriflame | Gunnebo Intrum Justitia Loomis Securitas Systemair | | | Coor Services Dometic Nobina Transcom Tribona Victoria Park |

Table 4 continues on next page

Continuation of Table 4 from previous page

| Industry* | Strength portfolio | Concern portfolio | No sustainability work (excluded) | Excluded (financial companies) | Observations <48 months (excluded) |
|---|---|--|--|--|--|
| IT and Telecommunications | Sectra RaySearch | Tele2 Telia Tieto | HiQ Net Entertainment | | CLX ComHem Eltel IFS IFS Global Transmode *Unibet (Not AB) |
| Retail | | Clas Ohlson H&M Kappahl Qliro | | | Dustin |
| Construction | | JM NCC PEAB Skanska | | | |
| Media | | MTG | | | |
| Hotels and restaurants | | Rezidor | | | Scandic |
| Investment companies & Banks | | Handelsbanken Nordea SEB Swedbank | Avanza Nordnet Lagerkrantz Melker Schörling | Bure Creades Industrivärden Investment AB Öresund Investor Kinnevik Latour Ratos Vostok New Ventures | Collector East Capital Explorer Hoist Finance Nordax Traction |
| Medical | Medivir Oasmia Orexo Vitrolife | | | | AddLife Attendo Bactiguard Camurus Capio Humana |
| Car sales | | Bilia | | | |
| Transport | | SAS | | | Nobina |
| Staffing | | Proffice | | | |
| Consulting | Sensys Gatso SWECO ÅF | | | | |

This table shows the classification of the companies into the strength and the concern portfolio. Classification of the companies' sustainability work based on the SSCI (classification method developed for this study). In addition, total number of companies that have been excluded from the dataset is also shown due to 1) no sustainability work 2) financial and investment companies 3) companies with less observations than 48 months.

* Industry classification is based on Retriever's industry classification

Table 5 (appendix) presents the classifications of all the companies in a list, without dividing into industries. In this table, it is easy to look up a specific company's classification. Table 6 (appendix) shows the total number of companies in the dataset that are included in the strength and the concern portfolio within each industry. Also, the share of companies within each industry that are included in the strength and concern portfolio, respectively, are presented. For instance, within the manufacturing industry, there are 23 companies in the strength portfolio and 8 companies in the concern portfolio. This means that 74% of the companies in the dataset within the manufacturing industry are included in the strength portfolio, while 26% are included in the concern portfolio.

As mentioned before, the allocation of companies between the strength and concern portfolio varies between the industries; for some industries, a greater share of companies is included in the concern portfolio, or the other way around. Furthermore, most companies within a specific industry tend to get the same strategy classification, as their products serve similar needs. For instance, SKF that produces bearings and lubricants sells its products with the purpose to reduce friction and thereby increase resource efficiency. This means that SKF will be classified as having implemented sustainability in their business model. Innovation within SKF is at least partially performed to further reduce friction, or friction over time as a result of more durable products, which makes SKF a company with sustainability integrated in the business model. The same thing can be said about all the life science companies, since their products are developed and sold to cure human diseases. All their innovation is performed to create the most efficient and reliable medical treatments, which also means that they have included sustainability in their business model by definition. The same logic would apply to any of SKF's competitors. H&M on the other hand, which probably is one of the leading companies within sustainability among other companies in the same size and industry, has not been classified as a company that has included sustainability in their business model. Despite extensive efforts, where H&M, for instance, encourage customers to recycle their cloths, the majority of H&M's customers have not been considered to buy H&M products because of their sustainability work. Hence sustainability is not one of their major unique selling points, at least not yet.

Some companies have been more difficult to classify than other; especially companies within the real estate industry. What makes the real estate companies more difficult to classify compared to other industries is that their ability to include sustainability in the business model can be questioned. To be more precise, location is often the most important factor when the customer picks their locations of the real estates. Despite the extensive work that the real estate companies perform (i.e. reducing the environmental impact and being resource efficient), few customers choose to rent the real estate if the location is not right. Extensive work with resource efficiency might be a success factor, but it is rarely a major unique selling point. To conclude, none of the observed real estate companies have sustainability included in the business model, according to the SSCI. The same logic can be applied to banks. A bank allocates capital to different investments and hence, it is hard for an external to determine whether these allocations

ate made towards sustainable investments or not. That means, none of the Swedish banks have included sustainability in their business model, according to the SSCI.

3.1.3. Comprising strength and concern portfolios based on the Asset4 ESG index

To classify the companies based on the Asset4 ESG index, data on companies' ESG factors are obtained from the Thomson Reuters Asset4 ESG database. The Asset4 ESG index scores companies' ESG work on a scale between 0 and 100. To be more precise, each ESG factor obtains a score based on several parameters that Thomson Reuter's database uses to base their ESG ranking on. These parameters, as well as the method of how the Asset4 ESG index is calculated are explained in *Table 2 (appendix)*. For this study, all of the Swedish companies that the Asset4 ESG database covers are used. For each company that has obtained scores on the ESG factors, an equally weighed total score is calculated based on the scores of the three parameters. To make it clear, for each company, each ESG parameter contributes with one third to the total ESG score. Then, the companies are divided into two equal groups. The first group, called the strength portfolio, includes the companies with the highest ESG scores. The second group, the concern portfolio, includes the companies with the lowest ESG scores. Several companies has been excluded from the dataset due to no observations reported by the Asset4 ESG index. *Table 7* shows which companies that are included in the strength and concern portfolio per industry. *Table 8 (appendix)* shows how many companies within each industry that is included in the strength and the concern portfolio, respectively. Industry classification is made based on Retriever's classifications.

To improve consistency with the SSCI score, only ESG data for 2014 was used for classifying the companies into one strength and one concern portfolio based on Asset4's ESG index. In similarity to the SSCI, the Asset4 ESG index is also partly constructed based on the information from each of the covered companies' annual reports.

The Asset4 ESG index is chosen since it is a leading index within the field of ESG, with a broad coverage of Swedish companies. The index is similar to the KLD index that is used by Galema et al, since both indices take similar parameters into account when calculating the ESG scores. The similarity between the indices improves the comparability of the results obtained in this study with Galema et al's findings.

Table 7: Classification of the companies' sustainability work based on the Asset4 ESG scores

| Industry* | Strength portfolio | Concern portfolio | Excluded (financial companies) | Companies excluded due to no observations |
|---|---|---|--|--|
| Food production | Swedish Match | | | |
| Manufacturing | Alfa Laval Assa Abloy Atlas Copco Boliden Electrolux Elekta Ericsson Husqvarna SCA Volvo | Holmen Lundin Petroleum Nobia Sandvik SKF Trelleborg | | SOBI Nibe Prevas |
| Real estate | | Castellum Faberge Kungsleden Whilborgs | Lundbergsföretagen | |
| Consumer goods | Axfood | Getinge Hexagon Meda | | Ica Gruppen Hexpol |
| Service | Billerud Korsnäs | Securitas | | Eniro |
| IT and Telecommunications | TeliaSonera | Tele2 | | |
| Real Estate | | | | Hufvudstaden Pandox |
| Retail | | H&M | | |
| Construction | JM | Skanska | | NCC |
| Media | MTG | | | |
| Investment companies & Banks | | | Industrivärden Investor Kinnevik | Handelsbanken Nordea SEB Swedbank |
| Service | | | | Intrum Justitia |
| Transport | | SAS | | |

This table shows the classification of the companies into the strength and the concern portfolio. Classification of the companies' sustainability work based on Asset4's ESG scores. In addition, total number of companies that have been excluded from the dataset is also shown due to 1) financial and investment companies 2) companies excluded due to no observations

** Industry classification is based on Retriever's industry classification*

3.2. The Cahart four-factor model

When the strength and concern portfolios are constructed, a Cahart four-factor model tests if the portfolios can deliver excess return, respectively, and if there is a difference in excess return between the two portfolios. The regression is performed on stock prices during the four years, 2012-2015. The Cahart four-factor model is an extension of the Fama-French three factor model and takes more explanatory variables into account when describing the return of a stock or a portfolio. The Fama-French three factor model is an extension of the traditional asset-pricing model, CAPM, and adds the variables SMB (size) and HML (value) to the regression, except from the MRP (market risk premium) that already is included in the CAPM. The Cahart four-factor model extends the Fama-French three factor model by adding the explanatory variable, MOM (momentum). Consequently, a Cahart four-factor model is used in order to establish a relationship that takes more explanatory variables into account when analysing the relationship between risk and returns for the different SRI portfolios in this study.

Monthly returns on stocks are regressed on the returns on a market portfolio of stocks:

$$R_{t,i} - Rf_t = \alpha_i + \beta_i(RM_t - Rf_t) + s_iSMB_t + h_iHML_t + m_iMOM_t + \varepsilon_{t,i} \quad (1)$$

RM: return on a value-weighted market proxy in month t

Rf: return of a one-month treasury bill in month t

SMB: the difference in monthly return between a group of companies with low market capitalization (small) and a group of companies with high market capitalization (big)

HML: the difference in return between a value (high B/M) and growth portfolio (low B/M)

MOM: the monthly return on a portfolio long on past one-year winners and short on past one-year losers

The method of calculating the factors used in the Cahart-four factor model are described following. The market risk premium is the measure of systematic risk and is calculated by subtracting the risk-free rate from the monthly value weighted return for all stocks in the sample ($R_m - R_f$). The risk-free rate is the return on a one month Treasury Bill.

The SMB factor (*small minus big*) measures the excess return on small cap stocks over large cap stocks. Hence, the SMB factor is defined by ranking all of the companies' market capitalization (*size*), from highest to lowest, for all companies in the dataset. Then, the companies are divided into two groups with equal number of companies, based on the level of market capitalization. The first group includes the companies with the smallest market capitalization (*small*) and the second group includes companies with largest market capitalization (*big*). The factor SMB (*small minus big*) is then calculated by subtracting the *big* portfolio from the *small* portfolio, replicating a long-short strategy, in order to obtain the excess return on small

cap stock over large cap stocks. Excess return is then calculated based on the closing price at the end of each month, for each company.

The HML (*high minus low*) factor measures the excess return of value stocks over growth stocks. HML is measured by ranking the companies based on their book-to-market ratio. The companies are divided into two equally big group based on the level of book-to-market ratio. The first group includes the companies with highest book-to-market ratio (*high*) and the second group includes companies with the lowest book-to-market ratios (*low*). The HML factor is then calculated by subtracting the *low* portfolio from the *high* portfolio, replicating a long-short strategy, in order to obtain the excess return on value stocks over the growth stocks. The calculation of excess return is measured based on the closing price at the end of each month, for each company.

The MOM factor (*momentum*) is measured by calculating the past 12 months return for the entire sample for the last trading day each month. The MOM factor is calculated by dividing the companies into two groups, one with past 12 months winners and one with past 12 months losers. The MOM factor is the average return from a long-short strategy, which goes long in past 12 months winners and short in past 12 month losers.

The monthly averages for the four factors in the Cahart four-factor model are calculated for the whole sample. These monthly averages are used for the regressions both for the regressions based on the SSCI portfolios and for the Asset 4 ESG index.

3.3. Generalized Method of Moments approach (GMM)

In addition to testing the excess returns on the SRI portfolios, respectively, a difference portfolio is created to assess the return on. The regression is performed on stock prices between 2012 and 2015. The regression setting on the difference portfolio is defined below, where $R_{t,i,strength}$ is the return on the strength portfolio and $R_{t,i,concern}$ is the return on the concern portfolio.

$$R_{t,i,strength} - R_{t,i,concern} = \alpha_i + \beta_i(RM_t - Rf_t) + s_iSMB_t + h_iHML_t + m_iMOM_t + \varepsilon_{t,i} \quad (2)$$

Since model (2) allows for correlation between the explanatory variables and the error term, ϵ , an endogeneity problem could potentially exist. In case of endogeneity in the regression, the coefficients for the explanatory variables could be biased and hence, give misleading results. In order to avoid possible endogeneity problems, the regression on the difference portfolio is tested in a Generalized Method of Moments system (GMM system). The GMM approach was developed by Hansen (1982) and has become one of the most widely used methods for estimations of parameters in models. The GMM approach is further explained following.

In a GMM system, the parameters are estimated. To estimate the parameters, a specification of a certain number of moment conditions is required. A corner stone in the GMM method is the *analogy principle*. That means that a parameter can be estimated by replacing a moment condition with the sample analogue. Thus, the moment conditions are functions of the parameters, where the expected value equals zero.

$$E[g(y_t, \theta_0)] = 0 \quad (3)$$

When the number of moment conditions equals the number of parameters in the model, the GMM system is said to be *exactly identified*. In that case, the GMM estimator is known for being an equal weight to all moment conditions. However, in the case of this study, there are seven moment conditions (l) and four parameters (k). When there are more moment conditions than parameters in a GMM system, (such as $l > k$), the system is *over identified*. When the system is over identified, the moment conditions cannot be zero; however, they take on a value as close to zero as possible. Furthermore, when the system is over identified, the GMM estimator could not be an equal weight to all moment conditions. Instead, the GMM estimator will depend on a weighting matrix.

When the system is over identified, as in this study, a two-step GMM approach is used. The first step includes a generation of a temporary GMM estimate, which depends on an weight matrix (W), based on the assumptions that the errors are i.i.d ($W=I$). In the second step, the GMM estimation selects different weight matrixes so that the estimators can accept heteroskedacity, clustering and autocorrelation of the standard error. According to Hansen's findings, the optimal GMM estimator uses a weight matrix that equals the inverse of the moment covariance matrix; such as:

$$S = Cov(z, u) \text{ where } S \text{ is the covariance matrix of the moment conditions.}$$

The moment conditions (I) used in this study are book-to-market, ROE, Net Income, New Debt, EBITDA, EBIT and amortization. These moment conditions were the moment conditions with the highest explanatory power among the moment conditions used by Galema et al.

The GMM approach avoids potential endogeneity problems by controlling for heteroskedasity problems. In particular, a GMM system does not assume the observations to be normally distributed.

3.4.Valuation analysis

In order to study the different sustainability strategies effect on valuation, several key-metrics are studied. For this, the book-to-market value (B/M-value), EBIT/Market value (EBIT/MV) and P/E-ratio is used. The B/M-ratio is used because the book value of equity gives an independent balance sheet valuation based on the same accounting standards, which can be compared to the market value of equity. Furthermore, in the long-run, net income should equal the cash flow, which means that the P/E-ratio should be a good proxy for the cash flow valuation. The EBIT/MV is used as a further proxy for the cash flow and excludes tax and interest expense. This measure is relevant since the tax expenses for an individual company may vary between the years. The calculation of the key-metrics is defined below.

$$B / M \text{ value} = \frac{\text{Book value of Equity}_{t-1}}{\text{Market value of Equity}_t} \quad (4)$$

$$EBIT / MV = \frac{EBIT_t}{\text{Market value of Equity}_t} \quad (5)$$

$$P / E = \frac{\text{Market value of Equity}_t}{\text{Net Income}_t} \quad (6)$$

4. DATA

This section describes the data sources that have been used for performing the different tests in the method of this study. Also, this section includes description of the adjustments made in the dataset.

4.1. Data sources

The dataset in this study solely includes Swedish large cap and mid cap companies listed on Nasdaq OMX Stockholm. Only Swedish companies have been chosen to limit the effects from different regulations that affect the companies' sustainability work. Also, investors' sentiments should be more homogenous in a single market. Only listed companies have been chosen to obtain daily stock prices. Small cap companies have been excluded since their capacity to communicate their sustainability activities are limited due to less resources; something that is evident when observing public information.

To obtain data for the SSCI, the companies' annual reports are used. The annual reports are used to categorize each company into different SRI portfolios, as described in section 3.1. When instead classifying the companies into one strength and one concern portfolio based on the Asset4 ESG index, Thomson Reuter's database is used. The Asset4 ESG index provides scores on companies' ESG factors. Each ESG factor gets a score between 0 and 100. The Asset4 database is global and contains ESG data on more than 3,100 companies, including 52 Swedish listed companies. The data solely includes Swedish listed companies for the years 2011-2014. The Thomson Reuter ESG data is reported on a yearly basis, to be more precise, in connection with the companies' annual report releases. Based on the scores on the ESG parameters, the companies are classified into different SRI groups.

Stock prices and accounting data for all companies at large cap and mid cap was obtained and resulted in 74 companies for Large cap and 103 companies for Mid cap (total 177 companies). Stock prices (closing prices) have been retrieved from Thomson Reuters DataStream on a monthly frequency between January 2012 and December 2015. To be more precise, the stock price at the end of each month and company has been obtained. That implies all results in section 5 are based on monthly numbers.

Fiscal-year end accounting data (both balance sheet and income statement) have been obtained from the Retriever database. The reason for using fiscal-year end accounting data with a

yearly frequency is the higher accurateness in the yearly annual reports, compared to the quarterly reports. The accounting data was downloaded for the years between 2010 and 2014.

The risk-free rate has been downloaded from the Swedish Riksbank and corresponds to the Swedish 1 month Treasury bill. The risk-free rate at the end of each month is obtained between January 2011 and December 2015.

The main reason for the relatively short studied period in this research is to avoid noise from the financial crisis in 2008 on excess return. Also, the development and quality of sustainability reports has increased over the past years.

4.2. Adjustments made to the dataset

Adjustments have been made on the dataset in order to make it more suitable for the purpose of this research. Firstly, available accounting data and stock prices have been downloaded for all companies listed on large cap and mid cap at the Nasdaq OMX Stockholm. That resulted in 74 companies on the large cap list and 103 companies on the mid cap list, which total 177 companies. However, several adjustments on the dataset have been made. Firstly, companies that have been listed less than 48 months are excluded. This results in a removal of 50 companies. The reason for only including companies with observations of 48 months or more is to achieve consistency and capture the effect over time. However, this may cause survivorship bias in the dataset and thereby decrease the robustness of the study. This aspect is discussed in section 5.4.1. The main reasons for companies that have fewer observations than 48 months are due to new listing (initial public offering) or delisting. These events are commonly known to upset the pricing of the stocks and is therefore a reason to exclude the companies from the study.

Furthermore, companies that do not perform any sustainability work at all have been excluded from the dataset, which resulted in a removal of 9 companies. The reason for excluding these companies is that the group is too small for using in a regression setting and compare with the other SRI portfolios constructed in this study. In addition, investment companies have been removed from the dataset, which corresponds to 14 companies. The reason for excluding investment companies from the dataset is that their business is limited to a relatively small number of employees focusing on corporate governance and investment strategies. The major part of their revenues comes from their portfolio companies. Additionally, investment companies buy and sell holdings, which means that their business might change several times each year.

One company from the dataset has been excluded since it is a preferred stock, which does not have the same characteristics as a normal stock. Also, one company is excluded since it is not an AB. When the adjustments on the dataset have been made, total number of companies in the sample equals 103 companies.

Since Swedish annual reports are published in April or May, the accounting data variables in this research are replaced with a lagging variable that postpone the accounting data. The reason is to achieve a reliable matching of stock-price data with the accounting data, in order to reflect the time discrepancy between the publication of the annual report and the stock price. To be more precise, the accounting data has been moved four months ahead in time (i.e. accounting data at December 2011 has been moved to April 2012. Fama and French (1992) argue for a six months lagging variable when using U.S. data. However, since U.S. annual reports generally take more time to publish, a four months lagging variable seems reasonable for this study performed on Swedish data. The sustainability data, which is based on the annual reports, has also been replaced with a four months lagging variable for the same reason.

5. RESULTS AND ANALYSIS

In this section, the results from the different steps of the method used in this study are presented and analysed. Firstly, summary statistics for the strength portfolio, concern portfolio and difference portfolio is presented. Secondly, the result from the Cahart four-factor model is presented and analysed. Finally, the strength and concern portfolios are compared using B/M-ratio, EBIT/MV-ratio and the P/E-ratio to analyse the valuation of the strength and concern portfolio respectively.

5.1.SRI portfolios

Table 9 presents descriptive statistics for the strength portfolio, concern portfolio and the difference portfolio, when the strength and concern portfolio are constructed based on the SSCI. In *Table 10*, the same descriptive statistics are presented for the strength, concern and difference portfolio, when the strength and concern portfolio are constructed based on the Asset4 ESG index. To be more precise, mean return, standard deviation, median, number of observations and number of companies for each portfolio are presented on a monthly basis. When the strength and concern portfolios are constructed based on the SSCI, the table shows that the strength portfolio includes 44 companies, while the concern portfolio equals 59 companies. The corresponding figures for the strength and concern portfolio when they are constructed based on the Asset4 ESG index, equals 16 and 18 companies, respectively.

Table 9 indicates that mean return is higher for the strength portfolio compared with the concern portfolio, when portfolio construction is based on the SSCI. For the strength portfolio, mean return equals 1.31% while the corresponding figure for the concern portfolio is 0.87%. The table also presents that the mean return for the difference portfolio shows a positive value of 0.45%. Descriptive statistics from *Table 9* also indicates that the standard deviation for the strength portfolio is higher compared to the concern portfolio, corresponding to 10.11% for the strength portfolio and 8.23% for the concern portfolio.

TABLE 9: Descriptive statistics of the strength, concern and difference portfolio (monthly data) 2012-2015**Note:** Strenght and concern portfolio are constructed based on the SSCI (classification method developed for this study)

| DESCRIPTIVE STATISTICS | | | | | |
|------------------------|-------------|--------------------|--------|------------------------|---------------------|
| SRI Portfolio | Mean return | Standard deviation | Median | Number of observations | Number of companies |
| Strength portfolio | 1.31% | 10.11% | 0.48% | 2,208 | 44 |
| Concern portfolio | 0.87% | 8.23% | 0.50% | 2,784 | 59 |
| Difference portfolio | 0.45% | 1.64% | 0.03% | 4,992 | 103 |

This table reports the mean return, standard deviation, median, total number of observations and total number of companies for the strength, concern and difference portfolio, respectively on a monthly basis.

Table 10 shows that the mean return for the strength portfolio is lower than the mean return for the concern portfolio, when the strength and concern portfolio are constructed based on the Asset4 ESG index. The mean return for the strength portfolio is 0.57%, compared with 0.85% for the concern portfolio. Also, the standard deviation is higher for the strength portfolio compared to the concern portfolio. The descriptive statistics in *Table 10* also shows that the mean return for the difference portfolio is 0.42%.

TABLE 10: Descriptive statistics of the strength, concern and difference portfolio (monthly data) 2012-2015**Note:** Strenght and concern portfolio are constructed based on Asset4's ESG scores

| DESCRIPTIVE STATISTICS | | | | | |
|------------------------|-------------|--------------------|--------|------------------------|---------------------|
| SRI Portfolio | Mean return | Standard deviation | Median | Number of observations | Number of companies |
| Strength portfolio | 0.57% | 6.98% | 0.22% | 728 | 16 |
| Concern portfolio | 0.85% | 8.57% | 0.67% | 770 | 18 |
| Difference portfolio | 0.42% | 2.45% | 0.72% | 1,498 | 34 |

This table reports the mean return, standard deviation, median, total number of observations and total number of companies for the strength, concern and difference portfolio, respectively.

The results from *Table 10*, when the strength a concern portfolios are constructed based on the Asset4 ESG index, differ from the mean return obtained on the strength and concern portfolio when the portfolio construction was based on the SSCI. The latter shows that the strength portfolio reports a higher mean return than the concern portfolio. On the contrary, when the strength and concern portfolios are constructed based on the Asset4 ESG index, the mean return is higher for the concern portfolio. The mean return for the difference portfolio, that goes long in the strength portfolio and short in the concern portfolio, shows positive result for both indices.

The higher mean return for the strength portfolio compared to the concern portfolio that is obtained when using the SSCI, contradicts with the findings of Schröder, Statman, Geczy et al and Kreander et al. They argue for that SRI portfolios do not perform differently compared to conventional peers. Also, the result of higher mean return for the strength portfolio compared to the concern portfolio contradicts with Renneboog et al's view of that SRI portfolios underperform compared to conventional peers. However, the lower mean returns for the strength portfolio that is obtained using the Asset4 ESG index, aligns with Renneboog et al's findings.

So far, the results indicate that the SSCI is a better measure for identifying the so-called *win-win* situations, where sustainability work is rewarded by obtaining higher returns. According to Tirole, higher returns should be achieved by companies that consider sustainability in their business and sacrifice short-term profits in favour for long-term profitability.

However, the difference between the results from the SSCI and the Asset4 ESG index, do not include any explanatory factors (i.e risk factors). Furthermore, the difference in standard deviation between the strength and concern portfolios constructed based on the two indices, respectively, indicates that risk and other factors could explain the difference in returns. This is further analysed by the results obtained from the Cahart four-factor model.

5.2. The Cahart four-factor model

Table 11 presents descriptive statistics for the difference factors used in the Cahart four-factor model. The monthly market risk premium (MRP), which captures the systematic risk, is 0.82%. The HML portfolio shows the highest monthly mean return of 0.72%, while the momentum (MOM) portfolio shows a negative result of -0.76%. The monthly mean return of the SMB factor is 0.18%.

Table 11: Descriptive statistics of the portfolios used in the Cahart four factor model (monthly data) 2012-2015

| DESCRIPTIVE STATISTICS | | | | |
|------------------------|-------------|--------------------|--------|------------------------|
| | Mean return | Standard deviation | Median | Number of observations |
| MRP | 0.82% | 3.32% | 1.08% | 4,992 |
| SMB | 0.18% | 2.97% | -0.25% | 4,992 |
| HML | 0.72% | 1.89% | 1.00% | 4,992 |
| MOM | -0.76% | 4.70% | -0.90% | 4,992 |

This table presents the mean return, standard deviation, median and total number of observations for the portfolios used in the Cahart four factor model on a monthly basis.

The results from the regressions performed using the Cahart four-factor model are presented in *Table 13*, when the strength and concern portfolio are constructed based on the SSCI. As could be observed in the table, the coefficients for all the explanatory variables in the strength portfolio have lower explanatory power compared to the concern portfolio. The value of R^2 equals 0.16 for the strength portfolio and 0.25 for the concern portfolio

Table 13 also shows that the monthly alpha is higher for the strength portfolio compared to the concern portfolio. To be more precise, the monthly alpha is 0.0042 for the strength portfolio and 0.0013 for the concern portfolio. The alpha value is statistically significant at the ten percent level for the strength portfolio, but not statistically significant for the concern portfolio. For the regression performed in a 2 stage GMM system on the difference portfolio, the monthly alpha equals 0.0038 and is statistically significant at a two percent level. The regression used in a Cahart four-factor model has also been performed by adding one explanatory variable at time, in order to observe how explanatory powers and significance of the variables changes when more variables are added. These regressions are shown in *Table 14 (appendix)*.

Regarding the explanatory variables in the regressions, when the strength and concern portfolio are constructed based on the SSCI, both the HML and the MOM factors report results with poor significance for the strength portfolio. The MRP and the SMB factors, however, are statistically significant with a p-value of zero. For the concern portfolio, all the explanatory variables, except from the MOM factor reports strong significance with a p-value of zero. For the difference portfolio, the SMB and HML factors are statistically significant with a p-value of zero. The MRP and MOM factor on the other hand, are not statistically significant and reports a z-stat of 0.13 and 0.69, respectively.

The MRP factor has the highest explanatory power on excess return, both for the strength and concern portfolio. The MRP is higher for the concern portfolio, at 1.13, compared with the strength portfolio, at 0.97. Another observation that could be identified is that the SMB factor has the second highest positive impact on excess return, for both the strength and concern portfolio. To be more precise, the coefficient for the SMB factor in the strength portfolio equals 0.53 and in the concern portfolio the coefficient equals 0.28. The HML factor has a negative impact on excess return for the SRI portfolios, with -0.01 for the strength portfolio and -0.31 for the concern portfolio. The MOM factor indicates a negative impact on monthly excess return for

the strength portfolio and a slightly positive influence for the concern portfolio; however, these results are not statistically significant in the regression.

For the difference portfolio, performed in a 2 stage GMM system, the SMB factor has the highest explanatory power in the regression. The SMB coefficient is 0.26 and statistically significant with a p-value of zero. The HML factor has almost the same explanatory power as SMB and equals 0.26, which differs from the strength and concern portfolios negative values on the HML factor. The MOM factor shows a positive impact on excess return of 0.13. The MRP factor has an explanatory power of -0.11 in the difference portfolio. This result is rational since a long-short strategy with a beta close to 1, like the difference portfolio, should eliminate a significant amount of systematic risk. In his case, where the concern portfolio includes a greater number of companies than the strength portfolio, a negative explanatory power is also rational. To give one example, an equally sized difference portfolio consisting two portfolios with a beta close to 1 should have a beta close to zero.

Table 13: Cahart four factor model regressing excess return on the strength, concern and difference portfolio (monthly data) 2012-2015.
Note: Strength and concern portfolio are constructed based on the SSCI (classification method developed for this study)

| CAHART FOUR FACTOR MODEL | | | | | | |
|--------------------------|--------|---------|--------|---------|---------|----------------|
| Strength portfolio | Alpha | MRP | SMB | HML | MOM | R ² |
| (5) | 0.0042 | 0.9727 | 0.5320 | -0.0071 | -0.0093 | 0.16 |
| t-stat | 1.90 | 14.60 | 7.29 | -0.06 | -0.21 | |
| p-value | 0.06 | 0.00 | 0.00 | 0.95 | 0.83 | |
| Concern portfolio | Alpha | MRP | SMB | HML | MOM | R ² |
| (5) | 0.0013 | 1.1272 | 0.2751 | -0.3066 | 0.0196 | 0.25 |
| t-stat | 0.85 | 24.78 | 5.52 | -4.13 | 0.65 | |
| p-value | 0.39 | 0.00 | 0.00 | 0.00 | 0.51 | |
| Difference portfolio | Alpha | MRP | SMB | HML | MOM | |
| (5) GMM | 0.0038 | -0.1149 | 0.2632 | 0.2620 | 0.0850 | |
| t-stat | 2.33 | -1.50 | 24.10 | 3.62 | 0.40 | |
| p-value | 0.02 | 0.13 | 0.00 | 0.00 | 0.69 | |

This table presents the results from Cahart four factor model regressing monthly excess return on the strength, concern and difference portfolio. The strength and concern portfolio are constructed based on the SSCI. The difference portfolio is regressed in a 2 stage GMM system

Table 16 presents the results from the Cahart four-factor model, when the strength and concern portfolios are classified based on the Asset4 ESG index. As could be observed in the table, the explanatory power for the strength portfolio is slightly higher than for the concern portfolio. The R² value for the strength portfolio is 0.06 and 0.04 for the concern portfolio. These

R^2 values are significantly lower than the R^2 values obtained when the strength and concern portfolio were constructed based on the SSCI.

Table 16 shows that the monthly alpha is higher for the concern portfolio compared to the strength portfolio. Alpha for the concern portfolio equals 0.0189, while alpha for the strength portfolio is 0.0138. The alpha values are statistically significant at the one percent level and the five percent level, respectively. The regressions used in the Cahart four-factor model are also presented in *Table 17 (appendix)*, where one explanatory variable is added at a time in order to show the difference in significance and explanatory power when one variable at time is added.

When the strength and concern portfolios are constructed based on the Asset4 ESG index, the SMB and the MOM factors are statistically significant with a p-value of zero for both the strength and concern portfolio. The MRP is statistically significance at the one percent level for the strength portfolio and at the five percent level for the concern portfolio. The HML factor, on the other hand, is not statistically significance for neither the strength nor the concern portfolio, with a t-stat of 1.79 and 0.75, respectively.

The SMB factor has the highest explanatory power on excess return for both the strength and concern portfolios, when they are calculated based on the Asset4 ESG index. For the strength portfolio, the SMB coefficient is 0.38 and for the concern portfolio the corresponding figure is 0.34. The coefficient for the MRP is slightly higher for the strength portfolio compared to the concern portfolio, corresponding to 0.013 and 0.012, respectively. The MOM factor shows a negative relationship with excess return for both the strength and concern portfolio. More specifically, the MOM coefficients for the strength portfolio amounts to -0.19 and for the concern portfolio -0.23. The HML factor in the strength portfolio is 0.25 and for the concern portfolio 0.05.

For the regression on the difference portfolio, performed in a 2 stage GMM system, shows that the monthly alpha equals 0.0066 and is statistically significant at a ten percent level. All the explanatory variables, except from MRP and MOM, are statistically significant with a p-value of zero. The HML factor shows the highest explanatory power on excess return in the difference portfolio, of 0.24. The SMB factor shows the second highest explanatory power, which equals 0.22.

Table 16: Cahart four factor model regressing excess return on the strength, concern and difference portfolio (monthly data). 2012-2015
Note: Strength and concern portfolio are constructed based on Asset4's ESG scores

| CAHART FOUR FACTOR MODEL | | | | | | |
|--------------------------|--------|--------|--------|--------|---------|----------------|
| Strength portfolio | Alpha | MRP | SMB | HML | MOM | R ² |
| (5) | 0.0138 | 0.0125 | 0.3836 | 0.2516 | -0.1882 | 0.06 |
| <i>t-stat</i> | 2.23 | 2.52 | 4.44 | 0.14 | -3.39 | |
| <i>p-value</i> | 0.03 | 0.01 | 0.00 | 1.79 | 0.00 | |
| Concern portfolio | Alpha | MRP | SMB | HML | MOM | R ² |
| (5) | 0.0189 | 0.0117 | 0.3414 | 0.0532 | -0.2322 | 0.04 |
| <i>t-stat</i> | 2.55 | 1.93 | 3.26 | 0.31 | -3.46 | |
| <i>p-value</i> | 0.01 | 0.05 | 0.00 | 0.75 | 0.00 | |
| Difference portfolio | Alpha | MRP | SMB | HML | MOM | |
| (5) GMM | 0.0066 | 0.0029 | 0.2189 | 0.2436 | 0.1296 | |
| <i>t-stat</i> | 1.66 | 1.09 | 8.77 | 8.27 | 1.04 | |
| <i>p-value</i> | 0.10 | 0.28 | 0.00 | 0.00 | 0.30 | |

This table presents the results from Cahart four factor model regressing excess return on the strength, concern and difference portfolio. The strength and concern portfolio are constructed based on Asset4's ESG score. The difference portfolio is regressed in a 2 stage GMM system

The results obtained when the strength and concern portfolio are constructed based on the SSCI, could be compared to the results obtained when the SRI portfolio are constructed based on the Asset4 ESG index. In the first case, alpha was higher for the strength portfolio than for the concern portfolio. On the contrary, when the portfolios were constructed based on the Asset4 ESG score, alpha was higher for the concern portfolio than the strength portfolio. This result indicates that the SSCI is a better measure for identifying *win-win* companies.

The result of positive alphas obtained in this study, both when the strength and concern portfolios are constructed based on the SSCI and the Asset4 ESG index, contradicts with Galema et al's findings of that sustainability does not generate positive alphas. To be more precise, only one of their twelve SRI portfolios shows a significant positive yearly alpha of 0.034.

This study's findings of a higher monthly alpha for the strength portfolio compared to the concern portfolio, based on the SSCI, confirms Renneboog et al's theories about the stakeholder maximization view and the shareholder expense view. More specifically, the SSCI strength portfolio is constructed to include companies where CSR investments perform according to the stakeholder maximization view. Stated differently, for the companies included in the strength portfolio, investments in CSR should generate value for the stakeholders. The SSCI concern portfolio, on the other hand, is constructed to include companies where CSR investments perform according to the shareholder expense view. Investments in CSR are made at the expense

of the shareholders. Hence, the result of a lower alpha for the concern portfolio could be explained by that the CSR investment is an expense paid by the shareholders. Likewise, one explanation of a higher alpha for the strength portfolio could be that CSR investments generate value for the shareholders.

However, Renneboog et al's stakeholder maximization view and shareholder expense view cannot be used in the same way to explain the higher alpha obtained in the concern portfolio, when the SRI portfolios are constructed based on the Asset4 ESG index. Instead, the differences between the SSCI and the Asset4 ESG index could be one explanation of that the concern portfolio obtains a higher alpha based on the Asset4 ESG index. To be more precise, the Asset4 ESG index might have a low correlation with each company's financial performance. Since the Asset4 ESG index rather is a combination of several negative screens of the parameters environmental, social and governance, it could be argued that the measure does not focus on the opportunities that are generated by a company's sustainability work. To frame it differently, the Asset4 ESG index is rather a strength and weakness analysis than an opportunities and threats analysis. The implication is that the result has little connection with the company's future business opportunities. Since the performance of the business drives stock-market returns, it will be reflected in a lower alpha value.

In extent, the explanation of that the results might have little connection with the company's future business opportunities is also in line with the low explanatory power of the regression performed using a Cahart four-factor model, when the Asset4 ESG index is used. The explanatory power is significantly higher for the strength and concern portfolios when they are constructed based on the SSCI. The higher explanatory power for the SSCI indicates that the results have stronger correlation to future business opportunities. The difference in explanatory power could also be explained by the higher number of companies that are included in the SSCI compared to the number of companies covered by the Asset4 ESG index.

If the Asset4 ESG index rather is a strength and weakness analysis of a company's sustainability work, it could be one explanation of the higher alpha generated by the concern portfolio, compared to the strength portfolio. To state it differently, the Asset4 ESG index only captures the expenses of sustainability work, rather than the opportunities sustainability might

generate. Therefore, the Asset4 ESG index observes CSR investments as an expense, which is more in line with Renneboog et al's shareholder expense view.

Another explanation of the higher alpha for the strength portfolio compared to the concern portfolio, when the SRI portfolios were constructed based on the SSCI, could be information asymmetry. A lower alpha for the concern portfolio could be explained by uncertainty about the sustainability work; an uncertainty whether their sustainability work could result in future positive cash flows due to their sustainability work. To give one example of how information asymmetry could explain the difference in alpha, an example from the company Swedish Match can be used. According to their annual report, the Swedish producer of tobacco products is involved in an undefined number of legal-proceedings. There are lawsuits both against Swedish Match alone, as well as lawsuits against tobacco companies as a group. To be more precise, Swedish Match is involved in 1,200 legal processes, only in the state of West Virginia, where tobacco companies have been sued as a group. These legal-processes are on top of conventional conflicts, which occur in all business. It is difficult for an investor to estimate the impact of these processes. The management of Swedish Match states in the annual report that they *"can not in any meaningful way estimate the damages that might be awarded, if any, in any on-going or unasserted disputes of this nature, there are in the opinion of management good defences against all claims and each claim will be vigorously defended"*. The limited information about these legal processes clearly indicates the existence of incomplete information. As a result, this creates an uncertainty for investors when valuing Swedish Match.

The implication of unpredictable circumstances, like legal processes against Swedish Match, is that those events increase the risk for lower future cash flows. Hence, rational investors should require a higher return to be compensated for the additional risk. This is also consistent with the result obtained in this study, more specifically, consistent with the results obtained on the MRP coefficients. This study's findings show a higher MRP coefficient for the concern portfolio compared to the strength portfolio, when the SRI portfolios are constructed based on the SSCI. This could be interpreted as the investors' being compensated for the additional risk of holding companies in the concern portfolio.

The information asymmetry could also be one explanation of the difference in explanatory power of the Cahart four-factor model between the SSCI portfolios and the Asset4

ESG portfolios. When the Asset4 ESG index is used, a lower explanatory power for all four factors in the Cahart four-factor model is observed. The interpretation is that the Asset4 ESG index does not fully capture the information asymmetry, since all the considered factors in the index have the same effect on all companies. Despite a low score on one of the social parameters, the overall effect is limited. This result in a poor explanatory power, as observed for the regressions performed using the Cahart four-factor model, when the SRI portfolios are constructed based on the Asset4 ESG index.

As stated before, the monthly alpha for the difference portfolio amounts to 0.0038 (i.e. 0.0466 annually). The monthly alpha for the difference portfolio, using the Asset4 ESG score, equals 0.0066 (i.e. 0.0821 annually). Comparing the alpha for the difference portfolios in this study with the alpha value obtained by Galema et al on the difference portfolio, shows a higher alpha on the difference portfolios in this study. Galema et al obtained an annually alpha on the difference portfolio of 0.034. The positive alphas on the difference portfolios strengthen the results from the Cahart four-factor model discussed earlier. To be more precise, the positive alpha on the difference portfolio indicates that companies in the strength portfolio generate a higher excess return than the concern portfolio. Furthermore, since the regression on the difference portfolio is run in a 2 stage GMM approach that controls for endogeneity, the results obtained from the difference portfolio should be more robust.

Consequently, in accordance with the results from the regressions based on the SSCI, rational investors will allocate their capital towards companies where sustainability is integrated in the business model. Hence, they will allocate less capital towards companies that work with sustainability as philanthropy. To some extent, this result in a positive spiral where companies that have sustainability as an USP will invest more money on the field and further improve their USP. The result is more satisfied customers, a more sustainable world and higher returns for shareholders. This view is also consistent with McWilliams and Siegel who suggest that all stakeholders will benefit from sustainability work in the long-run.

5.3.Valuation of SRI portfolios

Table 18 presents descriptive statistics of the key-metrics B/M-ratio, EBIT/MV and P/E-ratio for the strength and concern portfolio, respectively, when the strength and concern portfolios are constructed based on the SSCI. The median for the key metrics indicates that the strength

portfolio tends to be more overvalued, compared to the concern portfolio. To be more precise, the median of the B/M-ratio and the EBIT/MV is slightly lower in the strength portfolio compared to the concern portfolio. In addition, the median of the P/E-ratio is higher in the strength portfolio compared to the concern portfolio, which indicates higher valuation of the companies within the strength portfolio. The median for the P/E-ratio is 15.85 in the strength portfolio and 13.50 in the concern portfolio.

TABLE 18: Descriptive statistics of B/M, EBIT/Marketvalue and D/E (2012-2015)

Note: Strength and concern portfolio are constructed based on the SSCI (classification method developed for this study)

| DESCRIPTIVE STATISTICS | | | | |
|------------------------|---------|--------------------|--------|------------------------|
| Strength portfolio | Mean | Standard deviation | Median | Number of observations |
| Book to Market Value | 0.73 | 1.14 | 0.47 | 2032 |
| EBIT/Market Value | 0.07 | 0.15 | 0.06 | 2032 |
| P/E | -144.96 | 1970.38 | 15.85 | 2032 |
| Concern portfolio | Mean | Standard deviation | Median | Number of observations |
| Book to Market Value | 0.92 | 1.88 | 0.48 | 2457 |
| EBIT/Market Value | 0.16 | 0.33 | 0.10 | 2457 |
| P/E | 95.58 | 971.37 | 13.50 | 2457 |

This table reports the mean return, standard deviation, median, total number of observations and total number of companies for the strength, concern and difference portfolio, respectively.

Table 19 presents the descriptive statistics of the key-metrics B/M-ratio, EBIT/MV and P/E-ratio for the strength and concern portfolio, respectively, when the strength and concern portfolio are constructed based on the Asset4 ESG index. According to the summary statistics in the table, the strength portfolio is higher valued compared to the concern portfolio, but the result is not unison. The B/M-ratio is higher for the strength portfolio compared to the concern portfolio, while the P/E ratio is lower for the concern portfolio compared to the strength portfolio. Also, EBIT/MV is slightly lower in the strength portfolio compared to the concern portfolio.

TABLE 19: Descriptive statistics of B/M, EBIT/Marketvalue and D/E (2012-2015)

Note: Strength and concern portfolio are constructed based on the Asset4 ESG scores

| DESCRIPTIVE STATISTICS | | | | |
|------------------------|-------|--------------------|--------|------------------------|
| Strength portfolio | Mean | Standard deviation | Median | Number of observations |
| Book to Market Value | 0.63 | 0.34 | 0.60 | 564 |
| EBIT/Market Value | 0.11 | 0.07 | 0.09 | 564 |
| P/E | 14.90 | 35.37 | 15.76 | 564 |
| Concern portfolio | Mean | Standard deviation | Median | Number of observations |
| Book to Market Value | 0.63 | 0.69 | 0.44 | 934 |
| EBIT/Market Value | 0.10 | 0.07 | 0.10 | 934 |
| P/E | 32.14 | 109.75 | 14.18 | 934 |

This table reports the mean return, standard deviation, median, total number of observations and total number of companies for the strength, concern and difference portfolio, respectively.

In general, the strength portfolio is valued higher in regard to the EBIT/MV and the P/E-ratio. The B/M-value gives more mixed results; with similar values for the SSCI portfolios, while for the for the Asset4 ESG index, a higher value for the strength portfolio compared to the concern portfolio is observed. However, the strength portfolio seems to be higher valued than the concern portfolio for both indices. Galema et al explain this difference by excess demand for SRI stocks. Nonetheless, there are several other potential explanations. First of all, companies in the strength portfolio could be assumed to have higher growth in cash flows, at least in relative terms. Secondly, companies in the concern portfolio could be assumed to face a higher risk for significant expenses associated with legal processes, like in the case with Volkswagen as discussed in the hypothesis. Moreover, the potential expenses that are associated with legal processes are unpredictable and potentially circumvented by information asymmetry.

One explanation of lower valuation for of the companies in the concern portfolio could be a higher risk of significant expenses associated with negative events (as for the case for Swedish Match). In addition, as discussed in section 5.2 about legal processes and Swedish Match, negative events are often associated with information asymmetry, which further lowers the valuation. The effect of information asymmetry, as discussed in section 4.2 can also be used to explain the difference in valuation between the strength portfolio and the concern portfolio. This result is in line with Merton's view of that the value of a company will always be lower with incomplete information. However, there are also other factors that can explain the lower valuation of the concern portfolio, such as lower growth potential.

5.4. Causality problem

Even though the results from this study indicate that there is a relationship between a company's sustainability work and financial performance, it could be questioned whether the results capture the true casual effect, or if there is only a correlation. In the case of this study, it is not for certain that the different sustainability strategies themselves have the true casual effect of the difference in returns. To make it more clear, companies within the same industry tends to get the same score on the SSCI measure. This could potentially be explained by that it is rather the industry that determines whether sustainability is included in the business model and not the specific company's sustainability strategy.

However, companies' business models are the result of active decisions taken by both the board and the management. Therefore it is likely to assume a connection between a successful strategy and good corporate governance. This means, it could be corporate governance that is the casual effect behind the observed differences. Anyway, the results are still relevant for investors since good corporate governance is hard to identify. If there is a relationship between good corporate governance and sustainability as a part of a company's business model, the knowledge that a specific company has included sustainability in the business plan may help to conclude that the company is good in several other aspects, such as corporate governance, something that is highly relevant for all investors.

To summarize, even though there would not be a causality between a company's sustainability work and financial performance, the findings of this study shows that there is a correlation. The result of a positive relationship between a company's sustainability work and financial performance may be sufficient for investors.

5.4.1. Small sample bias

Due to the small number of companies included in the Asset4 ESG index, the sample might be skewed, which could result in conclusions that are not completely true. Also, the problem with a small sample further strengthens the arguments against the Asset4 ESG measure.

Another aspect to consider is that the SSCI index only is tested in the Swedish market in this study. Also, the SSCI is only compared to one traditional ESG index, more specifically, the Asset4 ESG index. As discussed above, the traditional ESG indices differ in their methods of evaluating companies' ESG performance. Consequently, comparing the SSCI measure against another traditional ESG index could potentially lead to different results.

Moreover, the potential survivorship bias in this data, due to removal of companies with less observation than 48 months, is not considered to be a significant issue for the results. That is because none of the companies on large cap or mid cap have defaulted during the past years.

6. CONCLUSION

6.1. Conclusion

The purpose of this study is to investigate the relationship between companies' sustainability work and financial performance. Swedish listed companies are classified into two different portfolios based on their sustainability work. The financial performance is compared between a strength and a concern portfolio, respectively. Two different indices are used for the division, the Sustainability Strategy Classification Index (SSCI), developed for this study and the Asset4 ESG index. The results from the different sustainability indices are compared. According to SSCI, companies that have included sustainability in their business model are included in the strength portfolio, while the companies that work with sustainability as philanthropy are included in the concern portfolio.

When the SSCI is used to classify companies' sustainability strategies, companies with sustainability integrated in their business generate both higher absolute returns and higher excess returns, compared to companies that work with sustainability as philanthropy. These results are in line with Tirole, who argues for that sustainability work goes hand in hand with financial performance. The traditional Asset4 ESG index gives mixed results on financial performance between the strength and concern portfolio. Hence, the companies in the strength portfolio cannot be concluded to outperform companies in the concern portfolio. This result confirms the findings of Schröder, Statman, Geczy et al, Kreander et al and Galema et al, who argue for no significant difference in financial performance between socially screened assets and conventional peers.

When the valuation of the strength and concern portfolios is compared, a higher valuation is observed for the strength portfolio compared to the concern portfolio, regardless of which measure that is used. The explanation is most likely to be higher expectations for future cash flows associated with the company's sustainability work. To be more precise, either sustainable companies have business models that will generate higher cash flows in the future, or companies that work more with sustainability as philanthropy face higher risks of negative expenses.

The differences suggests that the SSCI is a better measure when it comes to finding *win-win* stocks, which combines sustainable business and financial performance. The findings suggest that the companies are better classified according to the stakeholder maximization view

and the shareholder expense view. Furthermore, the SSCI is a better measure to distinguish between companies that align with the stakeholder maximization view and the shareholder expense view respectively, compared to the Asset4 ESG index. This result is obtained by a stronger focus on opportunities and threats concerning sustainability in the observed companies business models rather than a strength and weakness analysis of the same companies. The difference is that the SSCI's score is closer to the individual company's actual business performance and hence the connection to stock returns is stronger.

6.2. Suggestion for further research

The findings in this study suggest that there are several areas that could be investigated in further research. One suggestion of further research could be to investigate the relationship between corporate governance and the sustainability strategy to exploit the causality problem, discussed in section 5.4.

Also, as discussed in this study, the SSCI mainly focus on the opportunities and threats in a company's sustainability work and the Asset4 ESG index focus on strengths and weaknesses in company's sustainability work. The two views could be analysed in a combined model, like a traditional SWOT-model, which is used for strategic analysis with regard to strength, weaknesses, opportunities and threats. Hence, more aspects would be considered when interpreting companies' sustainability strategies.

Another area for further research could be within the field of investigating differences in companies' sustainability work and volatility. Since difference in volatility is observed between the strength and concern portfolio when the SSCI is used, a deeper analysis of the relationship between volatility and sustainability work. Moreover, the higher information asymmetry for companies in the concern portfolio, as discussed in this study, could also be a reason for observing a difference in volatility between the groups.

In this study, four years of financial performance have been observed with relatively normal market conditions. Hence, it could be of interest to performing the same study over a longer period of time, in order to test whether the results are similar to the four years period. In addition, it would be interesting to perform the same study during a market downturn, when the results could be assumed to be more obvious.

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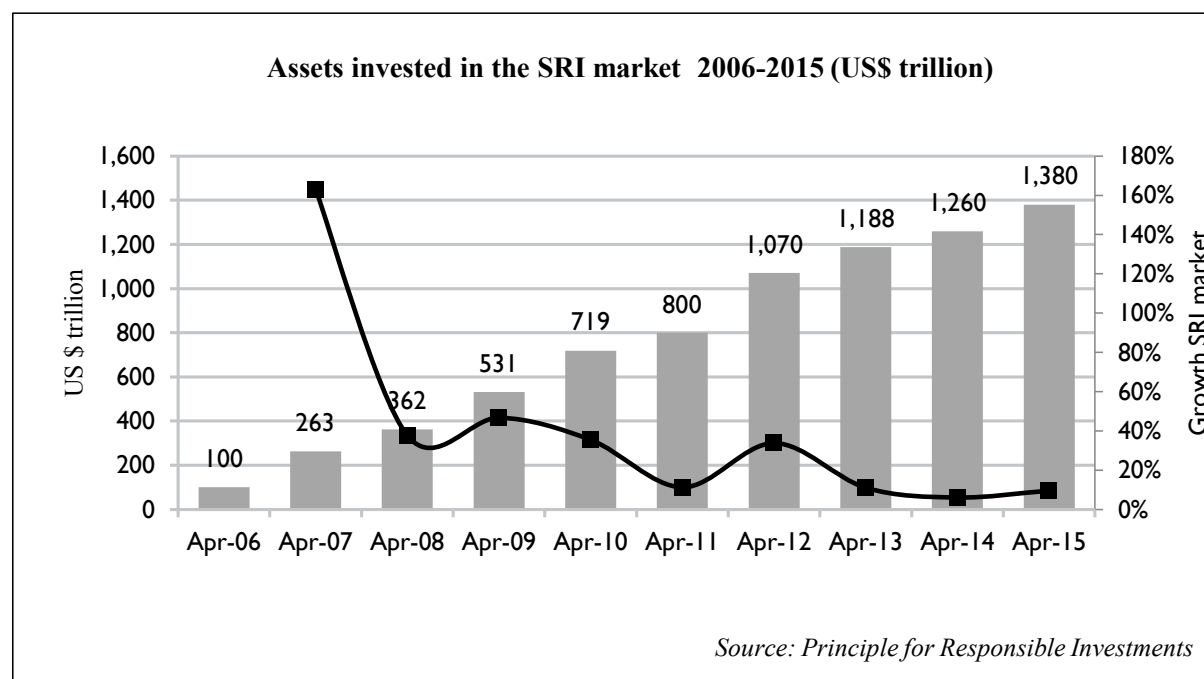
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APPENDIX

Table 1: Assets invested in the SRI market through Principle for Responsible Investments (PRI)



This table reports total assets invested in the SRI market through Principle of Responsible Investments between april 2006 and April 2015. The table also shows the growth rate in total assets invested.

Table 2: KLD's database

The KLD database scores companies based on their environmental, social and governance (ESG) work. The ESG factors are evaluated through five main pillars; environment, community & society, employees & supply chain, customers and governance & ethics. The KLD database excludes companies with negative scores, or unethical companies. Around 90 percent of the companies that the KLD database covers is large cap companies, while nine percent is mid cap and one percent is small cap companies. The company KLD Research & Analytics created the KLD criteria, to later become a part of Morgan Stanley Capital International (MSCI) KLD.

More than 140 analysts work on collecting company data for 35 ESG pillars that are included in the KLD database. Companies are rated on an AAA-CCC scale relative to the performance of their industry peers. MSCI KLD covers more than 6,000 companies across the whole world.

Table 3: Thomson Reuters Asset4 ESG database

Thomson Reuters Asset4 ESG database contains ESG data on more than 5,000 companies, where the parameters environmental, social and governance are given a score between 0 and 100 depending on how they perform on the different areas. Around 150 market expert analysts collect data from the companies to

base the scores on. Within each ESG parameter, there are several pillars that the Asset4 ESG index evaluates. The first parameter, environment, includes data on resource use, emissions and innovation. The second parameter, social, includes data on workforce, human rights, community and product responsibility. The third parameter, governance, includes data on management, shareholders and CSR strategy. From all these pillars, more than 70 key-performance-indicators (KPIs) are calculated. Based on the KPI's, each factor (environmental, social and governance), get a score.

| Table 3: Sample of the 400+ ESG metrics | | |
|--|---------------------------------------|---|
| Environmental | Social | Governance |
| Biodiversity Impact Reduction | Accidents Total | Ant-Takeover Devices |
| Carbon Offsets/Credits | Average Training Hours | Audit Committee Independence |
| CO2 Equivalents Emission Total | Customer Satisfaction | Board Cultural Diversity |
| Eco-Design Products | Day Care Services | Board Meeting attendance Average |
| Energy Use Total | Donations Total | Board Member Affiliations |
| Environmental Expenditures | Employee/Contractor Fatalities | Board Member Compensation |
| Environmental Products | Employee Satisfaction | CEO-Chairman Separation |
| Environmental R&D Expenditures | Flexible Working Schemes | Classified Board Structure |
| Environmental Supply Chain Management | Health & Safety Policy | Compensation Committee Independence |
| Estimated CO2 Equivalents Emission Total | HIV/AIDS Program | CSR Sustainability Committee |
| e-Waste Reduction | Human Rights Policy | CSR Sustainability External Audit |
| Green Buildings | Improvement Tools Business Ethics | CSR Sustainability Report Global Activities |
| Hazardous Waste | Lost Time Injury Rate | Female on Board |
| Hybrid Vehicles | Lost Working Days | Global Compact |
| Non Hazardous Waste | Management Training | GRI Report Guidelines |
| Policy Energy Efficiency | Policy Child Labor | Highes Pemuneration Package |
| Renewable Energy Use | Policy Diversity and Opportunity | Policy Board Diversity |
| Targets Emissions | Quality Management Systems | Policy Board Experience |
| Waste Recycling Ratio | Supply Chain Health & Safety Training | Policy Board Independence |
| Waste Total | Total Injury Rate | Policy Board Size |
| Water Pollutant Emissions | Trade Union Representation | Policy Equal Voting Right |
| Water Recycled | Training Cost Total | Shareholder Vote on Executive Pay |
| Water Technologies | Turnover of Employees | Voting Cap Percentage |
| Water Withdrawal Total | Women Employees | Staggered Board Structure |
| | Women Managers | Veto Power on Golden Share |

This table reports a sample of the 400+ key-metrics included in Asset4's ESG classification. Source: Thomson Reuter Asset4 ESG database

Table 5: Company classification based on the SSCI (classification method developed for this study)

| Company | Company classification | Company | Company classification |
|------------------------------------|----------------------------------|---|----------------------------------|
| AAK AB (publ) | Concern | Investment AB Öresund | Investment company |
| AB Sagax | Concern | Investmentaktiebolaget Latour | Investment company |
| AB Traction | Investment company | Investor Aktiebolag | Investment company |
| ABB Norden Holding AB | Strenght | Invido AB (publ) | Less observations than 48 months |
| ACTIVE Biotech AB | Strenght | ITAB Shop Concept AB | No sustainability work |
| AddLife AB | Less observations than 48 months | JM AB | Concern |
| Addiech AB | Concern | KappAhl AB (publ) | Concern |
| ÄF AB | Strenght | Klövern AB | Less observations than 48 months |
| Aktiebolag Fagerhult | Strenght | Kungsleden Aktiebolag | Concern |
| Aktiebolaget Electrolux | Strenght | L E Lundbergföretagen Aktiebolag (publ) | Investment company |
| Aktiebolaget Industrivärden | Investment company | Lagercrantz Group Aktiebolag | No sustainability work |
| Aktiebolaget SKF | Strenght | Lifco AB (publ) | Less observations than 48 months |
| Aktiebolaget Volvo | Strenght | Lindab International AB | Strenght |
| Alfa Laval AB | Concern | Loomis AB | Concern |
| Alimak Group AB (publ) | Less observations than 48 months | Lundin Mining AB | Concern |
| Arcam Aktiebolag (publ) | Strenght | Lundin Petroleum AB | Concern |
| ASSA ABLOY AB | Concern | Meda Aktiebolag | Strenght |
| AstraZeneca AB | Strenght | Medivir Aktiebolag | Strenght |
| Atlas Copco Aktiebolag | Strenght | Mekonomen Aktiebolag | Concern |
| Atrium Ljungberg AB | Concern | Melker Schörling AB | Investment company |
| Attendo International AB (publ) | Less observations than 48 months | Modern Times Group MTG AB | Concern |
| Autoliv Holding AB | Strenght | Munksjö Paper AB | Less observations than 48 months |
| Avanza Bank Holding AB | No sustainability work | Myronic AB (publ) | Strenght |
| Axfood Aktiebolag | Strenght | NCC Aktiebolag | Concern |
| Axis Aktiebolag | Concern | Nederman Holding Aktiebolag | Strenght |
| B&B TOOLS Aktiebolag | Concern | NetEnt AB (publ) | No sustainability work |
| Bactiguard Holding AB | Less observations than 48 months | New Wave Group AB | Strenght |
| Beijer Alma AB | Investment company | NIBE Industrier AB | Strenght |
| Beijer Ref AB (publ) | Preferred stocks | Nobia AB | Concern |
| Besqab AB (publ) | Less observations than 48 months | Nobina AB (publ) | Less observations than 48 months |
| Betsson AB | No sustainability work | Nolato Aktiebolag | Concern |
| Bilia AB | Concern | Nordax Group Holding AB | Less observations than 48 months |
| BillerudKorsnäs Aktiebolag (publ) | Strenght | Nordea Bank AB | Concern |
| BioGaia AB | Strenght | Nordnet AB | No sustainability work |
| Boliden AB | Concern | NP3 Fastigheter AB | Less observations than 48 months |
| Bravida Holding AB | Less observations than 48 months | Oasmia Pharmaceutical AB | Strenght |
| Bufab AB (publ) | Less observations than 48 months | OEM International Aktiebolag | Less observations than 48 months |
| Bulten AB | Less observations than 48 months | Opus Group AB (publ) | Strenght |
| Bure Equity AB | Investment company | Orexo AB | Strenght |
| Bygghem AB | Concern | Oriflame Cosmetics AB | Strenght |
| Camurus AB | Less observations than 48 months | Pandox Aktiebolag | Less observations than 48 months |
| Capio AB (publ) | Less observations than 48 months | Peab AB | Concern |
| Castellum Aktiebolag | Concern | Platzer Fastigheter Holding AB (publ) | Less observations than 48 months |
| Catena AB | Concern | Proffice Aktiebolag | Concern |
| Cavotec Sverige Aktiebolag | Less observations than 48 months | Qliro Group AB (publ) | Concern |
| Clas Ohlson Aktiebolag | Concern | Ratos AB | Investment company |
| Cloetta AB | Strenght | RaySearch Laboratories AB (publ) | Strenght |
| CLX Communications AB (publ) | Less observations than 48 months | Recipharm AB (publ) | Less observations than 48 months |
| Collector AB | Less observations than 48 months | Rezidor Hotel Group AB | Concern |
| Com Hem Holding AB | Less observations than 48 months | SAAB Aktiebolag | No sustainability work |
| Concentric Skånes Fagerhult AB | Less observations than 48 months | Sagax Jordbro AB | Less observations than 48 months |
| Coor Service Management Holding AB | Less observations than 48 months | Sandvik Aktiebolag | Strenght |
| Corem Property Group AB | Less observations than 48 months | Sanitec Holdings Sweden AB | Less observations than 48 months |
| Creades AB (publ) | Investment company | SAS AB | Concern |
| D. Carnegie & Co Aktiebolag | Less observations than 48 months | Scandi Standard AB (publ) | Less observations than 48 months |
| Diös Fastigheter AB | Concern | Scandic Hotels Group AB | Less observations than 48 months |
| Dometic Group AB (publ) | Less observations than 48 months | SECTRA Aktiebolag | Strenght |
| Duni AB | Strenght | Securitas AB | Concern |
| Dustin Group AB | Less observations than 48 months | Sensys Gatso Group AB | Strenght |
| East Capital Explorer AB (publ) | Investment company | Skandinaviska Enskilda Banken AB | Concern |
| Elekta AB (publ) | Strenght | Skanska AB | Concern |
| Eitel AB | Less observations than 48 months | SkiStar Aktiebolag | Concern |
| Fabege AB | Concern | SSAB AB | Strenght |
| Fastighets AB Balder | Concern | Stora Enso AB | Strenght |
| FastPartner AB | Concern | Svenska Cellulosa Aktiebolaget SCA | Strenght |
| Fenix Outdoor AB | Less observations than 48 months | Svenska Handelsbanken AB | Concern |
| Fingerprint Cards AB | No sustainability work | SWECO AB (publ) | Strenght |
| Getinge AB | Concern | Swedbank AB | Concern |
| Gränges AB | Less observations than 48 months | Swedish Match AB | Concern |
| Gränges Sweden AB | Less observations than 48 months | Swedish Orphan Biovitrum AB (publ) | Strenght |
| Gunnebo Aktiebolag | Concern | Systemair Aktiebolag | Concern |
| H & M Hennes & Mauritz AB | Concern | Tele2 AB | Concern |
| Hallex Aktiebolag | Strenght | Telefonaktiebolaget LM Ericsson | Strenght |
| Heba Fastighets Aktiebolag | Concern | Telia Company AB | Concern |
| Hemfosa Fastigheter AB | Less observations than 48 months | Thule Group AB | Less observations than 48 months |
| Hexagon Aktiebolag | Concern | Tieto Sweden Professional Services Aktiebolag | Concern |
| HEXPOL AB | Concern | Tobii AB | Less observations than 48 months |
| HiQ International AB | No sustainability work | Transcom WorldWide AB | Less observations than 48 months |
| HMS Networks AB | Concern | Transmode AB | Less observations than 48 months |
| Hoist Finance AB (publ) | Less observations than 48 months | Trelleborg AB | Strenght |
| Holmen Aktiebolag | Strenght | Tribona AB | Less observations than 48 months |
| Hufvudstaden AB | Concern | UNIBET GROUP PLC | Not AB |
| Humana AB | Less observations than 48 months | VBG GROUP AB (publ) | Concern |
| Husqvarna Aktiebolag | Strenght | Victoria Park AB | Less observations than 48 months |
| ICA Gruppen Aktiebolag | Strenght | Vitrolife AB | Strenght |
| IFS Global AB | Less observations than 48 months | Vostok New Ventures AB | Investment company |
| IFS | Less observations than 48 months | Willstam AB | Concern |
| Indutrade Aktiebolag | Concern | Willborgs Fastigheter AB | Concern |
| Intrum Justitia AB | Concern | | |
| Investment AB Kinnevik | Investment company | | |
| | | Strenght portfolio | 44 companies |
| | | Concern portfolio | 59 companies |

This table shows all companies from large cap and mid cap at the Stockholm Stock Exchange that was downloaded from Retriever. The table shows which companies that have been included in 1) the strength portfolio 2) the concern portfolio 3) No sustainability work 4) less observations than 48 months 5) Investment companies 6) Not Swedish AB

Table 6: Share of companies in the strength and concern portfolio per industry, as well as companies excluded from the dataset.

Note: Strength and concern portfolio are constructed based on the SSCI (classification method developed for this study)

| Industry* | Strength portfolio | Concern portfolio | No sustainability work (excluded) | Excluded (financial companies) | Observations <48 months (excluded) |
|--|--------------------|-------------------|-----------------------------------|--------------------------------|------------------------------------|
| Food production <i>% of total companies</i> | 1 33% | 2 67% | | | |
| Manufacturing <i>% of total companies</i> | 23 74% | 8 26% | 3 | | 11 |
| Real estate <i>% of total companies</i> | | 13 100% | | 1 | 10 |
| Consumer goods <i>% of total companies</i> | 8 47% | 9 53% | | 1 | 6 |
| Leisure <i>% of total companies</i> | | 1 100% | 1 | | |
| Service <i>% of total companies</i> | 3 38% | 5 63% | | | 6 |
| IT and Telecommunications <i>% of total companies</i> | 2 40% | 3 60% | 2 | | 7 |
| Retail <i>% of total companies</i> | | 4 100% | | | 1 |
| Construction <i>% of total companies</i> | | 4 100% | | | |
| Media <i>% of total companies</i> | | 1 100% | | | |
| Hotels and restaurants <i>% of total companies</i> | | 1 100% | | | 1 |
| Investment companies & Banks <i>% of total companies</i> | | 4 100% | 4 | 9 | 5 |
| Medical <i>% of total companies</i> | 4 100% | | | | 6 |
| Car sales <i>% of total companies</i> | | 1 100% | | | |
| Transport <i>% of total companies</i> | | 1 100% | | | 1 |
| Staffing <i>% of total companies</i> | | 1 100% | | | |
| Consulting <i>% of total companies</i> | 3 100% | | | | |

This table shows the share of companies that are classified in the strength and the concern portfolio within each industry. The table also shows how big share (%) of the companies included in the dataset that are included in the strength portfolio and the concern portfolio, respectively. In addition, total number of companies that have been excluded from the dataset is also shown due to 1) no sustainability work 2) financial and investment companies 3) companies with less observations than 48 months.

* Industry classification is based on Retriever's industry classification

Table 8: Share of companies in the strength and concern portfolio per industry, as well as companies excluded from the dataset.

Note: Strength and concern portfolio are constructed based on Asset4's ESG scores

| Industry* | Strength portfolio | Concern portfolio | Excluded (financial companies) | Companies excluded due to no observations |
|---|--------------------|-------------------|--------------------------------|---|
| Food production % of total companies | 1 100% | | | |
| Manufacturing % of total companies | 10 63% | 6 38% | | 3 |
| Real estate % of total companies | | 4 100% | 1 | |
| Consumer goods % of total companies | 1 25% | 3 75% | | 2 |
| Service % of total companies | 1 50% | 1 50% | | 1 |
| IT and Telecommunications % of total companies | 1 50% | 1 50% | | |
| Real Estate % of total companies | | | | 2 |
| Retail % of total companies | | 1 100% | | |
| Construction % of total companies | 1 50% | 1 50% | | 1 |
| Media % of total companies | 1 100% | | | |
| Investment companies & Banks % of total companies | | | 3 | 4 |
| Service % of total companies | | | | 1 |
| Transport % of total companies | 1 100% | | | |

This table shows the share of companies that are classified in the strength and the concern portfolio within each industry. The table also shows how big share (%) of the companies included in the dataset that are included in the strength portfolio and the concern portfolio, respectively. In addition, total number of companies that have been excluded from the dataset is also shown due to 1) financial and investment companies 2) companies excluded due to no observations

* Industry classification is based on Retriever's industry classification

Table 12: Correlation matrix between the variables in the Cahart four factor model

Note: Strength and concern portfolio are constructed based on the SSCI (classification method developed for this study)

| CORRELATION MATRIX | | | | | |
|--------------------|--------|-------|-------|------|-----|
| | Return | MRP | SMB | HML | MOM |
| Return | 1 | | | | |
| MRP | 0.42 | 1 | | | |
| SMB | 0.27 | 0.35 | 1 | | |
| HML | -0.02 | 0.10 | -0.16 | 1 | |
| MOM | -0.11 | -0.24 | -0.12 | 0.10 | 1 |

This table presents the correlation between the variables used in the Cahart four factor model

Table 14: Cahart four factor model regressing excess return on the strength, concern and difference portfolio (monthly data) 2012-2015

Note: Strenght and concern portfolio are constructed based on the SSCI (classification method developed for this study)

| CAHART FOUR FACTOR MODEL | | | | | | |
|--------------------------|---------|--------|--------|---------|---------|----------------|
| Strength portfolio | Alpha | MRP | SMB | HML | MOM | R ² |
| (1) | 0.0131 | | | | | 0 |
| <i>t-stat</i> | 6.06 | | | | | |
| <i>p-value</i> | 0.00 | | | | | |
| (2) | 0.0037 | 1.1424 | | | | 0.14 |
| <i>t-stat</i> | 1.81 | 18.89 | | | | |
| <i>p-value</i> | 0.07 | 0.00 | | | | |
| (3) | 0.0041 | 0.9750 | 0.5336 | | | 0.16 |
| <i>t-stat</i> | 2.03 | 15.29 | 7.48 | | | |
| <i>p-value</i> | 0.04 | 0.00 | 0.00 | | | |
| (4) | 0.0042 | 0.9760 | 0.5322 | -0.0099 | | 0.16 |
| <i>t-stat</i> | 1.95 | 15.07 | 7.29 | -0.09 | | |
| <i>p-value</i> | 0.05 | 0.00 | 0.00 | 0.93 | | |
| (5) | 0.0042 | 0.9727 | 0.5320 | -0.0071 | -0.0093 | 0.16 |
| <i>t-stat</i> | 1.90 | 14.60 | 7.29 | -0.06 | -0.21 | |
| <i>p-value</i> | 0.06 | 0.00 | 0.00 | 0.95 | 0.83 | |
| Concern portfolio | Alpha | MRP | SMB | HML | MOM | R ² |
| (1) | 0.0087 | | | | | 0 |
| <i>t-stat</i> | 5.55 | | | | | |
| <i>p-value</i> | 0.00 | | | | | |
| (2) | -0.0011 | 1.1889 | | | | 0.23 |
| <i>t-stat</i> | -0.77 | 28.85 | | | | |
| <i>p-value</i> | 0.44 | 0.00 | | | | |
| (3) | -0.0008 | 1.0892 | 0.3177 | | | 0.24 |
| <i>t-stat</i> | -0.60 | 24.93 | 6.50 | | | |
| <i>p-value</i> | 0.55 | 0.00 | 0.00 | | | |
| (4) | 0.0011 | 1.1202 | 0.2747 | -0.3006 | | 0.25 |
| <i>t-stat</i> | 0.77 | 25.33 | 5.51 | -4.08 | | |
| <i>p-value</i> | 0.44 | 0.00 | 0.00 | 0.00 | | |
| (5) | 0.0013 | 1.1272 | 0.2751 | -0.3066 | 0.0196 | 0.25 |
| <i>t-stat</i> | 0.85 | 24.78 | 5.52 | -4.13 | 0.65 | |
| <i>p-value</i> | 0.39 | 0.00 | 0.00 | 0.00 | 0.51 | |
| Difference portfolio | Alpha | MRP | SMB | HML | MOM | |
| (5) GMM | 0.004 | -0.115 | 0.263 | 0.262 | 0.085 | |
| <i>z-stat</i> | 2.33 | -1.50 | 24.10 | 3.62 | 0.40 | |
| <i>p-value</i> | 0.02 | 0.13 | 0.00 | 0.00 | 0.69 | |

This table presents the results from Cahart four factor model regressing monthly excess return on the strength, concern and difference portfolio. The strenght and concern portfolio are constructed based on the SSCI. The difference portfolio is regressed in a 2 stage GMM system

Table 17: Cahart four factot model regressing excess return on the strength, concern and difference portfolio (monthly data) 2012-2015**Note:** Strenght and concern portfolio are constructed based on Asset4's ESG scores

| CAHART FOUR FACTOR MODEL | | | | | | |
|--------------------------|--------|--------|--------|--------|---------|----------------|
| Strength portfolio | Alpha | MRP | SMB | HML | MOM | R ² |
| (1) | 0.0085 | | | | | 0 |
| <i>t-stat</i> | 2.76 | | | | | |
| <i>p-value</i> | 0.01 | | | | | |
| (2) | 0.0217 | 0.0160 | | | | 0.0 |
| <i>t-stat</i> | 3.62 | 3.41 | | | | |
| <i>p-value</i> | 0.00 | 0.00 | | | | |
| (3) | 0.0185 | 0.0139 | 0.3908 | | | 0.04 |
| <i>t-stat</i> | 3.11 | 2.97 | 4.55 | | | |
| <i>p-value</i> | 0.00 | 0.00 | 0.00 | | | |
| (4) | 0.0196 | 0.0163 | 0.4107 | 0.2428 | | 0.05 |
| <i>t-stat</i> | 3.28 | 3.34 | 4.74 | 1.71 | | |
| <i>p-value</i> | 0.00 | 0.00 | 0.00 | 0.09 | | |
| (5) | 0.0138 | 0.0125 | 0.3836 | 0.2516 | -0.1882 | 0.06 |
| <i>t-stat</i> | 2.23 | 2.52 | 4.44 | 0.14 | -3.39 | |
| <i>p-value</i> | 0.03 | 0.01 | 0.00 | 1.79 | 0.00 | |
| Concern portfolio | Alpha | MRP | SMB | HML | MOM | R ² |
| (1) | 0.0085 | | | | | 0 |
| <i>t-stat</i> | 2.76 | | | | | |
| <i>p-value</i> | 0.01 | | | | | |
| (2) | 0.0289 | 0.0179 | | | | 0.01 |
| <i>t-stat</i> | 4.04 | 3.16 | | | | |
| <i>p-value</i> | 0.00 | 0.00 | | | | |
| (3) | 0.0259 | 0.0160 | 0.3748 | | | 0.03 |
| <i>t-stat</i> | 3.64 | 2.82 | 3.60 | | | |
| <i>p-value</i> | 0.00 | 0.01 | 0.00 | | | |
| (4) | 0.0261 | 0.0164 | 0.3779 | 0.0399 | | 0.03 |
| <i>t-stat</i> | 3.64 | 2.76 | 3.60 | 0.23 | | |
| <i>p-value</i> | 0.00 | 0.01 | 0.00 | 0.82 | | |
| (5) | 0.0189 | 0.0117 | 0.3414 | 0.0532 | -0.2322 | 0.04 |
| <i>t-stat</i> | 2.55 | 1.93 | 3.26 | 0.31 | -3.46 | |
| <i>p-value</i> | 0.01 | 0.05 | 0.00 | 0.75 | 0.00 | |
| Difference portfolio | Alpha | MRP | SMB | HML | MOM | |
| (5) GMM | 0.0066 | 0.0029 | 0.2189 | 0.2436 | 0.1296 | |
| <i>z-stat</i> | 1.66 | 1.09 | 8.77 | 8.27 | 1.04 | |
| <i>p-value</i> | 0.10 | 0.28 | 0.00 | 0.00 | 0.30 | |

This table presents the results from the Fama, French and Cahart regression on the strength, concern and difference portfolio. The difference portfolio is regressed in a 2 stage GMM system

Table 20: Motivation of classification into strength and concern portfolio, per company

| Company | Aarhus Karlshamn (2014) |
|--|---|
| Current sustainability actions | Have clear annual goals for market place, supply chain, environment, workplace and community, which are followed up in the annual report. Significant part of the sustainability work performed within the field of palm oil. |
| Products sold with sustainability as an USP | From what can be observed from the annual report no products are sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

| Company | ABB (2014) |
|--|--|
| Current sustainability actions | Have clear goals for resource efficiency, corporate governance, human rights and safety, which are reported and followed up annually in the annual report. Actions made during the year include reducing emissions of green-house gases and increased recourse efficiency in production plants. |
| Products sold with sustainability as an USP | Some new innovative products developed during the year with sustainability as one factor are: cable, doubles power flow and extends range significantly with reduced losses – Switchgear technology with eco-efficient insulation gas, cuts carbon footprint of GIS – SmartVentilation for underground mines, cuts energy use and improves safety. |
| Sustainability as a part of product development | ABB works with power generation, power transmission, power distribution, production automatization, production electrification but also with transportation with systems for both ships and rail based vehicles. All these fields are areas where energy efficiency, reliability and durability are central. Sustainability drive product development within these fields. |
| Result | Sustainability integrated in the business model |

| Company | Active Biotech (2014) |
|--|---|
| Current sustainability actions | The pharmaceutical company, Active Biotech has set up several targets and measures in order to protect the environment. These goals include minimize waste and reduce environmental impact. |
| Products sold with sustainability as an USP | The company develops products based on a process that aligns with their environmental targets. Environmental issues aims to be a central part in the business. |
| Sustainability as a part of product development | Active Biotech develops processes, techniques and products that comply with their environmental values. Research is performed to obtain more efficient processes and products. |
| Result | Sustainability integrated in the business model |

| Company | Addtech (2014) |
|--|--|
| Current sustainability actions | Addtech performs work within the field of environmental, social and governance and follow of up on the sustainability work each year. |
| Products sold with sustainability as an USP | Based on the information in the annual report, it is difficult to argue for that any of Addtech's products are sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

| | |
|--|--|
| Company | Alfa Laval (2014) |
| Current sustainability actions | Works with the ESG-factors and has an environmental council that makes decisions regarding Alfa Laval's environmental strategy. Alfa Laval is engaged in different projects (i.e. project that aims to ensure clean water to all and make cities sustainable). |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

| | |
|--|--|
| Company | Arcam (2014) |
| Current sustainability actions | Performs concrete work of integrating sustainability in their business model. Arcam has developed the Electron Beam Melt (EBM) system, which aims to make processes more efficient in terms of material used. |
| Products sold with sustainability as an USP | The solutions for production of metal components that Arcam sell, contribute to sustainability due to systems making the material use efficient. |
| Sustainability as a part of product development | The EBM system, which utilize the maximum of material to generate minimum material loss (i.e. involves finding ways to produce fuel-efficient aircrafts). EBM could also, for example, be used in the production of orthopedic implants. |
| Result | Sustainability integrated in the business model |

| | |
|--|---|
| Company | ASSA ABLOY (2014) |
| Current sustainability actions | ASSA ABLOY has introduced a number of energy-saving products in order to reduce energy-consumption and carbon emissions. They have also taken several concrete measures to improve safety performance in manufacturing. |
| Products sold with sustainability as an USP | Offer customers energy-saving products, but in fact, customers generally don't choose ASSA ABLOY's products due to the company's sustainable actions. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

| | |
|--|---|
| Company | Astra Zeneca (2014) |
| Current sustainability actions | Astra Zeneca aims to minimizing the long-term effects on the environment of pharmaceuticals. They focus on ensuring the environmental safety of their products and protect natural resources, as well as reducing their carbon emissions. |
| Products sold with sustainability as an USP | Astra Zeneca develops greener drugs, greener chemistry and greener packaging. Furthermore, life science companies are sustainable by definition because their products are developed to save as many lives as possible and to reduce sickness. Since the most effective drug wins the market, the most sustainable product becomes the market leader. |
| Sustainability as a part of product development | All drugs are developed to cure some sort of disease, which means their product development is programmed to enhance sustainability by definition. Use of model that enables potential safety, health and environmental issues to be identified and designed out at the earliest possible stage in the development of medical treatment |
| Result | Sustainability integrated in the business model |

| | |
|--|---|
| Company | Atlas Copco (2014) |
| Current sustainability actions | 93% of Atlas Copco's was reused, recycled or recovered during 2014, the share of women in the organization has improved during the past years. Also, CO2 emissions, energy consumption and work accidents have been reduced. Furthermore, a new generation of drill rigs with 17% increased efficiency was launched. |
| Products sold with sustainability as an USP | Atlas Copco produce products for; industrial power tools and systems, industrial assembly solutions, quality assurance products, software and service, equipment for drilling and rock excavation, construction and demolition tools, portable compressors, pumps and generators, lighting towers, and compaction and paving equipment. Those products are all sold with an emphasis on durability and resource efficiency which implies sustainability has to be an USP in Atlas Copco's business, |
| Sustainability as a part of product development | In order to maintain the leading position and treat patients with the best possible products, Atlas Copco needs to continually develop their products. |
| Result | Sustainability integrated in the business model |

| | |
|--|---|
| Company | Atrium Ljungberg (2014) |
| Current sustainability actions | Atrium Ljungberg has taken several actions within the field of sustainability. One example is that they choose environments and places that are environmentally friendly and energy efficient. They have participated in campaigns to encourage people to donate used clothes. They have concrete goals on decreasing carbon emissions. |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

| | |
|--|--|
| Company | Autoliv (2014) |
| Current sustainability actions | Have set up goals on how to limit their effect on the environment and at the same time developing products that aim to save lives. |
| Products sold with sustainability as an USP | Passive safety products like airbags, seat belts, whiplash protection etc. that reduce damages in case of an accident. Autoliv also produce products for active safety like radar-guided cruise controls, pedestrian recognition, city safety systems and systems autonomous cars that do not only avoid accidents but also reduces consumption in driving. Also, a company such as Autoliv, which main business is to develop security products, are sustainable by definition. |
| Sustainability as a part of product development | Autoliv has taken a leading role in active traffic safety and continuously improve and develop both systems for active safety and autonomous driving for cars and other vehicles. This means they continuously work to improve road safety and driving efficiency. |
| Result | Sustainability integrated in the business model |

| | |
|--|--|
| Company | Axfood (2014) |
| Current sustainability actions | Axfood work extensively with reducing energy consumption in all their stores. Furthermore all Axfoods stores have reverse vending machines and Axfood work with their own private-label brand Garant, which only sells ecological products. |
| Products sold with sustainability as an USP | Offering organic and vegetarian products to customers, who become more and more interested in these kinds of alternatives. Hence, Axfood has increased their selection of organic and vegetarian products. |
| Sustainability as a part of product development | In line with the green trend, Axfood is developing a new launch of private label products, where some of the meat has been replaced with high quality legumes. Axfood is also taking several concrete measures to reduce food waste within its own operations. They also work with opinion-shaping activities in order to reduce food waste. |
| Result | Sustainability integrated in the business model |

| | |
|--|---|
| Company | Axis (2014) |
| Current sustainability actions | Axis has implemented a policy on how their sustainability work should be performed. They focus on reducing energy consumption, as well as phasing out hazardous materials (even before they are classified as harmful for the society). |
| Products sold with sustainability as an USP | Sustainability is not observed as an USP for Axis. Based on the information in the annual report it is hard to argue for that a customer chooses Axis's security and alarm systems before a competitor, due to their sustainability strategy. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered as important. |
| Result | Works actively with sustainability but more as philanthropy |

| | |
|--|--|
| Company | B&B Tools (2014) |
| Current sustainability actions | Responsible business is important for B&B Tools where four forms of responsible business are performed: economically responsible, environmental responsibility, social responsibility and ethical responsibility. Their idea is that satisfied customers result in happy employees, satisfied partners and happy owners, which results in social responsibility. |
| Products sold with sustainability as an USP | The majority of the business comes from industrial supplies, where the major USP is availability and quality. Hence sustainability is not considered a major USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

| | |
|--|---|
| Company | Balder (2014) |
| Current sustainability actions | Has adopted environmental policies in order to improve their work on the ESG factors. Balder promote energy efficient material and environmentally friendly products. |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

| | |
|--|---|
| Company | Bilia (2014) |
| Current sustainability actions | Bilia has taken certain concrete measures and have concrete goals (i.e. reduce carbon emissions and works towards being more energy efficient). |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

| | |
|--|--|
| Company | Billerud Korsnäs AB (2014) |
| Current sustainability actions | In recent years Billerud has worked with increasing efficiency in production plants, nature conservation in owned land, voluntary set-aside on owned land and production of district heating in production plants. Billerud Korsnäs is one of the world's leading suppliers of high-quality packaging materials based on renewable raw material. |
| Products sold with sustainability as an USP | Quality packaging made of plant based materials as opposed to plastics. Food and fresh food packaging all made from renewable plant material. |
| Sustainability as a part of product development | Tetra Recart, collaboration with Tetra Pak. Developed a product made of plant based material that can be used as a substitute of traditional metal cans for food products. Billerud Flute, a cardboard based unit used in the food supply industry with superior durability and strength. |
| Result | Sustainability integrated in the business model |

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| Company | BioGaia (2014) |
| Current sustainability actions | BioGaia performs sustainability work within the field of ESG. Except from having concrete targets of reducing carbon emission, they adapt their packaging to be environmentally friendly. |
| Products sold with sustainability as an USP | Biogaia's products are sold with an ecological approach and aims to be probiotic products with documented health benefits. The packages of BioGaia's products are developed to have the smallest environmental impact as possible and be small, not bulky. |
| Sustainability as a part of product development | Develops products to maintain the leading position both when it comes to offering a product with health benefits, as well as the packaging process. Environmental aspects are weighted into the decisions when developing the packages. |
| Result | Sustainability integrated in the business model |

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| Company | Boliden (2014) |
| Current sustainability actions | Boliden has focused its sustainability work within four main areas. Health & safety, environmental impact, unplanned stoppages and talent pools. Also, Boliden continuously work with biodiversity in the surrounding of its mines and make volunteer deposition of land. |
| Products sold with sustainability as an USP | Boliden has to close mines in order to reduce its environmental impact, which means sustainability is not considered a major USP in Boliden's business. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Byggmax (2014) |
| Current sustainability actions | Byggmax has taken concrete sustainability actions to reduce carbon emission. The company has also reduced their carbon emissions per ton of materials sold. This is explained by more efficient management of goods, as well as more transportation by boat. |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Castellum (2014) |
| Current sustainability actions | Castellum performs extensive sustainability work. 20% of their real estate portfolio is certified in accordance with the criteria of Miljöbyggnad, Green Building or BREEAM. Also, Castellum participate in different collaborations with stakeholders to improve public transport and schools/universities within the areas of their properties. |
| Products sold with sustainability as an USP | Even though Castellum work with issues that aligns with sustainability, such as improvement of public transportations, which makes the location of the real estate better placed in terms of a sustainable view; it is difficult to argue for that sustainability is sold as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Catena (2014) |
| Current sustainability actions | Catena works with their sustainability targets, which primarily focuses on improving energy efficiency in their properties, as well as sustainable logistics and societal development. |
| Products sold with sustainability as an USP | Even though Catena can choose location that could reduce carbon emissions, it is difficult to argue that sustainability is an USP for the company. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Clas Ohlson (2014) |
| Current sustainability actions | Clas Ohlson has defined concrete sustainable targets. One of them includes offering "product for a more sustainable lifestyle" and the aim is that these products will represent at least 12 percent of total sales. Also, they work on meeting a circular economy and further develop resource-efficient business models. |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Cloetta (2014) |
| Current sustainability actions | Implemented sustainability programs for prioritized raw material, such as cacao and palm oil. Require the suppliers to have a traceable pipeline of palm oil back to the mills. |
| Products sold with sustainability as an USP | All cocoa and chocolate is UTZ-certified, which means that the cocoa growers get the opportunity and better conditions to develop sustainable farming. Also, all palm-oil that Cloetta uses indirectly is certified by the RSPO (Round Table of Sustainable Palm Oil). |
| Sustainability as a part of product development | Developing products based on raw materials that are from sustainable resources and farms, which also aims to target customers that would like to know the ingredients of the products bought. |
| Result | Sustainability integrated in the business model |

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| Company | Diös Fastigheter (2014) |
| Current sustainability actions | Diös Fastigheter has taken several concrete actions within the field of sustainability, i.e. switched to renewable energy and developed procedures for energy projects. |
| Products sold with sustainability as an USP | Based on the information from the annual report, no products are sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Duni (2014) |
| Current sustainability actions | Duni has developed a process for drying the paper material used in its products based on renewal energy rather than fossil fuels. Duni has also implemented a vision to become 100% fossil-free by 2020. |
| Products sold with sustainability as an USP | Duni constantly expands its offering of recycled products for all customers. Both products based on paper and products based on plastics can be recycled. |
| Sustainability as a part of product development | Increased offering of recyclable products, introduction of fossil-free solutions within the production. |
| Result | Sustainability integrated in the business model |

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| Company | Electrolux (2014) |
| Current sustainability actions | Electrolux has clear sustainability goals (i.e. takes on measures to reduce emissions and develops processes to phase out hazardous material. Targets are defined to reduce resources through the Green Spirit program. |
| Products sold with sustainability as an USP | From what can be observed in the annual report, no such products are sold with sustainability as an USP. |
| Sustainability as a part of product development | Develops and offers resource efficient solutions. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Elekta (2014) |
| Current sustainability actions | Elekta takes several concrete measures to minimize their environmental impact alongside developing safe and cost-efficient solutions. |
| Products sold with sustainability as an USP | Develop equipment and software that aims to ensure that the patients receive the best treatment. Elekta also supports clinics to reduce their costs of healthcare systems, as well as meet their environmental target. |
| Sustainability as a part of product development | Sustainability is a part of the product development at Elekta, since their mission is to improve, prolong and save lives – and all equipment and software is developed with the aim of ensuring that patients receive the best treatment possible. |
| Result | Sustainability integrated in the business model |

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| Company | Ericsson (2014) |
| Current sustainability actions | Ericsson work with sustainable sourcing, improved transparency, anti corruption and human right challenges. Also, Ericsson's carbon footprint has been decreased during the past years and IT-waste has been reduced. |
| Products sold with sustainability as an USP | Within Ericsson's business the human rights and the freedom of speech is core to the business. Ericsson's products have enhanced the democratic development in many countries around the world. Hence sustainability is an USP in Ericsson's business. |
| Sustainability as a part of product development | The development of telecommunication in recent years has reduced the need for physical meetings and hence reduced environmental impact from travels. Also, the entrance into new market continues the improvements in human rights as discussed above. |
| Result | Sustainability integrated in the business model |

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| Company | Fabege (2014) |
| Current sustainability actions | Fabege has several concrete goals for their sustainability work. A concrete target is that green leases should account for 50 percent of total space under newly signed leases. Except from reducing carbon emissions, they focus on environmental certifications. All new build are environmentally certified by BREEAM or Miljöbyggnad. |
| Products sold with sustainability as an USP | According to the annual report, it is difficult to argue for that sustainability is sold as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Fagerhult (2014) |
| Current sustainability actions | Fagerhult works within the field of ESG and has set up several goals within each parameter, which are followed up in the annual report. |
| Products sold with sustainability as an USP | Has performed a technological shift to LED, which lead to significant energy efficiency and long lifespans for light sources. |
| Sustainability as a part of product development | Continue making major investments to develop the technology and innovate new products to maintain a leading position. |
| Result | Sustainability integrated in the business model |

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| Company | FastPartner (2014) |
| Current sustainability actions | FastPartner communicates their sustainability targets in their annual reports, which includes reducing the energy consumption, minimize the use of resources, as well as increase the focus on recycling. |
| Products sold with sustainability as an USP | Sustainability has not led to more business for FastPartner and could not be considered as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Getinge (2014) |
| Current sustainability actions | Getinge is a provider of products and services for operating rooms, intensive-care units, hospital wards, sterilization departments, elderly care and for life science companies and institutions. Getinge put a strong focus reduction of emissions. However results have been mixed during the past years emissions have increased rather than decreased in some areas. |
| Products sold with sustainability as an USP | Getinge has developed the EcoDesign products where sustainable sourcing is emphasized. However, the EcoDesign products only present a minor part of the business and a large part of the business comes from one-time products. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Gunnebo (2014) |
| Current sustainability actions | Is a global provider of cash handling solutions, safes and vaults as well as a provider of electronic safety systems. An emphasis on the usage of recycled materials has been used during the past years. However this is done from a low level. |
| Products sold with sustainability as an USP | Sustainability is not considered a major USP in Gunnebo's business. Customers rather focus at durability and safety. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | H&M (2014) |
| Current sustainability actions | H&M has taken several concrete sustainability actions within the field of ESG. One example is that they encourage customers to recycle their clothes in the H&M stores. The company is also involved in different sustainability projects around the world. |
| Products sold with sustainability as an USP | Customers have not been considered to buy H&M clothes because of their sustainability work and hence, the products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Haldex (2014) |
| Current sustainability actions | Haldex's sustainability work has focused on reduced waste and improved efficiency in the production process. Haldex has also started a project where biofuels replace fossil fuels in the production. |
| Products sold with sustainability as an USP | Sustainability is considered a major USP in Haldex's product offering, which mainly focus on brake components where durability and safety are USPs. The strong emphasis on safety indicates a focus on sustainability. Also, durable parts maximize efficiency over a longer time-horizon. |
| Sustainability as a part of product development | Haldex work with refurbishment of used part as a step to improve resource efficiency and to keep costs down for their customers. This indicates a strong focus on sustainability. |
| Result | Sustainability integrated in the business model |

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| Company | Heba Fastigheter (2014) |
| Current sustainability actions | Heba Fastigheter performs extensive work within the field of environmental, social and governance. One concrete target is to reduce the energy consumption with 20% until 2020. Also, they work with minimizing waste and create more resource efficient solutions. |
| Products sold with sustainability as an USP | Based on the information in the annual report, Heba Fastigheter's sustainability work has not directly led to more business. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Hexagon (2014) |
| Current sustainability actions | Hexagon promotes employee management as a part of their sustainability work. Also, resource efficiency is constantly improved both in the design phase and in the production phase. |
| Products sold with sustainability as an USP | Hexagon's sensor systems are used for a broad range of applications. Durable and reliable products are considered as the two main USP's, which means sustainability is not a major USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Hexpol (2014) |
| Current sustainability actions | Hexpol has clear goals with their sustainability work within six different areas; energy, climate, environment systems, hazardous chemicals, safe work-places and suppliers. The progress is reported in each area. None of the goals have yet been achieved; however Hexpol makes progress within all areas. |
| Products sold with sustainability as an USP | Hexpol's polymer compounds are mainly sold with regard to durability and functionality. Hence sustainability is no major USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | HMS Networks (2014) |
| Current sustainability actions | HMS network produce control systems for factory management with. The products are developed and sold with a emphasis on improved efficiency in its customers factories. |
| Products sold with sustainability as an USP | As described above, HMS's systems are developed to improve efficiency in factories and to enhance productivity. This indicates that sustainability is a major USP. |
| Sustainability as a part of product development | New product development manly focus on further improvements in resource efficiency. |
| Result | Sustainability integrated in the business model |

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| Company | Holmen (2014) |
| Current sustainability actions | Holmen has implemented initiatives that aim to establish a secure energy supply. They also work on reducing emissions of fossil carbon dioxide. They aim to be resource-efficient of renewable raw materials and energy. |
| Products sold with sustainability as an USP | They develop packaging with natural, renewable raw materials from forests that are sustainably managed forests. Holmen also produce fossil-free energy from hydro and wind power. |
| Sustainability as a part of product development | The production at Holmen's mills and sawmills is to a great extent based on renewable electrical and thermal energy. Holmen has made significant investments in biofuel boilers at the paperboard mills, in order to develop sustainable solutions. |
| Result | Sustainability integrated in the business model |

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| Company | Hufvudstaden (2014) |
| Current sustainability actions | Hufvudstaden works with sustainability issues by carry on its operations in an ethically, socially and environmentally responsible way; both in the way in which they deal with customers, suppliers, partners and staff. A concrete example is their work with City of Stockholm and City of Gothenborg, which includes development within the field of urban development. |
| Products sold with sustainability as an USP | Based on the information in the annual report, sustainability has not led to more business as results of their sustainability work. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Husqvarna (2014) |
| Current sustainability actions | Husqvarna focus its sustainability work within seven different areas. Product development, sourcing, manufacturing, logistics, sales, use and recycling. Improvements in the different fields are made with help from goals within each area for the time period 2013-2015. |
| Products sold with sustainability as an USP | Husqvarna sell and develop products with an emphasis on safety, durability and efficiency. This is achieved through innovative solutions and advanced technology. As a result sustainability is a major USP in Husqvarna's business. |
| Sustainability as a part of product development | One of Husqvarna's slogans is "passionate about innovation". The electrical and automated lawnmowers are one example of sustainable solutions where electric motors have replaced combustion engines and as a result offer a more sustainable solution. |
| Result | Sustainability integrated in the business model |

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| Company | Ica Gruppen (2014) |
| Current sustainability actions | Ica Gruppen's sustainability work is performed by using tools and models to ensure that the products are processed in a way that meet their environmental goals. Except from concrete measures regarding waste minimizing and reducing carbon emissions, Ica Gruppen aims for a healthier lifestyle of the customers and offer sustainable and ecological products as a part of reaching this goal. |
| Products sold with sustainability as an USP | Ica Gruppen has developed the own organic "I love Eco", which solely includes products that are ecological and sustainable. Ica Gruppen has also relaunched the concept of the brand "Ica Gott Liv"; a concept for customers who want to be inspired by a healthier life. The products within this brand have a low salt and sugar content, less fat and more fibre. |
| Sustainability as a part of product development | Increasing demand of the product from the organic product range "I love Eco", has led to product development and many new organic dairy products are launched. |
| Result | Sustainability integrated in the business model |

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| Company | Indutrade (2014) |
| Current sustainability actions | Indutrades sustainability work mainly focus on the responsibility for individuals and social aspects. Several of Indutrade's companies offer sustainable solutions for its customers. |
| Products sold with sustainability as an USP | Indutrade's business is a combination of several niched industrial companies where the emphasis on sustainability differs between the different companies. For a majority of Indutrade's business sustainability has not been considered a USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Intrum Justitia (2014) |
| Current sustainability actions | Intrum Justitia's sustainability strategy is to contribute to a sound economy for people and society, by minimizing the environmental impact. The perform work within the field of environment, social and governance. |
| Products sold with sustainability as an USP | Based on the information in the annual report, no product is sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | JM (2014) |
| Current sustainability actions | JM has several concrete goals within the field of sustainability that are followed up in the annual reports. One concrete example is that they perform a materiality analysis in order to observe the operation's prioritized sustainability aspects. They also perform extensive work to reduce energy consumption and being resource efficient. |
| Products sold with sustainability as an USP | Based on the information in the annual report, sustainability has not led to more business for JM. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | KappAhl(2014) |
| Current sustainability actions | KappAhl has taken several concrete sustainability actions. The company is a co-founder of a project of cleaner textile production in India, SWAR. Also, customers can hand in old textiles in KappAhl's stores. |
| Products sold with sustainability as an USP | Some of KappAhl's products are sustainability labelled (i.e. organic cotton), which could be sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Kungsleden (2014) |
| Current sustainability actions | Kungsleden has concrete targets within the field of sustainability. One example is that they aim to reduce energy consumption by 20% until 2020. They are also engaged in different project within the areas environmental, social and governance. |
| Products sold with sustainability as an USP | Sustainability work within Kungsleden does not lead to more business for the company. Hence, sustainability cannot be considered as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Lindab (2014) |
| Current sustainability actions | Lindab has clear reporting within sustainability and work continuously with waste reduction and energy consumption. |
| Products sold with sustainability as an USP | Lindab work with indoor climate, providing systems and solutions of a more comfortable and energy efficient inner climate. Since most real estate companies tries to lower their costs and environmental impact, they seek more efficient and environmentally friendly solutions for the inner climate. This means Lindab design efficient indoor climate systems. |
| Sustainability as a part of product development | In order to make customers renew their current indoor systems Lindab work with new products that are more energy efficient, that means sustainability is part of the innovative systems. |
| Result | Sustainability integrated in the business model |

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| Company | Loomis (2014) |
| Current sustainability actions | Loomis work on developing their transport processes in order to cut cost and reduce the environmental impact. Their sustainability work focuses on lower their environmental impact and they have set up several concrete goals. |
| Products sold with sustainability as an USP | Based on the information in the annual report, sustainability is not sold as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Lundin Mining (2014) |
| Current sustainability actions | Lundin Mining has several targets regarding sustainability for 2015. No fatalities should occur in the operations, both water and mineral should be used in a more efficient way to reduce waste. Also, Lundin Mining should close at least one mine. |
| Products sold with sustainability as an USP | Lundin Mining would improve its environmental impact by closing mines, which is one of the goals Lundin Mining has set up in order to reduce its environmental impact. That highlights the problem with the business from a sustainability perspective. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Lundin Petroleum (2014) |
| Current sustainability actions | Lundin Petroleum has a relationship with Lundin foundation, which provides capital and assists local incentives for improvements in social and economic development. |
| Products sold with sustainability as an USP | Lundin Petroleum's product offering is mainly based on fossil fuels that hurt the environment in several ways. Hence sustainability is not a USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Meda (2014) |
| Current sustainability actions | Meda performs extensive work within the field of sustainability and is committed to responsible business practices. They use materiality analyses to prioritize sustainability areas. Product functionality, safety and efficient use of materials are corner stones in their sustainability work. |
| Products sold with sustainability as an USP | Meda provides value for the patients by offering product that can treat diseases and save lives. |
| Sustainability as a part of product development | In order to maintain the leading position and treat patients with the best possible products, Meda needs to continually develop their products. |
| Result | Sustainability integrated in the business model |

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| Company | Medivir (2014) |
| Current sustainability actions | Medivir work with sustainability through environmental key-metrics, suppliers and partners, environmental policies, environmental education and an internal control system. |
| Products sold with sustainability as an USP | Medivir's speciality treatments are designed to target speciality treatments infections and oncology where better treatments cure diseases and improves lives. Sustainability is considered a major USP. |
| Sustainability as a part of product development | Sustainability is a part of the product development at Medivir, since their mission is to improve, prolong and save lives – and all equipment and software is developed with the aim of ensuring that patients receive the best treatment possible. |
| Result | Sustainability integrated in the business model |

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| Company | Mekonomen (2014) |
| Current sustainability actions | Mekonomen performs materiality analysis in order to identify internal and external stakeholders' views on sustainability. Also, they have set up several concrete goals within the area of sustainability. |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Modern Times Group (2014) |
| Current sustainability actions | MTG reports their environmental impact for travel and offices. A significant part of their sustainability work is to promote a wide range of third party non-profit organizations. They have developed an own initiative "Game Changers", which support social entrepreneurs. |
| Products sold with sustainability as an USP | MTG's products/services are not sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Mycronic (2014) |
| Current sustainability actions | Mycronic has reduced its generation of waste, reduced emissions from transports, work actively with diversity among employees and education of employees. |
| Products sold with sustainability as an USP | Mycronic's products are sold with a great emphasis on resource efficiency. The products targets increased automatization and improved resource efficiency. Hence sustainability is a major USP. |
| Sustainability as a part of product development | To further improve Mycronic's USP innovation targets further improved resource efficiency. |
| Result | Sustainability integrated in the business model |

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| Company | NCC (2014) |
| Current sustainability actions | NCC works with reducing the use of resources and develops new technical solutions and products in order to contribute to sustainability. NCC has also implemented recycling terminals for construction waste. |
| Products sold with sustainability as an USP | Based on the information in the annual report, sustainability work has not led to more business. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Nederman Holding (2014) |
| Current sustainability actions | Nederman work with sustainability in the following areas; product development, reduction of energy consumption and waste generation, reduction of CO2 emissions and development of suppliers. The core is to enhance Nederman's position as a leading supplier of filtering, cleaning and recycling equipment. |
| Products sold with sustainability as an USP | Nederman produce products that filtrates, cleans and recycle in demanding industrial environments. Nederman's products are eco-efficient and minimize costs, reduce material usage, energy consumption and emissions. Hence sustainability is a clear USP. |
| Sustainability as a part of product development | For each new application that is found for Nederman's technologies, further eco-efficiency is obtained. |
| Result | Sustainability integrated in the business model |

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| Company | New Wave Group (2014) |
| Current sustainability actions | New wave work with sustainability in three phases. Design and product development, procurement and production, transports and logistics. Emissions have been decreased in all phases and a new eco brand has been developed. |
| Products sold with sustainability as an USP | The Cottover brand has been developed, which use ecological cotton in its products. The Cottover Iis also marked with the Fair-Trade trademark and Svanen trademark. Also, Orrefors and Kosta Boda are brands with a strong emphasis on quality and durability. Sustainability Iis an USP. |
| Sustainability as a part of product development | The Cottover brand has been developed with sustainability in mind. The cutover textiles can be used in all New Wave' products. |
| Result | Sustainability integrated in the business model |

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| Company | NIBE (2014) |
| Current sustainability actions | Nibe focus their sustainability work within six main areas; energy, business principles, quality- and environmental certification, products, safe workplaces and suppliers. The work is mainly progressing according to plan. On the Swedish market, Nibe's heat pumps reduce energy consumption with 12Twh annually. |
| Products sold with sustainability as an USP | Nibe's products within heating and internal climate are mainly sold to reduce energy consumption for customers. |
| Sustainability as a part of product development | Nibe's product development mainly focuses on the development of new products that further reduce energy consumption and lowers heating costs for its customers. |
| Result | Sustainability integrated in the business model |

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| Company | Nobia (2014) |
| Current sustainability actions | Nobia has set up several goals within sustainability, which are followed up in the annual report. They aim to reduce their carbon emissions, as well as focus on development in production and logistics. |
| Products sold with sustainability as an USP | It is hard to argue for that customers buy Nobia's product due to the company's sustainability profile. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Nolato (2014) |
| Current sustainability actions | Nolato is engaged in several sustainability projects (i.e. programs for social responsibility in China and Hungary). The company also works with reducing their environmental impact. |
| Products sold with sustainability as an USP | Based on the information in the annual report, Nolato's products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Nordea (2014) |
| Current sustainability actions | Nordea targets social responsibility in the sustainability work. Routines and processes among the employees have been improved to eliminate irregularity. Nordea base their sustainability work on their stakeholders' expectations and tries to perform accordingly. |
| Products sold with sustainability as an USP | Banking is not considered as a business where sustainability can be a USP. Few customers are won as a consequence of their sustainability work. However money can be directed to business and investments that are more or less sustainable, but this is hard to determine as an external observer. To conclude sustainability has not been regarded as a USP for Nordea. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Oasmia Pharmaceutical (2014) |
| Current sustainability actions | Environmental impact from the company's operation is minimal, since the chemical and solvent used in their activities do not seep into the surroundings. The chemicals and solvents are managed by the recycler RagnSells. |
| Products sold with sustainability as an USP | The pharmaceutical products are sold to save lives and treat diseases. |
| Sustainability as a part of product development | The company develops efficient products for treating different diseases and promote health. In order to keep their leading position offering pharmaceutical products, sustainability must drive the product development. |
| Result | Sustainability integrated in the business model |

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| Company | Opus (2014) |
| Current sustainability actions | Continuous work to make sure that the results from vehicle inspections is accurate and that the results are consistent. That means safer and environmentally sound cars on the roads. |
| Products sold with sustainability as an USP | Opus runs vehicle inspections, which are mandatory for car owners and regulated by law. The purpose of the inspections is to make sure that all cars on the roads meet specific emission and safety standards, which both prevent accidents and improve air quality. |
| Sustainability as a part of product development | When Opus venture into new market, like Pakistan, Mexico etc. It will improve road safety and emissions in those countries. That means Opus help the state in a specific country to make sure that the country's car park is safe and meet the defined emission standards. |
| Result | Sustainability integrated in the business model |

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| Company | Orexo (2014) |
| Current sustainability actions | Orexo focus its sustainability work within five different areas; product development, suppliers, manufacturing, transportation and usage. The focus is on reduced emissions, reduced costs for the customers and good availability. |
| Products sold with sustainability as an USP | Orexo has developed its own under the tongue treatment (sublingual) where the effects of traditional treatments are improved by the unique process. The result is better treatment and substantially lower costs for the customer. That implies a strong emphasis on sustainability in Orexo's business. |
| Sustainability as a part of product development | For each new treatment that implements Orexo's sublingual method, both costs and effectiveness is improved. |
| Result | Sustainability integrated in the business model |

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| Company | Oriflame (2014) |
| Current sustainability actions | Oriflame work with reduced usage of petroleum products in its products and have decreased the usage by 80% in the past years. Also plastic microbeads have been removed from all products. Furthermore Oriflame only use sustainable palm oil and enhance women's participation in the labour market. No animal fur is used. |
| Products sold with sustainability as an USP | Oriflame has introduced the Ecobeauty, which is a cross category cosmetics range approved by– Fairtrade, Ecocert, The Vegan Society and the Forest Stewardship Council. As a result sustainability has been considered a major USP. |
| Sustainability as a part of product development | Oriflame continuously work with completing the Ecobeauty range with new innovative products. Also traditional products that could be harmful. |
| Result | Sustainability integrated in the business model |

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| Company | Peab (2014) |
| Current sustainability actions | Peab has taken several measures to develop their sustainable construction processes. They also work with a green profile for their projects (i.e. Several of their projects are environmentally classified according to BREEAM). |
| Products sold with sustainability as an USP | Peab's sustainability work does not lead to more business for the company. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Proffice (2014) |
| Current sustainability actions | Proffice has developed a traveling policy that should lower emissions from the employee's transports. Also, Proffice tries to improve diversity among employees and work with human rights. |
| Products sold with sustainability as an USP | Sustainability is not considered a major USP within staffing and recruitment. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Qliro Group (2014) |
| Current sustainability actions | Qliro Group work on finding ways to reduce their environmental impact and has set up several concrete sustainability goals. A significant part of their sustainability work is within the field of developing their packaging selection to optimize product protection for the deliveries, in order to minimize the use of material. |
| Products sold with sustainability as an USP | Based on the information in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | RaySearch (2014) |
| Current sustainability actions | The core of RaySearch's business is to develop software solutions for radiation therapy of cancer. That implies that saving human lives is core in the business model. |
| Products sold with sustainability as an USP | Customers demand reliable and efficient systems that prevent cancer to the greatest extent. That implies sustainability has to be an USP. |
| Sustainability as a part of product development | To keep up with competition and improve the advantage over competitors innovation is targeted to improve the systems capability to cure cancer by improving the radiation therapy process. |
| Result | Sustainability integrated in the business model |

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| Company | Rezidor Hotel (2014) |
| Current sustainability actions | Rezidor Hotel performs extensive work within the field of ESG and has set up several goals to reduce environmental impact. They have also initiated different projects to promote sustainability. To be more precise, they have developed sustainable brands, such as "Pink Breakfast", which support the worldwide breast cancer awareness. They have also implemented a project called "Just a Drop". For every 250 towel that the guests choose reuse, Rezidor Hotels make a donation to provide a child with safe drinking water for life. |
| Products sold with sustainability as an USP | Despite several projects within the field of sustainability, it is hard to argue for that a customer chooses Rezidor Hotel due to its sustainability work. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Sagax (2014) |
| Current sustainability actions | Sagax has taken several measures to reduce their environmental impact. They work on reducing its dependence of fossil fuels. Their main areas that they work on minimizing the environmental impact are energy consumption, hazardous substances and indoor climate. |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Sandvik (2014) |
| Current sustainability actions | Sandvik has identified five sustainability risks within its business with the aim to mitigate the effect in each area. The five areas are; compliance, health & safety, environment, supplier conduct and customer conduct. |
| Products sold with sustainability as an USP | A large part of Sandvik's product offering is constructed for applications in a demanding environment. Durability is an important factor that reduces the material usage and resource efficiency in for e.g. drilling business. |
| Sustainability as a part of product development | Further improvements in durability are made in order to further reduce material usage and resource efficiency for Sandvik's customers. |
| Result | Sustainability integrated in the business model |

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| Company | SAS (2014) |
| Current sustainability actions | SAS has set up many concrete goals within the field of ESG. First of all, they will reduce their emissions by 20% during 2015, compared with 2005. They will also reduce the energy consumption in their buildings. |
| Products sold with sustainability as an USP | Based on the information in the annual report, it is hard to argue for that a customer chooses to fly with SAS from a sustainable perspective. Hence, sustainability is not an USP for SAS. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Sectra (2014) |
| Current sustainability actions | Sectra develops IT-systems that improve communication between different hospitals and units within the same hospitals. The purpose is to improve treatment for patients. |
| Products sold with sustainability as an USP | Durability and reliability are the two most important factors in Sectra's business. A more durable and reliable IT-system improves treatment, hence sustainability is an USP in Sectra's business. |
| Sustainability as a part of product development | Product development within Sectra is mainly targeted to improve treatment for patients by further development of Sectra's IT-system. |
| Result | Sustainability integrated in the business model |

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| Company | SCA (2014) |
| Current sustainability actions | SCA performs its sustainability work within eight different areas; People & Nature Innovations, Hygiene Solutions, Code of conduct, Employee Health & Safety, Climate & Energy, Fibre Sourcing, Biodiversity and water. Good progress is reported within all fields except Climate & Energy where wind energy is behind target. |
| Products sold with sustainability as an USP | All SCA's products are based on a renewable material and could be recycled. In many cases, SCA's products replaces products made from plastics or oil and contribute to more recyclable products. Hence sustainability is an USP. |
| Sustainability as a part of product development | For e.g. the Tena Pants have been introduced during the year, which is 23% less harmful to the environment with the same absorption capacity. Furthermore all new applications that are developed by SCA increase the usage of renewable products. |
| Result | Sustainability integrated in the business model |

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| Company | Securitas (2014) |
| Current sustainability actions | Securitas work with reducing their environmental impact and participate in projects to support the local community. On example is that they, in some markets, recycle old uniforms. |
| Products sold with sustainability as an USP | Based on the information in the annual report, it is hard to argue for that a customer chooses Securitas due to their sustainability work. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Sensys Gatso Group (2014) |
| Current sustainability actions | The employees are considered Sensys Gatso's most important asset and a great deal of work is made to maintain employees and to create an attractive work environment. Also, Sensys Gatso support the Zero-initiative, which implies nobody should die in the Swedish traffic. |
| Products sold with sustainability as an USP | Sensys Gatso produce road safety systems, such as road surveillance systems, speed-cameras, traffic-lights etc. The products are sold with an emphasis on safety, which saves lives. That implies sustainability is a major USP. |
| Sustainability as a part of product development | During the past year the RS242 has been developed, which is a multi-lane surveillance system that improves safety and tracks violations of traffic rules. |
| Result | Sustainability integrated in the business model |

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| Company | Skandinaviska Enskilda Banken (SEB) (2014) |
| Current sustainability actions | SEB have taken several measures regarding sustainability work and has developed one sustainability strategy that focuses on responsible business, people and community and environment. |
| Products sold with sustainability as an USP | Banking is not considered as a business where sustainability can be a USP. However money can be directed to business and investments that are more or less sustainable, but this is hard to determine as an external observer. To conclude sustainability has not been regarded as a USP for SEB. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Skanska (2014) |
| Current sustainability actions | Skanska reports its performance within emissions, material usage and work related accidents. Accidents have decreased during past years. However both CO2 emissions and material usage have increased during the past years. Skanska also use eco-labels and certification for some of its products. |
| Products sold with sustainability as an USP | There are often minimum criteria's regarding energy consumption, water usage etc. in Skanska's business. However once these are met sustainability is not considered a major USP in Skanska's business. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Skistar (2014) |
| Current sustainability actions | Skistar has set up sever concrete goals on how to work with sustainability issues within the framework of the operation's focus areas. |
| Products sold with sustainability as an USP | From what can be observed in the annual report, products are not sold with sustainability as an USP. |
| Sustainability as a part of product development | From what can be observed in the annual report, sustainability is not a part of product development. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | SKF (2014) |
| Current sustainability actions | SKF works with a product lifecycle approach to its products, where they try to reduce the environmental impact in all stages, production, lifetime and recycling. SKF work continuously to improve efficiency in its plants. |
| Products sold with sustainability as an USP | Wheel bearings are designed to reduce friction and thereby increase resource efficiency, same goes for lubrication systems. Reducing friction and increasing resource is sustainable by definition. Furthermore SKF has developed a product portfolio called "Beyond Zero" where the whole product lifecycle is reviewed by external auditors. |
| Sustainability as a part of product development | SKF's products are designed to reduce friction which means SKF spends significant efforts to further reduce friction and minimize energy consumption. Furthermore the work with the steadily growing "Beyond Zero" drives innovation within the sustainable field. |
| Result | Sustainability integrated in the business model |

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| Company | SOBI (2014) |
| Current sustainability actions | SOBI constantly tries to improve availability of its medicines, this is made by 1) identifying the most efficient treatment for patients when designing the treatments in order to improve the results and to keep costs down for the customers. Also a 24/7 helpdesk is used to secure good supply if SOBI's products. Tests are performed in the most ethical way. |
| Products sold with sustainability as an USP | SOBI develops treatment for rare disease. When patients are cured, the patient's life is normally improved. As a result SOBI's products are sold with sustainability as an USP. |
| Sustainability as a part of product development | In the past year Kiobrina, Kepivance and SOBI002 have ben launched, which are all improvements of existing products. The new treatments improve the results from treatments and cure more patients, which means sustainability is important in product development. |
| Result | Sustainability integrated in the business model |

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| Company | SSAB (2014) |
| Current sustainability actions | SSAB takes an approach to sustainability where the entire value chain is analysed. Resource efficiency and limitations to the emissions are key elements both for improved profitability and good performance within sustainability according to SSAB. |
| Products sold with sustainability as an USP | SSAB is specialized in high durability steel products, which can reduce material usage and weight in several different applications. That implies sustainability is an USP for SSAB. |
| Sustainability as a part of product development | As high durability steel is further improved, resource efficiency is improved for the users. This means SSAB's innovation targets sustainability to a great extent. |
| Result | Sustainability integrated in the business model |

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| Company | Stora Enso (2014) |
| Current sustainability actions | Stora Enso work against clear goals within three different areas concerning sustainability, Environment and Efficiency, Forest and Land use, People and Ethics. Clear improvements have been achieved during the past years. |
| Products sold with sustainability as an USP | Stora Enso business includes Consumer Board, Packaging solutions, Biomaterials, Wood Products and Paper. All products are made with wood and biomass as a base, which creates a USP as opposed to similar products made from plastics or oil. |
| Sustainability as a part of product development | Stora Enso has a clear goal to offer everything that is made from oil from wood instead, something that clearly makes sustainability an USP. |
| Result | Sustainability integrated in the business model |

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| Company | Svenska Handelsbanken (2014) |
| Current sustainability actions | Svenska Handelsbanken works on the ESG factors and has clear goals and methods of how the sustainability work is performed. They work on reducing their environmental impact, which mainly are derived from travelling, materials, energy consumption and equipment. |
| Products sold with sustainability as an USP | Banking is not considered as a business where sustainability can be a USP. Few customers are won as a consequence of their sustainability work. However money can be directed to business and investments that are more or less sustainable, but this is hard to determine as an external observer. To conclude sustainability has not been regarded as a USP for Handelsbanken. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | SWECO (2014) |
| Current sustainability actions | Sweco work with a clear business ethic's framework that involves CSR aspects of Sweco's business. |
| Products sold with sustainability as an USP | Sweco work with urban development and clearly emphasize sustainable solutions with better resource efficiency and improved durability. Sustainability is clearly one common USP in all their offerings. |
| Sustainability as a part of product development | With sustainability as a clear USP, new sustainable solutions are constantly developed to improve compared to the competition. |
| Result | Sustainability integrated in the business model |

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| Company | Swedbank (2014) |
| Current sustainability actions | Swedbank's sustainability work mainly focuses on governance and social issues. Much work has been done by training employees in sustainable banking. Swedbank has also moved to a new headquarter which has substantially better energy performance. |
| Products sold with sustainability as an USP | Banking is not considered as a business where sustainability can be a USP. Few customers are won as a consequence of their sustainability work. However money can be directed to business and investments that are more or less sustainable, but this is hard to determine as an external observer. To conclude sustainability has not been regarded as a USP for Swedbank. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Swedish Match (2014) |
| Current sustainability actions | Swedish Match has recently released the vision "for a world without cigarettes", with the aim to convert smokers to users of other tobacco based products which should be less harmful. They also report their actions in several fields regarding sustainability. |
| Products sold with sustainability as an USP | Products containing tobacco are considered to be harmful and a source of many diseases. Hence Swedish Match do not sell products with sustainability as an USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Systemair (2014) |
| Current sustainability actions | Systemair focuses on energy efficiency and to develop products with low environmental impact. Also, Systemair focus on choosing safe materials for the development of their products. |
| Products sold with sustainability as an USP | Customers might choose Systemair's ventilation systems due to their energy efficiency. |
| Sustainability as a part of product development | Sustainability is not a major USP in Systemair and is not considered as a part of the products development. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Tele2 (2014) |
| Current sustainability actions | Tele2 summarize their own sustainability actions with the worlds "transparent actions". Their efforts are mainly targeted at social aspects and governance aspects and transparency is used as the key to success. The aim is to report all extraordinary events and the business in Kazakhstan has been subject to increased transparency in recent years. |
| Products sold with sustainability as an USP | Within Tele2's business as a communication provider, sustainability is not considered as a major USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Telia (2014) |
| Current sustainability actions | Telia has focused its sustainability work in the following areas anti-corruption, freedom of expression, customer privacy, occupational health and safety, sustainability in the supply chain and environmental responsibility. This indicates a clear focus towards social factors and governance factors. |
| Products sold with sustainability as an USP | Within Telia's business as a communication provider, sustainability is not considered as a major USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Tieto (2014) |
| Current sustainability actions | Tieto has a traveling policy that tries to limit travel as much as possible. Also Tieto constantly work with reducing their energy consumption in offices, servers and data centres. In addition Tieto has been awarded for their climate data. |
| Products sold with sustainability as an USP | Tieto tries to always provide the most resource and energy efficient solutions for its customers. |
| Sustainability as a part of product development | One example is Mondi's choice of Tieto as their provider of a performance control system for sustainable paper and board production. |
| Result | Sustainability integrated in the business model |

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| Company | Trelleborg (2014) |
| Current sustainability actions | Trelleborg is trying to improve its resource efficiency in several areas. They have clear targets in each area and the results are evaluated every year. |
| Products sold with sustainability as an USP | Trelleborg produce products within sealing, damping and protection. Sustainability has not been considered to be major USP for those applications. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Sustainability integrated in the business model |

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| Company | VBG Group (2014) |
| Current sustainability actions | VBG works actively with limiting the environmental impact from their business. Their largest factory in Vänersborg is for e.g. classified according to the ISO 14001. |
| Products sold with sustainability as an USP | The major part of VGB's business comes from truck equipment and truck trailers. Sustainability is not considered to be a major USP for those products. |
| Sustainability as a part of product development | Durability and practicality have been considered to be the most important factors in VBG's business. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Vitrolife (2014) |
| Current sustainability actions | Vitrolife work with a sustainability policy, which includes a continuous work for increased resource efficiency, minimizing emissions both from both production and travels. The work also include ethical and social responsibility. |
| Products sold with sustainability as an USP | Vitrolife's products embrace the human life by the production of fertilizers that bring happiness to many parents around the world. |
| Sustainability as a part of product development | Vitrolife constantly work with improving the effects from its fertilizers, which implies that more lives are created. |
| Result | Sustainability integrated in the business model |

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| Company | Volvo (2014) |
| Current sustainability actions | Work with initiatives to reduce carbon emissions and at the same time develop products that are more fuel efficient. They measure the emissions from production and usage, which must meet certain requirement according to ISO 14001. |
| Products sold with sustainability as an USP | Offering safe and sustainable transport solutions that are fuel efficient, that are sold by both safety and fuel efficiency as USP's. More specifically Volvo offers |
| Sustainability as a part of product development | Volvo develops products that are driven by quality, safety and environmental care. Focus on developing fuel-efficient vehicles and machines, which is proved by the introduction of hybrid engines, dual-clutch transmissions etc. |
| Result | Sustainability integrated in the business model |

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| Company | Wallenstam (2014) |
| Current sustainability actions | Wallenstam strongly promotes green energy to their customers and they have become self-contained within green energy through the investment in 64 wind turbines. Additionally they fulfil the existing energy standards by a large marginal. Wallenstam also participate in sponsorships for less privileged children. |
| Products sold with sustainability as an USP | The location has been considered to important that sustainability is not considered to be a major USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | Wihlborgs (2014) |
| Current sustainability actions | Wihlborgs works has clear goals regarding their environmental impact and measures both energy consumption and CO2 emissions on a yearly basis. Also, they work with certification of all their buildings, where majorities of all new building are built according to Miljöbyggnad Guld. |
| Products sold with sustainability as an USP | The location has been considered to important that sustainability is not considered to be a major USP. |
| Sustainability as a part of product development | Since sustainability is not a major USP, innovation in the field has not been considered very important. |
| Result | Works actively with sustainability but more as philanthropy |

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| Company | ÅF (2014) |
| Current sustainability actions | All projects and assignments undertaken by ÅF must meet certain sustainable measures (i.e. include efficient use of resources and renewable materials). If the concrete measures are not fulfilled, the project is rejected. |
| Products sold with sustainability as an USP | ÅF offers the customers sustainable alternatives in the field of consulting within engineering, industry and infrastructure. They propose new technology in order to contribute to efficient use of resources and reduced environmental impact. |
| Sustainability as a part of product development | The way projects and assignments are undertaken by ÅF, promotes a sustainable thinking and approach, through the business model. |
| Result | Sustainability integrated in the business model |