SUSTAINABLE INVESTING – A NO-BRAINER

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ABSTRACT

Business Management and Entrepreneurship
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Supervisor Ismo Vuorinen

TIIVISTELMÄ

Opinnäytetyö käsittelee vastuullista sijoittamista sijoitusrahastoilla pien- ja yksityissijoittajan näkökulmasta. Tutkimusten mukaan vastuullinen sijoittaminen voi tarjota keskimääräistä parempaa tuottoa sijoittajalle. Opinnäytetyön tavoitteena on tutkia johtaako sijoitusrahaston korkea vastuullisuus parempaan tuottoon. Lisäksi opinnäytetyö tutkii miten sijoitusrahastojen kulut ja aktiivisuus käyttäytyvät suhteessa vastuullisuuteen.

Teoriaosuus koostuu sijoittamisen, vastuullisuuden ja vastuullisen sijoittamisen taustatiedosta ja historiasta. Taustateoria on kerätty näiden teemojen kirjallisuudesta, internetlähteistä sekä aikaisemmista tutkimuksista. Tutkimusaineisto on kerätty Morningstar -palvelusta ja esimerkiksi pankkien ja pankkiiriliikkeiden verkkosivuilta ja rahastojulkaisuista.

Opinnäytetyössä vertailtiin rahastojen tuottoja, kuluja ja aktiivisuutta luokittelemalla ne Morningstar Sustainability Ratingin ja vastuullisuusluokkien perusteella. Lisäksi tutkittiin varsinaisten vastuullisten rahastojen vastuullisuutta ja muita ominaisuuksia.

Opinnäytetyö on tehty itsenäisesti ilman työelämäohjausta sen läpinäkyvyyden ja riippumattomuuden varmistamiseksi. Tutkimusta ja sen johtopäätöksiä kuitenkin kommentoivat vastuullisen sijoittamisen asiantuntijat finanssialalta.

Avainsanat Sijoittaminen, sijoitusrahastot, vastuullisuus.

Sivut 61 sivua, joista liitteitä 7 sivua

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This thesis is about sustainable investing with mutual funds from household and private investor's perspective. According to previous studies, sustainable investing could offer better than average returns for investor. The goal for the thesis is to find out if high sustainability leads to higher returns. In addition, the thesis studies how costs and activity behave in relation to sustainability.

The theory consists of the background information and history of investing, sustainability and sustainable investing. The theory is collected from literature, internet sources and previous studies. The research data is collected from Morningstar and bank and brokerage websites and annual, semi-annual or monthly fund reviews.

The thesis compares returns, costs and activity of the mutual funds by dividing them by the Morningstar Sustainability Rating (MSR) and into MSR classes. Additionally, the thesis studies sustainability and other attributes of sustainable mutual funds.

The thesis is done without work life assignment to ensure its independence and transparency. However, sustainability specialists from financial sector comment on the research and its conclusions.

Keywords Investing, mutual funds, sustainability.

Pages 61 pages including appendices 7 pages

CONTENTS

1 INTRODUCTION

Sustainability is a global megatrend that is affecting every human and every business in the world. Without more sustainable lifestyle the future for unborn generations will be challenging. If there's a future at all.

At the same time, people overall are wealthier than ever before and the overall amount of wealth in the world is increasing (Credit Suisse 2018, 14).

Wealth is created and managed by investing it. Saving and investing is also a trend which has strengthened in the last few years. This can be seen by observing traditional and social media daily.

These two trends could strengthen each other and help to solve sustainability problems.

1.1 Objective and structure of the thesis

The objective of the thesis is to find out if sustainable investing is more profitable for household or private-investor than more traditional investing as claimed. The thesis increases the awareness of sustainable investing in general. The more accurate impact is to highlight the possible benefits of sustainable investing and to find out if the claims about sustainable investing are true. The thesis approaches sustainability from an investor perspective and it doesn't process sustainability as a question of personal value.

The structure of the thesis is described below in Figure 1.

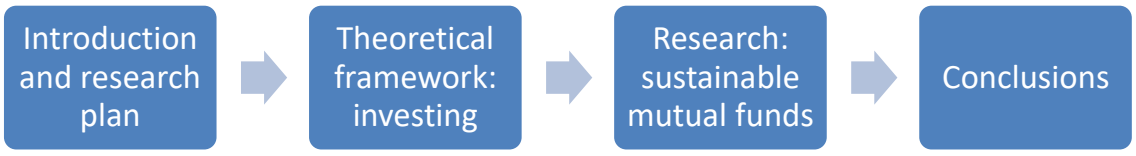

Figure 1 Structure of the thesis.

The introduction part explains the reasons for selecting the topic, the objectives for the thesis and the research questions. Introduction part also defines some keyword used in the thesis.

In the second chapter, quantitative and comparative research as research methods are introduced. The chapter defines quantitative and comparative research methods and introduces their features.

The theoretical framework focuses on investing. The most important single theory is the theory of efficient markets. The theoretical framework will explain investing in general and will focus more deeply on mutual funds that are the actual area of the research. Also, the concepts of sustainability and sustainable investing are introduced in this part.

The third part of the thesis is the actual research part. In this part, research data is introduced and processed. Sustainable mutual funds are compared by their profit returns, cost, sustainability, Active Share-rating and Tracking error. The Morningstar sustainability rating will be exploited to measure sustainability. Then the averages results of sustainable mutual funds are compared to the results of traditional mutual funds and market indices.

In the final chapter, the conclusions are introduced and the research results are assessed.

1.2 **Topic selection and research questions**

Traditional and social media were panicky after IPCC (Intergovernmental Panel on Climate Change) released its latest special report about global warming in October 2018. The impacts of global warming are serious: limiting global warming to 1.5 °C could save species from extinction, areas from drought and slower sea level rising. Even a small, inevitable global warming, leads to higher risks in health, livelihoods, food security, water supply, human security and economic growth. (IPCC 2018). Global warming is a threat that must slow down in the future and sustainability is one of the solutions.

In the market economy, which western countries mostly live, financial incentives guide capital flows and investments, but also human behavior in general. Sustainable investing could accelerate sustainability if it appears to be as profitable as claimed. The reason for this is that capital is intelligent: it always seeks the most profitable options.

According to Serafeim (2014, 12), investing one dollar 20 years ago in traditional growing business would be now worth of 14.46 dollars. But investing the same dollar in an environmentally and socially responsible company that is also growing, would be now worth of 28.36 dollars. This example highlights the possibility that sustainable investing could be a no-brainer.

The research focuses on mutual funds, which are easily available for household and private investors. Mutual funds offer efficiency and diversification in a simple form. Depending on the source, only ten or twenty percent of active fund managers can outperform the average market return. It is hard to see this fact changing in sustainable investing.

The activeness of a certain fund is often measured by Active share-rating which functionality will be introduced later in the thesis.

The thesis will find out how sustainable investing settles with the investing principles or results that are often viewed by the investors.

The returns are the main reason for investing in the first place. Do sustainable mutual funds offer higher returns than traditional mutual funds or market indices? The question discovers the most essential answer for the investor: if the hypothesis appears to be wrong and sustainable funds offer regularly higher returns, sustainable investing is clearly a no-brainer.

If sustainable investing could be equated with organic products, would it cost more than non-organic? What does sustainable investing cost? Thesis finds out how expensive sustainable investing is. The costs of an investment are in a key role when accumulating long-run returns.

By using the Morningstar Sustainability Rating, the research will find out if sustainability is just a sales pitch or not. This is relevant as transparency and responsibility are things that are often related to sustainability issues.

Are sustainable funds really active or not? Active share and Tracking Error are used to measure the activity of a certain fund. One element of sustainable investing is social responsibility. If a sustainable fund is not really active, it directly violates the one main element of sustainable investing.

1.3 **Previous studies**

Sustainable investing is a trendy theme among investors at the moment. There are studies made before that indicate that sustainable investing offers better risk-weighted returns than traditional investing. In his study, Clark (2015, 42) summarizes the following benefits for sustainable investment cases:

- More sustainable companies outperform less sustainable companies in stock market
- The cost of capital and debt are lower for more sustainable companies, which enables better financial profitability

Term ESG is often regarded as a basis of sustainable investing. ESG literally stands for: environment, social and (corporate) governance. These three issues define the different aspects of sustainable investing.

In their study Blackrock (2018, 6) demonstrates, ESG-focused equity benchmarks outperform the traditional ones practically in every way:

annualized returns are higher, but volatility and maximum monthly drawdowns are lower. The comparison is presented in Figure 2.

	US		World ex-US		Emerging markets	
	Traditional	ESG Focus	Traditional	ESG Focus	Traditional	ESG Focus
Annualised return	15.8%	15.8%	10.5%	11.1%	7.8%	9.1%
Volatility	9.5%	9.6%	11.4%	11.6%	14.4%	14.3%
Sharpe ratio	1.62	1.60	0.88	0.92	0.51	0.61
Maximum monthly drawdown	-13.9%	-13.8%	-23.3%	-22.6%	-35.2%	-33.0%
Price-to-earnings	19.4	19.5	17.2	17.1	13.3	13.7
Dividend yield	2.1%	2.1%	3.2%	3.2%	2.7%	2.8%
Number of stocks	620	293	1,011	419	831	288
ESG score	5.2	6.6	6.5	7.9	4.4	6.2

Figure 2 Comparison of traditional and ESG-focused equity benchmarks by region, 2012 - 2018 (Blackrock Investment Institute 2018, 6).

Blackrock (2018, 2) summarizes that “existing quality metrics, such as strong balance sheet, have a lot in common” with sustainability issues. Sustainability seems to be obvious, but deeper understanding of the ESG implementation is the key to the success. Not following the single ESG-ratio given in a number or in another measure.

Blackrock divides ESG investing styles in two main categories: avoid and advance. Avoiding means literally rally that investor avoids certain industries, sectors or companies that have poor ESG implementation. This action is called screening.

Advancing has three sub-styles: ESG, thematic and impact. In ESG the investor is led by different ESG-ratings. In thematic style, investor focuses on particular E, S or G issues. Impact means that the investor has a specific non-financial target or outcome which comes with financial return. (Blackrock 2018, 4.)

According to the University of Zurich (2018, 24), sustainable investments by institutional investors grew 92 percent and by private investors 38 percent in 2016 – 2017 (Figure 3). The speed of growth highlights the fact that institutional investors are above private investors when it comes to sustainability.

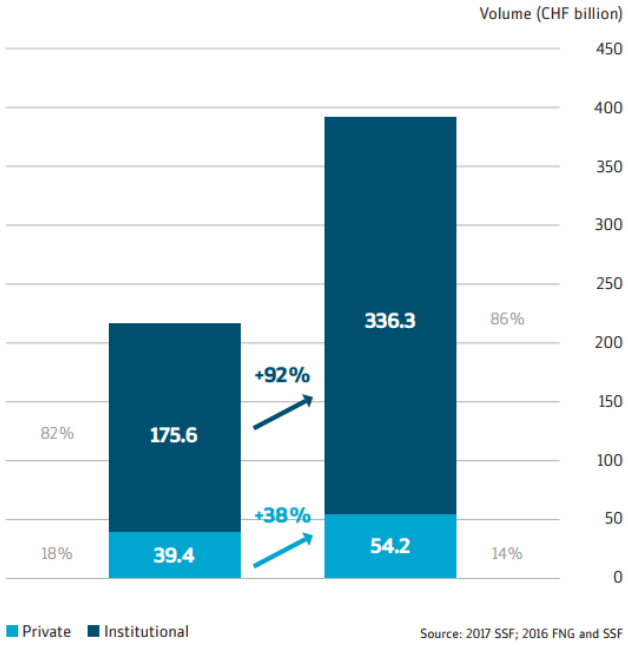

Figure 3 Development of institutional and private sustainable investment in 2016 - 2017 (University of Zurich 2018, 24).

This development may have an impact on the results as well. Institutional investors have typically more resources, knowledge and lower costs versus household and private investors. Institutional investors also have a wider variety of options. According to Schroders (2018, 19), investors who are paying attention to sustainability and are expecting higher returns, have also better knowledge. Schroders study supports conclusion that institutional investors are more aware of sustainable investing.

This development shows that there is a need to study sustainable investing more from the private investor's view. However, this development is not a bad thing: often the sophisticated investment strategies and analyses are first used by institutional investors and over time they spread among private investors too.

The momentum for sustainable investing is driven by investors own choices but also by tightening regulation and international agreements like the Paris Agreement or the Sustainable Development Goals. Companies with sustainable products will also benefit from the change in people's consumption habits that are hopefully going in more sustainable direction.

1.4 Key definitions

Investing means committing capital in order to earn a return.

Financial investment means buying an asset, which purpose is to generate income or is to be sold with a higher price in the future.

A mutual fund is a financial investment instrument where investors buy shares of investment portfolio managed by the portfolio manager.

Sustainability means fulfilling the needs of the present with a way that will not compromise the ability of future generations to meet their own needs (World Commission on Environment and Development 1987, 41).

1.5 **Disclaimer and transparency**

The author of this thesis works in the Finnish financial sector. This thesis is done without work life assignment to ensure the independence of it and its results. The final evaluation and comments are requested from sustainability and ESG specialists from the financial sector.

The information of the thesis is not intended to constitute investment advice or as advice to buy, sell or switch any financial instruments. Investments always carry risks and the value of all types of investments may increase or decrease over time.

Past performance does not guarantee future results. Investor should not rely on any past performance as a guarantee of future investment performance.

2 RESEARCH METHODS

Scientific research must be logical and objective. It results must be generalizable and verifiable. The theoretical framework and the results must be compatible. (Holopainen & Pulkkinen 2008, 13.)

Research can be empirical or theoretical. Empirical research uses existing or gathered data to test a theory. At the end of the research, the theory is either supported or resisted. This may lead to a need to modify the theory. (University of Jyväskylä, 2010.)

Theoretical research has an opposite starting point. In a theoretical approach, the theory includes all the known information and the theory will create a new conclusion that confirms itself as there is no logical way to deny it. In theoretical research, there is no substantial research object. (University of Jyväskylä, 2010.)

Empirical research methods are used to uncover new or deeper information from data. Research methods are processes and techniques that are used when uncovering information from data. There are many different types of research methods that can be used alone or simultaneously.

Empirical research methods are divided into two main categories: qualitative and quantitative research methods. Qualitative research methods are used to get answers on questions like why and how. Quantitative research methods explain questions like what, where and how much or often. Qualitative research can be used to explain and understand the results of quantitative research. Research methods complement each other. (Tilastokeskus, n.d.)

2.1 Quantitative research

Quantitative research is expressed in numbers. Even if the research data is qualitative, it's constructed in numerical form. Quantitative research gives answers to questions like what, where, how often or how much. (Holopainen & Pulkkinen 2008, 21.)

Quantitative research explains what is happening, but not why something is happening. The explaining is done by collecting and analyzing research data. The data is expressed in numbers, but in the end, the numerical findings are reported in written form.

Quantitative research is objective research method. This means that the research data and results are independent and the research her- / himself is not affecting them. However, the conclusions can include opinions of the researcher. (Vilkka 2007, 14.)

Quantitative research is a practical research method to test hypotheses in real life. Hypotheses are untested statements between two or more variables. Hypotheses are derived from theory and they must be capable of being tested. (Nardi 2014, 48.)

The quantitative research method was used in this thesis to test hypotheses and to explain research questions.

2.1.1 Phases of quantitative research

Every research, despite the method, starts with defining the objectives. Objectives can be expressed as research questions or as a hypothesis. After the objectives are clear, the suitable samples and variables can be defined. This forms the actual research data. This is an important phase because it defines which kind of data is needed. Data should be able to produce answers to the research questions.

Collecting data is the third phase of quantitative research. Data can be collected through polls, questionnaires, surveys or using and editing existing data. Data can be primary or secondary. Primary data is data, that is gathered by the researcher her- or himself. Secondary data means that the data is gathered by someone else. Data are expressed in numerical form. (School of Research, 2016.)

Especially when using secondary data, like in this thesis, the data can be incoherent because of the different sources or forms. Editing and cleaning the data is the fourth phase of quantitative research. This means that the data is edited in a reasonable and practical form. (School of Research, 2016.)

Analyzing the data is the fifth phase. The analysis opens up and explains the data. This is done by numerical tables, statistics, charts and figures, but also in written form. Analyzing is more than just expressing the results. The analysis creates and identifies information from the results and tests the hypothesis. (Vilkka 2007, 118.)

The last phase is presenting the results of the research. This is done by combining information and conclusions in the form of article or report for example.

The set of research phases are presented below in Figure 4.

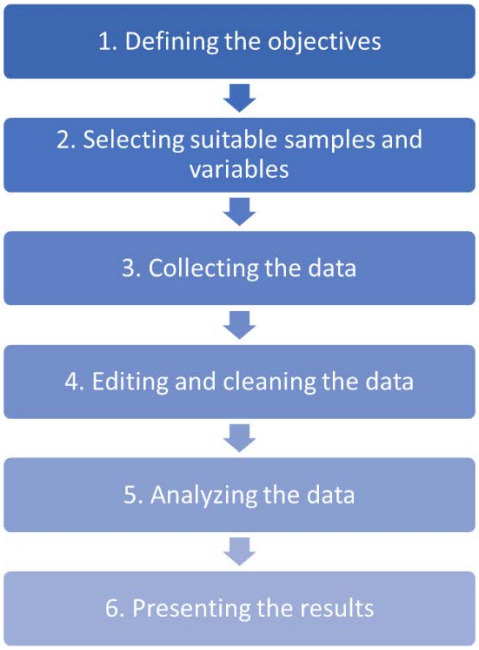

Figure 4 Six phases of quantitative research (School of Research, 2016).

2.1.2 Data collecting methods

As mentioned earlier, there are several methods to collect data for quantitative research: polls, questionnaires, surveys, interviews and existing data. All the methods have their own pros and cons when it comes to objectivity and reliability. Depending on the method, collecting data is one of the most demanding phases of quantitative research. Whatever the data collecting method is, the collected data itself is not research yet (Vilkka 2007, 17).

The quality of the data also defines how reliable are the research results. According to Heikkilä (2004, 45), good research data should contain at least one hundred samples if the results are studied in a general level. If the data contains groups that are compared with each other, there should be 200 – 300 samples. This should be considered when forming an idea of a certain research and data collecting method.

Polls, questionnaires and surveys are the most common and best-known data collecting methods. These are methods where the questions are standardized: the same questions are asked in the same order and in the same way. For this reason, these methods suit well for large and scattered groups. These are good methods if asking private questions because the respondent can remain her or his privacy. (Vilkka 2007, 28.)

Nardi (2014, 71) highlight two problems for these methods: the amount of different surveys is very high nowadays and people easily regard them as time-consuming junk mail. It is difficult to get answers and often there

is a need for a second round to get enough samples. The second problem is the objectivity: the survey can be biased. This means that the researcher's own assumptions and opinions reflect on the questions or in the answer options.

In interviews, the research questions are standardized like in the previous methods. The main difference is that the researcher writes down the answers. Interviews are good for precise researches, that is not too wide: interviewing a large group of people is slow and impractical. Scheduling and informing the respondents is important. Often it is a good idea to transcribe the interviews.

Despite the data gathering method, it is always important to assess the objectivity before, during and after the gathering. Heikkilä (2004, 76) reminds that there can be events or occurrences during the interviews, that dramatically effect on people's opinion on a certain subject. Reliable and objective results are born under normal conditions.

Using existing data is one way gather research data. Different institutions provide plenty of useful data that is often available even free of charge. As mentioned earlier, this kind of data is called secondary data. When using secondary data, source criticism is essential. According to Vilkka (2007, 34), the researcher should think questions like who, when and why the data is provided?

2.1.3 Sample survey

A sample survey is used when the target population is large, and it is hard or impossible to study it as a whole. In a sample survey, a smaller group is selected for a closer look. In empirical research, the target population is the group of physical units that are under research. (University of Jyväskylä, 2015.)

Before gathering data, it is necessary to define who or what is part of the target population. Nardi (2014, 113) gives the following example: the population of all students on campus is the research. First, it has to be determined who is a student: only the full-time students, should the ones studying abroad be included or to use all the registered students were they in school or not?

The units in the selected target population are called samples. The samples are gathered by using data collecting methods. Samples make up the actual research data.

In general, census study leads to more accurate results than a sample survey. According to Routio (2007), it may be vice versa: as there is more time for each sample, the quality and the depth of the study may be

better. Also, when the target population is very large, it takes a lot of resources to make that research.

2.1.4 Statistics

Different statistical figures are used to present the qualities of research data. They describe the whole data as a single number which helps to understand the magnitude and range of the data. Some figures, like regression analysis, can be used to strengthen the conclusions of the research.

The central tendencies are used to describe the average or middle of the data. According to Myers et al. (2010, 15), common central tendencies are median, mean and mode. Median is the value that is in the middle of the data when it's arranged in order of magnitude. Mean is the average value when the sum of all values is divided with the number of values. The mode is the value that occurs most often in the data.

The measures of dispersion and variability describe how scattered the data is. They can be compared to the central tendencies. The range is a value that informs the difference between the lowest and the highest point of data. The interquartile range measures the range between the first and third quartile of the data. As it describes the dispersion of the mean 50 % of the data, it is used to give a more real picture of the data. The problem with range and interquartile range is that they observe only two points of the data. Standard deviation is more commonly used because it covers the whole data. Standard deviation tells how much every value in the data varies from the mean. In other words, it describes how tightly the values are located around the mean. This is a more reliable way to observe the dispersion of the data. (Myers et al. 2010, 20.)

The correlation coefficient is a statistic that indicates how strongly two variables are related or are they at all. The product moment correlation coefficient, also known as the Pearson correlation, is a number that ranges from -1.0 to +1.0. Higher the value is, stronger two variables are related to each other. Practically this means that if X and Y are related, the correlation is higher than 0, the value of Y should grow as X grows. (Myers et al. 2010, 444.)

It is important to understand that correlation does not imply causality. Correlation can be a coincidence or there can be a third factor which is the actual reason for correlation. The correlation coefficient may give a hint of causality, which validation requires more research. (Myers et al. 2010, 457.)

Regression analysis is a method to observe the relationship and possible causalities between two or more variables. It is used to evaluate the

predictability of the model and the reliability of prediction. Regression analysis shows how strong this relationship is and if it's statistically significant. Statistical significance is the probability for the existence of a relationship between variables. Statistical significance can be notified in three levels: 95, 99 or 99.9 % (Tilastokeskus, 2019).

Statistical significance defines the risk level for the results. If the statistical significance is 95 %, the results leave a 5 % possibility that they are wrong.

As the variables are shown in the chart, the regression line will demonstrate the possible relationship between the variables. The slope of the regression line is the regression coefficient. Regression coefficient tells how much the dependent variable changes if the explanatory variable changes one unit. Closer the variables are to the line, more reliable is the predictability. (Tietoarkisto, 2008.)

2.2 **Comparative research**

Comparing things is the natural behavior of thinking for humans. That makes it a practical approach also for research. Comparison is a way to express the features and specifics of something. (Kekkonen 2008, 33.)

Comparative research is a research method where the similarities and differences of two or more groups or phenomena are explored. Comparative research can be based on quantitative or qualitative data. The units in data are standardized to make them comparable. (University of Jyväskylä 2010).

According to Routio (2007), comparative research applies well on situations where there is a collection of units that belong to the same group but has some different features. In this case, sustainable funds are part of the group of mutual funds.

In comparative research, the similarities and differences are compared by selecting essential features for the research. Features that are identical through the group, are not included in the comparison. (Routio 2007).

For collecting research data, the same methods can be used as mentioned earlier in the quantitative research paragraph. It is essential to make sure that the data is comparable: the old idiom "comparing apples and oranges" refers to this problem. There are apparent differences between apples and oranges, as fruits they belong to the same group, but comparing them doesn't provide any value and is not practical.

As Kekkonen (2008, 33) points out, everything can be compared to each other, but at the same time, everything is more or less unique. That's why it is important to carefully select the objects for comparison.

The comparative research method is used in this thesis to detect the possible differences between sustainable and traditional funds. The selected features for comparison are annual returns, costs, sustainability and Active Share-rating.

3 INVESTING

Investment is an agreement where money or other resource is given away in exchange for future profits. The profit is a reward for the investor. Profit consists of two elements. The first element is that the investor is not able to use the money that is invested in something. The second element is that there is always an uncertainty if the money returns. (Nikkinen et al. 2002, 9.)

Another way to define investing is through consumption. Warren Buffet, regarded as one of the most successful investors all time, writes that "investing is forgoing consumption now in order to have the ability to consume more at a later date". (Buffet 2012, 17.)

The uncertainty of profits and returns are called risk. Risk is the possibility of loss. The loss can affect both capital and profits and can vary between different investments. Risk consists of several factors which also vary between different investments. The factors are for example inflation and interest rate risk, market risk, business risk, financial risk and liquidity risk. All these factors effect on the possible profits. Risks are often regarded as an unpleasant thing, but risks are a natural part of investing, which enables the potential for high profits. The investor is always observing the balance between profits and risks.

3.1 A brief history of modern investing

Investing has changed during history and it has always reflected the current era. Originally investing was more a part of trade. The trade parties exchanged resources in order to create means of production. The investor received profits as products. Nowadays, the profits are the future money flows.

The first financial exchange to connect investors with investment opportunities was established in Antwerp in 1531. Amsterdam Stock Exchange was established in 1787. The first fund, the Presbyterian Minister's Fund, was created in Philadelphia in 1759 to ensure pensions for ministers and their families. (Reamer & Downing 2016; Worrow 2016.)

The first and the second Industrial Revolution (1760 – 1840 and 1860 - 1914) allowed investing for a larger public. This was due to innovations like steam power, radio and electric power. The New York Stock Exchange was established in 1792. (Reamer & Downing 2016.)

In the 20th century, first investing theories were published. These theories included concepts like asset pricing, risk and portfolio management and the evaluation of performance. Persons like Irving

Fisher and Harry Markowitz published theories that are still relevant. (Reamer & Downing 2016.)

The Great Depression hit financial markets in 1929. In the aftermath of the market crash, institutions like the Securities and Exchange Commission were established, which are still existing and were the basis for regulated markets. (Worrow 2016.)

Jack Bogle and Vanguard introduced the first index fund in 1976. In the 1980s, insider trading ended up with headlines as many traders were sentenced. It is believed that the Ponzi scheme by Bernie Madoff was originally started already in the mid-1980s. Madoff was arrested in 2008. (Reamer & Downing 2016.)

Global financial crisis burst in 2007 – 2008. It was because of so-called subprime mortgages. The crisis is said to be the worst since the Great Depression and it compromised the whole banking system.

Now, most of the trades are executed by algorithms and robot. The trade volume has multiplied many times. Information is available everywhere and all the time. Financial markets are more efficient than ever before. This development allows everyone to invest and prosper in financial markets.

3.2 **Investment instruments**

As this thesis is focusing on sustainable investing in modern financial markets, the presented investment instruments are the commonly used ones.

Shares are units that entitle to ownership in certain company. A shareholder is entitled to a share of the company's assets and yield. (Nikkinen et. al 2002, 12.) The yield can be paid out in the form of dividend for example. Shares are often regarded as a high-risk asset class due to the volatility share prices are facing. Shares are constantly priced in secondary markets like stock exchanges, which are the most known marketplaces. Volatility means how much profits differ from average.

However, in the long run, shares are by far the most profitable asset class. Higher risk and volatility are compensated by higher profits. (Leppiniemi 2002, 12). The difficulty is to identify the successful ones from the endless amount of companies and their shares. In general, this is the ultimate challenge of investing.

Bonds are debts that are issued to the market by the company or other operators like states. The idea of a bond is that the debt is split into smaller pieces which allows it to spread for a larger number of investors. Creditors are lending their money for the debtor. In exchange, creditors

receive interests which are one form of profits. At the end of the debt's maturity, the debtor returns the original investment.

Mutual funds consist of numerous shares, bonds or a combination of them. In mutual fund investors buys a share of certain fund which relocates the assets. In Finland, funds are managed by limited companies which are regulated by the act on common funds (Puttonen & Repo 2011, 53).

The mutual funds usually have a different theme or strategy which defines how the incoming assets are invested. Mutual funds are an easy way to make diversified investment portfolio. This thesis will compare sustainable investing through mutual funds. For this reason, mutual funds are explained more specifically in the next chapter.

3.3 **Mutual funds**

Mutual funds are investments that gather money from investors and purchase stocks, bonds or other securities with this money. The collected money and purchased securities together form a portfolio. (Fidelity 2018). Mutual funds can be active or passive. The active mutual funds have a portfolio manager who is responsible for selecting and overseeing the assets inside the portfolio. In passive mutual fund, the assets are selected by following a certain index. The idea is to gain a return which is equivalent to the index's return.

Mutual funds allow investors to reach diversification and more exotic markets in an easy way. Investing in mutual funds doesn't require a significant amount of money: in many cases, the minimum investment can be ten euros for example. The easiness and good availability are reasons for the popularity behind mutual funds. Banks and wealth management companies, for example, are providers who offer mutual funds for their customers.

In Finland, mutual funds offer tax efficiency, especially when investing in accumulation class. Accumulation class means that any income generated by the fund investment will be automatically reinvested back into the fund (Fundcalibre, n.d.). This saves the investor from paying taxes from the income. Another fund class is income class. Income class pays out some share of the income. The fund class can be often recognized from the fund's name, but at least it's mentioned in fund rules or Key Investor Information Document (KIID).

3.3.1 Profits

The selected asset class is the key driver behind the profits. Different assets classes have different profits and risks. Under the circumstances,

the first decision for the investor is to select an asset class, which suits one's goals and risk tolerance. Mutual funds can invest in one or many asset classes at the same time. Figure 5 expresses this clearly: stocks gives the best profit (average of 6.7 % per annum) in the long run but are more volatile than other asset classes. Real return means profits after inflation is reduced.

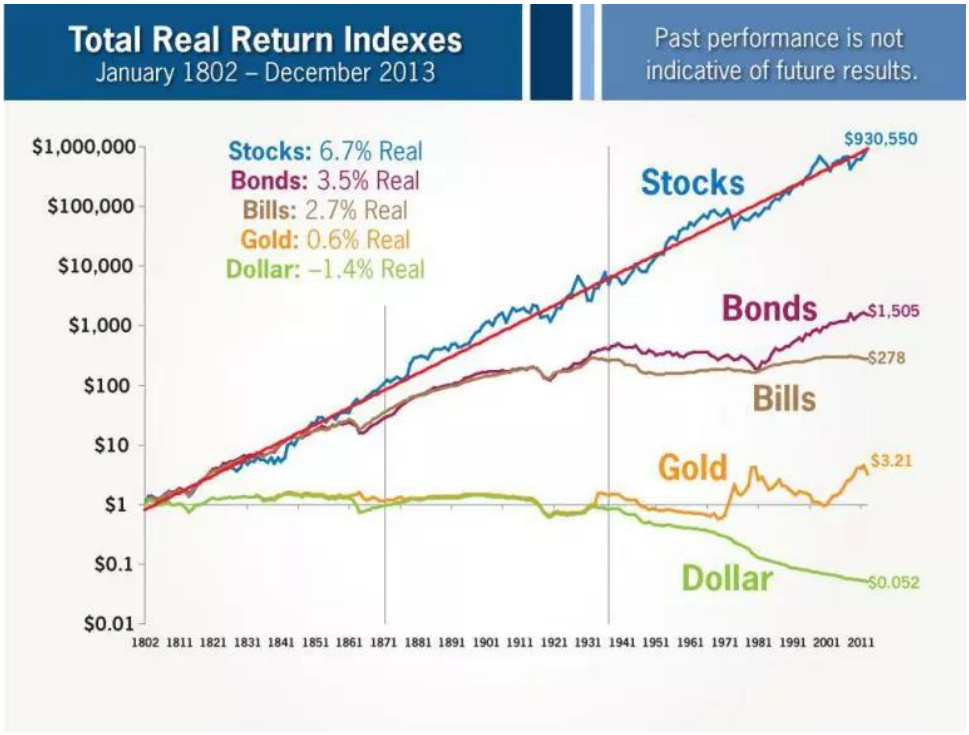

Figure 5 Total Returns on U.S. Stocks, Bonds, Bills, Gold and the Dollar, 1802-2013 (Siegel 2013).

Inside a certain asset class, it is still worth finding out some details. Markets and companies are spread over the world in different locations and currencies. Companies can be large or small, which can affect their liquidity in the market. All these elements offer a chance for profits, but also create risks. An investor should understand the whole or make sure that the fund manager understands.

Another option is to settle for average market profits which are still rather good. The investor is also able to save in costs because there is no need for the fund manager. Settling for average market profit is easy and efficient: just choose a suitable passive index fund. Passive index funds have become mainstream nowadays. According to George Watson (2017), PwC defines that passive assets are to grow in 37 trillion by 2025. PwC also defines that as assets invested in markets grow in overall, the passive assets are taking a rising percentage of the amount.

3.3.2 Costs

Professional management, easiness and availability sound good for investors. The companies providing these kinds of services are taking their cut of money invested as a fee. Fees are percentages charged from the invested money.

Like in every investment, in mutual funds too, it is important to understand that costs are running all the time and in every market condition. If the fund manager fails and creates losses for the investors – the costs are still running. The costs are the only sure thing in investing. And they matter a lot. A simple calculation in Figure 6 demonstrates how much a 0.5 difference makes in ten years.

	Fund A	**Fund B**
Investment	10 000 €	10 000 €
Fee / year	1,00 %	1,50 %
Total amount after 10 years before fees	25 937 €	25 937 €
After fees	24 274 €	23 507 €
Difference	767 €	

Figure 6 Investment period is ten years. Return per year is ten percent. (Möttölä 2008, 86.)

The costs are documented in the Key Investor Information Document (KIID) that is required by the law. It also includes other useful information such as a description of calculated returns, risks and investing policy.

There are several kinds of fees that are charged: management fee, subscription and redemption fees and a performance fee. Different funds and fees can be compared by using the total expense ratio (TER) measure. TER simply tells how much costs were charged from the fund capital. TER is good for use, because sometimes the annual management fee doesn't include costs like trading fees, legal fees and other operational expenses. (Investopedia 2018.)

The fees vary depending on which asset class is the fund investing in and if the fund is active or passive. Generally, equity funds are more expensive than bond or hybrid funds. Hybrids funds are funds that are investing in both, equities and bonds. Also, active funds are more expensive than passive funds. In recent years, the fees have decreased in overall because of the high demand of the index funds. For investors, this is obviously a good development.

Figure 7 below shows this development from the year 2000 to 2017. Note that the expenses shown are averages. There is no reason to pay above these averages if the fund can't deliver better returns in exchange for higher expenses.

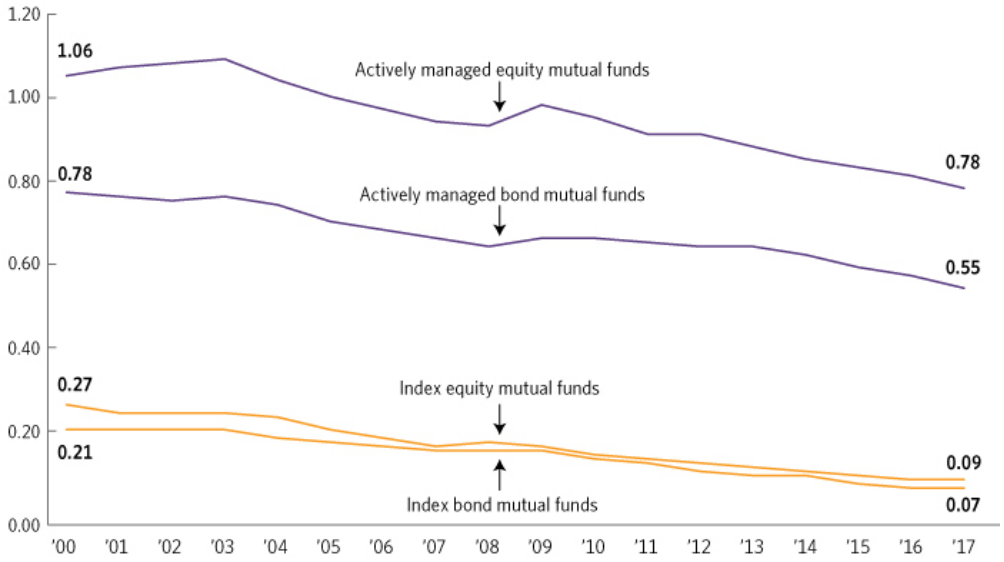

Figure 7 The development of fund expenses in US (Investment Company Institute 2018, 126).

In 2018 the trend has been the same: according to McCullough (2019), investors paid less to own funds than ever before in the United States. The asset-weighted average expense ratio declined 6 % from the previous year and was 0,48 %. McCullough (2019) adds that investors saved about 5,5 billion dollars in expenses compared to the previous year.

As the United States is still the hearth of investing and the birthplace of passive index funds, the expenses of investing are the lowest. In Europe and in Nordics, the expenses are higher especially for household and private investors. Still, the same trends are and will affect in Europe and Nordics too.

3.3.3 Active Share-rating

Active Share-rating tells essential information for the investor, who is investing in an actively managed fund. Active Share-rating tells how much the fund investments differ from its benchmark index. Higher difference results in higher Active Share-rating. High Active Share-rating means that the fund is truly active. This connects to costs: active funds are more expensive and therefore investor should gain active management. If the active fund has a low active share, the investor should rather invest in a passive index fund.

Active Share-rating is valued between 0 – 100 %. Value of zero means that the fund is a duplicate with the benchmark index. Value of 100 means that the fund has no common investment with the benchmark index.

The following simplified example in Figure 8 shows how active share is calculated. In real life, there are more than five investments inside a fund.

Investment	X Weight in fund, %	Y Weight in benchmark index, %	X - Y Active weight, %	Absolute value of active weight, %
A	20	15	5	5
B	15	0	15	15
C	35	25	10	10
D	0	20	-20	20
E	30	40	-10	10
Total	100	100	0	60

Figure 8 Active share calculation (Khusainova & Mier 2017, 2).

The example in Figure 8 gives an active share of 60 % which is regarded as a threshold for so called “closet-indexers” (Khusainova & Mier 2017, 4). A closet indexer means fund management that is claiming to manage the fund actively and is charging active management fees but is actually staying close to the benchmark index. This kind of behavior is misleading the investors because they are not receiving what they are told by the fund. (European Securities and Markets Authority 2016).

Active Share-rating of 20 % or less, is regarded as an index fund. Value of 20 – 60 % refers to a closet indexing. An active fund should have a value of 60 % and preferably even higher. Investor should understand which kind of investment policy the fund manager has, and engage to this decision.

3.3.4 Tracking Error

Tracking Error is another tool to evaluate fund activity. It is also called as active risk. Tracking Error reveals how much the fund performance differs from its benchmark index. Low Tracking Error means that the fund performance is similar to the benchmark index’s performance. This means that passive index funds have low Tracking Error with a good reason. On the contrary, actively managed funds should have higher Tracking error.

Tracking Error doesn’t inform which way the fund performance differs. High Tracking Error can mean that the performance may have differed to a negative way. Tracking Error doesn’t include information about the fund’s absolute performance.

Tracking Error can be calculated in two ways. The first way is simpler. As an example, fund X return for the previous twelve months is six percent and the benchmark index return is 5.5 %. This subtraction creates Tracking Error of 0.5 %.

Another way to calculate Tracking error is based on the standard deviation between fund and benchmark index performance over time. The form is presented in Figure 9 below.

$$TE = \sqrt{\frac{\sum (F - I)^2}{N - 1}}$$

Figure 9 Formula for Tracking error (Study.com 2019).

Example of calculation goes as follows:

Time	Fund X performance	Benchmark index performance
1	6.5 %	4.5 %
2	7 %	4 %
3	5 %	5.5 %

Figure 10 Calculation of tracking error

1. Calculate Tracking error for each time period by subtracting performances: 2 %, 3 % and -0.5 %.
2. Square each value: 4 %, 9 % and 0.25 %.
3. Sum these values: 13.25 %.
4. Divide the sum with time periods (N – 1): 6.625 %.
5. Take square root of 6.625 %: 25.74 %.

Tracking Error of 25.74 % in Figure 10 would be extremely high in real life. Usually, the value of Tracking error stays under 10 %. Several attributes determine the Tracking Error. Markets and sectors may impose limitations for options to take the active risk. Management fees and other costs also create a difference between fund and benchmark index. Funds are getting new investments and some investors are withdrawing their investments, which create capital flow in and out of the fund. For these reasons, even a passive index fund has Tracking Error above 0.0 %.

According to Helena Ranta-Aho (2016), Morningstar study (2016) states that even a one fifth of mutual funds investing to European market are closet-indexers. This highlights the problematics for investor: low activity, but high costs.

According to Ranta-Aho (2016), Matia Möttölä (2016) states that the best way to use Active Share-rating and Tracking Error is to use them simultaneously. According to Ranta-Aho (2016), Möttölä (2016) adds that

neither of these tools, however, don't tell which fund will succeed in the future.

3.4 **Efficient markets hypothesis**

The function of financial markets is to allocate capital in targets where it is the most useful. Usefulness is determined by the profitability of the investment. This happens if the financial markets are efficient. The efficiency is processed through information. The hypothesis is that all prices in the markets reflect the available information. This means that it would be impossible to overperform markets because the prices react only to new information, all the current information is already available, and this shouldn't affect the prices anymore. Therefore, market changes appear random and unpredictable: nobody knows the new information in advance. Otherwise, it wouldn't be new.

If the markets wouldn't be efficient, illogical events would appear. As an example, let's assume that a company, which share price is ten euros, makes a new deal that increases its annual profits by ten percent. Analysts calculate that after this new deal is delivered, the fair price for the share would be 11 euros. If nothing happens to the share price, an investor could buy shares with ten euros and gain secured ten percent profit when selling them with 11 euros. In efficient markets, the share price increases instantly after the new deal is published, because the share price reflects new information. (Nikkinen et al. 2002, 80 – 82.)

Eugene Fama's efficient markets hypothesis includes three levels of efficiency that is connected to the accessibility of information in the markets. These three levels of efficiency are a weak, a semi-strong and a strong form of efficiency.

Weak form of efficiency means that all the prices in the markets include the historical information about prices and trades. This means that markets are efficient enough to make technical analysis useless. In modern days, this kind of data is easily available in digital form. (Morningstar n.d.)

Semi-strong form of efficiency means that all the public information is available and the prices in the markets are reflecting this information. Examples of public information are annual and quarterly reports, press releases, dividends, analysis and profitability forecasts. The hypothesis claims that the semi-strong form makes fundamental analysis useless as all the public information is already affecting the prices. As the information in the weak form is also public, the weak form of efficiency is included in the semi-strong form which is expressed in Figure 11. (Morningstar n.d.; Nikkinen et al. 2002, 83.)

In the strong form, even the unpublished and inside information is reflected by the prices. This may seem odd, but the idea is that for example inside information is used to gain an advantage in the markets. And this will affect the prices. Note, that using inside information is against the law. In the strong form of efficiency, it is impossible to make excessive returns. Therefore, the only rational way of investing would be passive index investing. (Nikkinen et al. 2002, 83-84.)

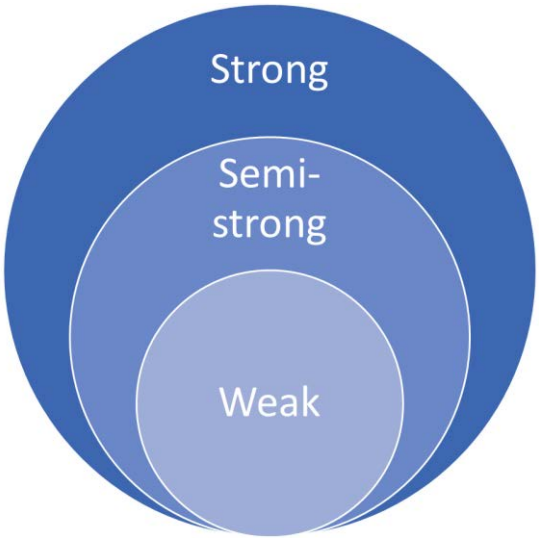

Figure 11 Three forms of market efficiency. A lower form is always included in the upper one (Nikkinen et al. 2002, 84).

Another dimension of efficiency is the technical part. It contains attributes like liquidity, effective communication and modern trading technology. These attributes highlight especially in smaller and emerging markets, but also in single companies. In general, the more liquid certain market or company is, the more reliably the prices reflect the true value (Leppiniemi 2002, 63).

Leppiniemi (2002, 62) demonstrates this dimension with an example by Kari Salonen, Danske Capital wealth manager, from the Tallinn stock exchange: if a Finnish bank would start a relatively small fund with invests of 17 million euros, the prices would soar at least 20 percent.

The debate if the financial markets are efficient or not has been long and is continuing. Conclusions and opinions divide economists, but it is safe to say that market efficiency has strengthened all the time: the speed and the amount of communication is growing, which strengthens the efficiency.

The general opinion and the consensus are that financial markets are somewhere in the middle of semi-strong and strong forms. At least the history has proven that overperforming the average returns regularly is very hard, if not impossible, in the long run. This conclusion makes efficient market hypothesis important for this thesis: could such a simple theme as sustainable investing prove so profitable as claimed?

4 SUSTAINABLE INVESTING

4.1 Definition of sustainability

The origin of the word sustainability is the Latin verb *sustinere*. Literally, in English, it means "to hold". To sustain has many meanings in English. In this frame, it means to endure. Staub-Bisang (2012, 9) defines sustainability as the capacity to endure. Depending on the perspective, sustainability has different dimensions.

From the ecology perspective, sustainability describes how biological systems remain diverse and productive. From the human perspective, sustainability means human well-being with environmental, economic and social responsibilities. (Staub-Bisang 2012, 9.)

Another definition of sustainability is the one already stated in the beginning of this thesis. World Commission on Environment and Development defines sustainability as follows: "Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs". The commission means that sustainability implies limits that are dependent on the current state of technological development, political will and the direction of investments. The limits are not absolute, but every generation must work towards as sustainable future as possible. Simply put, the idea of sustainability is not to use more resources than is necessary. (World Commission on Environment and Development 1987, 16.)

4.2 A brief history of sustainability

Today sustainability has become a necessary megatrend. The awakening of sustainability, however, goes far into history. In 1592, the Prince Bishop of Eichstätt of Bavaria in Germany adjusted a law for forest management as he was alarmed by the destructions of forests in his region. In the early 18th century, Hans Carl von Carlowitz became the first one to define the concept of sustainability in his work on forestry, Sylviculture Oeconomica. Von Carlowitz was worried about the scarcity of timber as the mining industry had consumed the local forests. Von Carlowitz limited the timbering of the trees to a number that was expected to grow back. (Staub-Bisang 2012, 10.)

The United Nations has had a significant role in sustainability. In 1983, the United Nations founded the World Commission on Environment and Development. Four years later, the commission released the report Our Common Future, also known as the Brundtland report. Norwegian prime minister Gro Harlem Brundtland was the first chairman of the commission. (Staub-Bisang 2012, 10.)

The Kyoto Protocol was committed by industrialized nations in 1997. The Kyoto Protocol had a target of reducing the carbon dioxide emissions by five percent by the year 2012 as compared to 1990 levels. (United Nations Framework Convention on Climate Change 2008, 12.)

As written above, the firsts steps of sustainability were taken when realized that using resources more than is sustainable, will lead to problems.

4.3 **The 17 sustainable development goals by the United Nations**

The United Nations have defined 17 sustainable development goals in their 2030 Agenda for Sustainable Development. The agenda was adopted in 2015. In the agenda, member countries “recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth - all while tackling climate change and working to preserve our oceans and forests”. (The United Nations, n.d.)

The 17 sustainable development goals are:

1. No poverty
2. Zero hunger
3. Good health and well-being
4. Quality education
5. Gender equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, innovation and infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible consumption and production
13. Climate action
14. Life below water
15. Life on land
16. Peace, justice and strong institutions
17. Partnership for the goals

The goals aim for comprehensive better and sustainable future for everyone on the planet including humans, animals and nature in environmental, social and governmental levels.

4.4 Definition of sustainable investing

Sustainable investing is a broad term and there are many definitions of it. It is used in various contexts to cover all sustainability-related themes in the field of investing.

Now, the most common definition of sustainable investing is based on environmental, social and governance issues, also known as the ESG factors. Sustainable investing is an investment strategy or philosophy that combines these factors with the financial objectives that have been set for the investment (Staub-Bisang 2012, 12.)

4.5 A brief history of sustainable investing

According to Fulton in his study for Deutsche Bank (2012, 18), sustainable investing has four states or periods in its history, see Figure 12 below. Deutsche Bank defines the first period as ethical investing, which started by religious groups like Quakers in the 1500s. In practice, this meant that these religious groups avoided investments that conflicted with their principles of religion. In the 20th century, the church driven by Christian values was against alcohol, gambling and tobacco. The first ethical mutual fund, Pax World Fund, was established in 1971 in the ongoing wrangling of the Vietnam War.

The second period was called as early socially responsible investing (early SRI). The values were still the main driver for sustainable investment decisions. In this period, sustainable investing took a closer view for the companies: social, ethical and environmental behavior of companies were observed. The Brundtland report with its definitions of sustainable company and the UN in overall were driving forces as sustainable investing started to become more mainstream. (Fulton et al. 2012, 20.)

Early SRI developed to its current state from the late 1990s to the present time. Early SRI developed as an actual investment strategy which underlined environmental, social and governance (ESG) factors, but was also seeking returns. This is the current SRI period. The main difference between early and current SRI is that the current SRI doesn't seek value over returns. The modern investment screening techniques allow investors to gain both values and returns. (Fulton et al. 2012, 20.)

ESG is the most modern state of sustainable investing which started in 2003. Governance was highlighted as a success factor by investors which shaped current SRI as ESG. In 2006, the UN Secretary General Kofi Annan refined ESG factors as principles of responsible investing, settled ESG as the trend of sustainable investing. (Fulton et al. 2012, 20.)

Sustainable investing is a progress that has and will develop over time. The original principles are still there although modern strategies and

techniques are the current tools to implement sustainability in for investing. The institutional investors have been in the first wave of sustainable investing in every period and still, they are leading the way. However, household and private investors have an increasing opportunity to take sustainability issues into account.

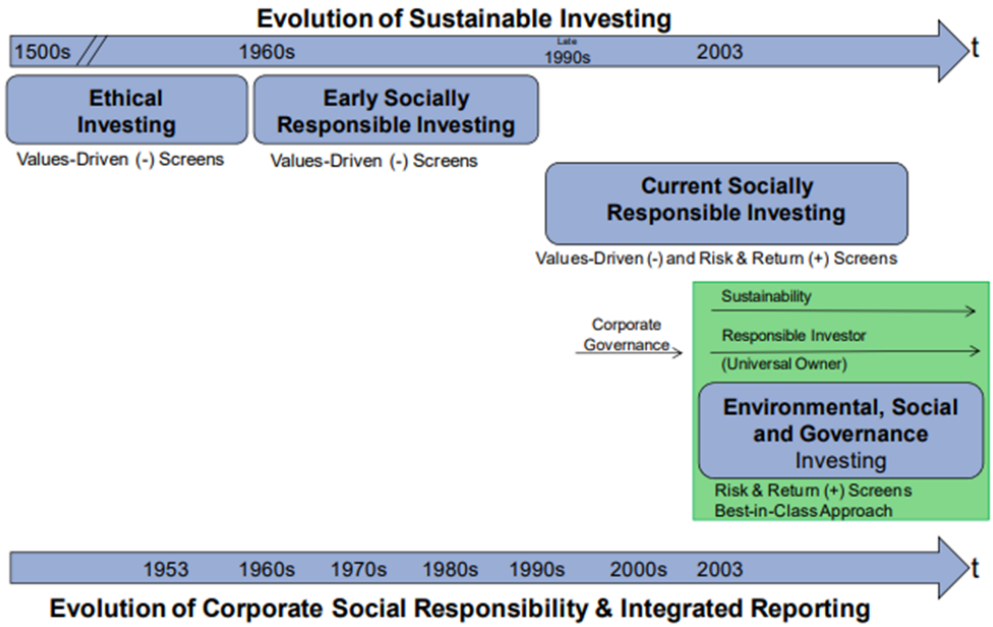

Figure 12 Evolution of Sustainable Investing (Fulton et al. 2012, 18).

4.6 **ESG**

Term ESG is often used as a synonym for sustainable investing. Literally, ESG stands for environmental, social and governance factors as a part of the investment process. These factors are noticed alongside financial factors, which obviously are the key factors for a good investment. (MSCI 2019.)

Staub-Bisang (2012, 13) defines ESG in the wake of Kofi Annan as the three pillars of sustainability. ESG investments embrace all these main elements. However, ESG doesn't mean that other concerns like ethicality should be excluded. Rather, those can be used in addition.

According to MSCI (2019), the benefits of ESG are higher profitability, lower tail risk and lower systematic risk. MSCI states that high ESG-rated companies often have higher profitability and dividend payments than low ESG-rated companies. Lower tail risk means that high ESG-rating leads to a lower likelihood of major incidents. Lower systematic risk means lower systematic risk exposure, lower volatility and lower costs of capital.

Environmental factor means that issues related to nature and its sustainability are taken in concern. The idea is to think the environment at both ends of company actions. How to: reduce carbon emissions and

footprint, save water, take care of biodiversity, reduce waste and toxic. These actions are basically transforming the current operations. Equally important is to invest in new opportunities like clean tech, green buildings and renewable energy. (MSCI 2019.)

Social factor includes issues like customer satisfaction, data protection and privacy, gender and diversity, employee engagement, community relations, human rights and labor standards. Social issues are often related to the company's brand and reputation. Through this relation, it effects on customer behavior and in the end company's turnover and profitability. Good examples of social responsibility are clothing manufacturers which have had poor employee conditions in their supply chain in developing countries. The publicity of these things has forced companies to take more social responsibility. (CFA Institute 2015, 13.)

Governance factor focuses on the company's administrative processes and management. Practically it means accounting, board and management diversity, executive pay, business ethics, tax transparency and corruption. Governance issues have been the most covered ESG factor historically as they are tied to financial reporting and analysis. (MSCI 2019; CFA Institute 2015, 14.)

Figure 13 above binds together the ESG-issues and the main themes inside each theme.

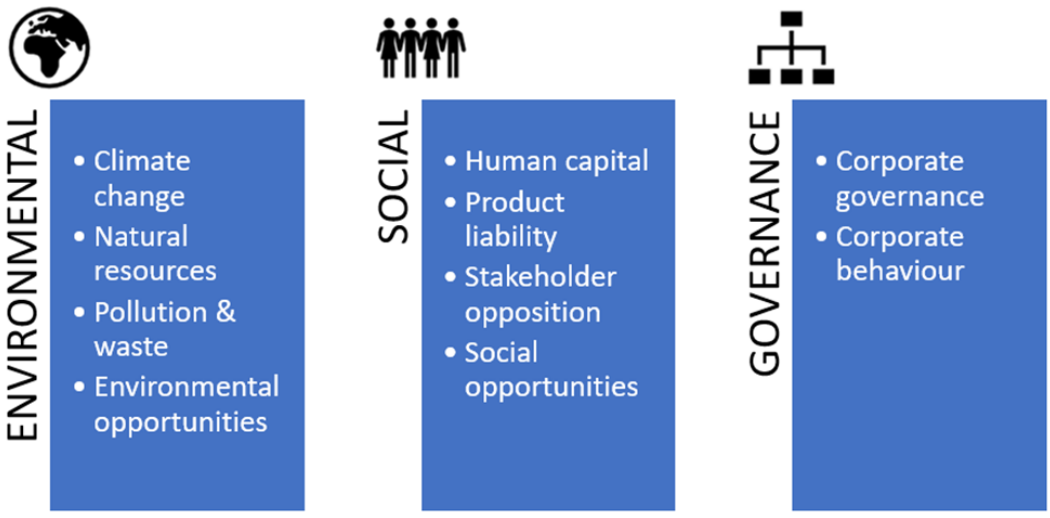

Figure 13 ESG factors and issues (MSCI 2019).

4.7 **ESG strategies**

There are several strategies to approach ESG factors in the investment process. Depending on the investor or investment manager, single or many strategies can be used simultaneously. The goal for ESG strategies is that it leads to an investment that is absolutely or relatively sustainable than average investment. However, there are strategies which may lead

to an investment that is less sustainable than average. The strategies still have the same goal, but different approach. Higher sustainability requires a more active role and time from the investor in strategies like active ownership.

Exclusionary screening is the simplest ESG approach and strategy. Screening totally excludes companies or whole sectors that disagree with ESG factors, moral values or common standards. Depending on the decision, exclusionary screening can exclude products like alcohol and tobacco, services like gambling and companies or sectors that are violating human rights or environmental protection. The problem with exclusionary screening is that it ignores the economical side entirely. Some sector is totally forbidden, no matter how great the potential return is. (CFA Institute 2015, 17.)

Best-in-class selection means that investor selects companies that have higher ESG attributes than their peers. This strategy doesn't exclude any particular sector but favors the most sustainable companies inside it.

Active ownership means that the investor is actively trying to influence the company's sustainability from the inside. As other exclusionary screening and best-in-class selection favors already sustainable companies, active ownership is willing to create one. Change to a more sustainable company takes time, money and other resources. Active ownership has similar features and means with activist investing. These means are voting in shareholder general meetings, meeting with the company management, gaining a seat on the board, issue a complain to regulators or authorities and issuing statements to the media. As seen in these examples, sometimes change needs painful actions to achieve a better future. (CFA Institute 2015, 20.)

ESG integration is a strategy or approach that fully integrates the ESG factors to investment analysis. ESG integration means that environmental, social and governance risks and opportunities are considered during the investment decision process. Sectors like mining or oil production include high environmental risks. These risks and the potential costs of those are considered when valuation for the company is calculated. Simply put, companies that have high ESG risks, need a higher risk premium to get invested. Unlike other strategies, ESG integration includes sustainability issues in any other strategy used. It is not a separate or individual approach for ESG issues.

4.8 **Principles for Responsible Investment**

Principles for Responsible Investment (PRI) is a program that aims for more sustainable investments and financial world. The foundation of the program are six principles that include ESG issues into investment process.

The PRI was established in 2005 by the United Nations Secretary-General Kofi Annan. The world's largest institutional investors were invited to develop the principles. The principles were published in 2006 in the New York Stock Exchange. (PRI 2019, 5.)

The Principles for Responsible Investment are:

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

The principles are made by investors for investors. This ensures that they recognize the needs of the financial world, but also drives the ESG issues in to the industry. Different investors can engage to these principles by signing them with the PRI program. Since the 2006 publish there have been over 2 300 signatories. The PRI has an academy which offers education and training for implementing the principles and ESG issues. The PRI is funded by annual membership fees from the signatories and donations from governments and other organizations.

4.9 **Morningstar sustainability score**

Morningstar Sustainability Rating (MSR) was released in 2016. Morningstar provides sustainability rating to help investors to evaluate fund sustainability in an objective way. According to Hale (2017, 24), "the MSR is a measure of how well the companies held in a portfolio are managing their ESG risks and opportunities relative to portfolios within the same Morningstar category".

The MSR is issued monthly and according to Chen (2018), it includes around 20 000 mutual funds and ETFs. The MSR is based on three step process. First, the Morningstar Portfolio Sustainability Score is calculated for every fund portfolio. Second, these scores are continuously used to calculate a portfolio's Morningstar Historical Portfolio Sustainability Score. The third step is to give the MSR rating for a portfolio based on its Morningstar Historical Portfolio Sustainability Score relative to its Morningstar Global Category. (Morningstar 2018, 1.)

The MSR is calculated to a fund portfolio through underlying company-level ESG-ratings. These ESG-ratings are based on Sustainalytics ESG-ratings. Sustainalytics is an ESG-rating company which is part owned by Morningstar. Sustainalytics ESG-ratings are relative inside the same sector or industry and they use a scale of 0 – 100. To make the ratings comparable across different sectors and industries, Morningstar normalizes these ratings. (Morningstar 2018, 2.)

With a score of 50, company positions at the average level of the peer group. Scoring a rating over 70 requires at least two standard deviations above average. Rating of 60 requires one standard deviation above average and rating of 40 one below. A score of 30 or less, is given with two deviations below average. (Morningstar 2018, 3.)

Normalized ESG-ratings make up the Morningstar Portfolio Sustainability Score. The Morningstar Portfolio Sustainability Score covers all the securities in the portfolio that has ESG-rating. 67 % of the portfolio securities must have ESG-rating. Otherwise the Morningstar Portfolio Sustainability Score is not added and the fund can't have its final MSR. The score is always rescaled to 100 %. (Morningstar 2018, 3.)

The second step in the MSR process is Morningstar Historical Portfolio Sustainability Score. It is the average of the trailing 12 months of the Morningstar Portfolio Sustainability Score. This way Morningstar adds more consistency to the process.

In the third phase, funds are assigned their absolute Morningstar Sustainability Rating and they are ranked inside their Morningstar Global Categories. The category must include at least 30 funds with Historical Portfolio Ratings. Otherwise, the ranking will not be formed for the category.

In addition to the absolute MSR, Morningstar uses a globe icon to describe the fund's rating inside its category as expressed in Figure 14. Highest ten percent is given five icons, next 22.5 percent are given four, next 35 percent three, next 22.5 percent two and the last ten percent one.

Distribution	Score	Descriptive Rank	Rating Icon
Highest 10%	5	High	
Next 22.5%	4	Above Average	
Next 35%	3	Average	
Next 22.5%	2	Below Average	
Lowest 10%	1	Low	

Figure 14 Morningstar Sustainability Rating (Hale 2017, 25).

The MSR is a practical tool for an investor to evaluate the sustainability of the portfolio holdings, but the absolute decision still leans on personal values and choices. As the MSR is relative to its category, it's important to understand that the MSR values shouldn't be compared across different categories.

4.10 **Other sustainability ratings**

Morningstar Sustainability Rating is just one of many sustainability ratings. Sustainable investing can be approached in many strategies and the approach is also the main difference between different sustainability ratings.

CDP is a charity organization that produces information and scoring for investors, companies, cities, states and regions to evaluate and manage their environmental impact. CDP scoring is based on climate change, water and forests themes. The rating scale is from D- to A. The scoring is conducted via questionnaire which is used to calculate the scoring. The answers and the results are dealt with the respondent. This way the responders will get clear picture of their current situation but also instructions on how to improve their environmental affairs. (CDP 2019, 8.)

MSCI ESG Rating is a relative rating that evaluate companies ESG issues through three pillars, ten themes and 37 different key issues. The key issues are selected annually. The rating scale is from AAA to CCC and the rating is relative to the industry peers. The pillars, themes and key issues are presented in Figure 15.

3 Pillars	10 Themes	37 ESG Key Issues	
Environment	Climate Change	Carbon Emissions	Financing Environmental Impact
		Product Carbon Footprint	Climate Change Vulnerability
	Natural Resources	Water Stress	Raw Material Sourcing
		Biodiversity & Land Use	
	Pollution & Waste	Toxic Emissions & Waste	Electronic Waste
		Packaging Material & Waste	
	Environmental Opportunities	Opportunities in Clean Tech	Opp's in Renewable Energy
		Opportunities in Green Building	
Social	Human Capital	Labor Management	Human Capital Development
		Health & Safety	Supply Chain Labor Standards
	Product Liability	Product Safety & Quality	Privacy & Data Security
		Chemical Safety	Responsible Investment
		Financial Product Safety	Health & Demographic Risk
	Stakeholder Opposition	Controversial Sourcing	
	Social Opportunities	Access to Communications	Access to Health Care
		Access to Finance	Opp's in Nutrition & Health
Governance	Corporate Governance*	Board*	Ownership*
		Pay*	Accounting*
	Corporate Behavior	Business Ethics	Corruption & Instability
		Anti-Competitive Practices	Financial System Instability
		Tax Transparency	

Figure 15 The structure of the MSCI ESG Rating (MSCI 2018, 4).

Corporate Knights, media and investment research company, publishes the ranking list of the most sustainable companies annually. The ranking list is called the Global 100. The ranking process includes about 7 500 companies and over 3.7 million data points. (Strauss 2019.)

Corporate Knights' sustainability assessment is process includes four steps. The first step is the Starting Universe, which means public-listed companies with gross revenue of one billion dollars or more. In the second step, companies are screened for sustainability disclosure practices, financial health, product categories and behaviour and for financial sanctions. Companies that pass the screening process, are accepted for the Global 100 Shortlist. In the third, selection, phase the shortlisted companies are scored with 21 different key performance indicators like: resource, employee and financial management, clean revenue and supplier performance. In the last phase, the Global 100 ranking is published. The ranking includes top performing companies within each subsector. (Corporate Knights n.d., 4.)

4.11 **Criticism against sustainability ratings**

The process of sustainability ratings is not fully transparent. This causes uncertainty on the reliability of the sustainability ratings. As services providers like MSCI or Sustainalytics are companies aiming for profit, they do not open all the processes which effect on the company's

sustainability rating. This leads to a situation where someone is deciding what sustainability means but is not opening up the definition as a whole.

According to Leskinen (2016), even small practical differences in sustainability, may lead to a high difference in the sustainability ratings. This happens because of the relative distribution of the rating. Leskinen (2016) adds, that the ratings measure only the current portfolio, but not the actions or the impact on the companies. Fund could invest in low rating companies and could still be very sustainable by affecting the companies from the inside.

Active ownership is an example of a strategy which actions be very sustainable but may lead to low ratings. Traditionally mutual funds haven't actively used their voting rights, but in the terms of sustainable investing, the mutual funds have activated. According to Braham (2017), Morningstar knows the limitations of the MSR. Therefore, Morningstar is planning to update their MSR process and try to pay more attention to the actions of ownership, like using the voting rights in general meetings.

5 EMPIRICAL STUDY

The hypothesis of the thesis is that the funds with high sustainability ratings give higher returns than the funds with low sustainability ratings. The hypothesis assumes that sustainable investing offers same benefits for the household and private investors that are confirmed for the institutional investors in previous studies.

The study will give answers for the following questions:

- Do sustainable mutual funds offer higher returns than traditional mutual funds or market indices?
- How the costs of sustainable mutual funds settle in overall?
- How sustainable are sustainable mutual funds?
- Are sustainable funds really active or not?

In this part the data for the study is introduced, its attributes and findings are processed.

The selected significance level for the study is 5 % because of the small amount of the samples. Some of the desired attributes were not available in single funds. Also, because the past performance does not guarantee future results, it is not pleasant to set higher significance level for this study.

5.1 Presentation of research data

Research data were manually collected from Morningstar websites. Morningstar is a sovereign investment analysis company that provides analysis and data for mutual funds, exchange-traded funds and stocks. Morningstar is focusing on analysis and data services. As Morningstar is not selling investments products or services, its data can be held unbiased.

The research data was collected in February 2019. The data includes information from 188 mutual funds from 24 service providers which are Finnish banks, brokerage and investment firms. The figures that were gathered are annual returns of one, three and five years, running costs, Morningstar Sustainability Rating, Active Share-rating and Tracking error.

As Morningstar doesn't provide information on Active Share-rating or Tracking error, these figures were gathered from fund managers webpages and annual, semi-annual or monthly fund reviews. Data was collected between 25th and 28th February 2019.

This research focuses on equity funds. The funds included in the research data are all in euros and accumulative class. By this solution, the effect of currencies is neutralized, and the returns stay comparable.

5.2 Sustainability

The sustainability of the funds is first introduced as sustainability and its potential impact is the basis for this research. Sustainability is observed through Morningstar Sustainability Rating and MSR-classes. Funds included in the research data distribute in MSR classes as follows in Figure 16.

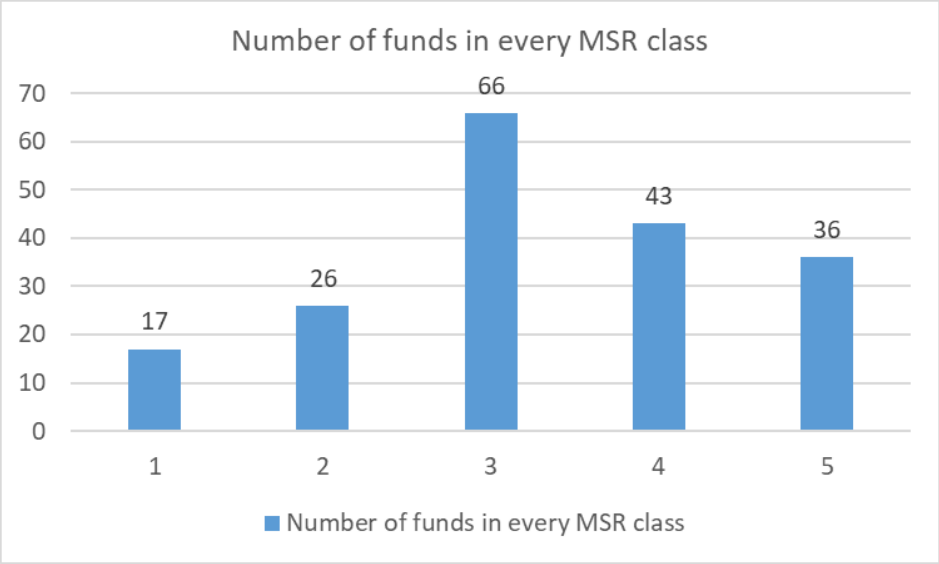

Figure 16 Number of funds in every MSR class.

17 funds (9,04 % of all) have low sustainability rating and 26 (13,83 %) have a sustainability rating below average. 66 funds (35,11 %) have average sustainability. 43 funds (22,87 %) are above average and 36 funds (19,15 %) place in the highest sustainability class with five icons.

As seen in the following table in Figure 17, the research data represent funds that are more sustainable than average when using MSR. The best class exceeds the basic distribution with 9.15 percentage points.

MSR distribution	Score	Research data distribution	Difference
Highest 10 %	5	19.15 %	9.15 pp
Next 22.5 %	4	22.87 %	0.37 pp
Next 35 %	3	35.11 %	0.11 pp
Next 22.5 %	2	13.83 %	-8.67 pp
Lowest 10 %	1	9.04 %	-0.96 pp

Figure 17 Comparison between MSR and research data distribution.

The lowest MSR in the research data is 35,08 and the highest is 60,66. Average MSR is 50,11. The MSR distribution is presented in Figure 18

below. These numbers support Hale's (2017, 24) conclusion that most of the companies settle between 30 and 70 which results in the same scale in the funds.

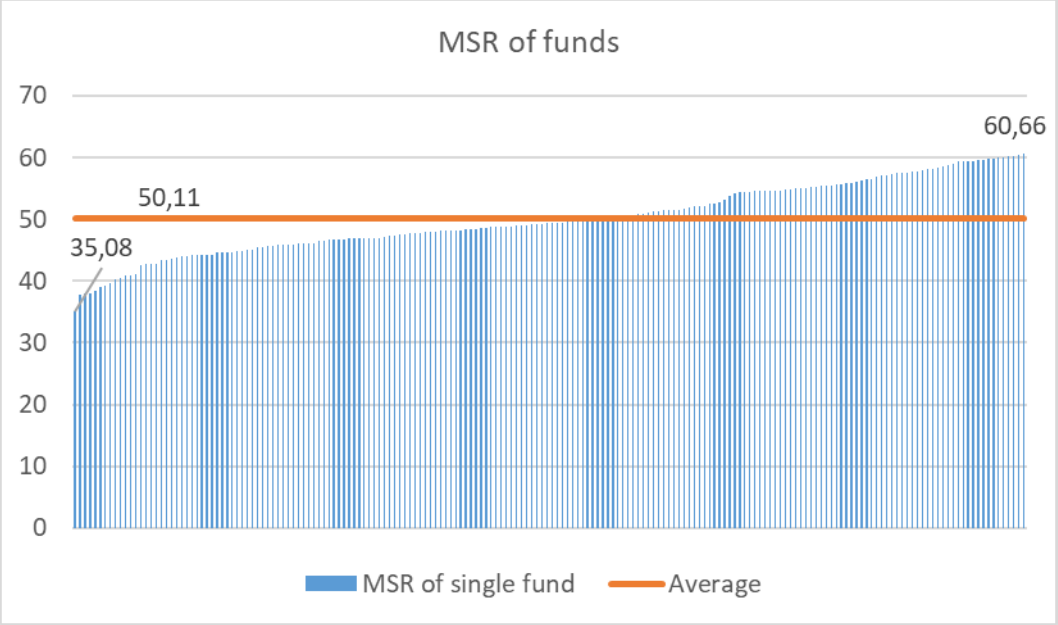

Figure 18 MSR of the funds in research data.

5.3 Returns

Annual returns were collected for one, three and five years. The average annual returns for the whole research data were 0,85 %, 9,84 % and 7,90 %. All the funds did not have three or five years returns available as they didn't exist or they were merged with other funds. Three year returns were available for 157 funds and five year returns for 135 funds.

The range lowers with longer periods (Figure 19) as time tends to decrease volatility, but it is still rather high. When looking range for five-year returns inside a single MSR class, the lowest range is in MSR class 2 (8,07 %) and the highest in MSR class 3 (17,58 %). This doesn't support the idea that high sustainability would offer lower volatility.

	Lowest	Highest	Range
1-year return	-14,36 %	19,38 %	33,74 %
3-year return p.a.	1,60 %	24,93 %	23,33 %
5-year return p.a.	-0,54 %	18,94 %	19,48 %

Figure 19 Range of returns

In the following Figure 20, the annual returns are compared between different MSR classes. This reveals if the funds with higher sustainability class have performed better than the ones with lower sustainability.

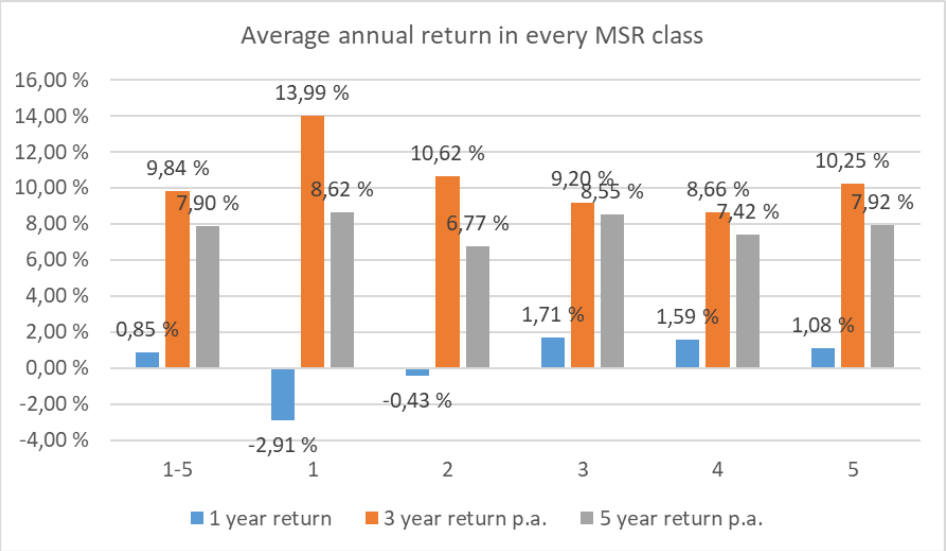

Figure 20 Average annual return in every MSR class.

As seen above in Figure 20, the average annual returns for the whole research data were 0,85 %, 9,84 % and 7,90 %. MSR class 1 has the worst one-year return, but the best returns in three- and five-year level. MSR class 1 includes more funds that are investing in emerging markets than other classes. As an example, three funds investing in Russia have three-year annual returns of 18,71 %, 20,99 % and 23,44 %. These returns are remarkably high.

The performance of emerging markets explains the MSR class 1 returns as emerging markets have typically lower sustainability than developed markets. The latest year has been bad for emerging markets, but on three- and five-year level the returns have been high.

It is relevant to compare returns not only between MSR classes but also with the main equity indices to get a reference for average market returns.

MSCI indices are often used as benchmark indices for funds or platforms for passive index funds. This shows, that they are widely accepted to describe average market returns. MSCI is nowadays an independent, established by Morgan Stanley, a research company which has provided equity indices over 40 years.

Three indices by MSCI were used for this comparison: MSCI ACWI, MSCI Emerging Markets and MSCI World. MSCI ACWI and MSCI World are global equity indices which in February 2019 included 1 632 and 2 757 constitutes. The purpose of these indices is to cover the whole world's investable equity market. Majority of the constitutes are from developed markets like the United States, Japan, the United Kingdom, eurozone and Canada. (MSCI, 2019.)

MSCI Emerging Markets index focuses on emerging markets and had 1 125 constitutes from markets like China, South Korea, Taiwan, India and Brazil. (MSCI, 2019). The annual returns for these indices are seen below.

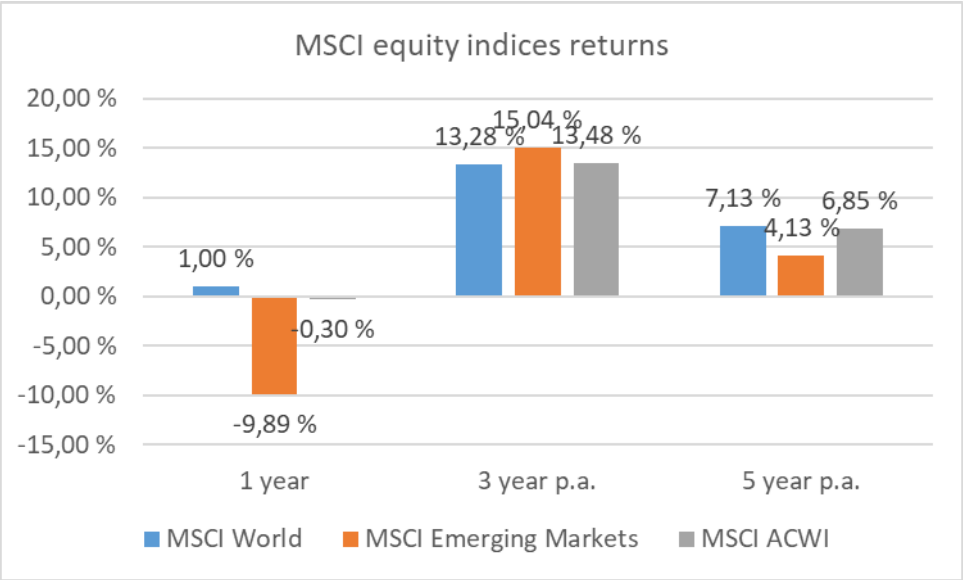

Figure 21 MSCI equity indices annual returns.

As seen in Figure 21, the one-year return hasn't been good in funds or indices. The main reason for this is the market crash in December 2018 where markets fell around 20 %. It is a good example of the volatility of the stock market. It also highlights the fact that it is meaningful to compare returns always in the longest possible timeline because it decreases the effect of short-term volatility and gives more reliable results.

When observing the annual five-year returns, the average return of the funds outperforms all the indices which is surprising. The average return for funds was 7,90 % per annum. The average return for indices was 7,13 % (MSCI World), 4,13 % (MSCI Emerging Markets) and 6,85 % (MSCI ACWI).

Best-performing MSR classes on a five-year level were one (8,62 %) and three (8,55 %). MSR class five outperformed the average and the indices slightly: 7,92 %.

The correlation coefficient between MSR and funds five-year performance was -0,19. Between MSR classes and five-year performance, the correlation coefficient was -0,04. With these results, statistical significance is not reached.

5.4 **Costs**

Costs are the most important concern for the investor. Returns are uncertain, but costs will certainly happen. The average running costs for the funds in research data were 1,55 %. The running costs were available for all 188 funds as it is required by the law to inform costs to investors.

According to the Investment Company Institute (2018, 126), the costs for active mutual funds were 0,78 % and for passive index funds 0,09 % in the United States in 2017. In the UK, costs were 1,46 % for active funds and 0,73 % for passive funds in 2015 (Vanguard 2015, 7).

In overall, the costs are higher than in the UK or in the US. Reason for this may be that Finland is a small market which reduces competition. The range for the costs was 3,00 %, as the lowest costs were 0,30 % and the highest 3,30 %.

The average running costs are presented in Figure 22. The lowest running costs were in MSR class 5: 1,41 %. MSR class 5 includes six passive index funds that have low running costs. The highest costs were in MSR class 1: 2,02 %. MSR class 1 includes funds that are investing in emerging markets as mentioned earlier. Emerging markets have typically less developed systems and more manual processes which lead to higher costs in investing. Also, it is more complicated to get information which also increases costs. Practical things like translating and interpreting foreign languages and long traveling distances are expenses that the investor will pay for.

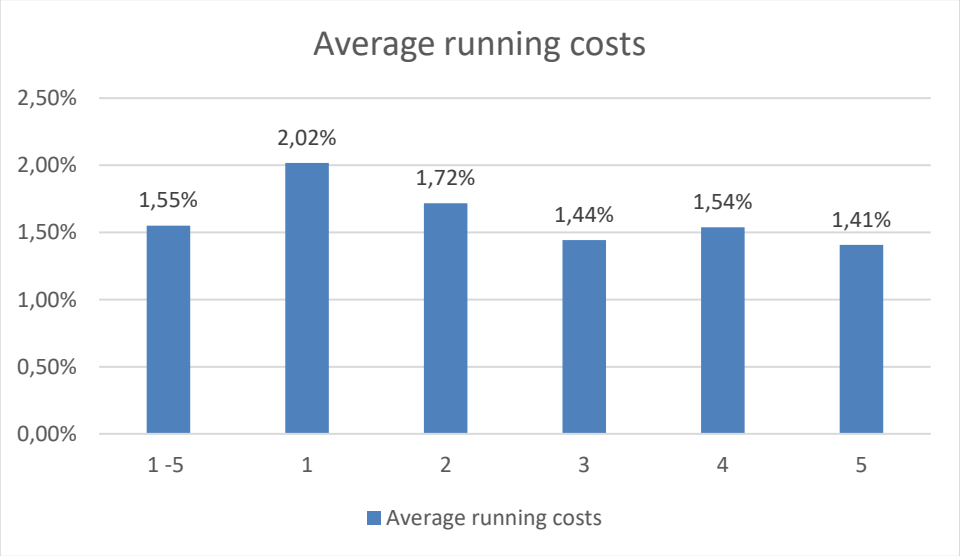

Figure 22 Average running costs

Even the MSR class 5 has the lowest costs, it doesn't look like that increasing sustainability would lead to lower costs as MSR class 3 has lower costs than MSR class 4. The correlation coefficient between MSR and running costs was -0,32.

5.5 **Sustainable funds**

Many of the largest service providers have included sustainability issues and ESG-factors in their whole investment process. This means that it is hard to decide if a single fund should be considered specifically as a

sustainable fund. On the contrary, it means that sustainability issues and ESG-factors are widespread in investing and are considered as a normal part of the investing process. This kind of approach is called ESG integration which was introduced in the ESG strategies section of this thesis.

However, the research data included 11 funds, that are sold or marketed as a sustainable fund. They may use different strategies to reach higher sustainability or they have sustainability orientated benchmark index which guides the investments.

These funds have average MSR of 51,95, which was slightly above average (50,11). Typical MSR class was 4 (5 out of 11). Only one of these funds was in MSR class 5. The range for MSR was 15,35 (lowest 44,97, highest 60,14).

The fund with the highest MSR was passive index fund investing in the Finnish stock market and had sustainability-oriented benchmark index. Despite the small sample, it seems that so-called sustainable funds are not that much more sustainable than funds on average.

The average costs were 1,25 % and the range was 1,47 percentage points (from 0,43 to 1,90 %). As the cheapest funds are all passive index funds with sustainable benchmark index and they all have MSR above average, it seems that sustainability doesn't require higher costs.

According to Helena Ranta-aho (2019), sustainability-focused mutual funds are expensive. Four sustainability-focused active funds all had running costs more than 1,50 % when compared in spring 2019.

5.6 **Activity**

Only 54 out of 188 funds informed their Active Share-rating, which makes it hard to draw reliable conclusions. Average Active Share-rating for these funds was 65,92. Data includes four funds that are passive index funds which lower the Active Share-rating for the whole data. When the index funds were deleted, Active Share-rating was 70,73. As Active Share-rating is above 60, it can be said that these 50 funds are active. Lowest Active Share-rating was 0,90 and highest 99,65. The range was 98,75.

It is common for funds with Active Share-rating above 90, that they are investing especially in middle- and small-cap companies. This can be seen as quite normal as the large-cap companies have a higher weight in indices which makes it easier to differ from the benchmark index when investing in smaller companies.

Tracking Error-figure was available for 117 funds. Average Tracking Error was 4,43 and range was 11,22. An investor who is investing in an actively

managed fund should seek Tracking Error above 10 to get value for money. Only two funds in the research data had Tracking Error above 10.

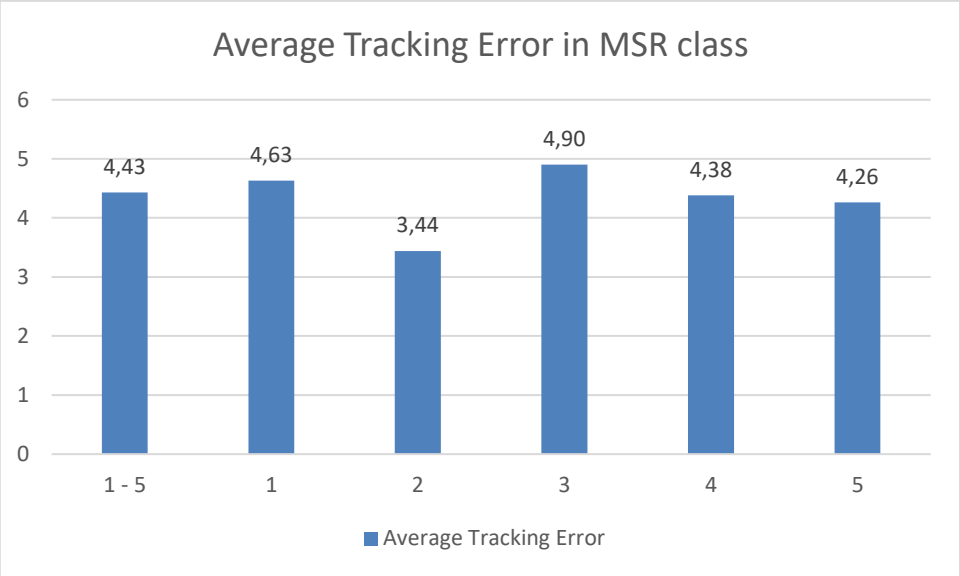

Figure 23 Average Tracking Error in MSR class

As a comparison in Figure 23 shows, there is no dependence between MSR classes and Tracking Error. Sometimes the fund rules may set restrictions on investing: for example, the fund can't invest in companies, which market value is under one hundred million euros. This can restrict the possibility to actively diverge from the benchmark index. This may lead to low Tracking Error as some markets don't have many suitable companies that fill the rules.

6 COMMENTS FROM THE FINNISH FINANCIAL SECTOR

The thesis and its findings were introduced for sustainable investing and ESG specialists from the Finnish financial sector. Specialists were asked to comment how they see sustainable investing among household and private investors and how they see the findings of the thesis.

Annika Manninen (2019), head of ESG from OP Financial Group states: “It is challenging to draw conclusions of sustainable funds and their returns in comparison to mainstream funds, due to the varied use of the term “sustainability” and the varied methods in responsible investing”.

The definition of sustainable investing varies among investors. As an example, Manninen (2019) tells that traditional strategies like ethical exclusion is not built to meet the financial objectives as modern ESG-strategies are. Therefore, investor should find out which strategy the fund is executing and compare the results of similar strategies to each other. The upcoming regulation for sustainable finance by the EU will hopefully clear out the current situation, where it is challenging for an investor to recognize different sustainability practices.

The most highlighted issue was that using the MSR or any other single sustainability rating system is problematic. Every rating system has different characteristics and principles for sustainability. Sustainability can be even defined differently.

Anna Hyrske (2019) from Ilmarinen embodies this problem very well with an example of Toyota. Two sustainable indices, FTSE4Good and DowJones Sustainability, made opposite decisions with Toyota. One chose Toyota to its top three companies. Another one excluded Toyota totally from the index. This kind of situation makes it appropriate for investor to consider how sustainable Toyota is, or is it sustainable at all?

Before making an investment decision and using some sustainability rating system to support it, investor should understand what the rating is actually telling about sustainability. The numerical value of a rating tells little about the ESG implementation and strategy.

The weakness of the MSR is that it is measuring only the current underlying portfolio. The MSR ignores the actions and impact that active portfolio manager could make in to the companies.

Another weakness in the MSR is that it is a relative rating. According to portfolio manager Esa Saloranta (2019), the sustainability of the companies inside a certain sector often develop quickly towards the top 25 %. Relativeness of the MSR leads to results, where the differences in the rating are high, but the actual differences in sustainability may be

lower. The specialists highlighted that the measurement of sustainability is still developing, and the current practices don't consider all things.

According to Landau (2019), the MSR gives rough guidelines about fund's sustainability. However, the MSR is not telling the whole story as presented earlier in this chapter.

Saloranta (2019) adds that one good indicator for sustainability is the carbon footprint as it is quite well available. Carbon footprint focuses especially to the environmental part of sustainability. Saloranta (2019) continues that the measuring of the sustainability is not complete. To get better understanding, the investor should get familiar with the investing process and even interview the portfolio manager about sustainability. Saloranta (2019) gives an example of a good question for the portfolio: "How the portfolio manager is getting an advantage to the investment process through sustainable investing?"

To the results of this study, Hyrske (2019) underlines that investor should find suitable tools to observe sustainability. Otherwise, there is a risk to end up invest something high costs and potentially low returns.

In actively managed fund, sustainability may be the starting point or the approach for the management. The outcome is however behind many other reasons. The market areas, sectors, market values and in the end the stock picking determine the success of the fund. Sustainability itself is not the explanatory factor, but more of an integrated part and of the investing process.

A passive index fund with sustainable benchmark index seems to be good combination for an investor who is seeking high sustainability. The problem is, that passive index fund doesn't necessarily remove a company that causes an environmental disaster from the fund if the benchmark index is not doing so. As the indices are not updated in every moment, the investment could contain assets that are violating the sustainability principles. Also, a passive index fund is not necessarily using its ownership rights to impact the companies from the inside. These are issues that investor should pay attention to.

As sustainable investing is a very complex concept, Landau (2019) states that mutual funds are simple way to make sustainable investment. Maybe it is easier to get familiar with the fund's sustainability strategy than independently analyse the companies and their sustainability.

7 CONCLUSIONS

The goal of this thesis was to find out if sustainable investing through mutual funds offers value for household and private investors. The thesis had four different approaches which all are relevant for an investor who is planning to invest in mutual funds and is interested in sustainability issues.

Hypothesis for the study was that mutual funds with high sustainability offer higher return than other funds. The hypothesis proved to be wrong. Sustainability and profitability do not correlate with each other in the funds included in the research.

In overall, sustainability seems not to create added value for an investor who is willing to invest in a sustainable way through mutual funds. Yet, sustainability doesn't stand in front of high returns or low costs.

Investors should first build or pick a strategy and then find the most sustainable way to implement it. It is necessary for investor to understand which kind of strategy or implementation the fund manager is using.

Study succeeded as expected, but the number of mutual funds was a disappointment. The expectation was that Morningstar would have more data available. Also, there was a lack of information in some samples with yearly profits, Active Share and Tracking Error. Later, after the research data was gathered, I found out that Morningstar would have had even more funds which would have been suitable for the study. This would have increased the reliability of the study.

7.1 Sustainability

Sustainability was pretty much as expected after getting familiar with the Morningstar Sustainability Rating. Majority of the funds settled between 30 and 70. Surprising was that the distribution between MSR classes differed from the original model so strongly. As the MSR is based on reference groups, maybe the sustainability issues are looked more carefully in Finnish mutual funds than in overall?

The target market seems to have a significant effect on sustainability as most of the funds with high sustainability are investing in western countries and developed market areas. On the contrary, funds investing in emerging markets have typically lower sustainability rating.

It looks like that investor who is seeking sustainable options should emphasize developed markets instead of emerging ones. If the investor is

willing to invest in emerging markets, the investor should look for the sustainability rating, but also look for the fund's investing strategy.

Different ESG strategies don't always lead to a high sustainability rating. For example, active ownership needs time and actions before it will start to create higher sustainability. This highlights the fact that sustainability issues can be taken seriously even if it doesn't appear in the sustainability rating. Investor should moot which actions have the biggest impact on absolute level? Mining company working firmly with the ESG issues may have bigger environmental impact than solar power company, although its ESG ratings may be lower.

7.2 **Returns**

As mentioned, the hypothesis proved to be wrong. It seems that sustainability doesn't offer better performance or less volatility in the funds included in the research. As sustainability seems to be dependent on the target market, the performance is determined also by the geographical location.

This seems as outstanding performance in one and three-year returns in MSR classes 1 and 2. However, when time evens the volatility, the annual returns in the five-year level are more equal. Still, MSR class 1 has the best performance in the five-year level, but no conclusions can be drawn from that as there is no significant correlation between sustainability and returns.

Sustainability, like nothing else, is not a free lunch when it comes to returns.

7.3 **Costs**

Running costs are not related to sustainability, but to activity and market area. Every fund with running costs less than 0,50 % per year, is a passive index fund. In the expensive end of funds, are active and emerging markets funds. Sustainability rating or MSR class is not consistent in either end of costs structure.

The fact that MSR class 5 proved to be cheapest tells that costs cannot be justified with high sustainability. This is a good thing for an investor who is looking for sustainable investment.

7.4 **Sustainable funds**

11 expressly sustainable funds included in the study did not stand out in the research data in any way. Sustainable funds did not have especially

better performance, lower costs or higher activity compared to other funds.

Closet indexing is a real problem especially for household and private investors because they have no time, know-how or interest to find out what kind of fund they are investing in and what they should look for. Therefore, real activity and costs transparency could be held as an indication of social responsibility for the service providers that are offering sustainable funds for customers.

In the research data, less than one-third of funds published their Active Share rating. Wider use of Active Share would give investors a better possibility to estimate the investment and its costs, which would increase the responsibility and transparency of funds.

The research shows that the highest quality of sustainable fund is a passive index fund with a sustainable benchmark index to track.

Recently, new funds that will combine passive management and sustainability have entered the market. According to Elina Lappalainen (2019), Mika Leskinen (2019) says these funds combine the two megatrends of investing. The future looks bright for these funds with high sustainability and low costs.

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Appendix 1
RESEARCH DATA

Date	ISIN	Name	Running costs	MSR	MSR class	1 year return	3 year return p.a.	5 year return p.a.	Active Share	Tracking error
25.2.2019	FI0008800107	Aktia America B	1,85 %	47,68	4	14,03 %	12,12 %	11,18 %	75,9	2,68
25.2.2019	FI4000327580	Aktia Capital B	1,83 %	58,06	5	-0,28 %	9,22 %	6,26 %	52,6	-
25.2.2019	FI0008802905	Aktia Emerging Market Equity Select B	2,10 %	45,85	4	-0,84 %	16,57 %	-	73,9	3,62
25.2.2019	FI0008812169	Aktia Eurooppa B	1,87 %	57,21	4	-2,41 %	7,02 %	4,34 %	79,2	-
25.2.2019	FI4000014485	Aktia Europe Small Cap B	1,99 %	50,20	3	-2,10 %	6,36 %	-	96,4	-
25.2.2019	FI0008809025	Aktia Global B	1,87 %	51,35	4	4,50 %	8,94 %	7,47 %	83,8	-
25.2.2019	FI4000153697	Aktia Nordic B	1,86 %	56,98	4	-2,88 %	5,69 %	6,99 %	67,4	8,02
25.2.2019	FI0008803622	Aktia Nordic Small Cap B	1,99 %	50,65	3	-3,98 %	8,48 %	9,37 %	88	4,29
28.2.2019	FI4000261128	Aktia Osakesalkku B	1,28 %	48,08	2	0,72 %	-	-	-	-
25.2.2019	FI0008804158	Alexandria Aggressive Manager Fund	2,50 %	48,74	3	2,43 %	8,15 %	7,19 %	-	4,59
27.2.2019	FI0008801071	Alexandria Emerging Markets Manager	3,12 %	45,73	4	-6,64 %	8,92 %	5,59 %	-	5,7
25.2.2019	FI0008804844	Danske Invest China K	2,80 %	40,46	3	-7,88 %	12,47 %	9,91 %	-	3,86
25.2.2019	FI0008809322	Danske Invest Euroopan Pienyhtiöt K	1,50 %	42,69	1	-11,69 %	6,96 %	6,80 %	-	-
25.2.2019	FI4000223961	Danske Invest Eurooppa Osake K	1,35 %	57,66	4	3,02 %	4,34 %	3,83 %	-	-
27.2.2019	FI0008802871	Danske Invest Eurooppa Osinko K	1,75 %	56,27	3	2,63 %	5,04 %	4,50 %	-	-
25.2.2019	FI4000115506	Danske Invest Europe Enhanced Index K	0,39 %	55,51	3	-0,39 %	7,27 %	4,65 %	-	8,38
25.2.2019	FI0008802004	Danske Invest Global Tech K	0,50 %	48,12	3	19,38 %	24,93 %	18,94 %	-	7,02
25.2.2019	FI4000122999	Danske Invest India K	2,80 %	46,89	3	-1,47 %	8,56 %	13,07 %	-	5,84
25.2.2019	FI0008804869	Danske Invest Itä-Eurooppa Konvergenssi K	2,80 %	46,7	5	-9,20 %	4,82 %	2,34 %	-	4,5
25.2.2019	FI0008800420	Danske Invest Japani Osake K	1,50 %	48,1	3	-4,14 %	8,48 %	9,28 %	-	-
25.2.2019	FI0008803283	Danske Invest Kehittyvät Osakemarkkinat K	2,00 %	44,22	2	-5,17 %	12,76 %	8,36 %	-	-
25.2.2019	FI0008805254	Danske Invest Kestävä Arvo Osake K	1,40 %	51,13	4	13,12 %	17,58 %	16,37 %	-	-
25.2.2019	FI4000236559	Danske Invest Kompassi Osake Acc	1,95 %	52,2	4	-1,23 %	7,16 %	6,24 %	-	-
25.2.2019	FI0008810569	Danske Invest Latin America K	2,80 %	50,04	5	-0,15 %	19,19 %	5,14 %	-	4,69
25.2.2019	FI0008803564	Danske Invest MediLife K	1,95 %	46,92	3	17,47 %	10,26 %	11,88 %	-	2,75
28.2.2019	FI4000013172	Danske Invest North America Enhanced Index K	0,39 %	47,27	4	18,84 %	12,48 %	13,30 %	-	6,5

25.2.2019	FI4000016811	Danske Invest Pohjois-Amerikka Osake K	0,60 %	46,59	3	11,35 %	11,70 %	12,05 %	-	7,29
25.2.2019	FI4000029632	Danske Invest Russia K	2,80 %	38,97	2	-0,44 %	20,94 %	6,08 %	-	5,58
25.2.2019	FI4000052170	Danske Invest Suomen Parhaat K	1,50 %	57,71	5	0,46 %	7,26 %	-	-	-
25.2.2019	FI0008809033	Danske Invest Suomi Osake K	1,90 %	59,65	5	-1,94 %	7,66 %	6,83 %	-	-
25.2.2019	FI4000046669	Danske Invest Suomi Osinko Plus K	1,50 %	60,66	5	-2,97 %	11,87 %	9,11 %	-	-
25.2.2019	FI0008811112	Danske Invest Suomi Yhteisöosake K	0,95 %	59,71	5	-1,24 %	8,78 %	8,16 %	-	3,56
25.2.2019	FI0008810866	Dividend House European Small Cap B	1,90 %	51,38	3	-12,76 %	1,60 %	-	-	-
25.2.2019	FI0008801410	Dividend House Global Aristocrats B	1,80 %	48,73	3	9,36 %	-	-	-	2,4
27.2.2019	FI4000283023	Dividend House Nordic Small Cap B	1,70 %	52,76	4	5,56 %	14,14 %	9,61 %	-	0,59
25.2.2019	FI0008803887	Elite Alfred Berg Aktiivinen Fokus B	1,80 %	55,51	3	-4,88 %	8,34 %	-	-	-
25.2.2019	FI0008807763	Elite Alfred Berg Eurooppa Faktorit A	2,00 %	50,59	1	-6,13 %	-	-	-	4,97
25.2.2019	FI0008806328	Elite Alfred Berg Osake A	3,30 %	47,62	2	-3,85 %	9,46 %	-	-	3,71
25.2.2019	FI0008802947	Elite Alfred Berg Suomi Faktorit A	2,00 %	57,83	5	-1,46 %	-	-	-	4,76
25.2.2019	FI0008800644	Elite Alfred Berg Suomi Fokus B	1,80 %	59,3	5	-0,50 %	8,55 %	5,88 %	-	2,16
25.2.2019	FI0008800438	eQ Eurooppa Aktiivi 1 K	1,50 %	55,25	3	9,08 %	-	-	-	-
28.2.2019	FI0008801758	eQ Eurooppa Indeksi	0,50 %	54,5	2	0,33 %	7,42 %	4,43 %	-	0,14
25.2.2019	FI0008804760	eQ Eurooppa Osinko 1 K	1,73 %	56,38	3	0,25 %	4,55 %	6,75 %	-	6,01
25.2.2019	FI4000201496	eQ Japani Indeksi 1 K	0,50 %	48,58	4	-1,38 %	8,59 %	9,26 %	-	7,05
25.2.2019	FI0008802616	eQ Kehittyvät Markkinat Indeksi 1 K	0,65 %	45,01	3	-2,64 %	13,50 %	7,88 %	-	5,61
25.2.2019	FI0008802988	eQ Kehittyvät Markkinat Osinko 1 K	2,51 %	41,00	1	-3,54 %	17,34 %	8,89 %	-	3,82
27.2.2019	FI0008803523	eQ Sininen Planeetta 1 K	1,51 %	54,63	5	11,35 %	15,37 %	-	-	-
25.2.2019	FI4000261268	eQ Suomi 1 K	1,50 %	60,01	5	-1,11 %	10,66 %	9,08 %	-	-
25.2.2019	FI0008805031	eQ USA Indeksi 1 K	0,38 %	46,12	3	12,59 %	13,62 %	14,07 %	-	3,74
25.2.2019	FI4000020649	eQ Venäjä 1 K	2,72 %	35,08	1	-8,01 %	18,71 %	5,35 %	-	4
25.2.2019	FI0008804737	Evli Eurooppa B	1,60 %	57,51	4	-9,23 %	3,34 %	4,74 %	-	6,72
25.2.2019	FI4000206982	Evli GEM B	1,80 %	44,62	3	5,19 %	12,52 %	-	-	-
25.2.2019	FI4000020169	Evli Japani B	1,60 %	42,69	1	-12,58 %	9,37 %	9,24 %	-	8,26
26.2.2019	FI0008811021	Evli Maailma B	1,60 %	48,34	3	2,17 %	9,80 %	10,43 %	-	3,34
28.2.2019	FI0008808456	Evli Osakefaktori Eurooppa B	0,95 %	55,77	3	-1,06 %	7,53 %	-	-	4,92
25.2.2019	FI4000353867	Evli Osakefaktori USA B	0,95 %	46,85	4	13,40 %	-	-	-	-
25.2.2019	FI4000176425	Evli Pohjois-Amerikka B	1,60 %	43,92	1	8,40 %	11,73 %	10,90 %	-	6,02
25.2.2019	FI0008805932	Evli Pohjoismaat B	1,60 %	55,53	3	-0,12 %	9,41 %	11,01 %	-	5,42
27.2.2019	FI4000099221	Evli Ruotsi Osakeindeksi B	0,50 %	58,16	5	-2,27 %	4,65 %	3,06 %	-	11,29

25.2.2019	FI4000283031	Evli Ruotsi Pienyhtiöt B	1,60 %	51,4	3	6,11 %	6,05 %	9,80 %	-	1,86
25.2.2019	FI4000206990	Evli Suomi Select B	1,80 %	60,25	5	0,16 %	12,24 %	8,32 %	-	-
25.2.2019	FI4000270269	Evli Venäjä B	2,75 %	40,32	3	1,94 %	23,25 %	4,96 %	-	2,59
25.2.2019	FI0008802897	FIM Brands	1,80 %	46,67	3	9,51 %	5,64 %	7,26 %	-	-
25.2.2019	FI0008802855	FIM Eurooppa	1,80 %	54,8	3	-0,45 %	4,60 %	-	-	-
25.2.2019	FI4000148416	FIM Fenno	1,60 %	59,44	5	-1,32 %	6,06 %	6,19 %	-	-
25.2.2019	FI4000020573	FIM Kehittyvät Markkinat ESG	1,90 %	44,79	3	-4,59 %	-	-	-	-
27.2.2019	FI4000148879	FIM Multifactor Equity Europe A Growth Unit	1,60 %	54,2	2	-	-	-	-	-
25.2.2019	FI4000068366	FIM Multifactor Osake USA A Kasvusosuus	1,60 %	46,08	3	-	-	-	-	-
25.2.2019	FI4000242854	FIM Rohto	1,80 %	49,45	4	16,82 %	4,69 %	10,12 %	-	-
25.2.2019	FI4000060371	FIM Tekoäly A	1,75 %	48,88	3	8,85 %	-	-	-	-
25.2.2019	FI0008805585	FIM USA	1,50 %	45,84	3	10,26 %	6,53 %	10,51 %	-	-
25.2.2019	FI4000115282	Finlandia 2030	3,02 %	45,8	1	-0,72 %	-	-	-	4,36
25.2.2019	FI0008810999	Finlandia Laatuyhtiöt	2,22 %	46,98	2	4,27 %	-	-	-	6,6
25.2.2019	FI0008806187	Fondita 2000+ B	2,00 %	54,34	2	3,83 %	10,96 %	9,85 %	-	0,77
25.2.2019	FI0008803127	Fondita Equity Spice B	2,00 %	54,63	4	-9,03 %	5,53 %	4,90 %	-	3,02
25.2.2019	FI0008807102	Fondita European Micro Cap B	2,00 %	42,82	1	-14,36 %	-	-	-	6,54
25.2.2019	FI4000081344	Fondita European Small Cap B	2,00 %	48,19	2	-9,08 %	8,61 %	6,02 %	-	-
25.2.2019	FI0008803101	Fondita European Top Picks B	2,00 %	51,49	1	-9,68 %	3,42 %	2,25 %	-	3,01
25.2.2019	FI0008809876	Fondita Healthcare B	2,00 %	52,12	5	-	-	-	-	7,01
25.2.2019	FI0008803226	Fondita Nordic Micro Cap B	2,00 %	46,99	2	-12,88 %	2,17 %	4,81 %	-	3,19
25.2.2019	FI4000102645	Fondita Nordic Small Cap B	2,00 %	52,49	4	-7,98 %	6,48 %	6,01 %	-	-
25.2.2019	FI0008805619	Fourton Fiesta	0,64 %	47,58	3	-5,94 %	7,81 %	3,01 %	-	2,19
28.2.2019	FI0008801964	Fourton Hannibal	0,64 %	47,42	2	1,88 %	17,33 %	4,91 %	-	0,31
28.2.2019	FI0008801774	Fourton Tempo	0,64 %	50,44	4	-5,03 %	3,91 %	2,80 %	-	0,28
28.2.2019	FI4000315692	HCP Focus	1,15 %	38,49	1	12,30 %	19,44 %	17,97 %	-	-
28.2.2019	FI4000048780	JAM Systematic World Sectors A	1,45 %	48,03	3	-	-	-	-	-
25.2.2019	FI4000306865	LähiTapiola Eurooppa Keskisuuret A	1,50 %	57,02	4	-3,93 %	4,36 %	3,36 %	91,83	-
25.2.2019	FI0008812607	LähiTapiola Eurooppa Markkina A	0,31 %	54,99	3	0,22 %	-	-	17,39	3,41
27.2.2019	FI0008800362	LähiTapiola Hyvinvointi A	1,50 %	49,85	4	17,79 %	11,93 %	13,09 %	98,21	-
27.2.2019	FI0008800016	LähiTapiola Kasvu A	1,50 %	45,5	1	10,10 %	14,26 %	10,12 %	99,65	-
27.2.2019	FI4000010533	LähiTapiola Kehittynyt Aasia A	1,50 %	50,94	5	-	-	-	-	-
25.2.2019	FI0008811971	LähiTapiola Kehittyvät Markkinat A	1,75 %	49,18	5	-6,08 %	10,05 %	5,90 %	-	-

25.2.2019	FI4000088000	LähiTapiola Kuluttaja A	1,50 %	48,87	4	2,99 %	5,83 %	5,89 %	95,74	-
25.2.2019	FI0008809306	LähiTapiola Osinko A	1,50 %	52,17	4	-1,67 %	2,88 %	4,14 %	91,83	-
28.2.2019	FI4000029491	LähiTapiola Osinko Suomi A	1,50 %	60,36	5	4,43 %	12,80 %	7,90 %	35,32	0,44
25.2.2019	FI4000224365	LähiTapiola Skandinavia A	1,50 %	55,03	3	0,39 %	6,47 %	-	75,58	-
27.2.2019	FI4000010558	LähiTapiola USA Keskisuuret A	1,60 %	45,5	3	4,05 %	9,16 %	10,46 %	95,78	0,33
25.2.2019	FI4000123179	LähiTapiola USA Markkina A	0,30 %	46,09	3	14,07 %	-	-	29,06	3,84
25.2.2019	FI0008807094	Nordea Equity Core C K EUR	1,04 %	49,12	3	4,58 %	8,63 %	-	66,95	4,61
25.2.2019	FI4000088042	Nordea Equity Opportunities C K EUR	1,50 %	46,67	2	2,26 %	10,33 %	-	59,7	4,36
25.2.2019	FI0008804752	Nordea Euroopan Pienet Yhtiöt K	1,62 %	50,18	3	1,54 %	9,85 %	11,26 %	94,42	9,55
28.2.2019	FI0008802558	Nordea Eurooppa Indeksirahasto B K EUR	0,75 %	54,89	3	-0,04 %	6,65 %	4,36 %	3,45	5,14
25.2.2019	FI4000029327	Nordea Eurooppa K EUR	1,50 %	55,25	3	-7,54 %	3,27 %	2,98 %	79,22	0,07
25.2.2019	FI0008805486	Nordea Global Enhanced growth	0,60 %	49,1	3	8,04 %	-	-	56,47	6,16
25.2.2019	FI0008807565	Nordea Intia K EUR	1,85 %	43,73	2	-6,06 %	10,00 %	12,41 %	62,9	4,82
27.2.2019	FI0008802194	Nordea Itä-Eurooppa K EUR	1,60 %	43,39	4	-2,64 %	13,39 %	3,81 %	39,84	3,75
26.2.2019	FI0008812334	Nordea Japani I EUR	1,61 %	49,79	4	-4,48 %	6,57 %	6,56 %	71,07	5,2
25.2.2019	FI4000261300	Nordea Kaukoitä K EUR	1,60 %	44,91	3	-6,09 %	15,23 %	10,23 %	-	-
25.2.2019	FI0008814421	Nordea Kehittyvät Osakemarkkinat K EUR	1,87 %	44,72	3	-1,88 %	12,30 %	7,14 %	66,43	-
25.2.2019	FI0008801402	Nordea Kiina K EUR	1,84 %	44,12	4	-6,47 %	13,38 %	10,62 %	58,21	2,14
25.2.2019	FI4000148226	Nordea Maailma K EUR	1,00 %	49,30	3	5,94 %	10,74 %	9,93 %	72,44	-
25.2.2019	FI4000094628	Nordea Maailma Osinko A K EUR	1,50 %	51,54	4	4,52 %	6,54 %	7,88 %	83,4	3,34
25.2.2019	FI4000015532	Nordea Maailma Passiivinen B K EUR	0,50 %	48,52	3	8,90 %	10,74 %	10,36 %	-	7,48
25.2.2019	FI0008810627	Nordea Nordic Small Cap K EUR	1,60 %	50,67	3	-3,60 %	11,53 %	10,70 %	75,04	-
25.2.2019	FI0008802277	Nordea North American Enhanced Growth (EUR)	0,60 %	47,04	4	10,92 %	-	-	54,5	6,33
25.2.2019	FI4000353818	Nordea Pohjois-Amerikka K EUR	1,00 %	48,44	5	9,62 %	10,83 %	12,85 %	73,23	-
25.2.2019	FI4000353842	Nordea Pohjoismaat B kasvu	1,00 %	55,68	3	-	-	-	65,09	-
27.2.2019	FI0008806609	Nordea Pro Suomi K EUR	0,50 %	59,53	5	2,53 %	12,06 %	9,03 %	-	5,35
28.2.2019	FI0008802574	Nordea Suomi Indeksirahasto B K EUR	0,75 %	59,77	5	0,46 %	12,41 %	10,03 %	-	4,77
28.2.2019	FI4000104922	Nordea Suomi K EUR	1,41 %	58,44	5	3,47 %	10,95 %	7,93 %	-	3,65
25.2.2019	FI0008808860	Nordea Swedish Ideas Equity	1,51 %	54,96	3	-1,00 %	9,01 %	-	64,94	-
25.2.2019	FI0008801428	Nordea Venäjä K EUR	1,85 %	39,55	2	3,84 %	19,89 %	5,85 %	28,23	2,95
25.2.2019	FI4000003918	OP-Aasia Indeksi A	0,42 %	49,09	4	0,43 %	9,22 %	8,14 %	-	4,87

25.2.2019	FI4000171251	OP-Amerikka Analytiikka A	1,46 %	43,97	2	10,77 %	-	-	83	3,16
25.2.2019	FI0008814694	OP-Amerikka Arvo A	1,80 %	46,74	3	6,54 %	10,13 %	-	70	-
25.2.2019	FI0008814231	OP-Amerikka Indeksi A	0,39 %	45,95	3	13,51 %	13,01 %	13,60 %	1,6	8,17
25.2.2019	FI4000024492	OP-Amerikka Kasvu A	1,80 %	44,54	2	17,82 %	15,82 %	-	63	-
25.2.2019	FI4000232517	OP-Amerikka Pienyhtiöt A	1,96 %	40,88	4	6,18 %	12,04 %	9,72 %	93	-
25.2.2019	FI4000062377	OP-Eurooppa Indeksi A	0,39 %	54,62	3	0,41 %	6,81 %	4,26 %	-	-
25.2.2019	FI0008807722	OP-Eurooppa Nousevat Tähdet A	1,86 %	50,53	3	-9,91 %	4,76 %	-	86	6,63
25.2.2019	FI0008801188	OP-Eurooppa Osinkoyhtiöt A	1,86 %	54,64	2	-2,87 %	4,53 %	4,34 %	-	4,49
25.2.2019	FI4000006028	OP-Eurooppa Plus A	1,32 %	54,41	2	-5,65 %	3,38 %	-	-	2,7
25.2.2019	FI4000153820	OP-Ilmasto A	1,86 %	48,02	3	3,66 %	8,81 %	7,76 %	49	2,69
25.2.2019	FI0008803143	OP-Intia A	2,40 %	46,46	3	-7,64 %	4,69 %	9,75 %	65	3,38
25.2.2019	FI4000292602	OP-Japani A	1,95 %	43,49	1	-4,71 %	8,73 %	12,14 %	85	-
25.2.2019	FI0008803499	OP-Japanin Tähdet A-osuus	1,60 %	45,06	2	0,46 %	-	-	89	-
25.2.2019	FI0008809421	OP-Kehittyvät Osakemarkkinat A	2,05 %	45,71	4	-6,23 %	8,79 %	4,90 %	40	3,51
25.2.2019	FI0008811252	OP-Latinalainen Amerikka A	2,20 %	50,28	5	2,50 %	12,79 %	6,08 %	56	2,85
25.2.2019	FI0008802046	OP-Maailma A	1,87 %	48,31	3	0,10 %	6,53 %	6,48 %	-	7,29
25.2.2019	FI0008801790	OP-Maailma Indeksi A	0,63 %	48,26	3	6,49 %	-	-	-	4,88
25.2.2019	FI4000270228	OP-Pohjoismaat Indeksi A	0,39 %	60,00	5	0,73 %	5,27 %	4,76 %	0,9	-
25.2.2019	FI4000210810	OP-Puhdas Vesi A	1,86 %	49,7	4	7,75 %	9,14 %	5,49 %	39	2,79
25.2.2019	FI0008804745	OP-Suomi A	1,66 %	59,06	5	-5,50 %	9,13 %	8,49 %	-	6,98
25.2.2019	FI4000016753	OP-Suomi Indeksi A	0,39 %	59,46	5	-	-	-	-	-
25.2.2019	FI0008806203	OP-Vaurastuva Keskiluokka A	2,50 %	42,52	2	-8,24 %	9,43 %	6,72 %	84	1,24
25.2.2019	FI0008802962	OP-Venäjä A	2,56 %	40,93	3	5,55 %	23,92 %	10,21 %	48	7,87
25.2.2019	FI0008806930	OP-Vähähiilinen Maailma A	1,86 %	50,84	4	4,11 %	8,36 %	-	84	6,4
25.2.2019	FI4000048384	POP Amerikka B	1,74 %	49,49	5	-	-	-	-	-
25.2.2019	FI0008812987	POP Kehittyvät Markkinat B	1,94 %	44,12	2	-	-	-	-	-
25.2.2019	FI0008810908	POP Pohjoismaat	1,86 %	56,46	3	-2,84 %	5,70 %	7,01 %	-	6,04
25.2.2019	FI4000327606	POP Suomi	1,83 %	57,48	5	-0,27 %	9,20 %	6,24 %	-	-
25.2.2019	FI4000024930	POP Venäjä B	2,66 %	37,89	1	-	-	-	-	3,7
25.2.2019	FI0008813506	SEB European Equity B	1,30 %	55,79	3	1,14 %	6,77 %	6,60 %	-	5,94
27.2.2019	FI4000014139	SEB European Index B	0,42 %	54,63	2	0,67 %	7,69 %	4,58 %	-	3,56
25.2.2019	FI4000321096	SEB Finland Small Cap B	1,80 %	53,69	4	1,27 %	10,83 %	9,86 %	-	-
28.2.2019	FI0008807516	SEB Finlandia B	1,30 %	59,29	5	-1,62 %	11,10 %	8,44 %	-	2,02
25.2.2019	FI0008802921	SEB Global Equity Multimanager B	2,05 %	47,8	2	3,87 %	9,38 %	8,61 %	-	4,31
25.2.2019	FI4000003884	SEB North America Index B	0,41 %	46,05	3	12,57 %	13,66 %	13,35 %	-	9,52
25.2.2019	FI0008811054	Seligson & Co Aasia Indeksirahasto A	0,47 %	53,25	5	-0,14 %	8,33 %	6,32 %	-	3,78

25.2.2019	FI4000007562	Seligson & Co Eurooppa Indeksirahasto A	0,46 %	57,53	4	3,83 %	8,22 %	5,51 %	-	7,23
25.2.2019	FI0008811435	Seligson & Co Global Top 25 Brands Fund A	0,60 %	47,79	4	14,39 %	11,09 %	13,16 %	-	0,19
25.2.2019	FI0008801980	Seligson & Co Global Top 25 Pharmaceuticals A	0,61 %	51,8	5	16,22 %	5,11 %	8,87 %	-	2,82
25.2.2019	FI0008802673	Seligson & Co Kehittyvät markkinat A	0,75 %	44,19	2	-3,62 %	12,52 %	7,77 %	-	4,09
28.2.2019	FI0008802756	Seligson & Co Phoebus A	0,75 %	52,54	4	5,12 %	11,11 %	9,19 %	-	3,07
25.2.2019	FI4000076294	Seligson & Co Phoenix Fund A	1,15 %	48,78	3	-11,05 %	10,33 %	2,21 %	-	-
28.2.2019	FI0008807078	Seligson & Co Pohjois-Amerikka Indeksi A	0,43 %	51,53	5	14,05 %	14,92 %	13,91 %	-	2,74
25.2.2019	FI0008800412	Seligson & Co Russian Prosperity Fund Euro A	1,60 %	37,84	1	-6,06 %	23,44 %	5,63 %	-	-
27.2.2019	FI0008806625	Seligson & Co Suomi Indeksirahasto A	0,46 %	60,14	5	1,96 %	14,04 %	11,12 %	-	3,12
25.2.2019	FI4000066642	Seligson & Co Tropico LatAm	1,50 %	46,85	3	9,73 %	-	-	-	4,85
25.2.2019	FI4000096920	Säästöpankki Aasia B	1,96 %	39,23	1	-4,00 %	18,39 %	-	-	4,26
25.2.2019	FI4000307004	Säästöpankki Amerikka B	1,74 %	49,49	5	7,04 %	11,55 %	13,46 %	-	-
25.2.2019	FI4000058821	Säästöpankki Eurooppa B	1,86 %	51,89	1	2,68 %	9,03 %	8,36 %	-	2,99
25.2.2019	FI0008800339	Säästöpankki Itämeri B	1,84 %	57,13	4	-3,64 %	6,32 %	8,91 %	-	2,48
25.2.2019	FI0008805924	Säästöpankki Kehittyvät Markkinat B	1,61 %	44,12	2	-8,43 %	13,23 %	7,77 %	-	6,02
25.2.2019	FI0008810148	Säästöpankki Kotimaa B	1,84 %	58,63	5	-1,51 %	9,20 %	7,62 %	-	4,65
28.2.2019	FI4000029301	Säästöpankki Maailma B	1,47 %	49,49	4	-1,31 %	6,11 %	5,66 %	-	0,15
25.2.2019	FI0008813142	Säästöpankki Osake Maailma B	1,86 %	50,51	4	4,16 %	8,78 %	9,39 %	-	7,18
27.2.2019	FI0008809017	Säästöpankki Pienyhtiöt B	1,94 %	54,58	4	-8,51 %	7,43 %	9,99 %	-	-
25.2.2019	FI0008808514	Säästöpankki Venäjä B	2,66 %	37,89	1	1,47 %	20,99 %	5,83 %	-	3,65
25.2.2019	FI4000027974	Taaleri Arvo Kruunu Osake A	1,20 %	49,07	3	-11,23 %	5,59 %	-	-	1,1
25.2.2019	FI4000048442	Taaleri Arvo Markka Osake A	1,20 %	56,11	5	-	-	-	-	3,98
25.2.2019	FI4000220322	Taaleri Arvo Troikka A	2,00 %	43,59	4	-10,60 %	11,00 %	-0,54 %	-	-
25.2.2019	FI4000062260	Taaleri Kehittyvät Markkinat A	1,75 %	46,97	4	-4,21 %	11,06 %	4,60 %	-	-
25.2.2019	FI0008806112	UB EM Frontier Real Assets A	1,90 %	44,6	3	-	-	-	-	-
28.2.2019	FI0008800206	WIP Hakkapeliitat	1,20 %	49,66	3	-12,05 %	3,11 %	3,86 %	-	4,07
25.2.2019	FI0008807292	Ålandsbanken Europe Value B	1,40 %	55,66	3	-2,79 %	3,82 %	1,36 %	-	5,98
25.2.2019	FI0008810940	Ålandsbanken Maailma Osake B	1,80 %	48,05	2	5,22 %	6,47 %	5,84 %	-	-

25.2.2019	FI0008807417	Ålandsbanken Norden Aktie EUR	1,40 %	58,84	4	-3,93 %	3,25 %	-	-	11,18