Aalto University
School of Business

How Finnish Retail Investors Choose Stock Mutual Funds - A Qualitative Study with an Added Emphasis on Passive vs. Active Funds

Finance

Master's thesis

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2012

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Abstract of master's thesis

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Title of thesis How Finnish Retail Investors Choose Stock Mutual Funds – A Qualitative Study with an Added Emphasis on Passive vs. Active Funds

Degree Master's

Degree programme Finance

Thesis advisor Vesa Puttonen

Year of approval 2012 **Number of pages** 74 **Language** English

Abstract

An effective mutual fund market in which investors find and choose the funds which best suit their needs is beneficial from a societal perspective as it makes the markets more efficient. To bring the market closer to this goal, it is therefore important to study how retail investors make mutual fund decisions. This thesis provides a qualitative study into how private Finnish stock mutual fund investors make their decisions, with an added emphasis on how they determine whether to choose actively or passively managed funds. The study adds to previous research on mutual fund decision making by bringing qualitative analysis to a subject that has mostly been researched by using quantitative analysis techniques in the past. Also, there are no previous studies into how Finnish retail investors choose between actively managed funds and passive funds.

By conducting in depth semi-structured individual interviews for ten Finnish stock fund investors, the objective of this paper is to further our understanding of how retail investors, Finnish investors in particular, arrive at their investment choices. The interview data was analyzed to find patterns of behavior or ideas. The data was also compared to the results of past studies on mutual fund investor behavior and behavioral literature.

The results of this study suggest that many Finnish retail investors do not perform any comparisons of fund companies, instead choosing the default option, which is most often the investor's bank. According to the data, the main factor in choosing specific funds within the chosen company's options was the geographic location or industry of the stock holdings in the fund. The results differ significantly from those of past studies, which have essentially all suggested that the past performance of funds is the most important factor in choosing a stock fund. Further analysis suggests that the designs of previous questionnaire studies have been somewhat faulty as they left out some major decision factors, thus exaggerating the importance of some factors. The findings agree with past studies that a significant portion of mutual fund investors are ignorant of many central issues regarding their investments. Finally, the research suggests that there is a large group of investors who would be potential index fund investors if they had a better knowledge of how index funds operate and if index funds were more easily available to them.

Keywords Mutual funds, stock funds, retail investor, decision making, behavioral, passive, active

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Abstract of master's thesis

Tekijä Tuomas Talvio

Otsikko Miten suomalaiset piensijoittajat valitsevat osakerahastoja – kvalitatiivinen tutkimus, jossa painotetaan lisäksi valintaa passiivisten ja aktiivisten rahastojen välillä

Tutkinto Maisteri

Ohjelma Rahoitus

Ohjaaja Vesa Puttonen

Hyväksytty 2012 **Sivumäärä** 74 **Kieli** Englanti

Tiivistelmä

Tehokkaat sijoitusrahastomarkkinat, joissa sijoittajat löytävät ja valitsevat rahastot, jotka parhaiten sopivat heidän tarpeisiinsa, ovat hyödylliset yhteiskunnan näkökulmasta. Jotta markkinat pääsevät lähemmäksi tätä tavoitetta, on tärkeää tutkia miten piensijoittajat tekevät rahastovalintoja. Tässä kvalitatiivisessa tutkielmassa tutkitaan sitä miten suomalaiset osakerahastosijoittajat tekevät päätöksensä. Lisäksi painotetaan sitä, miten sijoittajat valitsevat passiivisten ja aktiivisten rahastojen välillä. Tämä tutkielma laajentaa aikaisempaa tutkimusta tuomalla kvalitatiivisen näkökulman aiheeseen, jota on aikaisemmin tutkittu lähinnä kvantitatiivisen tutkimuksen menetelmillä. Aikaisemmin ei myöskään ole tutkittu sitä, miten suomalaiset piensijoittajat valitsevat passiivisten ja aktiivisten rahastojen välillä.

Toteuttamalla kymmenen perusteellista puolistrukturoitua haastattelua suomalaisille osakerahastosijoittajille, tämä tutkimus pyrkii syventämään ymmärrystämme siitä, miten erityisesti suomalaiset piensijoittajat tekevät sijoituspäätöksensä. Haastatteluaineiston analyysissä pyrittiin löytämään käyttäytymis- sekä ajatusmalleja. Aineistoa myös vertailtiin aikaisempien tutkimusten tuloksiin sekä behavioristiseen kirjallisuuteen.

Tutkielman tulokset viittaavat siihen, että monet suomalaiset piensijoittajat eivät vertaile rahastoyhtiöitä vaan valitsevat oletusvaihtoehdon, joka on useimmiten sijoittajan pankki. Aineiston perusteella tärkein tekijä valinnassa valitun rahastoyhtiön rahastojen välillä on rahaston omistamien osakeyritysten maantieteellinen sijainti tai niiden toimiala. Tulokset poikkeavat merkittävästi aikaisemmista tutkimuksista, jotka käytännössä kaikki esittävät, että tärkein kriteeri rahaston valinnalle on niiden historiallinen tuotto. Syvempi analyysi viittaa siihen, että aikaisempien kyselytutkimusten muotoilut ovat olleet osittain virheellisiä, sillä niistä on puuttunut tärkeitä kriteerejä, jolloin tiettyjen kriteerien tärkeys on ylikorostunut. Tulokset ovat yhtäpitäviä aikaisempien tutkimusten kanssa siitä, että rahastosijoittajat ovat tietämättömiä monista keskeisistä sijoituksiinsa liittyvistä asioista. Aineiston perusteella näyttää siltä, että on olemassa suuri joukko sijoittajia, jotka sijoittaisivat indeksirahastoihin, jos heillä olisi parempi ymmärrys siitä miten ne toimivat, ja jos niitä olisi helpommin saatavissa.

Avainsanat Sijoitusrahastot, osakerahastot, piensijoittaja, behaviorismi, aktiivinen, passiivinen

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1. Introduction

1.1 Background and Motivation

There has been a plethora of studies on the factors that primarily affect retail investors' mutual fund decision making. This trend is understandable, as mutual funds form a substantial section of modern financial markets and the investments of retail investors. An effective mutual fund market in which investors find and choose the funds which best suit their needs is beneficial from a societal perspective. Therefore, to bring the market closer to this goal, it is important to study how decisions are made by retail investors.

Most Finnish and U.S. studies, regardless of the research method, indicate that past performance of the funds is the most important factor affecting fund choice. In their research, Sirri and Tufano (1998) and Kasanen, Lipponen, and Puttonen (2001) among others looked at flows into funds, Wilcox (2003) performed conjoint experiments to achieve the same conclusion, while Capon, Fitzsimmons, and Prince (1996) and Jäntti (2005) achieved the same results by asking the investors directly about their preferences.

The fee structure of funds has also been at the center of research in this field. In Jäntti's (2005) study, Finnish retail investors indicated that the fees the funds imposed on investors is the second most important factor in their choice of mutual funds. However, studies such as Kasanen's *et al.* (2001) show that fee size does not have a significant effect on the flow of money into funds. Perhaps fee structure is not as important for investors as they would themselves suggest, or else we might expect passive investing, which results in significantly lower fees, to be much more common. Also, if past performance truly is the most important factor in fund choice, then investors should logically believe past performance is a predictor of the future. Thus, actively managed funds would seem a logical choice: It is easy to find funds that have done exceptionally well in the past.

The decision making process for choosing a mutual fund is a very complex one. Since Savage (1954) first described the theory of rational decision making under uncertainty, there has been a great deal of research that suggests individuals are not able to, or simply choose not to, completely follow the decision making process that is expected of a rational individual making economic choices. Simon (1957) introduced the concept of bounded rationality, which

means that it is not possible for individuals to acquire all the relevant information regarding complex decisions and that individuals lack the required cognitive capabilities to compute all the relative information needed to arrive at the optimal solution. Therefore, we use heuristics, simple rules of thumb, and other ways of simplifying the decision making process to make choices that are satisfactory rather than optimal. The mutual fund choice decision is very complex, and the concept of bounded rationality affects it significantly. It is important to understand how investors deal with this complexity.

The issue of whether investors should favor passive funds to active funds has also been a hot topic in research. Early research in this area, such as Michael C. Jensen's (1968) study, showed that actively managed mutual funds have a very tough time in beating the market. As this would mean that active management of funds could actually hurt investors, the interest in studying the merits of passive versus active management has been enormous. After Burton Malkiel brought the idea of passive management of funds further exposure in his 1973 book a Random Walk Down Wall Street (Malkiel, 2007), the first index fund appeared on the U.S. market in 1976. While the popularity of passive investing has grown substantially, especially in the last couple of decades, actively managed funds still dominate the market. There is much evidence that, for at least the average investor who doesn’t spend time doing extensive fund research, choosing actively managed funds is likely to hurt their earnings. Given this evidence, how do retail investors arrive at the decision to invest in actively managed funds?

It is not surprising that the topic of active and passive investing has attracted such strong interest, since the topic clearly has very substantial practical and academic implications. Naturally, since many studies have found that actively managed funds consistently under-perform market indexes, investor interest in passively managed funds such as index funds and index ETFs has grown rapidly. From the academic perspective, research results indicating that active management under-performs market indexes strongly support the efficient market hypothesis: If prices are right, fund managers should not be able to beat the market.

Research analyzing active versus passive fund investing, though somewhat mixed, has so far mostly supported Jensen's initial findings. Even those who argue that fund managers with skill in timing and picking stocks can beat the market largely agree that the average actively managed fund earns less than the market return. From the societal perspective, would it not be of advantage if money in, for example, retirement accounts gained a higher average return?

Should it, at least to an extent, be the government's responsibility to educate investors on the positives of passive investing? If so, it is clearly important to understand how investors make fund choices. In the U.S., the arguments for the positives of passive management have even caused talk of legislative changes regarding retirement savings. For example, if passed, the 401(k) Fair Disclosure for Retirement Security Act of 2009[1] would have required an index fund option for all 401(k) participants.

The Finnish mutual fund market has always been considerably behind the U.S. market, and the situation is no different when it comes to passive investing. While index funds have been marketed for retail investors in the U.S. for decades, the first index funds aimed at retail investors only appeared on the Finnish market in 1998. However, interest in index funds seems to be quickly growing. Large banks are by far the most substantial mutual fund suppliers in Finland, and until 2011 they had never marketed index funds to retail investors. But, in September 2011 the first bank finally did so.

For most retail investors, it would seem logical that the default option when investing in stocks would be passively managed funds. Even if there are mutual fund managers who persistently outperform the market due to stock picking skills, it is very difficult to predict which managers will do so. The average retail investor lacks knowledge in areas such as portfolio analysis, so predicting which funds may beat the market is even harder. However, managed funds still form the majority of mutual fund investments.

1.2 Research Problem and Objectives

This thesis provides a qualitative study into how private Finnish stock mutual fund investors make their decisions, with an added emphasis on how they determine whether to choose actively or passively managed funds. By conducting in depth semi-structured individual interviews for ten Finnish stock fund investors, my objective is to further our understanding of how retail investors, Finnish investors in particular, arrive at their investment choices. By

1 This bill never became law. The bill was proposed in a previous session of Congress. Sessions of Congress last two years, and at the end of each session all proposed bills and resolutions that haven't passed are cleared from the books. Members often reintroduce bills that did not come up for debate under a new number in the next session.

understanding how decisions are made we are better able to educate retail investors on the investment choices available to them. This knowledge also helps in being able to better educate them on how to choose the investment vehicles that best suit their situation.

As most studies have done in the past, I will evaluate which specific fund characteristics, such as past performance, fee structure, independent fund ratings, services, and advertising affect investor decisions most. Since the mutual fund choice decision is such a complex one, I will include behavioral economics concepts in the analysis. Through the inclusion of behavioral economics I hope to be able to explain some aspects of individual decision making which do not seem rational on the face of it.

Lastly, I will approach the subject of mutual fund choice from the passive versus active investing perspective. For example, did investors in actively managed funds make a conscious decision to try to beat the market? In other words, have they thought about the characteristics of passive and active investing? If so, what do they base their preference for actively managed funds on? If not, would they be happy with achieving the average market return?

1.3 Contribution to Existing Research

While there have been many quantitative studies into what factors are most significant when retail investors choose their funds, there is hardly any qualitative research into fund investment decision making. Quantitative studies could miss important factors in how investors actually operate, as the questions must be limited in scope to allow for effective analysis. It is also difficult to perfectly judge beforehand what all the relevant questions are. This problem is not as significant in a qualitative interview study, as the researcher is able to adjust the questioning on the spot. This study significantly adds to previous research on mutual fund decision making by bringing qualitative analysis to a subject that has mostly been researched by using quantitative analysis techniques in the past.

The use of the behavioral economics approach will also add to previous research in the area, which has mostly centered on finding out opinions and decision factors without trying to analyze the behavioral causes. Also, the way in which investors choose between passive and active investment options needs further study. To my knowledge, there are no studies into how Finnish retail investors choose between actively managed funds and passive funds.

1.3 Structure of the Study

Chapter 2 of the study will provide a brief discussion on what is meant by passive and active funds (Section 2.1) and what the arguments for active and passive funds are (Section 2.2). These issues are discussed at this early stage in order to further establish that how retail investors view passive and active investing is a topic worthy of further studying, in addition to studying the more conventional questions regarding the mutual fund choosing process. The overview of the growth in passive investing in the United States and Europe (Section 2.3) and the overview of the Finnish mutual fund market and the growth of passive investing in Finland (Section 2.4) provide a background for the rest of the study, while further backing the importance of active and passive investing as a current research topic.

Chapter 3 discusses the prior literature and the theoretical framework for the thesis. I will discuss prior studies about how and why investors make the mutual fund decisions they make. I will also describe the decision making process and discuss behavioral models, heuristics and biases which explain investment decisions.

Chapter 4 describes the data and methods used in the study, while also assessing its limitations. Chapter 5 establishes the findings of the study, while providing most of the analysis of the interview data. Finally, Chapter 6 provides the major conclusions and some final discussion.

2. Passive and Active Stock Funds and an Overview of the Market

The growth of the mutual fund industry has been well documented. Therefore, in the following sections, I will focus on the growth of the passive fund market. The fact that it has grown significantly in recent decades alone makes it worthwhile to study investment attitudes towards index investing in addition to mutual fund investing in general.

2.1 Passive and Active Investing and Funds

The distinction between active and passive investing is straightforward. In active investing, the investor makes investment decisions with the goal of beating the market benchmark index. Active investing involves continuous buying and selling of assets and relies on the skill of the investor in timing the market and picking assets with superior performance. In passive investing, the investor purchases a selection of funds with the intention of holding them for the long-term, thus minimizing trading costs. The most common strategy in passive investing is to purchase a portfolio of funds that tracks the performance of a benchmark index, such as the Dow Jones Industrial Average. Index investing is therefore often used synonymously with passive investing.

Actively managed funds are funds where a manager makes active asset management decisions in an attempt to outperform the market. Passively managed funds are funds that hold a set of funds adhering to a pre-determined strategy, trading only when the strategy requires trading, and doing so without subjective decision making from the fund manager. For example, if a passively managed fund's portfolio consists of the 50 largest companies by turnover in a given market, the fund would adjust its portfolio only when the group of 50 largest companies changes. Most passively managed funds hold a portfolio that tracks the returns of a market benchmark index. Therefore, the terms passive funds and index funds are often used interchangeably.

This study focuses on actively managed mutual funds and index mutual funds. The role of index exchange-traded funds (ETFs) in the growth of passive investing internationally is significant. However, since the role of ETFs is still rather small in Finland and none of my interviewees own ETFs, I will concentrate my analysis on mutual funds. Nevertheless, as far as the conundrum of choosing between active and passive management is concerned, the

basic logic behind choosing an ETF and an index mutual fund is very similar. Therefore, I believe many of the past studies regarding active vs. passive investing apply largely to ETFs as well. As nearly all ETFs are index ETFs, I will use the term ETF when discussing index ETFs. In the next sections ETFs are prominent, as I discuss the growth of passive investing in the United States and Europe to show how investor attitudes towards passive investing are changing.

The reasons why mutual funds have been and continue to be a good investment option for retail investors include the services the fund company provides, efficient diversification, low transaction costs and professional management. These reasons among others have proven so significant that the mutual fund market has grown tremendously. However, in the case of index funds, the role of professional management is negligible. The following section discusses some of the arguments for both active and index investing, revealing how divided the finance research community is on the subject.

2.2 The Arguments for Passive and Active Funds

While the purpose of this study is not to determine whether active funds outperform passive funds, it is important to discuss the issue, as choosing between active and passive funds is one of the most essential decisions an investor should make. Also, as discussed in the introduction, it has been one of the hot topics in investing for the past few decades. The following overview of past studies shows why the issue of passive versus active investing is something that investors should at least consider. As the issue is so compelling and even has welfare ramifications, it is reasonable that studies are made into how individuals choose between the two strategies.

Michael C. Jensen (1968) first studied mutual fund returns from 1945 to 1964 and found that not only do actively managed mutual funds on average underperform market averages, but also that there was no evidence that individual active funds could consistently beat the market. Jensen's further study (1969) found further evidence that fund managers are unable to predict future asset prices to outperform the market and that inferior performance persists over decades. Ever since those studies were published, the argument on the merits of passive and active funds has been continuous. Understandably so, as active funds form a lion's share of

the mutual fund market and thus provide a significant amount of jobs for finance professionals.

Sharpe (1991) introduced the arithmetic of active management:

> If "active" and "passive" management styles are defined in sensible ways, it must be the case that
> (1) before costs, the return on the average actively managed dollar will equal the return on the average passively managed dollar and
> (2) after costs, the return on the average actively managed dollar will be less than the return on the average passively managed dollar

The argument is simple, and clearly holds when stocks held by active managers and passive managers are considered as a whole. However, it remains possible that active mutual fund managers form a subset of active managers that outperform other active managers and thus also passively managed funds. However, practically all research agrees that actively managed funds on average lose to their passive equivalents. The question which remains a topic of fevered discussion and study is whether there are a significant amount of actively managed funds that outperform passive funds consistently, which would contradict Jensen's initial findings.

Several more recent studies have challenged Jensen's early conclusions and argued that some active funds have persistent superior performance. Hendricks *et al.* (1993) found evidence that superior performance of active funds persists over a one year horizon but dissipates afterwards. Grinblatt and Titman (1992) found that funds have superior performance up to five years. Goetzmann and Ibbotson (1994) also found evidence that active funds can have consistent superior performance.

Brown, Goetzmann, and Ibbotson (1992) argue that the superior performance of active funds found in other studies is explained by survivorship bias. If funds which have ceased to exist due to poor performance are not calculated into the performance measures, the performance of successful active fund managers is overvalued. Malkiel (1995) studied mutual fund returns from 1971 to 1991 with a mutual fund sample that eliminated the survivorship bias and found no evidence for the persistence of superior returns of actively managed mutual funds.

However, Elton *et al.* (1996), using a sample free of survivorship bias, found that risk adjusted superior returns of active funds persist both in the short and long term. They were able to construct active fund portfolios based on past data that had positive risk adjusted returns. In contrast, Carhart (1997) found that superior mutual fund performance does not represent stock picking skills. He finds that any persistent above average returns can be explained by common factors in stock returns, differences in fees and transaction costs. While Bollen and Busse (2005) find evidence for short term performance persistence, it is so small that after taking into account transfer costs and taxes it is better for investors to keep to a buy and hold strategy.

The previous paragraphs reviewed only some of the studies regarding the performance of active funds, but without going into the discussion further it is reasonable to state that, as of yet, there is no definitive answer to whether it is possible to predict which actively managed funds will provide superior returns. However, Harless and Peterson (1998) state that since the focus of the discussion has been on superior returns, it has been to a large extent ignored that practically all of the studies have found strong evidence for persistent inferior performance of active funds. This result is significant and should perhaps be given more attention than has been done in the past.

For the individual retail investor the implications of the research reviewed here is straightforward: Even if it is possible, it is very difficult to find the active funds that will have superior performance in the future. The following section reviews how, despite the ambiguity of results into the merits of active and passive investing, passive investing has grown significantly during the past decades.

2.3 The Growth of Passive Investing in the U.S. and Europe

The world's first retail index fund, First Index Investment Trust, now called the Vanguard 500 Index Fund, was started in 1976 in the U.S. However, it was not until the last couple of decades that the growth of the index fund market truly took off. Figure 1 shows the growth of equity index mutual funds in the U.S. since 1993.

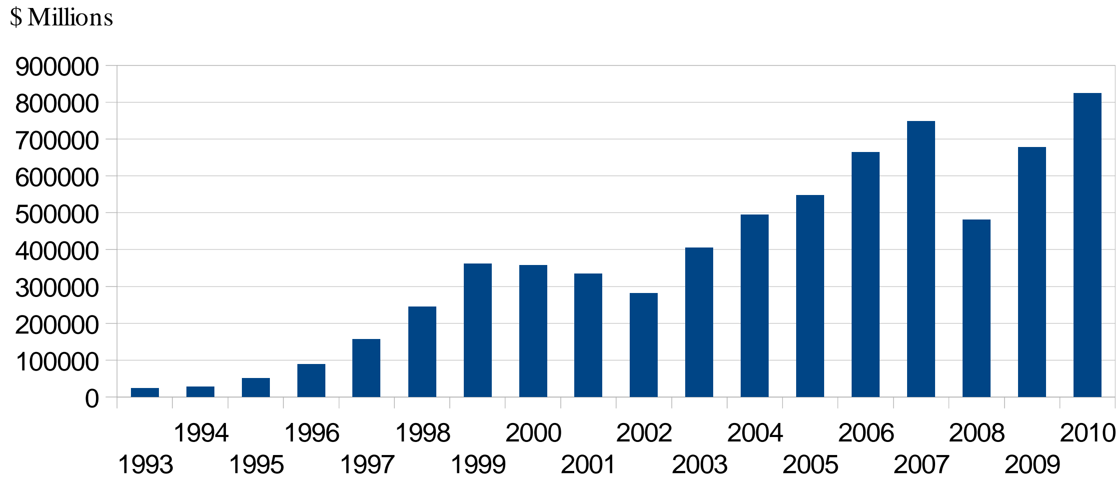

Figure 1. Total Net Assets of U.S. Equity Index Mutual Funds.
Source of data: 2011 Investment Company Fact Book. http://www.icifactbook.org/

In addition to this significant growth in absolute numbers, equity index mutual funds as a percentage of all equity mutual funds have grown as well, as figure 2. shows. This points to a significant change in investor's attitudes towards passive investing.

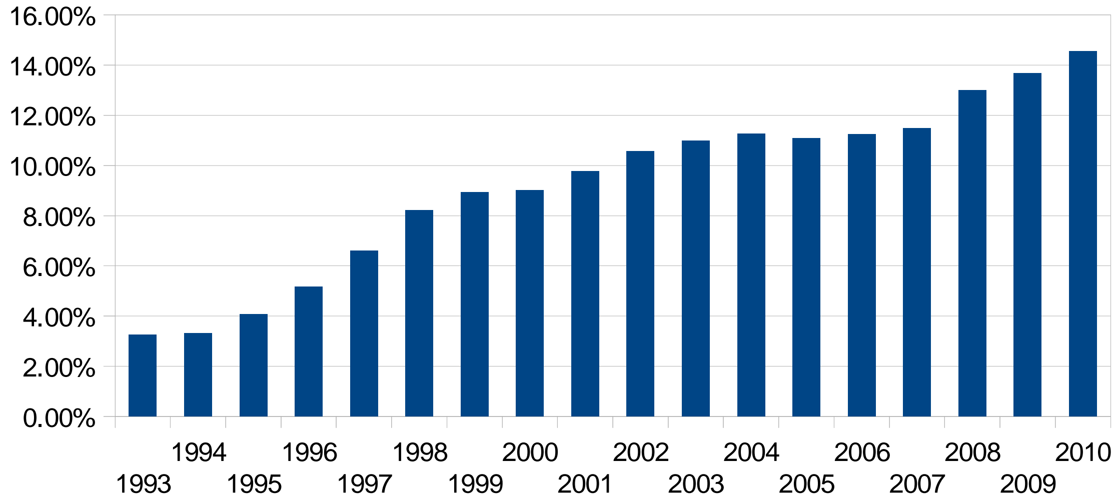

Figure 2. U.S. Equity Index Mutual Funds as a Percentage of All U.S. Equity Mutual Funds
Source of data: 2011 Investment Company Fact Book. http://www.icifactbook.org/

While total net assets in U.S. Stock mutual funds at the end of 2010, at $5.67 billion, were below their numbers in 2006 ($5.91 billion) and 2007 ($6.52 billion), U.S. equity index mutual funds had the highest year-end net total assets in the history of the asset class in 2010.

The other index fund type, ETFs, have also experienced rapid growth in recent years. The first ETFs became available in the U.S. in 1993 and in Europe in 1999, and figure 3. depicts the growth of the ETF market since.

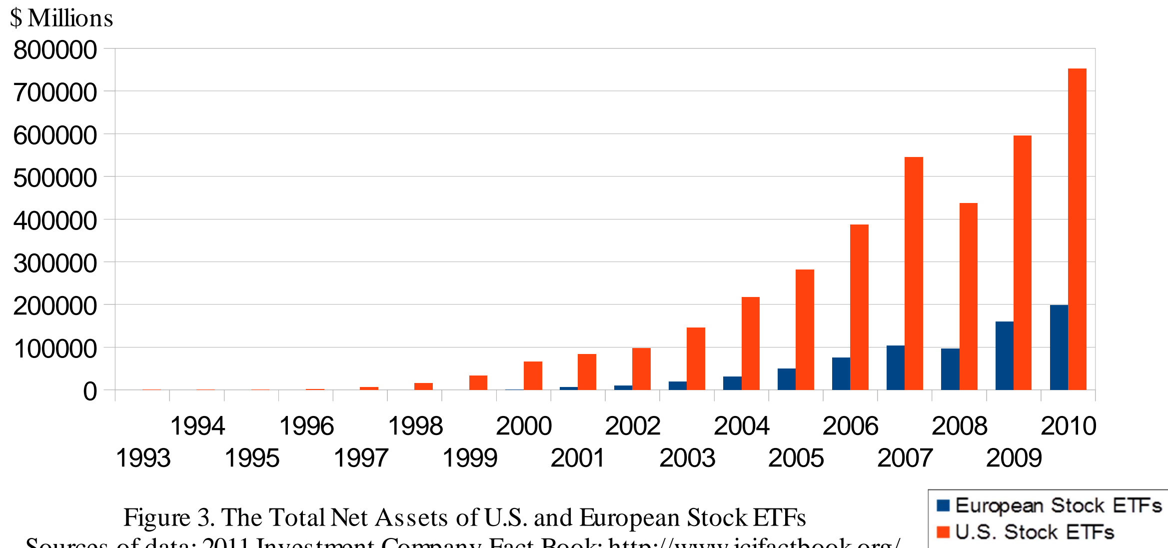

Figure 3. The Total Net Assets of U.S. and European Stock ETFs
Sources of data: 2011 Investment Company Fact Book: http://www.icifactbook.org/
and Industry Review from BlackRock: http://www.blackrockinternational.com

The U.S ETF and index mutual fund markets have experienced very similar growth trends within the last decade, clearly indicating a growing interest in passive investing overall. I could not find accurate data on the growth of the index mutual fund market in Europe, but since the European ETF market is following a similar growth trend as the U.S. equivalent, albeit lagging it a few years, I would expect to see similar growth in the European index fund market as in the U.S. equivalent.

Finally, to gain an idea on the overall growth of passive investing in the U.S, I calculated the total net assets of passive stock funds (both index mutual funds and ETFs) as a percentage of the total net assets in the whole stock fund market (mutual funds and ETFs). The percentage of passive stock funds has steadily grown from a mere 3.2 percent in 1993 to 21.8 percent at the end of 2010. Over a fifth of all assets in U.S. stock funds is now invested in passively managed funds, signifying a monumental change in investor attitudes in less than two decades.

2.4 The Finnish Mutual Fund Industry and the Growth of Passive Investing

Since the ETF-market is still taking its baby steps in Finland, I will focus on mutual funds in providing an overview of the Finnish stock fund market. The first Finnish mutual funds only appeared on the market in 1987, which is much later than in major international markets such as the United States, where the first mutual fund, the Massachusetts Investors' Trust in Boston, was established as early as 1924. However, since the mid 1990's, the growth of the Finnish mutual fund industry has been rapid. I gathered all the following data regarding the Finnish mutual fund market from past Mutual Fund Reports, which are monthly reports provided by the Finnish Mutual Fund Association[2]. Figure 4 shows the total assets under management in Finnish mutual funds at the end of September from 1997 to 2011 and the total assets under management in Finnish stock funds in the same period.

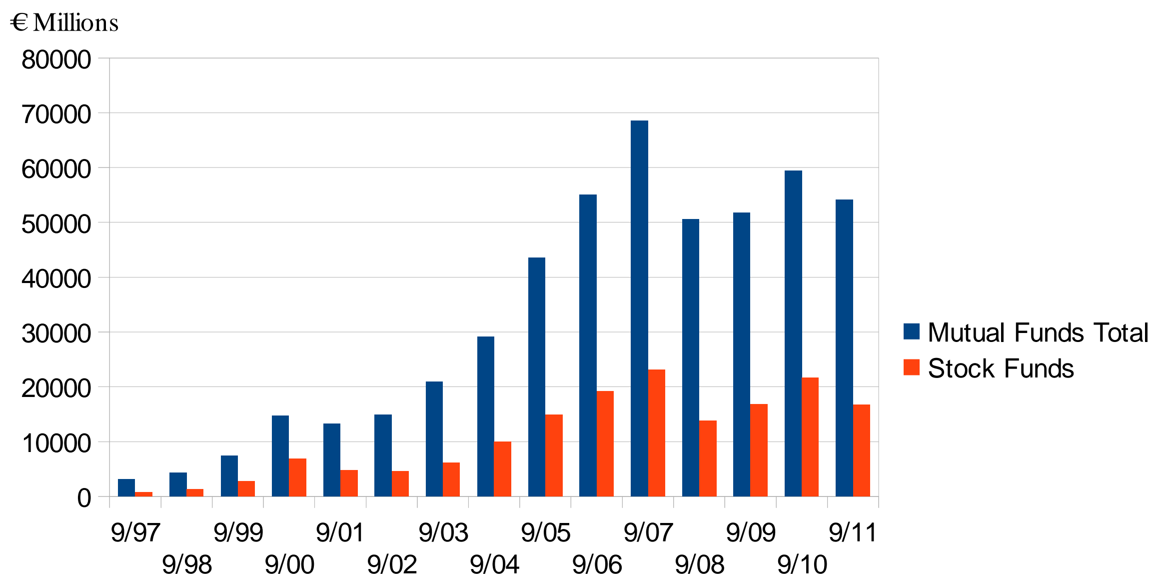

Figure 4. Total Assets Under Management in the Mutual Fund Market in Finland
Source: Rahastoraportti

The total assets under management have grown 17-fold in that time, while the growth of stock mutual funds has been even faster than the overall mutual fund market, having grown nearly 22-fold in the time period. However, it is clear that the growth of both the overall mutual fund market and the stock mutual fund market has been nonexistent for half a decade.

2 Available at http://www.sijoitustutkimus.fi

The growth of the stock index fund market differs significantly from the growth described above. After the first Finnish stock index mutual fund, Seligson & Co's FOX-indeksirahasto, was established in 1998, the stock index fund market has seen very large changes. At the end of September in 2001, Finnish stock index funds held EUR 496 million assets under management, or 10.7 percent of all stock funds. In the next five years the market had grown to EUR 2 358 million in 2006, or 12.3 percent of all stock funds. Finally, at the end of September the market had shrunk to EUR 1 347 million, or 8.0 percent of all stock funds. A quick glance at these numbers seems to reveal that after an initial growth, the interest in stock index funds has waned in the last five years. However, this seems to be the case only regarding institutional investors.

For the purposes of this study, I define funds marketed to retail investors as funds that require an initial investment of no more than EUR 1000. Using this definition, there were no index funds marketed to retail investors at the end of September 2001, while the whole selection of stock index funds consisted of only 9 funds. In September 2006, there were 21 stock index funds, 6 of which were aimed at retail investors. At the end of September 2011, the selection of stock index funds contained 24 funds. More importantly, 15 of those funds were now aimed at retail investors. Also, while the total money inflow into stock index funds was negative in the last five years, and while the overall mutual fund and stock mutual fund markets shrank in the same time period, the assets under management for the 6 stock index funds marketed to retail investors already in existence in 2006 grew from EUR 185 million to EUR 228 million.

Of the nine new index funds now aimed at retail investors, four were completely new funds, while five funds changed their policy to allow lower initial investments in order to attract retail investors. Importantly, three of the six funds that changed their policy to allow for retail investors were operated by OP-Rahastoyhtiö Oy, the second largest mutual fund company in Finland with a market share of 21,4 percent in September 2011. OP is the first Finnish bank to offer index funds to retail investors. The change took place as recently as September 29th 2011, so it seems that the larger players in the Finnish mutual fund market are slowly realizing the potential growth in offering index funds to retail investors.

An interesting aspect of OP-Rahastoyhtiö's change in policy to allow smaller initial investments is that the expense ratio of the index funds marketed to retail investors, at 0,75

percent[3], is considerably higher than for similar funds managed by smaller mutual fund companies (e.g. 0.45 percent for Seligson's similar index funds). Large Finnish banks have always been reluctant to offer index funds to retail investors due to the fact that, without active management, the high fees that naturally generate profits are hard to justify. The banks' position in the market has been strong enough, due to the large number of Finns who handle all their finances in the same bank, that they have not felt the need to offer anything but expensive actively managed funds. But, as the market analysis above shows, it now looks as if the best possibility for growth in the mutual fund industry is in index funds aimed at retail investors. So, it looks likely that OP has sensed the need to ride the wave of retail investor's growing interest in index funds, while trying to guarantee high profits by charging higher fees than other smaller index fund competitors. The fees are still much lower than for their own actively managed funds, a fact which they probably hope is enough to be able to attract any new investment from customer's who might have looked elsewhere for index funds. Investors accept the higher fees of the banks' actively managed funds due to the convenience of doing all business in the same place. Whether this is the case with regards to index funds remains to be seen. Ultimately, if OP's strategy is successful, we can expect other major players to follow suit quickly. This would likely result in a very large growth in assets under management for index funds marketed to retail investors.

3 OP-Rahastoyhtiö offers a bonus of 0,25% for participants in their bonus program, who have at least EUR 5000 total in different accounts. This would mean an expense ratio of 0,5%.

3. A Review of Research in Fund Investor Decision Making

The decision making process in picking a mutual fund differs greatly from that of investing directly in the stock market. This is common sense, as a mutual fund retail investor leaves the finer points of risk and return analysis of stocks to the fund manager. Or, in the case of index funds, takes that analysis out of the picture completely. Even though I would expect mutual fund retail investors to place some emphasis on risk and return considerations, they are likely to not be as substantial as could be expected of an investor purchasing individual stocks. Capon, Fitzsimmons, and Prince (1996) argue that by only relying on the principles of modern finance theory, which assumes that investors should make their decisions based solely on a risk-return analysis, we will gain only a partial understanding of fund investor purchase decision making. With this view in mind, this study will consider retail investor's mutual fund decisions comprehensively, taking into account a variety of factors such as mutual fund characteristics, advertisement and behavioral models. The following sections review the research in these areas. The behavioral models will be discussed in the next chapter.

3.1 Past Performance

Regardless of the method of research, previous studies largely agree that past performance is the most important factor affecting investor's fund choice. Wilcox (2003) performed a conjoint experiment into mutual fund decision making, which showed that investors place substantial emphasis on past returns. Studies looking at the flow of funds into mutual funds (e.g. Kasanen, Lipponen, and Puttonen, 2001; Ippolito, 1992; Sirri and Tufano, 1998; Warther 1995) agree that they are positively correlated with past performance. Sirri and Tufano (1998) found that investors indeed do base their decisions on past performance, but even more so when the recent performance is exceptionally good. They also discovered that positive performance increases fund inflows much more than negative performance increases fund outflows, which is evidence for the disposition effect (see Section 4.1.2). Based on an analysis of Finnish data, Kasanen, Lipponen, and Puttonen (2001) also concluded that investors choose funds based on past performance, and they also find the same asymmetry with regards to very good recent performance as Sirri and Tufano did. However, they further found that investors who invest in funds that are distributed through banks seem to know little of past performance. This is important from the Finnish perspective, since banks are such major players in the mutual fund market.

Studies conducted by interviews and questionnaires also show that investor decisions are mostly driven by past performance considerations. Capon *et al.* (1996) carried out phone questionnaires of a diverse sample of mutual fund investors, and the great majority stated that past performance was the main deciding factor in choosing between funds. Jäntti (2005) used a questionnaire to reveal the preferences of the investors of a large Finnish mutual fund provider. The investors named past performance as the most important fund characteristic in making a fund choice. In their interview study of 2000 American mutual fund investors, Alexander, Jones, and Nigro (1998) found that approximately 24 percent of respondents believed that a fund with above average returns in the past year would earn above average returns in the following year, while 70.6 percent believed that these funds would earn average returns in the following year.

The fact that practically all studies agree that past performance is the main driving factor in investor's fund choice yet most financial research indicates that past performance has limited predictive value for future performance is perhaps alarming. However, it does partly explain the average investor's continual preference for managed funds. Since past performance is used as a deciding factor, it is easy to find funds with recent exceptional returns.

Independent fund ratings such as Morningstar are often used in conjunction with past performance. Knuutila *et al.* (2007) found that funds with a five star rating receive much larger flows than funds with lower ratings. However, this is dependent on the funds being distributed by non-bank fund companies. In Jäntti’s (2005) study, independent ratings were rated the third most important decision factor in choosing mutual funds, only behind past performance and fees.

3.2 Costs of Funds and Fund Advertising

Logic would suggest that as the only return which can be completely predicted, the costs of funds should hold great importance in investment decisions. However, research tends not to agree. Kasanen *et al.* (2001) analyzed fund flows and found that the cost structure of funds is not related to fund demand. In Capon's *et al.* (1996) study, management fees were a relatively unimportant factor for 75 percent of investors. Alexander *et al.* (1998) also found that expenses were not an important factor for many investors. This is largely explained by the fact that only 15.7 percent of respondents believed that there was an inverse relationship between

returns and expenses, while around 20 percent believed that funds with higher expenses have higher returns on average.

Then again, in Jäntti's (2005) study Finnish investors named fund costs as the second most important factor, only behind past performance. Sirri and Tufano's (1998) findings were more ambiguous. While they did find that changes in fund fees and flows were inversely related, they also found that search costs of investors are an important determinant of fund flows. And, therefore, higher fees related to higher marketing costs produce positive flows. Advertising is a major contributor to the costs of a fund, yet understandably works in the opposite direction when it comes to flows into funds, so it is logical that I discuss it here.

Basing their study on an analysis of Finnish mutual fund data on the mutual fund family level, Korkeamäki, Puttonen, and Smythe (2007) showed that there is a positive relationship between advertising expenditure and flows. They concluded that fund families that include high performing funds increase flows by advertising. However, their analysis shows that advertising fund families with no high performing funds does not increase flows into the funds. Sirri and Tufano's (1998) findings support the conclusion that advertising is most beneficial to high performance funds. Korkeamäki *et al.* further find that fund families, which spend proportionally more on advertising, receive higher flows. This looks to be in agreement with the cost of funds research reviewed above: Higher advertising expenses result in higher costs for investors, but investors are rather indifferent to these costs.

Jain and Wu (2000) found that mutual fund companies choose to advertise the funds which experienced superior results compared to market benchmarks in the pre-advertising period, but the post advertisement performance of the funds on average was significantly below the benchmarks. As discussed in Section 3.2, past performance is a major deciding factor in fund choice, so the fact that companies concentrate their marketing on funds with recent superior performance is not surprising. Jain and Wu also found that the strategy seems to work, since their analysis shows that advertised funds attract much more investments than other similar funds. They conclude that the results should have policy implications, since fund sponsors base their advertising on an issue, past performance, which is misplaced, yet do so knowing that it attracts funds.

3.3 Are Mutual Fund Investors Naïve?

Capon *et al.* (1996) found that a significant portion of mutual fund investors are ignorant of many central issues regarding their investments. Of the investors interviewed for the questionnaire, only 60.7 percent knew the fee structure of the funds, while only 25 percent were aware of the investment management style of their funds. Over a quarter of the respondents could not describe how much, or even if any, international stock their funds held. Alexander's *et al.* (1998) results were similar, as they found that only 18.9 percent of the respondents were able to give an estimate of the expenses of their largest fund, while only 43 percent claimed to have known the expenses at the time of investment. They even found that 6 percent of respondents did not know that it is possible to lose money by investing in stock mutual funds. While they found that the financial literacy of mutual fund investors as a whole leaves a lot of room for improvement, it is especially true for investors investing through banks, which is the distribution channel used by most Finnish retail investors. Goetzmann, Greenwald, and Huberman (1992) go so far as to suggest that there is a large group of investors who do not know or do not care if their investments perform poorly. In this study, I will also evaluate the general knowledge investors have of their investments.

Harless and Peterson (1998) found that mutual fund investors do not consider risk and return in a way that we would expect from rational investors. Instead, they argue that investors are likely to use intuitive judgments that are too much weighted by recent excessive returns. Furthermore, investors are insensitive to moderate differences in the fees of funds when making predictions on future performance, and thus overlook the validity of small differences in fees in predicting long-term performance.

3.4 Investment Advisors and Brokers

Based on the studies described in the previous section, it seems that fund companies and investment advisors do a poor job of educating their customers prior to the investment decision. Bergstresser, Chalmers, and Tufano (2006) found that investment advisors and brokers provide hardly any benefits to consumers. They found that the funds bought through these channels have higher fees, lower performance, and display higher trend-seeking behavior.

4. Decision Making and Behavioral Finance

4.1 The Decision Making Process

Savage (1954) first described the modern theory of rational decision making under uncertainty, which relies on the method of subjective expected utility. In this decision process individuals first give probabilities to different outcomes, then assign utility values to these outcomes, and finally choose the option with the highest expected value. In economics, rational behavior means making decisions that maximize one's utility function under given constraints such as lack of resources, time etc.

Capon *et al.* (1996) describe a purchase decision model used by consumer behavior researchers as it applies to fund investment decisions: First, investors gather information about different funds from both their own memory and external sources such as friends, investment advisors, news, and advertisement. Next, investors develop a set of product and service attributes (e.g. past performance, fund costs) that are important for them in choosing between the different fund alternatives. Finally, investors use these attributes to choose the funds to purchase. When you combine this decision process described by Capon *et al.* with Savage's theory of rational decision making under uncertainty, a rational decision maker would be expected to assign utility values to all fund attributes, combine these to come up with a total utility value for each fund, and finally choose the fund with the highest expected value.

It is clear that the decision process above is not one that investors will be able to rigorously follow, and that there are limitations to how comprehensively people can follow such a process. The first, and most obvious of these limitations, is bounded rationality, first introduced by Herbert Simon (1957). Simon's bounded rationality, now an important aspect of behavioral economics, takes into account human limitations in both knowledge and cognitive capacity: A person cannot possible gather all the relevant facts and our brains are not wholly reliable and not able to compute all relevant information. For these reasons, Simon asserts that rather than making choices that maximize our utility, we satisfice. That is, due to the limitations in our cognitive capabilities we are likely to often choose the first option that satisfies a given need or to choose an option that satisfies most needs, rather than looking for the optimal option.

Let us assume we have arrived at a situation where an investor is trying to choose between Finnish stock mutual funds. He has 255 separate fund choices available to him, all of which have a myriad of attributes that affect the investor's decision. Many of these attributes, such as how the investor expects the fund to perform in the future, are uncertain. It becomes evident that the modern theory of rational decision making under uncertainty does not entirely describe the decision process of a rational retail investor, and that the concept of bounded rationality applies. The complexity of the decision means that people find ways of reducing the complexity of these decisions. The following sections discuss some of the ways in which people, due to bounded rationality, have simplified their decision making processes, and how this can affect their actual decisions through biases and other factors. Also, modern finance theory expects people to always make the choice with the highest returns given a certain risk level, but several factors can make investors deviate from trying to achieve this.

4.2 Heuristics and Biases

Kahneman and Tversky (1974) state that people use heuristic principles, in other words simple rules of thumb, to make simple judgmental operations out of complex tasks, such as predicting values. These heuristics are mostly advantageous, but can often lead to biases, errors, and deviations from the choices one might expect if the choice maker had complete information and unlimited mental abilities. I will discuss some of these heuristics and the biases caused by them that are relevant to the investment decision process being researched here.

4.2.1 Representativeness Heuristic

Insensitivity to predictability is a bias that arises when people are asked to make numerical predictions, such as the future value of a stock. If the company is given a favorable description, a prediction of a high future value will be most representative of the description, even though how the company is described might not have any predictive value for the value of the stock. (Kahneman and Tversky, 1974) Similarly, a Finnish retail investor could have a very favorable view of a bank, and would thus expect the mutual funds of the company to have high future values. However, past returns show that Finnish bank mutual funds perform poorly compared to those of smaller mutual fund providers. Attributes such as the bank's reliability and good service in arranging a mortgage do obviously not describe the skill level

of the fund manager compared to other managers, yet these attributes can lead the investor to favorably predict the future performance of the bank's funds.

The representativeness heuristic could also explain why past returns have such a significant effect on fund flows. In people’s minds, funds that have superior past performance are likely more representative of funds that will have superior future performance. This ignores the base probability, which is that past performance has little predictive value for future performance. Also, as people see patterns of past performance, for example a consistent superior return for the past two years, they are likely to attribute the pattern to the skill of the fund manager even though probability suggests that some funds will show such patterns of performance even without any stock picking skill present.

Another interesting faulty intuition that Kahneman and Tversky (1974) introduce, is the failure to account for regression toward the mean. As we have seen in Section 2.2, mutual funds show a regression toward the mean. Funds that performed exceptionally well in the past most often do not do so in the future. The tendency of people to disregard this regression toward the mean means that investors expect the exceptional performance to continue, thus believing in the predictive value of past returns, and thus picking stocks with exceptional past returns.

4.2.2 Loss and Risk Aversion, the Disposition Effect

Kahneman and Tversky (1979) claim that people are loss averse, which means that they feel losses more intensely than gains. The amount of utility lost is higher when a person loses 1000 euros than the amount of utility gained if a person wins 1000 euros. Loss aversion leads to risk aversion as people are inclined to avoid risky choices to avoid losses. For example, in a coin toss, a 50-50 proposition, people usually demand much higher winnings than losses to accept the bet. That is, people require a risk premium for assets under risk; the risk premium being the minimum amount of compensation needed to accept the risk.

The reluctance to realize losses, even when standard theory suggests they should be realized, was first introduced by Kahneman and Tversky (1979). Shefrin and Statman (1985) found evidence for this anomaly in financial markets and coined it the disposition effect, while studies such as Odean (1998) have also backed its validity. Grinblatt and Keloharju (2001)

gained similar results with Finnish stock market data. These studies all found that people are much likelier to hold on to losing assets than they are winners. The tendency is in large part explained by loss aversion, as investors would be forced to recognize their losses if they sold the assets below purchase value.

4.2.3 Availability Heuristic

The availability heuristic deals with how people estimate the frequency of an event based on how easily examples of said event come to mind. An example of a bias due to this heuristic is that people are likely to overestimate the frequency of heart attacks among middle-aged people, because heart attacks are very easy to remember. (Tversky and Kahneman, 1974) In the case of stock funds, it is easy to remember cases of stock funds dramatically outperforming the market, as those cases are very visible in the media, while cases of funds underperforming are much less represented and thus cases of it are difficult to bring to mind. Thus, an investor is likely to overestimate the probability of actively managed funds performing exceptionally well, and thus likely to overestimate the skills of mutual fund managers in general.

4.2.4 Cognitive Dissonance and the Endowment Effect

Cognitive dissonance, first introduced by Festinger (1957), is the tendency to modify beliefs to justify past actions. The main idea of the theory is that as individuals are distressed by the discrepancy of past actions and new evidence, they change their beliefs to lower this distress. Goetzmann and Peles (1997) argue that in the world of investments, individuals adjust their beliefs on how their investments have performed to feel better about these choices. They find that cognitive dissonance causes investors to have a positive bias towards their investment performance, and that this can explain why investors do not move away from poorly performing funds as much as expected.

The endowment effect, coined by Thaler (1980), argues that people believe something they own is better than something they do not own. The effect also predicts that people would demand much more to give up what they own than to acquire it. It could also partly explain why people are more willing to keep their poorly performing investments than would be

expected from a rational decision maker and why they consider them to be performing better than they actually are.

4.2.5 Mental Accounting

Mental accounting describes how people keep track of where their money goes, and how they, often subconsciously, evaluate and categorize transactions and other financial events. Mental accounting often results in decisions that violate rational economic theory, as individual mental accounting rules are not neutral. The attractiveness of a decision can be influenced by a number of mental accounting decisions, such as in which mental account to group a purchase. Mental accounting violates the economic principle of fungibility, as the same amount of money in one account is not a perfect substitute for the same amount of money in another account.

A classic example of mental accounting is how differently people treat money received that they did not predict, such as lottery winnings or a surprise bonus, to wages. People tend to spend this money much more freely than wages. (Thaler, 1985 and 1999) Also, people will evaluate cash completely differently from money in mutual funds. Cash is in a mental account for current consumption while money in mutual funds is in an account for consumption in the future. Furthermore, if the objective of a mutual fund is in the very distant future, such as with retirement, it is possibly felt as vague. Therefore, investors are much likelier to take substantial risks that they would not consider with something as tangible as cash, even though traditional economic theory would suggest that all money is equal after taking into account the time value of money.

4.2.6 Framing Effects and Status Quo Bias

While the theory of rational decision making would expect people to have the same preferences regardless of the framing of the question, Kahneman and Tversky (1981) show that preferences often change due to the framing of the question. That is, people answer the same question differently depending on how the question is presented. The question of which fund a retail investor should choose is a very complex one, the framing of which is affected by a multitude of factors such as conversations, advertisements, news items, analyst's opinions, and financial advisor's advice and also factors that they may not even consciously

notice. It is apparent that the fund industry should aim to frame the question in a way that would bring them the most revenues. And as managed funds bring the most revenues due to the higher fee structures, this could mean, for example, emphasizing returns of funds that have performed well and downplaying the importance of costs.

Thaler, Sunstein and Balz (2010) call those who create the environment in which decisions are made choice architects. One of their main claims is that people often choose the default option. Others agree that in choosing between alternatives, people tend to keep their current behavior as the default option (Samuelsson and Zeckhauser, 1988; Kahneman and Knetsch, 1991). This tendency is also known as the status quo bias. The option that requires the investor to do nothing is the one that many investors choose by default. A well-established example of the importance of the default option is the case of legislation regarding organ donors, as the percentage of organ donors is much higher in countries were donating organs is the default option than in countries where the donor has to choose to participate in the organ donation program.

In the Finnish mutual fund market, the status quo option is actively managed funds. The visibility and availability of managed funds has so far been much greater than that of passive funds, which has created the status quo of most retail investors having invested in them for a long time. Now, even when index funds are gaining more visibility in the market, many investors are likely to be affected by the status quo bias and continue to invest in managed funds, even if they observe their investments underperforming the index and passive funds could be a more suitable option. Another default option for many Finnish investors is investing through their banks, as many Finns perform all their monetary transactions through a single bank and are not likely to consider other options.

Governments have taken an increasing role as choice architects in recent past in the fund industry. For example, they require that funds disclose certain things that they find imperative for investor's decision making. The British government has even established a small new branch of government called the Behavioral Insights Team. Their goal is to help the government influence people's choices by framing the choices in ways that result in more behavior that is desired by the government. This is largely based on the concept of nudging, introduced by Richard H. Thaler and Cass B. Sunstein in their book Nudge: Improving Decisions about Health, Wealth, and Happiness (2008). Nudging means getting people to

make choices based on the way the options are presented. Sunstein and Thaler aim to justify nudging by the government with their concept of libertarian paternalism. The libertarian part of the concept insist that people should be able to do what they want, i.e. opt out of arrangements, while the paternalistic part of the concept maintains that choice architects are justified in trying to influence people's behavior to improve their lives. (Thaler and Sunstein, 2008)

If more evidence backs the argument that actively managed funds on average do worse than index funds, it would be of advantage for society if more money went into index funds and not into the pockets of fund managers. In this case, the government could, as choice architects, help frame the fund choice decision in such a way that index funds became the default option. The legislation needed for this to occur could for example include requiring investment advisers to explain index funds to investors.

4.2.7 Investments as Entertainment

It is possible that some investment decisions are affected by the entertainment value of the investment. Dorn and Sengmueller (2009) found that some investors draw entertainment value from trading, and thus do it excessively even though this diminishes their expected returns. For these investors, the costs of excessive trading are offset by the gains in entertainment value from gambling, discussing the trades, and anticipating the results. Similarly, there are likely to be fund investors who choose a fund for the entertainment value of, for example, seeing how it does against other funds and the market index. While the monetary reward might not be positive, this is rational behavior as the monetary losses are offset by the entertainment value.

5. Methods and Data

To conduct my study on the way Finnish retail investors make choices regarding their stock funds, I performed a qualitative interview study of ten Finnish mutual fund retail investors. The goal of the interviews was to look at the fund decision process from the perspective of individual retail investors to be able to find out what the driving factors are behind the fund purchase decisions. I also aimed to gain an understanding on the attitudes of the investors on some key issues, such as active and passive investing. In addition to the ten qualitative interviews, the same interviewees also answered two questions from the questionnaire used by Jäntti (2005) to enable me to more effectively compare my results to past studies and to be able to judge the reliability of past studies.

In this chapter I will describe the research process. I will begin by describing the process of interviewing the investors, which will be followed by a discussion on how the interview data was analyzed. Finally, I will assess the study and its limitations.

5.1 Carrying Out the Semi-Structured Interview

The research interviews were carried out by using the semi-structured interview technique often used in qualitative studies. Research interviews are usually grouped into three categories, based on the role of the interviewer and the degree to which the interview follows a preplanned structure and preplanned questions. Of the three groups, the structured interview is mostly used in order to achieve quantitative results. To achieve this, it is important to ensure that each interviewee is asked the same questions in the same order and, therefore, it is usually carried by using forms. At the other end of the scale is the unstructured interview, in which the interviewer only asks open-ended questions. The answer to a previous question determines the next question, and the interview is often very close to a normal conversation. The semi-structured interview, also known as the themed interview in Finnish research methodology, falls between these two ends of the scale. (Hirsjärvi & Hurme, 2008) Of the studies of the mutual fund decision on an individual level that have been discussed here, the study carried out by Capon *et al.* (1996) used the structured form of interview, while none have used the semi-structured or unstructured interview method.

The structure of the interview is based around themes and questions focused on the subject at hand. The framework of the interview works as a guiding tool for the interviewer, but the order, weight, and even the content of the questions can vary between interviews. (Koskinen, Alasuutari, and Peltonen 2005, Eskola and Suoranta, 2008) I chose the semi-structured interview method, as the interactive nature of it allowed me to truly get to the issues behind the interviewees' decisions making, while the structure allowed me to make sure I was able to address all the issues I needed to address in order to effectively compare and analyze the research data. Past studies have used questionnaires to study retail investors' mutual fund decision making. From the beginning, I felt that by using the semi-structured interview method instead, I could gain a more thorough picture of the complex individual decision making process.

In addition to the questions posed by the interviewer, the interviewee can also bring up new questions and deviate from the themes (Eskola & Suoranta, 2008). I aimed at letting the interviewees guide the discussion as much as possible, so that the conversation would flow as naturally as possible. This minimized my influence on the answers. The questions I posed regarding risk, however, were exactly the same for each interviewee to allow for more reliable comparison. With the use of the semi-structured interview, I was able to study a wide variety of issues regarding the mutual fund decision process on an individual level.

The interview was structured around seven main themes. Firstly, the interviewees were asked to freely describe their process of making their mutual fund investment, including, but not limited to, the circumstances surrounding the decision and the factors they considered when making the decision. The other six themes specifically addressed were advertising, costs of funds, past performance, how they viewed beating the market, risk attitudes, and attitudes towards index investing. The first three themes mentioned in the preceding sentence were suggested by previous studies on mutual fund decision making on the individual level, while the latter three were specifically chosen for this study in order to canvass the interviewees' attitude toward passive investing. The basic framework of the interview can be found in Appendix 2. The additional questionnaire questions, adopted from Jäntti's study, can also be found in appendix 3.

I chose the interviewees with the aim of achieving a diverse group of investors with regards to age, gender, salary, investment experience, and size of investments, so as to represent the

average retail investor as effectively as possible despite the very limited size of the interviewee group. Appendix 1 shows the distribution of these interviewee characteristics except for investment experience, which is thoroughly detailed in the findings. Since an important theme in this study is index investing, I also wanted to include index investors. The interviewees were people I know or people suggested by them. All interviewees were enthusiastic in their discussion on the topic and seemed to freely discuss their feelings, beliefs, and opinions.

The interviews were conducted in February and March 2012. The length of the interviews ranged from 27 minutes to 45 minutes. I asked the interviewees not to prepare for the interview in any way that would depart from their normal activities involving their mutual funds. If I had asked for them to, for example, check how their funds had performed compared to benchmark indexes and this was something that they normally would not do, it could have affected their attitudes towards their investments in a way that was influenced by me. And, after all, I wanted their responses to reflect their own attitudes at that specific moment in time. However, I allowed the interviewees to check their investment accounts on-line to check issues which had already been discussed to see whether this would change their views on the matter. For example, I allowed some interviewees to check the fee structure of their funds after we had already discussed their views on the importance of fees. If an interviewee was completely uninformed with a central topic of discussion, such as an index fund, I gave them a basic definition of the topic. The interviewees responded to the two additional questionnaire questions by e-mail a few weeks after the interviews.

I recorded each interview. To allow the interviewees to be as frank as possible on their views, it was very important to ensure the anonymity of the interviewees. Therefore, I limit the background information revealed of each interviewee. However, this does not limit the analysis to a great extent: As this study is not attempting to make statistically valid conclusions, it is not important to tie the age, gender, investment experience, fund companies, and size of investments of each interviewee to their views and opinions.

5.2 Analysis of the Interview Data

In analyzing the interview data, I used both the inductive and the abductive process. In the inductive process the analysis is driven by the empirical material (Hirsjärvi & Hurme, 2008).

Patterns and interrelationships are found by a thorough analysis of the data. In abduction, the researcher has theoretical frameworks that he seeks to verify through the research data.

I started the analysis process by carefully transcribing every interview. After reading through the material three times, I categorized the interview data into the seven themes mentioned in Section 5.1. The categorization was done to aide in finding patterns and themes from the large quantity of data, to help analyze the results of this study on each specific theme, and to compare the results of this study on each topic with past studies. I made no further codification of the data, as I did not think it would have brought any new information or aided the analysis process in other ways.

After categorizing the data, I interpreted the data in two ways to come up with conclusions. Firstly, I analyzed the data to find patterns of behavior or ideas. Secondly, I compared the data to the results of past studies on mutual fund investor behavior and behavioral literature.

In describing the data, I aimed to include enough contextual information to help in understanding the circumstances of the interviewees, while an opposing aim was to keep the description brief and focused on facts. Hirsjärvi and Hurme (2008) discuss two forms of description, thick and thin. Thick description aims at an in-depth and comprehensive description of the phenomenon, while thin description is focused merely on facts. The method of description used here is mostly thin. The quotes presented in the findings are translated from Finnish with the utmost care taken to preserve the original meaning of the interviewee. While many studies tie and compare the results to past studies in the concluding discussion, I incorporated past studies to the analysis as the data and results are introduced. This was done to provide a clearer picture of the qualitative analysis process.

5.3 Assessing the Research and its Limitations

As I chose the semi-structured qualitative interview method for this study, I essentially turned my back on any notions of statistical validity. The sample size of ten investors means that the study does not have much external validity as far as finding patterns of investor behavior or general beliefs is concerned. The aim of the study was to raise questions and point to important individual decision tendencies, which could later be studied with methods more suitable for external validity. Also, one of the study’s goals was to indicate possible problems

in the validity of previous studies, which can be achieved even without a large enough sample size for statistical validity as the analysis will show.

The reliability of the findings is based on three things. Firstly, the interviewees were at ease, enthusiastic about the subject, were explicitly promised that they would remain anonymous and all seemed to freely divulge their opinions and attitudes regarding mutual fund investing. I have no reason to doubt that the information they disclosed was how they truly viewed their decision making process. However, there is naturally no way to be absolutely sure of this. One of the reasons for a lack of uprightness could be that not everyone is comfortable discussing personal finance issues, especially the bad choices they have made. However, since they all freely agreed to the interview, it is reasonable to assume this not to be the case. Also, the discussions revealed a considerable number of less than optimal investment decisions, which provides backing for the premise that they did divulge their opinions freely. Secondly, great care was taken to make sure the quality of the data remained high throughout the process, from recording to transcription to analysis. Thirdly, I endeavored to keep my own opinions from affecting responses. I did this by keeping the questions neutral and as open-ended as possible and by attempting to hide emotions such as surprise during the interviews.

As the research is limited to Finnish investors, one should be careful when using its conclusions in discussing investors of other economies. As was established in Chapter 2, the Finnish mutual fund industry is in its early stages compared to many economies. Also, the prevalence of banks in Finnish retail investors' investment activities is bound to affect their views and investments to a great extent, which is likely not the case for example in the United States. Therefore, the views of Finnish investors can substantially differ from those of investors in other economies.

6. Findings

In Section 6.1 I will first describe the fund choosing process of each individual investor as they liberally described it. I asked the investors to freely go through the process of how they made their investments, and these descriptions are mostly derived from these answers. There were some follow-up questions, but the discussion at this point was mostly directed by the interviewee. The issues I specifically wanted to examine, and which I made sure to ask specific questions about, will be mostly discussed in sections 6.2 through 6.7. These issues are past returns, advertising, fund fees, beating the market, thoughts on and attitudes toward index investing, and risk attitudes. These issues will only be discussed in Section 6.1 if the interviewee described them without me specifically asking about them. That is, if they clearly recalled and mentioned them being significant factors in the decision process.

The interviewees will be named Investors A through K, omitting the I, so that the name does not get confused with pronoun ‘I’. Comparison to past studies is done in conjunction with the findings, which is often the case in qualitative research, and not only in the concluding discussions. I felt the reasoning behind the comparisons and analysis was easier to follow in this way.

6.1 The Fund Choosing Process

6.1.1 Investor A

Investor A’s fund choosing process started when her bank’s loan advisor suggested that she could start investing for retirement at the same time as arranging her mortgage the bank. The investment decision was so tied to the mortgage deal that she never considered other fund companies. She got a time for an investment advisor at the bank and the advisor explained the fund characteristics and risks, so that she could come up with her own decisions. Since she knew that she was investing for the long-term, she was told that she could put her money into riskier instruments. She then decided she would invest in both risky and less risky funds.

The focus of the stock holdings of the mutual funds had a large influence on her fund choice. As she wanted to invest in a fund that focused on her industry, one choice was simple. She also bought shares in a medical fund as she thought it was a rising sector. As a safer choice she decided to invest in a fund focused on European stocks. To diversify her geographic risk

she also bought a fund investing in Japanese stock. All these fund choices were made after hearing the advisor going through the basics of the funds, after which she made her own decisions.

Investor A stated that she trusted the investment advisor’s counsel. Therefore, the investment decision process was rather straightforward for her. Based on the advisor’s descriptions of fund characteristics she had clear ideas of what she wanted, and quickly made her fund choices.

6.1.2 Investor B

The first time investor B invested in stock mutual funds was when he had a substantial amount of spare money after a real estate transaction. The investments are not for any specific purpose such as retirement, and he could take the money out at any point. He went to an investment advisor at his bank to discuss possible mutual fund options. The advisor’s role in choosing the funds was letting investor B know all the options the bank had available.

Investor B explained that even though the advisor was present to help with details, the choice of funds was largely his. Firstly, he wanted a well-diversified fund portfolio. Secondly, he wanted to invest in bold and growing markets such as Russia, China and India, as he reasoned he needed to be a part of those if he wanted high growth. He picked a basic Finnish fund to add a safer option into the portfolio. These ideas were in part shaped by the information he had gained from continuously following economic news, and also by doing comparisons of funds from newspaper comparisons. While he trusted the expertise of advisors, he believed they have incentives to push certain products, so he wanted to make his own decisions to a large extent.

6.1.3 Investor C

Investor C made his stock fund investments some five years ago partly as an experiment, as he wanted to see how mutual funds work. Similar to investors A and B, he also made his fund purchases at his bank. He reasoned that as his investments were fairly small there was really no point in comparing fund companies. Also, he didn’t want to pay any fees to another company.

He didn't really listen to the investment advisor, as the advisor wanted to discuss investing in both stocks and bonds to diversify away some of the risk, while he wanted to invest purely in stock in order to achieve higher earnings. As he follows the economic media in his work, he had noticed that the developing markets had been touted a lot: He decided to see if he could gain some quick earnings from investing in them. He stated that the decision to invest in three funds focused on Russian, Indian, and Chinese holdings was a rather easy one. He was not interested in Finnish funds, as the market was doing well and the prices were high in his opinion, so the earnings forecasts were low.

6.1.4 Investor D

Investor D started his fund investments in 1999, when he was contacted by a brokerage company. While he didn't have any past experience in mutual fund investments, he had clear ideas about what he wanted. Firstly, from the beginning, he knew that the investments were done for the long haul, so the investment vehicles needed to adhere to that. Secondly, he wanted returns that were higher than those offered by a bank account, so his target returns for the long term were, and are, 6-8 percent p.a. Thirdly, he wanted the investment process to be rather effortless.

From the start, the advice and services offered by the investment advisor and the fund company have been very important for investor D. At the time of his original investment, he was also contacted by another fund company, but he found their options more difficult to fully comprehend than at the company he ended up investing with. The basic process was that he told the advisor how much returns and at what risk he wanted. And, as he wanted stable long-term returns of 6-8 percent p.a., the advisor suggested a fund that invests in mostly large company stock that offer stable returns. The main rule has been that this fund contains 80 percent of his investments, while he seeks higher returns from riskier funds with the other 20 percent. He has so far tried to achieve these higher returns through funds investing in Far East markets. He doesn't consider these funds as important, however, as he is mainly looking for steady long-term growth.

Investor D meets with the advisor biannually or annually to discuss developments. It is at these meetings that he decides on additional investments. He also describes his current

situation at these meetings. For example, if he wants to receive a higher return with a part of the funds, they discuss what the alternatives for achieving it are. Mainly this is done by discussing how the current pot is divided between the different funds. At times they also discuss what new funds could achieve his goals. However, they do not really make many changes based on market movements. Investor D believes that a small investor is always a little bit late in trying to take advantage of market movements. They have discussed bigger changes more during significant downturns, but fund transfers have not had an important role as he is looking for steady long-term returns.

Investor D is an example of a fund investor largely reliant on the investment advisor for his fund choices. He has basic ideas, and the investment advisor suggests funds and allocations that specifically fit those ideas. He has been largely satisfied with the service he has received, as it enables him to change the allocation to fit his needs rather freely, without it requiring much research by him. The investment advice has been so important to him that he has in fact considered changing fund companies after his long-term advisor changed companies a couple of years ago.

6.1.5 Investor E

Investor E was already an experienced stock investor when he made his mutual fund investments in the year 2000. He had always invested in stocks of companies that he could thoroughly investigate, which meant he had always invested in the stock of Finnish companies. At this moment in time, however, he had been thinking about investing in biotechnology, as it was a field he expected to offer high returns as it was to substantially grow in the near future. At the same time he reasoned that Asian markets were high growth markets, so also made the decision to invest in them. He thought of these investment targets as a way to further diversify his already substantial stock portfolio. Unlike the Finnish companies he had invested in before, he knew he could not satisfactorily investigate the international biotechnology companies and Asian companies. He also knew that it would be difficult to enter these markets by making stock investments directly. He decided that mutual funds were a reasonable way to invest in them, as he could rely on the research of a full-time fund manager.

Once he saw an advertisement for a biotechnology fund he went in and purchased shares in it. At the same time, he also invested in an Asian market fund. Investment advisors had no influence on his choices. He admitted that these two fund choices were made largely by using intuition. Investor E has been very unsatisfied with the mutual fund investment decision. Past experience has shown him that he can achieve higher returns by investing directly into stock, so he hasn't considered making additional mutual fund investments.

6.1.6 Investor F

Investor F began her stock fund investments a year ago, when the bank she considers her investment bank offered a higher rate of return for a deposit, if it was matched by an equal sized mutual fund investment. Her regular bank account and loans are at another bank, but as that bank's level and quality of service is much lower, she conducts all her investments at the bank discussed here. From the start of the interview, it was clear that the services offered by the fund company are very important to her.

She had spare money from a real estate deal and went to see an investment advisor at her investment bank to see what options were available to her. The investment was not made with any specific purpose in mind. The advisor surveyed her risk tolerance and expectations and the process progressed from there. She wanted to avoid high risk funds, so decided to concentrate her fund investments in the Nordic countries, as she reasoned they would be more stable during uncertain times. She accepted that, as stock funds, they did have substantial risk, but wanted to stay away from even higher risk funds such as ones investing in Asia or Brazil. The geographic make-up of the funds was the only part that really mattered to her. The size, industry, or other nature of the companies held by the funds was not important. She does pay attention to financial news, but it hasn't had an effect on her investment choices so far. She does expect that to change as she is currently looking to invest more money.

She tried to contact other fund companies as well, but quickly grew tired of their lazy responses, and the prompt service she received from her investment bank was ultimately the deciding factor for choosing them. She declared her exasperation on how difficult it is to receive good service in Finland for her type of young high-income investor, who doesn't yet have large sums of money to invest. Apparently, the best service is only reserved for the investors with high current investments without any consideration for who are likely to be the

big investors of tomorrow. She doesn't consider the basic investment advice offered at banks real advice, as they don't really take a comprehensive view of the client's situation. She does her business were her business is appreciated and she is treated accordingly.

6.1.7 Investor G

Investor G made his mutual fund purchases between 1996 and 2006. The stock funds are in a retirement account, which he purchased from an insurance company after comparing the offerings and fee structures of several companies. From the beginning he has looked at the investment from a portfolio point of view, in which good diversification has been the main issue. He has created a balanced portfolio with as diverse funds as possible that do not correlate with each other. As diversification was the main issue in his fund choice, he has funds that invest in different geographic regions as well as funds that invest in different industries.

He did meet investment advisors from a couple of fund companies, but decided that he could make investment allocation decisions that were just as good by studying the options himself. He doesn't believe that there are advisors with better or different information that would help in making better fund choices. He stated that if you are somewhat active and informed, you know that there are no tips to make easy money. As he, or the fund manager, doesn't have information that everyone else in the market doesn't have it is not possible to choose better than others. The best he can do is to follow well-known and well-established principles: Control the risk by diversifying well and then sit and wait.

For the first few years he did try to make positive fund allocation changes by following financial news and picking winners, but has not done it since 2006. He also explained that all his funds have been active funds that say they are trying to beat a benchmark index, but they haven't been able to consistently do so. Even so, that has not been his main concern. In addition to a diversified portfolio, his main issue in choosing funds has been that the funds and fund companies are reputable.

In addition to the retirement account, until recently he also had around 10 percent of his mutual fund investments in riskier stock funds. They included growth funds and big value funds which he described as very speculative. He reasoned that he could afford to keep 10

percent in these riskier funds. The purchase decisions for these funds were based on feelings or friend's recommendations, which he called irrational reasons. However, he has lately sold these funds. Investor G now fulfills his investment gambling needs by investing directly into Finnish and Swedish stock.

6.1.8 Investor H

Investor H began his mutual fund investments in 1997 when a client of his, who sold mutual funds at a bank, explained to him how mutual funds work and why it would be a good idea for him to invest in them to save for retirement. His initial reason for starting the monthly investments was that he considered himself to be very poor at saving, so this was basically just a way to force himself to save. It didn't really even matter to him if the investments made much money or not. He was told that, as he was so young, it only made sense for him to invest in stock funds because, despite the ups and downs that are inevitable, investing in stock funds is how he would earn the most in the long term.

He originally picked funds that he had an emotional connection to, so he picked something to do with Finland and the United States. He also picked funds in fields that he "pretended to know" were going to break through. He described the fund choices as very emotional. He never considered looking into what other fund companies had to offer. Since the initial purchase, he said he forgets about the funds most of the time. He checks how the funds have done quarterly, and the time he might make changes is usually only when he gets called in to see his key account service provider every two years.

Investor H states that he follows financial news a little bit, but he doesn't make decisions based on it, because every time he has done so, he has chosen wrong. He says that since he doesn't really know what he is doing, he just keeps the investments as they are. The main change he is planning to make in the future is to increase the portion of less volatile investments as he gets older.

6.1.9 Investor J

Investor J started his mutual fund investments in 2009, when he received a substantial inheritance and decided to invest some of the money for the long term. He knew he wanted to

invest in stocks, but as he didn’t have any desire to do it himself he decided to invest in mutual funds. A few months earlier, he had heard a couple of his friends arguing about active and index investing. While it didn’t really interest him much at the time, he now remembered the conversation, and did some quick internet research on the issue. He wasn’t looking to achieve very high returns, and the lower fees of index funds were a significant factor for him. The most relevant information he learned, however, was that it was very difficult to predict which active funds would provide superior returns compared to index funds and that on average active funds’ returns were lower. He decided that if he was practically guaranteed to earn more than the average active fund investor by investing in index funds, earning what the index earned was good enough for him.

While doing his quick research, Investor J had noticed an ad for a fund company that offered index funds. After this the investment choice was swift. He went in to see an investment advisor and picked a Finnish, European, Asian, and North American index fund. He explained that he didn’t want to worry about making the right choice, so just invested in all the different geographical areas that the company had available. He didn’t want to pick a fund from a certain industry, as the industry could be a bad decision. He was only interested in making safe choices that would earn stable returns. He didn’t want to worry about it afterwards. In fact, he had only checked the returns once since making the investment. He reasoned that if he doesn’t plan on making changes anyway, why would he want to check how the funds have done, as seeing how they’ve done might only make him doubt his decisions.

6.1.10 Investor K

Investor K first started investing in mutual funds in 2002, when his wages went up significantly as he entered a new job, and thus had more spare money each month. He had been thinking about starting monthly mutual fund investments, so went to his bank to discuss setting them up. He never considered looking at other fund company options. As he was mainly investing for retirement, he wanted to be able to earn stable long-term returns.

He had an initial idea about diversifying his funds geographically, and after discussions with the financial advisor that is what he ended up doing. He started with funds investing in Finland, Europe, and North America, and later added funds focused in Latin America and Asia. He downplayed the influence of the advisor, whose role he said was merely describing

the funds so that he was better equipped to make a decision. Within the next few years investor K added an environmentally responsible mutual fund to his portfolio. It was mainly an emotional decision, though he did also believe that it was something that could bring high returns as the field grew.

During the next decade, investor K paid a lot of attention to the financial media, even though he didn't make any changes based on market movements. His investments were for the long term, and he didn't believe you could actually time the market in any case. However, the attention he paid to financial news did eventually change his investment strategy. He read several articles about the performance of active mutual funds against index funds, and ended up doing his own research on the matter as well. Most of the evidence he read about pointed to the fact that active funds mostly perform worse than indexes. He originally found the evidence very surprising, as his own active funds had been performing very well. Two of his funds had beaten the benchmark index, while three had lost. However, the Finnish fund had beaten the index so convincingly that as a portfolio his funds had beaten their benchmark indexes during the time he had owned them. Yet, he says he found the evidence for passive investing very convincing. He realized that there will always be some winners, even if they could not be winners consistently, and eventually started to believe that even his highly successful Finnish fund was perhaps just one of the lucky ones.

While he believed that the index strategy was the preferable one, he didn't make changes to his portfolio for a few years, as he wasn't looking to change fund companies. That changed in the fall of 2011, when his bank started to offer index funds for retail investors. He transferred his European, American, and Asian funds to the index equivalents, and started to invest in the Nordic Countries index fund. As he still feels strongly about the environment, he is still investing in the environmental active fund, as there was no index equivalent for it available at his bank.

He still invests in the Finnish fund. This is partly because the bank doesn't offer a Finnish index fund. The rest of his reasoning was revealing about the emotional side of investing:

> *I pretty much know that past performance doesn't really mean anything. But the thing is, if they did offer a Finnish index fund, I can't be really sure I'd go with it. Well, instead of the active fund. It's been so good to me I don't know if I could get away from it. And, well, the Nordic fund would give me enough Finnish stock*

anyway on its own. It's not logical, but I'm going to keep the active fund for a bit of a gamble, even though I'm not looking to gamble with these investments. I'm regretting it a bit anyway, already, because the fund's been losing to the index since I made the changes. And to the Nordic fund as well.

6.1.11 Summary and Analysis of the Fund Choosing Process

In analyzing the interview data, I placed significant emphasis on information that the interviewees provided without specific questions regarding decision factors. For example, if an interviewee didn't mention past returns affecting their decision, I placed more importance on factors, such as the geographic location of fund holdings, which they mentioned without prompting. As it is, when freely discussing their fund choice, not one interviewee described past returns as having an effect on their decision. As will be seen in Section 6.4, past returns did have an influence on the decisions of some of the investors, but clearly past returns were not as important a factor as the ones mentioned in this section, as they were only mentioned when specifically asked about.

Perhaps the most important finding of these interviews is that most investors choose the first fund company that offers their services to them. Only investor G researched and compared fund companies prior to the investment. Five of the investors invested with the bank they had done business with before, without looking at other options. Two investors invested with the company whose advertisement first fit their needs. Two investors purchased their mutual funds at the first company that contacted them about mutual fund investments. It seems reasonable to deduce that many retail investors do not think that the performance of mutual fund companies differs from company to company. However, a quick research of companies would reveal to them that supposedly similar funds at different companies differ greatly in terms of fee structure, risk profile, stock holdings and returns. Also, the services provided by fund companies vary significantly.

While being the default option was the most important factor in deciding fund companies, the nature of the stock holdings of the fund was the most important factor in deciding between funds within a fund company. It is important to note that nine of the interviewees did not compare similar funds from different fund companies based on factors such as past performance or fee structure. Examining those factors has been the focus of past studies such

as Jäntti (2005) and Capon *et al.* (1996). If an investor was to choose between two Finnish growth funds offered by two Finnish fund companies, the decision factors examined by Jäntti and Capon *et al.* would be relevant. However, the results of this study suggest decisions such as described above are not relevant to many retail investors. Many investors simply choose to invest at their bank and then decide which of their funds fit their needs. The most important deciding factor in choosing funds at this point was the industry or geographic location of the companies whose stock the fund held.

The results of this study suggest that the questionnaire studies by Jäntti (2005) and Capon *et al.* (1996) were unable to get to the bottom of all the decision factors of retail mutual fund investors. For example, they did not ask whether the investors simply chose the default fund company. As discussed in the previous paragraph, an affirmative answer to this question would have likely rendered many of the other factors insignificant. Also, they didn't ask whether the most important factor in choosing specific funds was the geographic location or industry of the fund's holdings. While Jäntti's questionnaire didn't include this issue at all in the question that resulted in past performance being the most important factor, Capon's *et al.* questionnaire listed investment management style as one of the nine factors studied. It is possible that many respondents did not realize that the fund management style includes issues such as the industry of the fund holdings. This would likely show a faulty result due to the framing of the question. Overall, due to the limited format of questionnaires, the options probably leave out many factors that could be the most important for the investment choice. As a consequence, some factors could be overrated.

Even though the interviewees in this study, in replying to Jäntti's questionnaire, rated independent fund ratings as the second most important factor in choosing mutual funds, not one of them mentioned fund ratings during the interviews. It is reasonable to assume that if they had in fact compared fund ratings and that the ratings had an effect on their decisions, they would have mentioned them. The interviewees were presented with the following question (appendix 3), which was also used in Jäntti's (2006) study: "What is the most important criterion for selection, when you choose a mutual fund?" "Independent fund ratings" sounds like a very logical and reasonable answer to the question, even if the respondent had never seen such ratings. The respondent could be likely to rate it as a more important factor than factors which have actually had an influence on the fund choice merely because it sounds like a better answer. Jäntti's questionnaire is thus likely to overrate the

importance of independent fund ratings. This could be perhaps avoided by framing the question differently. This could, for example, be done by adding the following to the above question: “Only rate factors that you truly considered when you made your fund choice; give all other factors the lowest rating, even if they are good choices in your opinion.”

One factor that could explain why independent fund ratings did not receive more importance in this study could be the fact that six of the interviewees purchased their mutual funds through their banks. Knuutila *et al.* (2007) found that fund ratings affect investor decision making mainly for investors who do not invest through banks. Therefore, according to their findings, only four of the interviewees in this study were likely to consider fund ratings to start with.

For most of the investors, the role of the investment adviser was that of an information provider, while the investors maintained that the choice was mostly theirs. The investors relied largely on their own research, knowledge of industries and expectations of development in geographic areas to choose funds that they were either familiar with or that they expected to have high growth. Only investor D indicated that the fund choice was mostly guided by the adviser based on his situation and requirements.

Three of the investors admitted that emotion had a large part to play in choosing some of their funds. The need to gamble was also mentioned. It goes to show that the entertainment value of investments certainly has and influence on decision making.

6.2 Advertising

The findings of this study suggests that advertising can be one of the most important factors in the mutual fund investment decisions of some investors, even though past studies conducted by questionnaires or interviews have suggested their influence is minimal. It is reasonable to assume that interviewing is not likely to be the best way to find out how much advertisement affects investment decisions, since people might be willing to downplay its importance to emphasize what they consider rational reasons for their decisions. That is if they are able to recall the effect of advertising at all. Still, I found that in some cases advertisement can be an integral part of the decision making process.

As was discussed in Section 6.1, investor E stated that prior to his first mutual fund investment he had been considering investing in biotechnology companies. Once he saw a newspaper advertisement concerning the first biotechnology fund in Finland, he went in soon after and invested in the fund. Other than his preference for biotechnology stock, the advertisement was practically the only factor behind his fund choice. He didn't compare past returns, fees or fund ratings. The advertisement simply fit his need and the decision was made. Investors C and J were the other two interviewees who recalled advertising impacting their decision. They also revealed that the advertisement fit a pre-existing need. Investor C did, however, consider many other factors as well before settling on the advertised fund. As the mutual fund investment decision is such a complex one, it seems that advertisement is most effective when it is preaching to the converted. It is difficult to create a need, when the specific need is so multifaceted. However, once a need is already established, the lower search costs due to advertising become important.

The rest of the interviewees simply dismissed the possibility of advertisement having any impact on their decision at all. This is in line with Jäntti's (2005) study carried out with questionnaires, in which advertisement was the least important fund choice factor. How do we explain the difference between these results and the results of some of the other studies (see Section 3.2) which studied the impact of advertisement on investor behavior by analyzing actual market data, and which found that advertisement has a significant impact? Naturally, for advertisement to have a clear effect on fund flows, it does not need to be one of the most important investment decision factors. Even if it affects the decisions of a mere 10 percent of investors, it could easily have an observable impact on fund flows. Also, my narrow data set suggests that e.g. Jäntti's questionnaire tends to understate the importance of advertising. When filling out Jäntti's questionnaire a week after the interview, investor E rated advertisement as the least important factor for his fund choice, even though the interview revealed the complete opposite. It seems that the framing of the questionnaire greatly affects the answers. The other two interviewees discussed above also rated advertisement as the least important factor in the questionnaire, which was in complete contrast to how they described their fund choosing process.

The interviewee's attitude towards mutual fund advertising was mostly indifferent. However, without prompting investor C stated that "banks … have a big incentive to sell the products that have the best margins." Investor K expressed the most negative view of advertising, when

he said that fund companies only push the funds that have happened to perform well in the near past. He added that the funds that did well even a year or two ago are probably not mentioned at all, which he thinks shows that the companies are not really advertising so called good funds, but that they are in effect advertising funds that had just happened to be lucky at the moment.

6.3 Costs of Funds

The interviewee's indifference towards and lack of knowledge on fee structures were striking. Of the eight investors who invested solely in active funds, six admitted to not knowing the fee structure of their funds, while the remaining two were the only ones who in any way compared the fees of individual funds when making the investment decision. Even for these two the size of fees was not one of the most significant factors. The prevailing attitude amongst most of the interviewees, at the time they made their investments, was that the fees were insignificant and would not affect returns much. One interviewee's statement summed up the attitude: "It had a maintenance fee of some kind, but I didn't find it substantial in any way." As the issue is completely different for the two index fund investors, J and K, I will discuss them separately.

Investors A, B and D stated that since the original investment decision, they had already changed their attitudes towards fees. They had found out from published fund comparisons and news articles that the fees of funds could vary to a great extent, and admitted that they should have compared the fee structures of funds when making the investment decision. However, they still couldn't describe the fee structure of their own funds.

Investors F and H largely dismissed the importance of fees at the beginning of the interview. However, once they checked their maintenance fees during the interview, their attitudes towards them changed immediately. Before checking, Investor F stated that the funds haven't charged her a yearly maintenance fee. When I pointed out that they probably deduct it directly from the returns, she checked her fund company's website and went through the following revealing thought process: "The maintenance fee is apparently 1.85 percent. That is substantial yearly. It is not especially mentioned here in any way. This is really quite interesting." And then, after reading from the website the words "The ratio of total fees to…" she went on to conclude that the fee structure "has been made difficult." After this, her

attitude towards fees changed radically. The fact that investors make large investment decisions whilst not knowing substantial and fundamental facts about their investment choices is alarming. It is clear that at least some investment advisers do not make it clear enough to investors how big an effect fees can have on fund performance, and that the fees can vary significantly between funds.

The reality that six of the interviewees didn't consider fee structures at all when making their investment decision is even more interesting when we consider the fact that not one of them believe there is a positive relationship between higher fees and higher returns. Surely, if one believes that higher fees do not relate to higher returns, one should look for the funds with the lowest fees. That the interviewees did not do so can be explained by their lack of knowledge on the issue. As they didn't know their own funds' fee structures, the fees' significant effect on fund returns, and the substantial differences between funds, they didn't really have the knowledge required to start comparing funds. It is interesting to note that investor G, who was most aware of the importance of fee structure, emphasized how important it was for him that changes between funds were free for them. The fund company was able to put a positive spin on the fee structure.

The above results are largely in agreement with the results of past studies described in Section 3.2. As investors are largely indifferent to fund fees, it is not a surprise that fees do not have a large effect on fund flows. The data gathered by Capon *et al.* (1996) also provided similar results as the interview data in this study, as did Alexander's *et al.* (1998) study. Therefore, the only study with significantly differing results was Jäntti's (2005) study, which found that fund costs were the second most important factor in making fund choices. It is again interesting to note that when I used Jäntti's questionnaire for my small sample, the results were similar to his findings, even though the interviews discussed here revealed indifference towards fees during the investment decision. However, this can be explained by the fact that some of the interviewees' attitudes had already changed after the investment decision, and also by the fact that some of the interviewees changed their attitudes after studying the fee structures of their funds during and after the interviews.

At the time he made his original active fund investments, index investor K admitted to having the same lack of knowledge on fees as the investors discussed above. But, as he subsequently studied fund comparisons and read news articles on the issue, his attitude changed and index

funds became a viable option. Investor K summed up his feelings regarding fees and his switch to index funds: “I thought that, why am I paying these high fees for the kind of service, where someone is likely to make less than average decisions?” For investor J, fees were an important factor from the beginning.

6.4 Past Performance

Investors A, B, C, and D stated that the past returns of funds affected their fund choice. Investor C declared that it was in fact the most important factor in his fund choice, as he was looking for high returns he picked funds with high past returns. All four investors mentioned here indicated that they believe past returns can be used to predict the future in some ways. Investor A believes that if a fund has had stable growth in the past it is also likely to have stable growth in the future, so you can predict patterns of future earnings from past performance. Also, when choosing between similar funds, she believes that the fund with the higher past returns is much likelier to have higher future returns. Investors B and C believe that past returns is a measure of the fund manager’s skills, while investor B also believes that a fund which has been better than average in the past will also perform better than average in the future. Investor D believes that you can measure the stability of funds by studying past returns and seeing how quickly they respond to market changes. It had an important effect on his choices as he was looking for stability in his funds. While it didn’t really affect her fund choices, investor F believes that with the right expertise you can choose the funds that will perform best out of similar funds. Investor E believes that while past returns are not a good basis for predicting the future, they can be used to decide if a fund has a manager who makes mistakes.

The other four investors do not think past returns have any predictive value for future returns. Investor G explained that he always checks the past performance of funds when making purchase decisions, but always reminds himself not to let it affect the actual decision. Investors H, J, and K did not even look at past returns of different funds when making their decisions. Investor K did, however, think that it is possible to make judgments on an active fund’s future performance based on the amount of transactions the fund manager makes. He believes that if a fund has made more stock trades compared to others, it will also do so in the future, and that excessive buying and selling will be harmful for the fund’s performance in the future.

While the results of this study reveal that past returns are a major factor for many investors when choosing mutual funds, the results suggest it is not nearly as important as has been suggested in past studies. Both Capon’s *et al.* (1996) and Jäntti’s (2005) studies, which asked respondents to rate the criteria for fund choice, rated past performance as the most important decision factor. Capon’s *et al.* study revealed that past performance was the most important factor for over half of the respondents. In this study, only investor C declared it to be the most important factor behind his fund choice. This could, of course, be due to the very small sample size of this study, and that a larger sample size would have a higher percentage of investors for whom past performance is the most important factor. However, I believe the reason is that Capon *et al.* and Jäntti probably didn’t ask all the relevant questions, as was discussed in the summary of Section 6.1.

It must be said, however, that in filling out Jäntti’s questionnaire, the interviewees of this study rated past performance as only the third most important factor behind fees and independent fund ratings. So, even when answering the same questions as in previous studies, the results differed, meaning that the differences could be explained by the limited sample size. However, this does not explain why factors such as the geographic location or industry of the fund’s holdings were the most important for some interviewees, while the above mentioned studies did not even mention these factors. For three of the four interviewees that stated that past returns mattered in the decision, it was only one factor amongst many in the choice decision, and certainly not the most important.

As reviewed in Section 3.1, many studies have found a positive relationship between fund flows and past returns. This study of the individual decision making level supports these findings, as four of the ten investors in this study stated that past returns had an influence on their choice of funds. However, the results do not seem to agree with Kasanen, Lipponen, and Puttonen’s (2001) findings that investors who invest in funds that are distributed through banks seem to know little of past performance, since a higher proportion of the investors who declared that past returns influenced their decisions were investors in funds distributed through banks than other fund providers. However, this could be explained by differences caused by the small sample size.

6.5 Beating the Market

An important consideration when making investment decisions should be whether an investor wants to increase risk to try to achieve above average returns. That is, whether they are attempting to beat the market or not. The following section discusses the interviewees' attitudes towards beating the market. Specifically, I explore whether they think active funds do a good job of beating the market, whether the investors have made a conscious decision to try to beat the market, if they think their investments have beaten the market, and whether they think they have the required skills to choose funds that beat the market. Of the eight investors in active funds, six were able to satisfactorily explain what a benchmark index is. The following sections only discuss the eight active fund investors. As the index investors, namely investors J and K, have already invested to gain average market returns, they are a fundamentally different group and will be discussed separately in Section 6.5.6.

6.5.1 Measuring Performance

Most financial experts would agree that the most practical way of measuring an investment's performance is to compare it to a benchmark index of the asset type in question. For example, if one had invested in a European equity fund, one would want to compare how the investment has done compared to the European equity market as a whole. Comparing the investment to a bond fund would not be very practical, as the bond fund has significantly different risk characteristics and return expectations. Of course, one could also consider whether the chosen asset type was a good investment compared to other asset types, but individual funds should be compared against similar individual funds and the appropriate market or market segment. Also, it is the stated objective of practically all active stock funds to beat the benchmark index. It follows that this is what the funds should be judged on.

However, it seems the above reasoning is not as obvious for the retail investor. Out of the eight active fund investors, only investor G stated that he uses market indexes to judge the performance of his stock funds. He stated that in addition to comparing the separate funds to their benchmark indexes, he also compares his overall fund portfolio to major geographic stock market indexes. Also, he does this comparison for the lifetime of the funds, not for shorter time periods.

Investor B said that he compares his funds' returns to those of other similar funds. He didn't consider it his goal to have the best possible fund, but certainly not the worst either, and by comparing funds he is able to judge whether his returns are in the frame he aspires. When asked about market indexes, he said that he hasn't compared his funds to index returns, because he has "the information and understanding that even a fool can get market index returns." However, it is reasonable that he should compare how his investments have compared to the returns that a 'fool' can achieve.

The other six active fund investors did not consider market returns or other funds in judging how their funds have performed. Investors A, E, F, and H simply compared the current value of their investments to the amount they originally invested. The more above the original investment they are, the better the fund performance has been. They didn't have an objective return target in mind, so how they view their investments is likely to be somewhat inconsistent. Also, they could be holding the fund with the best long-term returns and best current performance compared to other similar funds, yet could be very unsatisfied with their fund choice due to a general decline in the stock markets. Similarly, they could be very happy with their investments in a bull market, while any number of similar investments could be earning a higher return. It is a problem if many investors do not know the right tools for judging their investments, as it means that the fund market could be far from efficient. Significant funds could erroneously go to fund managers who achieve negative results compared to average funds.

Investors C and D had a specific target return for their investments, 10 percent and 6 percent p.a. respectively and only considered the success of their investment choices compared to the set target return. This approach has the same problems as the approach discussed in the above paragraph. It does seem odd that investors A, C, D, E, F, and H are not interested in whether they could have made better choices or whether they could make better choices going forward. Logically, the only time investors A, E, F, and H would likely consider changing their investments is if they produced negative returns, and even then the change wouldn't take into account how the fund had performed against other similar funds. Similarly, Investors C and D would only be likely to consider changing their investments if they failed to achieve their target returns, which could be very arbitrary for their chosen funds.

6.5.2 Do Active Funds Beat the Indexes?

Of the eight active fund investors, only investors A, E and F thought that active funds on average beat their benchmark indexes. Investor A explained the common sense rationale for her opinion:

> *I think, that if there is an index, and the alternative is an active fund, where an expert forecasts and looks at what is worth investing in, that of course the expertise of the fund manager beats that kind of average return.*

The logic of this line of thinking is, on the face of it, so sound that it is surprising that five of the other active fund investors do not share it. Since fund managers are paid for their expertise, it seems very illogical to think that they would not beat the average.

Of the interviewees skeptical of fund manager performance, investor B said his opinion was based on articles in economic newspapers, which stated that active funds do a poor job against the market. Interviewee G explained that he believes that the costs of gaining better information than what the market has are larger than the gains from being able to make better than average decisions based on this information. Investor C based his belief in his own experiences, as his funds had performed much worse than their bench mark indexes. Investor D said he thinks that fund managers look at the situation from so close that they react to all changes, and thus lose in the trades by making too many changes. The most interesting case was investor H, who in effect changed his opinion during his answer, because he had not really thought the issue through before. The following words were said without an interruption from the interviewer:

> *It makes sense that active funds would beat the indexes. I guess I believe that some do and some don't, and if you pick one that does, you can really beat the market return, if you're lucky. So it's more fun from that perspective. But I guess if you really ask me what I think, if you take all the active funds and average them together, it would be pretty much the same as the indexes, but then you have the fees, active funds are more expensive, so I guess it's a bit stupid.*

The fact that he is changing his mind about active investing only because he is asked to think about it, reveals that he has made investment decisions without considering some of the most

important issues. A relevant question from a paternalistic viewpoint is whether it should be the responsibility of investment advisors to make sure that customers think about these issues when making decisions involving large sums of money.

6.5.3 Did They Decide to Beat the Market?

Only three of the interviewees had made a conscious decision to try to achieve above market average returns with at least a portion of their funds. Of them, Investor G had completely changed his attitude since then, and from this point forward would be happy with index returns. Investor B explained that even though he would be happy with average returns, he wanted to invest in active funds as "a sort of side bet". While his decision to beat the market was not as clear cut, Investor D had used a small portion of his investments to pick funds that were attempting very high returns, so was partly attempting to beat the market as well. However, he had invested the lion's share in funds that were trying to achieve stable market returns.

The other investors had not really thought about the issue at the time of the investment. Investor A explained her thinking:

> *When making the investment, I didn't think that I was trying to beat the market. But average returns are not enough for me, I want to gamble a little bit ... The thought has somewhat been: Suppose I get lucky after all.*

This is a clear example of an investor looking for emotional benefits, as discussed in Section 4.1.7, rather than simply thinking about maximizing returns as the rational market theory would expect. Her thoughts also suggest that her investment decisions have also been very much affected by over optimism. Investor B's description of active funds as a "sort of side bet" also suggests the presence of gambling. Investor C explained, that even though he had not made a conscious decision to beat the market, he would not be happy with average market returns, unless they are above his goal of 10 percent yearly returns. While he didn't believe active funds on average beat the market, he reasoned that the only way for him to be able to earn his target return was to invest in riskier active funds.

Thinking about the issue for the first time during the interview, investor F wanted higher than average returns with a part of his portfolio, while she would be happy with market returns with the rest. Even after thinking about the issue, Investor E didn't really consider market returns as a relevant subject. His only concern was finding funds that invest in interesting markets. As discussed in the previous section, investor H changed his views during the interview, because he hadn't thought about the issue before. So, he had not decided to beat the market when investing, but was leaning towards accepting average returns when thinking about the subject during the interview.

6.5.4 "Have I Been Beating the Market?"

I asked the eight active fund investors whether their funds had beaten their benchmark indexes. Investors A, B, and H stated that they believed their funds had beaten their benchmark indexes. To see whether these beliefs were based in fact or not, I looked at the long term fund returns for each fund compared to their benchmark indexes. I looked at the longest term data I could find for each fund. I did not evaluate whether the funds are using the appropriate benchmark indexes, merely how they are performing in relation to their stated aim of beating said market indexes.

Three of Investor A's four funds had significantly underperformed the index in the last 10 years, while one had almost exactly the same return as the index. One of Investor B's funds had beaten its benchmark by much more than the other had lost to its benchmark index, so he was justified in thinking his funds were beating the market. Of Investor H's six funds only one had beaten its benchmark index. Investors A and H clearly overestimated their funds' performances. As they had never considered measuring the performance of their funds against the market index, they had no basis for their belief. The fact that they considered their investments better than average similar investments could be due to cognitive dissonance or the endowment effect as discussed in Section 4.1.4.

It is interesting to note that the other five active fund investors did not think their funds had beaten their benchmarks, even though only one of them had actually been following whether that was the case. The behavioral theories discussed earlier would most likely predict that investors overrate their own performance. Perhaps the overall poor performance of the markets, and thus also their funds, has caused them to feel negatively about their investments,

and thus they negatively rate the performance of their funds, even though they have no logical reason to think they've underperformed against the market.

6.5.5 Do I Make Above Average Decisions? Why?

As discussed in Section 6.5.3, five of the investors had decided, either when making their investments or while thinking about their strategy afterwards, that they wanted higher than average market returns. This section discusses whether the interviewees believe they have the knowledge and skills to choose the funds that have higher returns than their benchmark indexes.

While investor A revealed that part of her decision to invest in active funds was a desire to gamble a little bit, she also believed at the time of investing that by making educated guesses she would be able to make better than average choices. For example, she invested in a fund that invests in her field of work. She reasoned that since she has a thorough knowledge of the field, she can make good investment decisions. However, since she didn't compare the holdings of different funds in the field, it is doubtful that she could use her knowledge of the field to her advantage unless she had judged the whole line of business to be undervalued by the market. Ultimately, however, her belief that she can make above average decisions means it is logical for her to invest in active funds.

Investor B described his active fund investments as a sort of "side bet", but he also believes that by constantly studying fund comparison statistics he is able to gain an understanding of which funds are the good ones. He believes it would only take him 1-2 days of work each month to really be able to successfully choose the funds which beat the market, an amount of time which he has not so far used for the task.

When investor H discussed whether he'd be able to pick the successful funds, he showed an interesting self-awareness regarding overconfidence:

> *I don't think I can pick the good funds. I think it would probably take a lot of work, but I'm not willing to take the time to do that, and if I did, I think the place to invest would be directly into the stock market. I think I could be just as smart as the fund managers and then I wouldn't be paying them to do it, the*

> *fees. I think if I really applied myself I could beat the market. But that's probably ridiculous as well, because everyone thinks they can.*

Investor C didn't think he could currently pick the winning funds. However, he did think that if he actively studied the fund market, he could pick funds that perform above the market average. In his estimation, it would take a few hours a month to be able to find the winning funds, but as his investments were so small, he didn't think it was worth the effort.

Investors D and F did not think they have the knowledge and skills to pick the winning funds, but both have tried to do so by relying on the expertise of investment advisers. Investor E didn't think that he could choose a fund that would beat its benchmark index, but did think he could pick a stock fund type that would perform better than average. An interesting aspect of his fund investment experience is that as the funds plunged much lower in 2001 than his original purchase price, he decided that he would wait until they came back to even and then sell them, which he did when it finally happened. At the same time he was making much larger profits in his direct stock investments, and said he believed that the fund investments had lower earnings expectations than his stock investments. The rational decision model would suggest that the logical choice would be to sell the lower quality investments and purchase higher quality investments to maximize returns. Why then keep hold of investments that he knew to be lower quality? This behavior can be explained by the disposition effect, which was discussed in Section 4.1.2.

Investor G explained his thinking on his fund picking skills as follows:

> *I don't believe I can choose funds that beat their indexes. You can save a lot by doing the groundwork not to make awful choices. That you only choose trustworthy fund companies and large trustworthy funds and stay away from speculative and shady funds. In that way you can weed out those unnecessary losses. But to be able to choose the winners, well no one else knows how to do that either.*

From the above discussion, it is clear that only A, B, and C believed they have the ability to pick winners if they put some effort into the task. Whether it is possible to forecast which funds will be winners in the future is an ongoing matter of debate in the finance community. However, according to the current and well-accepted understanding of market behavior,

investors A, B, and C displayed no reasons for their fund picking skills that stand up to scrutiny. Simply picking a fund in the field of one's employment, especially without comparing similar funds, will not predict a winning performance. Most academics would agree that it is not possible to merely study past performances of funds to be able to choose winning funds for the future. If consistently picking winners is in fact possible, it would take a more comprehensive analysis of fund holdings and strategies than explained by these investors. The fact that these investors believe it could be so easily done could be down to two reasons. One reason could be overconfidence in one's abilities. Perhaps as likely a reason is the investor's lack of knowledge on the mechanics of financial markets.

It is possible that if some of the investors who did not believe in their fund picking skills had had abnormally good returns in recent years, they would have been more inclined to rate their ability to pick winners higher. This would be due to a bias caused by the representativeness heuristic discussed in Section 4.1.1. They could incorrectly attribute the abnormally good returns to their own skills while ignoring the base probability that abnormally good returns are likely to happen at some point for any fund. In fact, investor E showed this tendency in his belief that he could do better than professional fund managers based on the fact that his individual stock investments had significantly outperformed the market and his mutual fund investments. This, even though he didn't put hours of analysis into the stock picks. In any case, for investors A, B, and C, their belief in their winner picking skills seemingly had no relation to how their funds had performed.

6.5.6 Index Investors and Beating the Market

As could be logically expected, the two index fund investors, Investors J and K, had no intention of beating the market. However, as Investor K still has one active fund, he correctly compares its performance to that of its benchmark index. They believe that active funds mostly lose to index funds. Both are happy with average market returns less the low fees they are paying, and do not think they would be able to pick superior active funds.

6.6 Thoughts on and Attitudes toward Index Investing

Of the eight active fund investors, only two were able to explain what passive investing and index funds mean. The two investors who were able to give a definition for these concepts,

investors E and G were also two of the most experienced investors. Even though index investing has grown rapidly in Finland recently, especially amongst retail investors as reviewed in Section 2.4, it seems that most investors are not aware of the different basic investment strategies available to them. When considering the following results, it is important to note that I did not discuss the findings of Section 2.2, "The Arguments for Passive and Active Investing", with the interviewees. I merely gave them a basic definition of index funds and that they aim to follow the returns of market indexes and generally have lower fees than active funds.

Of the six investors who did not previously, to a large extent, know what index funds are, four would now consider them a good investment option. Investor A would consider investing a part of her funds in index funds to have more stable stock funds in her portfolio. Investor D would invest in index funds to increase the stability of his returns, while he also believes that active funds perform worse than index funds. Investor F would be interested in index funds even though she believes active funds on average probably beat index funds. She doubts her own ability in choosing the winning funds, so index funds interest her. As investor H looked at the fee structure of his funds and also at how they had underperformed against their benchmarks, he became very interested in index funds. Investor B didn't consider index funds an option in the future, as he is now aiming to choose individual stocks to beat the market. Investor C would only consider index funds if they were expected to earn 10 percent p.a.

Of the investors already aware of index funds, investor E had no interest in them, as he believes active funds beat index funds on average. Investor G had been and is seriously considering investing in index funds. His fund portfolio is well diversified, but the separate geographical funds are losing to their benchmarks, so he is considering replacing them with corresponding index funds where available.

In summary, it seems clear that there is a significant group of investors who would change their investment strategy if they were aware of the options. If four of six investors interviewed here become very interested in index funds merely by learning what they are, it is reasonable to assume that there is a very large similar group in the general public as well. Many investors would be happy with average returns if they only knew that there were options available that would give them those returns. If the evidence discussed in Section 2.2, which suggests that it

is hard for retail investors to find winning active funds, is further substantiated, it seems clear that informing retail investors more thoroughly on the options available to them is important.

6.7 Risk Attitudes

Attitudes towards risk and risk aversion in particular significantly influence the investment decisions of retail investors. In addition to a client's investment goals, a client's risk tolerance is the most important issue for financial advisors when making investment recommendations. If an investor has investments that are too risky for the investor's attitudes towards risk, the investment's volatility could cause the investor to sell the investment at an inopportune time and to forget about the long-term nature of the investment. At the same time, since riskier investments generally provide higher returns, investing in safe investments would cause a less risk-averse investor to be unhappy with returns.

As risk attitudes should have a large influence on the fund choices of investors, I wanted to gain a tentative picture of the interviewees' risk aversion. I performed two crude tests by presenting the interviewees with two scenarios. The questions were not designed to gain a definitive understanding of the risk taking characteristics of the interviewees, as that would require observing real life behavior. However, they should give a rather good indication of how risk averse the interviewees are compared to each other.

Firstly, I wanted to measure the interviewees' risk aversion in an investment setting. The scenario involved a choice between choosing active or passive stock funds. I asked each interviewee whether they would invest in active funds if they knew for a fact that 50 percent of active funds beat the relevant index and 50 percent do not. The scenario assumed that there was a similar index fund option available to them. The interviewees were then asked a follow-up question: At what point would the percentage of active funds beating the index be so small that they would no longer invest in active funds, but would take the index option instead? For example, if only 5 percent of active funds beat their benchmark indexes, choosing an active fund would be much riskier than if 50 percent of funds beat the index.

The answer to this question is obviously not only decided by the investor's level of risk aversion, as someone with a high belief in one's fund picking skills would be much likelier to

pick active funds even if fewer of them beat the indexes. Therefore, I will also take this into account when analyzing the answers.

Secondly, I wanted to measure the interviewee's risk aversion in a non-investment scenario. This scenario is similar to some tests performed to test the theories of risk and loss aversion. The fictional scenario involved a choice of whether the interviewee would accept the following bet. The bet involved tossing a coin and the interviewee guessing either heads or tails. If they guess correctly they win 100 euros, if they guess incorrectly they lose 100 euros. It was made explicitly clear for the interviewee that the bet would be offered only once and in their current financial situation. If the interviewee would not accept the bet, they were asked a follow-up question: If the amount you would lose by guessing wrong stayed the same as before, how much would the winnings offered have to be for you to accept the bet? Naturally, the higher the winnings required by the interviewee, the higher their level of risk aversion is.

Table 1. shows the threshold percentages in the first scenario and required winnings in the second scenario for each interviewee.

Interviewee:	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**K**	**J**
Scenario 1, (%)	40	20	25	65	20	50	30	50	50	40
Scenario 2 (€)	10 000	500	500	100	500	200	150	100	200	120

Table 1. Risk Attitudes of the Interviewees

As one would logically expect, the four investors who were most against index investing, investors B, C, E, and G, were also the least risk-averse in the investment choice in scenario 1. They would be content in finding the winning active funds even if only a small proportion of them actually are winners. However, looking at their responses in scenario 2 it is clear that risk averseness is very much dependent on the situation. While they were the least risk averse in scenario 1, they were, as a group, very risk averse in scenario 2, which was aimed to measure general risk averseness. Lichtenstein, Kaufmann, and Bhagat (1998) hypothesized that active fund investors are less risk averse than those who prefer index funds, but this was not the case in this sample. So, it seems that their preference for active funds is not due to being less risk averse than other investors, as hypothesized by Lichtenstein *et al.*, but more to do with their attitudes towards investing in general.

Practically all of the investors showcased significant differences in risk averseness in the two situations, which can be partly explained by mental accounting. As a good example, Investor C earlier stated that he didn't deem it worth the hassle to compare fund companies when making his 5000 euro investment, which can be interpreted as a willingness to accept high levels of risk in the investment. He even stated that the funds he chose were practically the riskiest ones available, as he wanted to have the chance to win big. Yet here, when offered the chance to earn free money, he would require 500 winnings to take the bet. It is clear that, in his 5000 € investment, he could easily lose much more than 100 euros compared to other funds by making a poor fund choice. Also, he wouldn't take the index fund option unless only 25 percent of active funds beat the benchmark indexes. This cannot be explained by a belief in fund picking skills, as he stated that he doesn't currently have the skills to pick winning funds without putting substantial work into it, which he hasn't done and wouldn't do other than for much larger sums. He even stated that he doesn't like gambling, which is backed up by the results of the coin toss experiment. It seems that he is placing investments in a mental account where risk seeking behavior, even wildly so, is acceptable. For him, investments are somehow an area where risk is not only required, but something to be purposefully sought after. Yet, the fact that he doesn't really like the gambling aspect of it is borne out in the fact that he stated that he hasn't enjoyed the investment experience.

The small sample and simple analysis provided here suggests that investors have significant problems in evaluating the risk-return relationships of their investments. Somehow, small potential immediate losses are much more vividly felt by some than more substantial potential future losses. Perhaps this is a reflection of the mutual fund investment as a whole being ambiguous to retail investors. Most of the investors showed a much greater willingness to gamble in investments than with cash, even when the odds were much more on their side in the latter.

Investor D provided an interesting counterexample. While he was willing to take the bet in scenario 2 with the possibility of 100 Euro winnings, thus showing no risk averseness, he required 65% of active funds to beat the market for him to choose active funds over index funds if similar index funds were available. For him, retirement money is not something to be gambled with, while losing 100 Euros in the moment is just a part of the enjoyment of gambling.

7. Summary and Main Conclusions

The purpose of this thesis was to provide a qualitative study into how private Finnish stock mutual fund investors make their decisions, with an emphasis on how they determine whether to choose actively or passively managed funds. The objective was to further our understanding of how retail investors, Finnish investors in particular, arrive at their investment choices. Understanding how decisions are made helps in being able to better educate investors on how to choose the investment vehicles that best suit their situation. I evaluated which specific fund characteristics affect investor decisions most while also including behavioral economics concepts in the analysis. The research was committed by interviewing ten Finnish retail stock fund investors by using the semi-structured interview method. The interview data was then analyzed to find patterns of behavior or ideas. Also, the data was further analyzed by comparing it to the results of past studies on investment behavior and behavioral literature.

7.1 Main Conclusions

As might be expected, the interviews revealed that the mutual fund choice process is approached in countless different ways. However, the data suggests that there are certain tendencies which apply to many Finnish retail investors. Also, the results differed significantly from those of many past studies.

Perhaps the main finding of this study is that the results suggest that many Finnish retail investors do not perform any comparisons of fund companies. They often choose their own bank as the default option. When they do not choose the bank, they most often choose the first company that has contacted them, or the first company whose advertisement caught their eye. This is a significant finding, as most often the size of the stock mutual fund investments are very significant, varying from two thousand euros to 135 000 euros in this study. It is hard to imagine any other purchase of a similar size being made without the buyer doing substantial comparisons of the service/product providers. For example, we wouldn’t expect to see someone decide to buy a car, simply walk to the nearest car dealership and proceed to buy the first car that sort of looks nice. In effect, however, this is what many retail mutual fund investors seem to do when making their fund purchases.

The fact that the default fund company option is the one most investors choose has significant implications. Banks are the default option for many retail investors' mutual fund investments, especially those with relatively small holdings. As banks are probably aware of this trend, they are in a position where they can determine fund features that are more favorable to them than if they faced sterner competition to attract customers. This partly explains why Finnish banks often offer funds with higher fee structures than smaller competitors. Another finding of this study, which closely follows from the fact that banks are often the default option, is that mutual fund investors through banks are often much less knowledgeable of investment options than those who invest through other institutions.

After going along with the default fund company, the main factor in choosing specific funds within the company's options was the geographic location or industry of the stock holdings in the fund. Neither the stock holdings nor being the easiest fund company to do business with were options in Jäntti's (2005) or Capon's *et al.* (1996) questionnaires. This implies that the importance of factors such as past performance could be exaggerated. Thus, the analysis of the interview data in this study goes some way to establishing that some of the results from past studies on investor's mutual fund decision making on an individual level are questionable. This was made even more explicit after I compared the interview data with the answers given by the interviewees to Jäntti's questionnaire questions. Their answers to Jäntti's questions produced similar results to Jäntti's study while the analysis of their actual behavior described in the interviews produced completely different outcomes.

One of the main differences between the results of this study and prior studies is that the results suggest that past returns is not nearly as important a factor for investors in choosing mutual funds as has been suggested previously. Previous studies have essentially all agreed that past returns is the most important factor in fund choice, while this study suggests that it significantly trails the factors described above.

Interview data analyzed here implies that investors are largely indifferent to fund fees. This is in line with previous research which suggests that fees do not have a large effect on fund flows. However, it differs from Jäntti's (2005) results which ranked fee structure as the second most important decision factor.

My findings tend to agree with Capon's *et al.* (1996) findings that a significant portion of mutual fund investors are ignorant of many central issues regarding their investments. Only four of the ten interviewees could describe the fee structure of their funds. Just as alarming was the fact that only one of the eight investors in active funds used the proper benchmark to judge the performance of their funds. This is in line with Goetzmann's *et al.* (1992) suggestion that many investors do not know if their investments are performing poorly. Without using the right benchmark for comparison it is not possible to effectively evaluate performance of a fund and the investor could be either happy with one of the worst performers in its category or unhappy with one of the best performers in its category.

If there is a large group of Finnish mutual fund investors who are ignorant on major aspects of their fund holdings, they are likely to make poor fund choices. This could be a societal problem as it will negatively affect the efficiency of the market. It could be argued that it would be beneficial if fund companies and investment advisors were required to more explicitly and clearly state the fee structures of funds and how those fees affect the total returns of the fund. Likewise, fund companies and investment advisors could be required to explain the importance of benchmark indexes to the customer.

When considering Savage's (1954) modern theory of rational decision making under uncertainty, the behavioral analysis in this study showed evidence that the interviewees followed less than optimal decision models. There were clear examples of gambling behavior and treating investments as entertainment. Biases observed included loss and risk aversion, the disposition effect, biases caused by mental accounting, and the status quo bias. The analysis provided in this study suggests that investors have significant problems in evaluating the risk-return relationships of their investments. Small potential immediate losses are much more vividly felt by some investors than more substantial potential future losses. It seems clear that behavioral aspects should be, whenever possible, included in any analysis on mutual fund decision making.

Finally, the research here suggests that there is a large group of investors who would be potential index fund investors if they had a better knowledge of how index funds operate and if index funds were more easily available to them. Many of the investors interviewed here would be perfectly fine with achieving average market returns, but did not know that there is a vehicle which makes it possible to achieve them. Most of them did not believe that active

funds on average beat the market. At the same time, they generally doubted their ability to pick winners. In all, the results suggest that many investors would make different decisions in choosing between active and passive funds if they had more information and thought about the issue in more depth.

7.2 Suggestions for Further Research

The results presented here are clearly not statistically significant, but they make a convincing case that the designs of some previous studies on mutual fund decision making, namely those of Jäntti (2005) and Capon *et al.* (1996), are somewhat faulty, which could result in a lack of reliability. However, it is not conceivable to reach statistical validity on investor behavior through interviews due to the substantial work they require. Interviews also result in such enormous amounts of versatile data that quantitative analysis is practically impossible. Therefore, I suggest there is a need for further questionnaire studies on fund investor behavior. These studies should be carefully designed with a more comprehensive look at the mutual fund investment decision so as not to miss out on possible factors, such as those described in the previous section, which could have a significant influence on the fund investment decision.

Another beneficial topic for further research would be further investigating how well investors know the options available to them. As this study and prior research suggest, there is a large group of investors without basic knowledge of fund characteristics. While this investor ignorance has been studied in the past, the research has not involved whether investors are aware of options such as index funds, which might be suitable for them. Thus, there is a need for a statistically valid study on whether retail investors truly are unaware of the options available to them. Especially so, if society deems it part of its role to help ensure retail investors make better investment choices. The results could be used in legislating guidelines for fund companies and investment advisors.

Appendix 1: Interviewees

Investor A interview conducted on 7.2.2012

Investor B interview conducted on 12.2.2012

Investor C interview conducted on 19.2.2012

Investor D interview conducted on 22.2.2012

Investor E interview conducted on 12.3.2012

Investor F interview conducted on 19.3.2012

Investor G interview conducted on 18.3.2012

Investor H interview conducted on 21.3.2012

Investor J interview conducted on 28.2.2012

Investor K interview conducted on 16.3.2012

Age distribution: 27, 29, 36, 39, 39, 42, 44, 48, 62, 64

Gender distribution: 8 male, 2 female

Yearly salary: 30 000€, 38 000€, 43 600€, 50 000€, 50 000€, 56 400€, 62 000€, 72 000€, 160 000€, retired

Investments in total: 5 000€, 7 500€, 9 000€, 12 000€, 15 000€, 20 000€, 24 000€, 50 000€, 58 000€, 220 000€

Investments in stock mutual funds: 2 000€, 5 000€, 5 000€, 7 000€, 7 500€, 9 000€, 19 000€, 24 000€, 30 000€, 135 000€,

Appendix 2: Framework of the Interview

As the interviews were conducted in Finnish, the framework is presented in Finnish. How the framework was used in each interview depended greatly on the answers of the interviewee.

Sijoituspäätös yleisesti

Kerro yleisesti, miten teit sijoittamispäätöksesi omistamiisi rahastoihin.

Mahdollisia jatkokysymyksiä, mikäli asiat eivät selvinneet vastauksesta edellä kuvattuun avoimeen kysymykseen:

Oliko helpoin löytää?
Myyjä suositteli?
Käytitkö sijoitusneuvontaa ja oliko se tärkeässä roolissa?
Uskotko, että sijoitusneuvojat antavat osaavaa neuvontaa?
Mitkä asiat rahastossa kiinnostivat?
Rahaston sijoituskohteiden kotimarkkinat?
Sijoituskohteiden toimiala? Yritysten koko? Eettisyys? jne.
Seuraatko rahoitusalan uutisointia ja vaikuttiko se päätökseesi?
Minkä rahastojen osuuksia omistat? Pankin rahastoja vai muiden sijoitusyhtiöiden?
Mihin tarkoitukseen sijoitat?
Oliko valinta helppoa?

Mainonta

Miten mainonta vaikutti päätökseesi?

Kulurakenne

Mietitkö rahaston kulurakennetta sijoittaessasi?

Tiedätkö mikä rahastojesi kulurakenne on? (Merkintäpalkkio, hallinnointipalkkio, lunastuspalkkio)

Tiedätkö, mikä rahastojesi kulurakenne on muihin verrattuna?

Vertasitko sijoittaessasi?

Tuottavatko rahastot joilla on korkeampi kulurakenne parempaa tuottoa kuin rahastot keskimäärin?

Historiallinen tuotto

Oliko historiallinen tuotto merkittävässä asemassa päätöksessäsi?

Vertailitko eri rahastojen historiallisia tuottoja?

Voiko rahaston mennyttä arvonkehitystä mielestäsi käyttää hyväksi arvioitaessa tulevaa arvonkehitystä? Miten?

Markkinoiden voittaminen

Tiedätkö mitä ovat passiivinen ja aktiivinen sijoittaminen?

Mitä ovat aktiiviset rahastot ja indeksirahastot?

Voittavatko aktiivisesti hallinnoidut osakerahastot markkinaindeksin keskimäärin?

Kuinka monta prosenttia aktiivisesti hoidetuista rahastoista uskot voittavan vertailuindeksinsä?

Oletko tyytyväinen osakerahastoihisi? Miksi/Miksi et?

Kuinka usein seuraat arvonkehitystä? Päivittäin, viikoittain, kuukausittain, harvemmin, en ollenkaan?

Mihin vertaat sijoitustasi arvioidessasi sen tuottoa? (esim. osakemarkkinoihin kokonaisuutena, indeksiin, säästötiliin, korkorahastoihin)

Tiedätkö miten sijoituksesi on pärjännyt verrattuna vertailuindeksiinsä tai Suomen/Maailman osakemarkkinoihin kokonaisuutena?

Jos et tiedä, luuletko että se on tuottanut paremmin/huonommin kuin vertailuindeksinsä?

Oletko tehnyt päätöksen yrittää voittaa markkinat, eli saavuttaa paremman tuoton kuin markkinat keskimäärin?

Riittäisikö sinulle markkinoiden keskimääräinen tuotto?

Myytkö ja ostatko rahastoja aktiivisesti?

Osaatko valita rahastoja, jotka tuottavat paremmin kuin muut rahastot? Jotka voittavat vertailuindeksinsä?

Mitkä tekijät johtavat siihen, että osaat tehdä hyvä valintoja?

Teetkö rahastomerkintöjä ja myyntejä sen mukaan, miten markkinat ja itse rahastot heilahtelevat?

Minkä verran luulet että vaatisi aikaa tutkia vaihtoehtoja, seurata markkinoita, opiskella asiaa jne., jotta voisi sijoittaa hyvin?

Riskinotto

Hypoteettinen tilanne:

Jos tietäisit, että 50 prosenttia aktiivisesti hoidetuista rahastoista voittaa indeksirahaston, valitsisitko aktiivisesti hoidetun rahaston? Jos se olisikin 60 prosenttia? 80 prosenttia? 40 prosenttia? 20 prosenttia? Onko sillä edes merkitystä, vai uskotko joka tapauksessa valitsevasi rahaston, joka tuottaa paremmin kuin markkinat keskimääräisesti?

Ottaisitko vastaan seuraavan vedon?

Valitse kruuna tai klaava. Heitän lanttia. Jos arvasit tuloksen oikein, voitat 100 euroa, jos arvasit väärin, häviät 100 euroa.

Entä, jos mahdollinen voitto olisi 120 euroa, mutta tappio 100 euroa?

Montako euroa sinun tulisi voittaa, jotta ottaisit vastaan vedon mahdollisen tappion ollessa 100 euroa?

Pidätkö uhkapeleistä?

Passiivinen sijoittaminen

Oletko harkinnut passiivista eli indeksisijoittamista?

tai

Miksi sijoitat indeksirahastoihin?

Miksi et ole harkinnut?

Kiinnostaisiko sinua jatkossa sijoittaa indeksirahastoihin?

Appendix 3: Questionnaire Questions

The following questionnaire questions are the same as the two main ones used in Jäntti's (2006) study. The corresponding questions in Jäntti's study are questions 13 and 18.

1. Miten arvioisitte seuraavien tekijöiden tärkeyttä valitessanne sijoitusrahastoa?

Ympyröikää jokaisen tekijän kohdalla Teidän näkemystänne parhaiten vastaava vaihtoehto.

1. Rahaston historiallinen tuotto 1 2 3 4 5
2. Salkunhoitajan maine 1 2 3 4 5
3. Sijoitusneuvojan asiantuntemus 1 2 3 4 5
4. Rahaston perimät palkkiot 1 2 3 4 5
5. Rahaston näkyvä mainonta 1 2 3 4 5
6. Rahastoyhtiön tarjoamien rahastojen runsas määrä 1 2 3 4 5
7. Rahaston yhteiskuntaystävällisyys 1 2 3 4 5
8. Rahaston maine 1 2 3 4 5
9. Puolueettomat rahastovertailut (Morningstar/Eufex) 1 2 3 4 5
10. Muu, mikä________________________________ 1 2 3 4 5

1 Ei lainkaan tärkeä
2 Ei kovin tärkeä
3 Ei tärkeä eikä merkityksetön
4 Melko tärkeä
5 Erittäin tärkeä

2. Mikä on tärkein valintakriteeri, kun valitsette sijoitusrahastoa?

Merkitse viivoille tärkein numerolla yksi (1.) toiseksi tärkein numerolla kaksi (2.) kolmanneksi tärkein numerolla kolme (3.) neljänneksi tärkein numerolla neljä (4.) ja viidenneksi tärkein numerolla viisi (5.).

Rahaston perimät palkkiot___________

Rahaston historiallinen tuotto___________

Rahaston tarjoamat palvelut___________

Rahaston mainonta___________

Rahaston menestyminen puolueettomissa vertailuissa (esim. Morningstar)__________

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