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CONSUMER ATTITUDES TOWARDS DIFFERENT TRADING PLATFORMS IN FINLAND

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I hereby declare that I have compiled the thesis independently
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ABSTRACT

In this thesis I study through a survey the viewpoints of retail investors, and how traditional banks are perceived compared to the competiting broker services.
The thesis aims to answer two hypothesis;
H1: “Individual investors prefer online trading platforms over traditional banks”, and
H2: “Individual investors are mainly driven to choose platform by cost efficiency rather than other reasons, such as customer service, visual look, functionality or range of products available”.
I will also propose traditional banks solutions on how to improve their standings as investment brokers.
The study is motivated by observing the recent years rise of new market competitors of which none has been a traditionally functioning bank, most notable example being Nordnet AB. These competiting broker services may as well be referred to as “Online trading platform”, “Other online trading platform”, or just plainly “Trading platform” henceforth.

The study finds that individual investors indeed see other online trading platforms cheaper, less stagnant and having a larger investment product catalogue. It is noted that traditional banks’ competitive edge relies heavily on customer service, and additional tailored services, such as higher customer segments, whereas other online trading platforms attract customers on easy-to-use and -start platforms with far less effort needed in many cases from account creation to beginning of trading.
The hypotheses can not be rejected or accepted with this study only, due to results from regression analysis contradicting many of the survey answers, and thus the subject will need further research.

INTRODUCTION

Banks have traditionally been nearly the only institutions through which public has been able to invest their money to the stock market. Since the amount of online trading platforms has grown drastically in the past few years with new contenders entering the market, traditional banks among others have had to rethink their strategy on attracting customers. We have seen a rise in broker services that offer consumers an easy way to invest money into, for example, the stock market, mutual funds and structured products. They have penetrated the market with lower costs and aggressive advertising, while traditional banks have been slow on their moves to adapt to the new situation.

Digital, cost-effective, trendy, easy, profitable. These are all adjectives I have heard of regarding these new broker services, also referred to as “other trading platforms”, or “online trading platforms”, whereas banks have traditionally been perceived as highly conservative and hierarchical, which, however, can be thought as a two sided blade for them. Banks are seen as stable and trustworthy, but also as uninventive and unthoughtful for retail investors, and thus I am keen to find solutions for the banks to compete against online trading platforms that have profiled as being agile and inventive.

Since it is not always clear which investment platform would be the best for which customer type, and since public opinion affects many investors’ decisionmaking, this paper looks to highlight viewpoints of individual investors and thus deriving possible differences and edges the traditional banks and other investment platforms might have over each other.

With this, my hypothesis are:
H1: “Individual investors prefer online trading platforms over traditional banks”, and
H2: “Individual investors are mainly driven to choose platform by cost efficiency rather than other reasons, such as customer service, visual look, functionality or range of products available”.

The study on consumer attitudes was conducted through a survey shared online. The best way to find individual investors to answer such research is undoubtedly through forums used for investment discussion, and aimed for individual investors. In this case mainly two large Facebook groups were used to gather participants. The complete survey can be found in the appendix 2.
Also covered will be an analysis on subgroups of the sample, by running a binomial logistic regression and modelling how variables such as gender, age, investment experience or the size of ones investment portfolio affect individual investors' choices on used main trading platform.
Analysed is also whether the views of factors regarding different trading platforms, such as cost efficiency or customer service, correlate with the main platform currently used, at the same time answering to our hypotheses.

The paper can roughly be divided into four main parts: theory, methodology, results and conclusions. First will be covered theoretical framework, and background for the study, where broadly will be covered studies on different factors that might have effect on choosing a preferred trading platform.Noted also is the background of the study, why the study is deemed useful and needed.
Secondly will be the methodology of the study, with a view into the research instruments used, an anonymous survey and the data gathered run through a regression analysis. Sample characteristics will also be covered in this part.
After that, the findings, analysis and discussion, and a regression analysis will be presented. A separate chapter for discussion in general is included. Covered also are proposed solutions for banks and other platforms alike, and limitations of the research.

1. THEORETICAL FRAMEWORK AND BACKGROUND

Many individual investors tend to heavily rely on costs – initial or recurring. Costs in the beginning of investment activity [for example ticket fees – fees that permit participation, or information costs, such as education or literature], and during investing [for example mutual fund fees, transaction fees] may discourage investors off of investing activities (Haliassos & Bertaut, 1995) (Bertaut, 1998) (Vissing-Jorgensen, 2002), them failing to examine what they get for the price and if it affects their success as an investor, or broader, starting off as an investor.

It is no doubt easier than ever to have access to large amounts of data due to the internet revolution and thus more retail investors pick stocks and choose mutual funds on their own.
Notable to these self-service customers, according to (Ding, et al., 2007) is that "[…] self-service customers, in both an online context as well as with a high-involvement service, prefer personal control, time and cost saving, as well as the avoidance of personal contact in service".
This rise in independent individual investors might have made it easier for other online trading platforms penetrate the market, them being able to completely scrap, or at least make it easier to opt out of many of the high-involvement services traditionally linked to banks (Ding, et al., 2011).

Online trading platforms that, rather than focusing on all around services for investors, but offer just a platform to trade on, and maybe some self-service advice and charts, can better focus on advancing their product technologically, and that way more easily cut the fixed and marginal costs of trading, one notable example being transaction fees (Tyagi, 2004).
However, As (Barber & Odean, 2001) said, "Such cyberspace advice is nearly costless to reproduce. However, its quality varies greatly. If investors are unable to distinguish high quality advice from low, they are unlikely to pay more for quality. Indeed, with so much information available for free on the Internet, many investors will be unwilling to pay anything for advice alone."

What is also important to note, is that most banks work with a subscription based model on pricing for most of the customer segments on top of transaction fees, whereas most of the other trading platforms in Finland charge only on a transaction-based model. This, of course, is because the business model of traditional banks is very different from other online trading platforms and banks have traditionally used a subscription-based model. None the less, transaction-based model is found to be more profitable than subscription-based model (Geng & Zhang, 2019) and thus traditional banks should look into finding alternatives for charging subscriptions from their customers.

To the best of my knowledge, how individual investors perceive differences of trading platforms and choose their preferred one has not directly been studied before, but there is a lot of research on independent factors that lead the consumers to decide on their preferred platform, an example being broker service biasedness and more precisely financial advicer misconduct (Egan, et al., 2019). Big misconducts made by broker services, and more often individual financial advisers, sometimes end up in the news, and a clear misconception "All financial advisors are untrustworthy" may then arise in consumers. This could potentially be a dealbreaker with a traditional bank and a platform that offers no investment services, but rather just a platform to invest on and data to use.

In Competition for Attention (Bordalo, et al., 2016) salience theory is deeply studied. It is stated that "attention of decision makers is drawn to the most unusual, surprising, or salient attributes of the options they face(…)" (Bordalo, et al., 2016). We can find similarities to this in consumers choosing the platform they mainly use. Pricing of the product is seen very salient to most consumers and aggressive marketing on low costs captures customers' attention. A platform considered unusually good, easy to use, functional and low cost is competitive and what the company should thrive for.

A question whether the lowest cost platform indeed saves money in all situations could be further studied, since excess amount of trading easily leads into lower profitability (Odean, 1999), (Barber & Odean, 2000), that being linked to that online brokerage services influencing investors to trade more actively (Glaser, 2003). Thus, one could think that do lower trading costs lead into excess trading and thus overall lower profitability, and could higher profitability be achieved by implementing higher costs per trade, for example.

Many individual investors can be considered as sophisticated customers who actively seek information regarding the services they use. Companies try their best to shroud unfavorable information, such as costs and fee structure, behind as complicated paths as possible, while still balancing it off not to seem shady, as if they wanted to hide something. While it's a novel idea, and many might think it is worth it for the broker service, it is not worth for any of the participants in the market to unshroud or educate consumers of shrouded attributes its competitors have, since myopic consumers, who are not so willing to research themselves, will turn into sophisticated consumers that instead of add-on look out for a substitute (In our case, for example substituting a bank's costly actively managed fund to a passively managed fund such as index fund), while affecting only little to possibility of changing business from competitor to oneself. In other words; both firms lose while customer gains. (Gabaix & Laibson, 2006)

Past studies have found that male respondents make riskier decisions regarding investing (Apicella, et al., 2008) (Charness & Gneezy, 2007). This, however, according to Charness and Gneezy is because women make smaller investments in risky assets, making them appear as more risk averse (Charness & Gneezy, 2007).
Other differences that have been found on previous literature between male and female investors include, for example, that women rely more on professional advices, and make less autonomous decisions than their male counterparts. Men are also more speculative investors and have a longer investment horizon. (Marinelli, et al., 2017)
Female respondents have also shown lower financial knowledge than their male counterparts, correlating with participation on stock market (Van Rooij, et al., 2011), and thus partly affecting that women in general participate less in stock market than men (Almenberg & Dreber, 2015).

Since platform preference can also be thought of as an investment decision due to possible differences in products, prices and other attributes of the service, what is also be covered is whether the answers from this study are comparable with the results from previous studies regarding the effects of gender on investment decisions, and more precisely if gender affects the platforms the respondents choose as their main one.

Wealth has been found out to be correlating with participation into stock market, and other investing activity (Calvet, et al., 2007). The managing of portfolio of a wealthy individual tends to be much more complicated due to , for example, a larger amount and a larger variety of assets and taxation involved (Maude, 2010) (Hens & Bachmann, 2011), and thus the wealthy individual

might want to pay for all around wealth management, and deeper involvement of a financial advisor, i.e. traditional bank's private banking. Being able to participate in the higher customer segments of traditional banks, the ones that offer more easily financial assistance and more tailored service, may give a more positive view of traditional banks compared to other platforms.

1.1. Background

On 27.1.2020 a Finnish bank S-Pankki decided to close its brokerage and stock management services for all retail customers. The customers in S-Pankki were offered two options; to move their stocks to a different broker, or liquidiate them. S-Pankki signed a deal with Nordnet, an online trading platform operating in the Nordics to accommodate the assets moving for certain perks only customers from S-Pankki get. S-Pankki justified this decision by that the field is highly competed on and by making the deal with Nordnet, S-Pankki can focus on their main fields; lending and managing other assets than stocks.
While S-Pankki was not a large operator in brokerage services in Finland, this stirs up questions on whether the time of traditional banks as investment brokers is over, with all these nimble competitors focusing solely on brokerage services joining the market.

Regarding Nordnet, one of the largest stockbrokers in the Nordics; It operates completely online and during the past five years it has cemented its place as the main contender for traditional banks. Nordnet has traditionally been perceived as a starter friendly, cost effective and well managed investment manager and broker.
According to the 2015 Annual report of Nordnet they had had 490,400 active customers on board (Nordnet AB, 2015) and by 2019 it had grown to 913,900 active customers (Nordnet AB, 2019). The number of active accounts had also nearly doubled itself during those four years with 627,500 to 1,213,400 active accounts respectively. This leads to a question on whether the new customers of Nordnet have transferred from other platforms, have opened a secondary account at Nordnet, or are completely new with Nordnet as their first platform.

2. METHODOLOGY

The main method used to conduct this study was an anonymous survey targeted to Finnish individual investors. The answers were run though a binary logistic regression analysis with a dependent variable of investment platform used, traditional bank or other platform. Through binary logistic regression, we get to see how changes in the independent variables; age, gender, investment experience in years and portfolio size affect the choice of investment platform primarily used. I also run a regression on how the views on five different factors; cost efficiency, customer service, visual look, functionality and range of products available affect the choice of main investment platform. Presented are also tables constructed of the data gathered.

2.1. The research instrument

Since the paper focuses on finding consumer attitudes towards different banking platforms, and possible differences between them, it is ideal that the research data was collected through an anonymous survey that was published in Facebook on two large finnish investing related groups, Sijoituskerho („Investment Club“) and Vauras Nainen („a Wealthy Woman“). Both these groups hold around 60 000 unique members, of which some overlap with the other group. The survey was also published on author's LinkedIn page.

The survey focused on investors only and was conducted in finnish, since the target audience is finnish speaking. All the results and answers will be presented in english, translated from finnish. The survey was conducted on an online surveying platform called „Surveymonkey“, which allowed the questionnaire be completely anonymous, by hiding the IP adresses of partakers.
Each figure on the thesis is generated from the data gathered, using the „Surveymonkey“ platform. On the survey can be seen both qualitative and quantitative characteristics, since the survey was a 12 question survey of which two last ones were open ended, and the rest were guided response type questions.

To be noted is that he data will be presented in form of figures instead of tables, but for all the figures there can be found a table corresponding in the appendices presenting the same information in different form.

Some of the questions of the survey were further analysed in hopes to find correlation between different subgroups of respondents, and to link their views of different trading platforms to the platform they mainly use themselves.

As for modelling the regression analysis, a statistical software called „gretl“ was used, and a binomial logistic regression was chosen because it is the best fit for a dependent variable with only two options. In our case the investment platform used was the dependent variable, and „traditional bank“ and „other trading platform“ being the two options.
The regression was run only in two instances, with different independent variables, both looking to answer the two hypotheses previously mentioned.

2.2. Sample characteristics

The survey consisted of four pre-questions; gender, age, investment experience in years and portfolio size in euros. The sample of population derives from all the 131 survey partakers, all of them finnish, of which 41,98% were male, 54,96% were female, 1,53% considered themselves to be “other”, and the last 1,53% preferred not to answer.

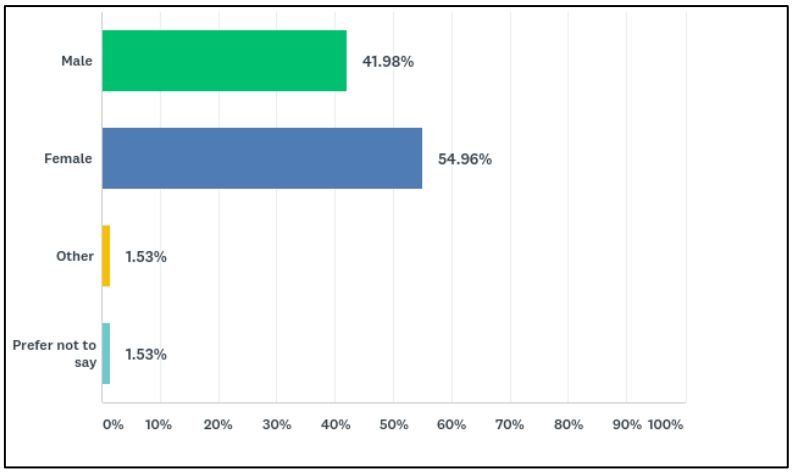

Figure 1. Gender of the respondent
Source: Data gathered from the survey

Age, and investment experience in years were both open ended questions, rather than ranges, to get as exact information as possible. Average age of a respondent was 34,5 and they had invested for a bit over 9 years, with a standard deviation of 9,15.

The last pre-question, investment portfolio size, was asked in ranges, as seen below, due to the sensitivity of the question.

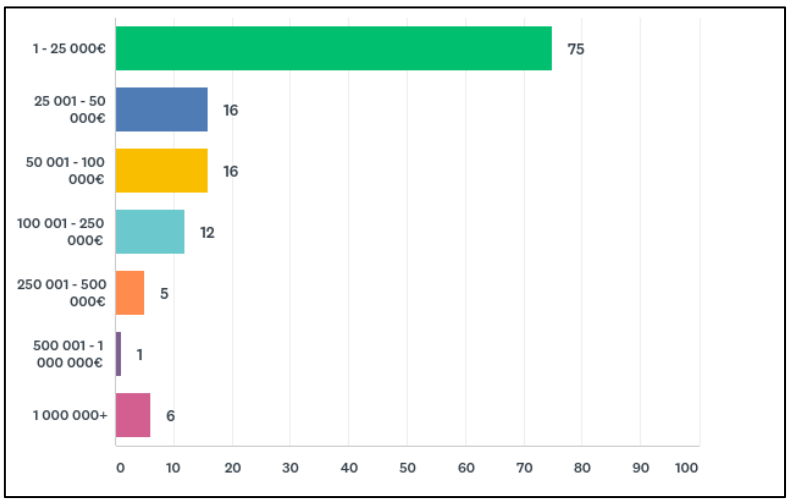

Figure 2. Respondent's portfolio size in euros
Source: Data gathered from the survey

Most of the respondents, 75, or 57,25%, fell into the first category; investment portfolio of 1€ to 25 000€ and the amounts of respondents in the three categories spanning from portfolio sizes of 25 001€ to 250 000€ were fairly evenly represented.

What is notable, is that of the respondents, there were 6 people (4,6%) who have over one million euros in their investment portfolio, while only one person has (0,7%) 500 001€ to 1 000 000€ and five people (3,8%) have 250 001€ to 500 000€.

3. EMPIRICAL RESULTS

3.1. Findings

After the pre-questions, questions regarding investment platforms used followed. The question 5 "Which of the following online trading platforms do you mainly use at the moment?" had six different non-bank related, "other trading platforms". Traditional banks were grouped into one and choice "other" was for if the platform used didn't fall into any of the answers above.

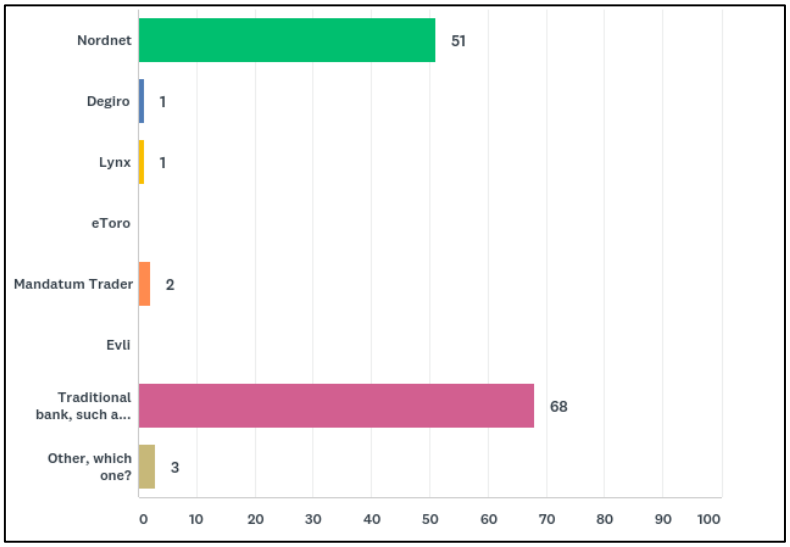

Figure 3. The online investment platforms mainly used currently
Source: Data gathered from the survey

As seen above, 68 (53,97%) of the respondents use a traditional bank as their main investment platform, while the biggest non-traditional competitor in the market, Nordnet, holds 51 (40,48%) of the respondents' main portfolios. A total of three people answered "other", those three being "Saxo", "Seligson" and "Avanza".

What is interesting, but not surprising due to banks' premium- and private banking plans, respondents with an investment portfolio valued over 100 000€ highly prefer traditional banks with over 78% of respondents choosing a traditional bank as their main platform.

On the other hand, the lower end of respondents with 1€ to 100 000€ portfolio value relied pretty evenly on both traditional banks (48,54%) and Nordnet (46,60%).

Splitting the respondents into genders, 48,53% of female respondents use other trading platforms as their main one, whereas only 43,64% male respondents do so.
To note; effects of different variables, such as age, gender, portfolio size, investment experience and, appearing in question 9, views of different factors regarding trading platforms will be studied in its own title, "3.2 Regression analysis".

The sixth question asked the respondents to rank five different factors of an investment platform from 1: the most important, to 5: the least important. The points were inverted for the chart below, so that the more points the factor has, the more important it was deemed.

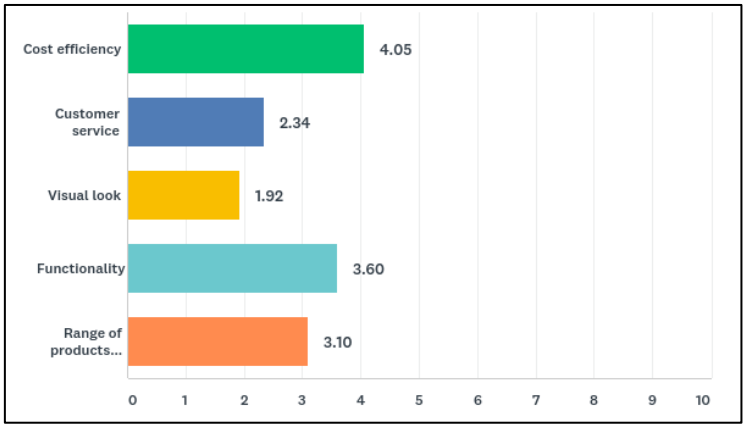

Figure 4. An average of the scores respondents gave to the factors
Source: Data gathered from the survey

Important to note when looking at the chart, is that average score is inverted, meaning that rank 1 equals to a score of 5, rank 2 equals to a score of 4, and so on. As seen on the chart, the most common for being ranked first in importance was cost efficiency with an average score of 4.05, with a falling order for functionality (average score 3,6), range of products (3,1), customer service (2,34) and lastly visual look (1,92).
These answers give ground to the hypothesis that cost efficiency is seen as the most important factor when deciding on a preferred investment platform.

When accounting only for investment portfolios valued over 100 000€, the importance of cost efficiency (average score of 3,65) and functionality (3,43) decrease, while importance of customer service (2,61), visual look (2,09) and range of products (3,22) increases.
More drastic changes we get when we account only for investment portfolios of over 250 000€. Functionality is deemed the most important factor with an average score of (3,91) and cost efficiency has decreased to a score of (3,27). At the lower end of portfolio sizes, the average scores of factors were virtually the same to those of the whole sample.

Male respondents seemed to appreciate cost efficiency more and functionality less than the average for both genders, with average scores of 4,20 and 3,45 respectively. Female respondents however rated functionality over the average of both genders, but cost efficiency under the average. Customer service, visual look and range of products were appreciated virtually the same between the genders.

The question 7 asked if the respondent has used different online trading platforms previously or parallel to their main trading platform, with the choices yes or no.
5 respondents skipped this question, leaving total respondents to be 126, of which 84 had used a different trading platform and 42 had not. This equals to 66,67% and 33,33% respectively.

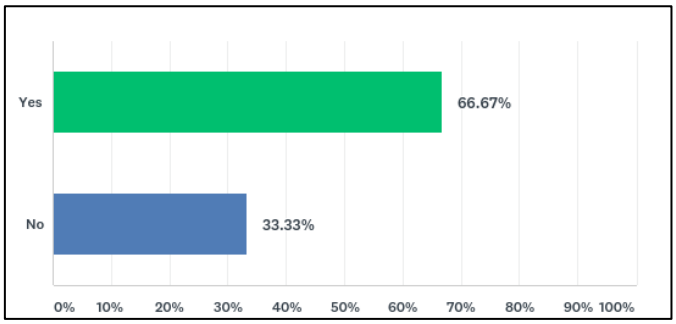

Figure 5. A question whether the respondent has used different online trading platforms
Source: Data gathered from the survey

The most notable differences between groups of respondents were for portfolio sizes' lower and higher tails, since respondents with a portfolio size of less than 25 000€ only roughly 62% had used different platforms than their current one, whereas roughly 82% of respondents with over 250 000€ in their investment portfolio had used different platforms than their current one, and of respondents with over 500 000€ in their investment portfolio the number was already 100%.

Interesting is also the fact that only 63,24% of female respondents had used, and 36,76% had not used different online trading platforms than their current one, whereas the percentages on the same question for male respondents are 69,09% and 30,91% respectively.
The smaller percentage for women could be connected with the general risk aversedness of female investors compared to male, but this would need further researching. What is also to note is that due to the small sample size, our results are more directional, rather than precise, thus researching this connection in this paper would be pointless.

The question 8 was a follow up for the question 7, and the last one regarding used trading platforms. “Which online trading platforms have you used previously or parallel to your current one?”. Multiple answers were allowed, and the respondents who answered no to the last question, were allowed to skip this question as is obvious.

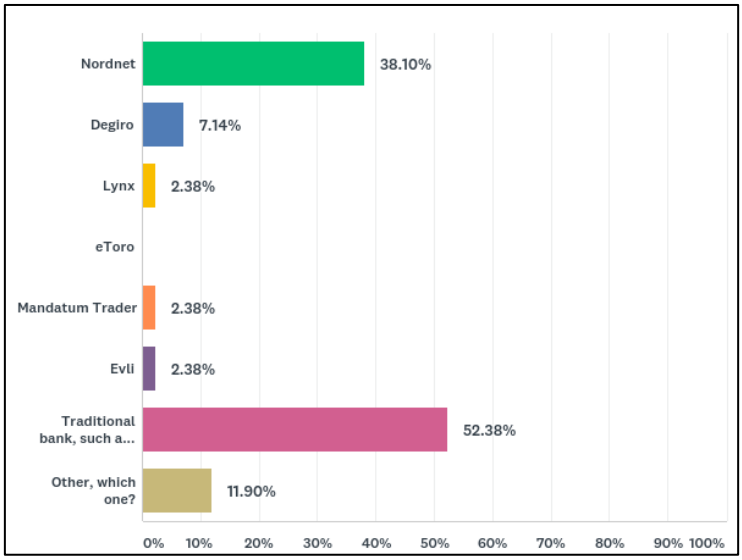

Figure 6. Which platforms have the respondents used previously or parallel to their current one
Source: Data gathered from the survey

As seen on the graph, Nordnet and traditional banks not only as main platforms, but also as previous or parallel platforms are the most common. Degiro is a popular answer aswell. Different platforms respondents have used or are using parallel are Seligsson, Mintos, Fellowfinance, Alfred Berg, Taaleri, Plus500, Trine and Privanet. Two respondents had used the option “Other, which one?” to comment a traditional bank.

The question 9 finds out how respondents see other online trading platforms compared to traditional banks, by using Likert scale of strongly disagree to strongly agree.

There are five claims of other online trading platforms: “Better customer service”, “Wider range of investment products”, “Better cost efficiency”, “Better visual look”, and “Better functionality”. Below are figures representing the answers respondents gave.

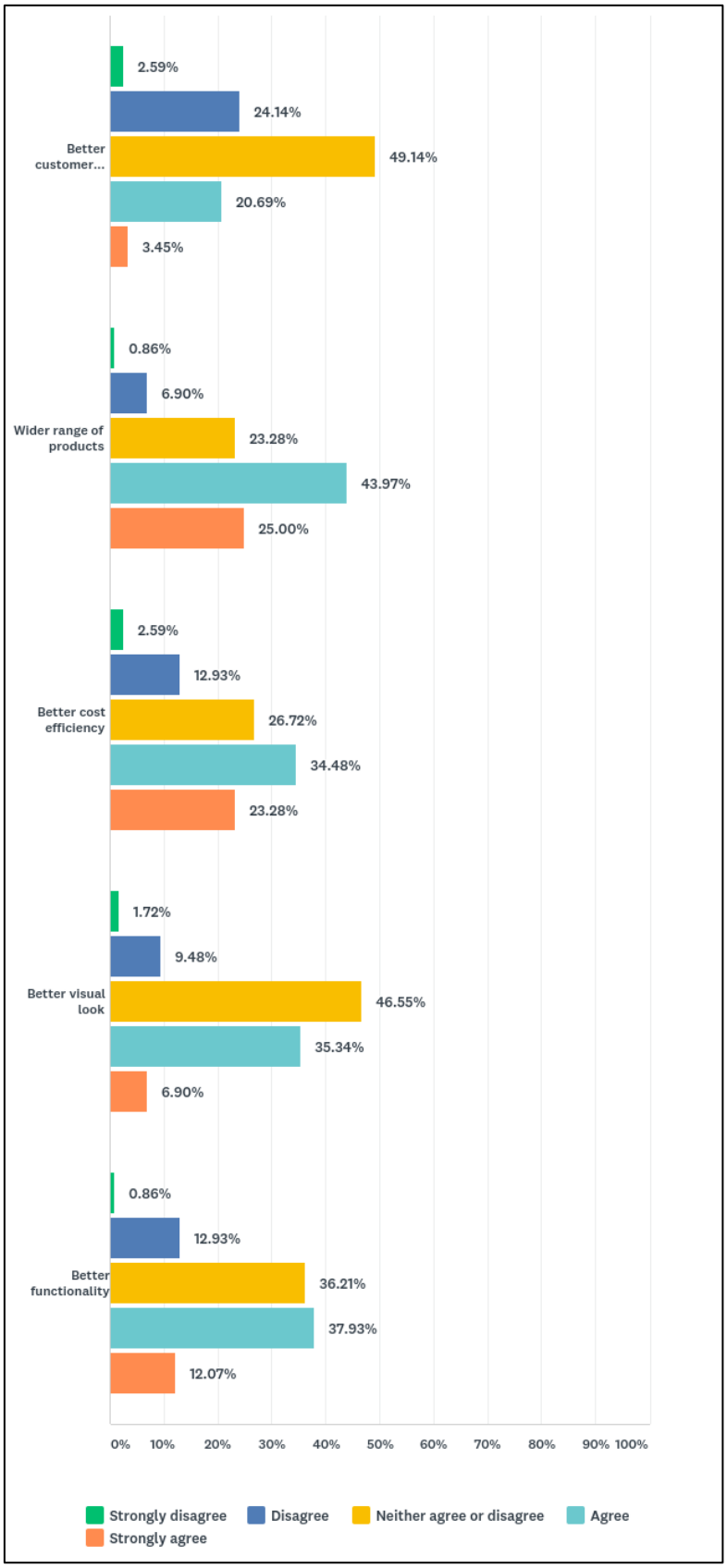

Figure 7. A distribution of answers from strongly disagree to strongly agree
Source: Data gathered from the survey

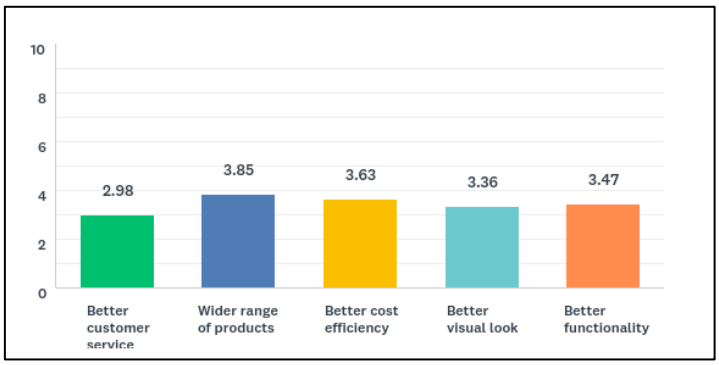

Figure 8. A weighted average of the answers to the question 9
Source: Data gathered from the survey

The first graph is a distribution between the answers and the second graph is a weighted average of the answers (Calculated with strongly disagree – strongly agree equals to 1-5 respectively).
While the "Neither disagree or agree", or the so called "middle" answers distort many of the questions, other trading platforms are clearly seen as having better functionality, visual look, cost efficiency and also a wider range of products. Only the level of customer service is close to equal between the two.

57,76% of the respondents answered strongly agree or agree to other trading platforms being more cost efficient. With a high percentage of strongly agree or agree were also "other online trading platforms have a greater range of products available" (68,97%), and "other online trading platforms have a better functionality" (50%).
Significantly less agreed were better visual look (42,24%), and better customer service (24,14%). Notable in these two factors was a large amount of answers neither agreeing or disagreeing, as seen on the figure,46,55% and 49,14% respectively. A difference between these two makes the fact that a big part of respondents either disagreed or strongly disagreed to other online trading platforms having a better customer service than traditional banks (26,73%). This was the only factor turning to traditional banks' favour.

The weighted averages show us the same answers concluded. In a falling order the range of products available (w.a. 3,85), cost efficiency (3,63), functionality (3,47), visual look (3,36) and lastly customer service (2,98). all but customer service rated over 3, meaning that as a mental image the respondents see other online trading platforms better than traditional banks.

These answers give ground to the hypothesis that overall individual investors indeed prefer online trading platforms over traditional banks, at least as a mental image. For a different point of view, how the actual main platform uses correlates with these views, see the part "3.2 Regression Analysis".

Going into the subgroups we find respondents with an investment portfolio of over 250 000€ found traditional banks better in all five categories, whereas respondents with a portfolio value less than 250 000€ found other online trading platforms better in all categories.
The most important differences between female and male respondents were that female respondents avoided extreme opinions. There was not a single "Strongly disagree" on the statements "better customer service", "wider range of products", "better visual look" and "better functionality". and all the percentages of "Strongly agree" were notably lower than those of male participants. As discussed in the theory part of the paper, this goes well in line with previous literature that women are indeed more risk averted than men.

The question 10 was a yes or no typed question with a follow up open question on why they think so to: "On 27.1.2020 a Finnish bank S-Pankki notified their customers about them quitting retail brokerage services. Do you see other traditional banks following their lead in the near future of 1-3 years period?"
A total of 111 of the 131 respondents answered the question with 26,13% of respondents thinking that banks will, and 74,77% of the respondents thinking that banks will not quit offering retail brokerage services in the next 1 to 3-year period.

Sorting the answers under keywords, non-profitability rose as the biggest comment on the respondents who answered "Yes". 11 out of 29 respondents told that it won't be profitable for banks to provide securities trading and safekeeping services, due to the competition. This statement can be backed up with the data from Question 6, respondents seeing cost efficiency as the most important factor of the given five for a bank, and Question 9, heavy belief on that traditional banks are more costly than other online trading platforms, and thus at least smaller banks will stop providing brokerage services in the near future. However, many thought that mutual funds, being a profitable product, will stay in the banks' catalogues, even securities trading would not be provided.
A few thought that many traditional banks will focus on narrower categories of customers in the future and limit other services, one of them being brokerage services.

As for the respondents who doubt other banks giving up on brokerage services, 35 of the 83 respondents (42,2%) felt that brokerage services, asset management and other investment related services are some of the most profitable services for banks and thus significant contributors to the banks' net income.
Some, however, notified that smaller banks have a way smaller portfolio of assets managed and that the size could negatively affect profitability (and the lack of it) in their opinion, and so larger banks who hold a lot of assets would continue, while smaller banks would wither away.

What was also a common comment for the respondents was that the traditional banks will keep on offering brokerage services due to it being a crucial part of their core operations. Not only because it's profitable, but because in many customer segments and for many customers the feeling of "getting everything under the same roof" is important.
Many respondents also mentioned brokerage services being an important way for banks to stand out and promote themselves to the potential customers, since the loan marginals are currently so low.

The question 11, being the last question of the survey asked the respondents to freely comment on what traditional banks could do to better compete with other trading platforms in the current market. 103 of the respondents answered to it with at least one word.
Customers expect customer-oriented service. The transaction fees and other costs, such as those of investment services are seen as too high and the number of products lacking. Reliability, personal encounters, efficiency and it-solutions such as software, platforms and applications were all frequent answers as well.

Some of the respondents see banks having a competitive edge over other platforms with the all-around services they can provide. Accessibility and easiness are seen as something the banks can provide since they hold on to bank accounts of customers and can provide an easy way to start investing. A few noted that banks should however advertise such expertise more, since the other brokers are seen as to advertise more aggressively according to some respondents.

Some respondents also appreciate the ability to book a time and talk person to person about investment matters in their local branch. While many have gone, some people still "rather have a chat in the branch".

The word “Funds” rose as a really frequent answer. Mutual funds provided by traditional banks are seen as highly expensive compared to their counterparts at the other providers. While this is not the case for most banks nowadays, as seen from the picture below, the conception is deeply rooted into the individual investors, since it has been in the past so and Nordnet revolutionized the market with it’s zero cost funds, previously called “Superrahasto”, meaning “Super fund”.

On the table below, a few notable finnish are listed. Funds “Nordea”, “OP-Suomi”, “POP Suomi, “FIM Fenno” and “SEB Finlandia” represent funds operated by traditional banks, while the rest are operated by other brokerage services.

Table 1. Three and Five year profits, and different expenses of various Finnish investment funds

Fund name	3y profit	5y profit	Operating Expense	Purchase fee	Redemption fee	Performance fee	Morningstar rank
SEB Finlandia	-2,38 %	0,80 %	0,70 %	1,05 %	1,05 %	–	2
Taaleri Arvo Markka	-3,56 %	1,31 %	1,20 %	1,00 %	1,00 %	20,00 %	2
Nordea Suomi K	-0,44 %	0,53 %	1,41 %	0,00 %	0,00 %	–	3
EQ Suomi 1 K	-0,73 %	2,40 %	1,53 %	1,00 %	1,00 %	–	3
UB HR Suomi Kasvu	-0,75 %	2,47 %	1,54 %	1,00 %	1,00 %	–	4
FIM Fenno	-1,06 %	0,02 %	1,60 %	1,00 %	1,00 %	–	1
OP-Suomi A	-2,98 %	0,90 %	1,66 %	0,00 %	1,00 %	–	3
Evli Suomi Select A	-0,16 %	2,48 %	1,80 %	0,00 %	0,00 %	–	2
Elite Alfred Berg Suomi Fokus A	-1,71 %	-0,48 %	1,80 %	3,00 %	0,00 %	–	1
POP Suomi	-2,59 %	0,40 %	1,93 %	1,00 %	1,00 %	–	3

Source: author’s own calculations based on the data gathered from each fund’s snapshot on the site morningstar.fi. ISIN codes on Appendix 3

There can be thought to be numerous reasons on why banks’ funds and generally their investment services are seen as really expensive. In the past banks in Finland have had negative publicity on asset management and that the funds have been performing poorly. One example being the scandal in 2009 revolving around Nordea’s Mermaid structured funds, which Nordea marketed to individual investors as a relatively risk-free asset, where in fact many of the investors ended up losing their money. There is a deep distrust on some Finnish investors towards traditional banks’ financial advisors and a thought that they seek nothing but profits for the bank and that investor is better off having their money elsewhere.

3.2. Regression analysis

A binomial logistic regression was run to find answers to the hypotheses of the study:
H1: “Individual investors prefer online trading platforms over traditional banks”, and
H2: “Individual investors are mainly driven to choose platform by cost efficiency rather than other reasons, such as customer service, visual look, functionality or range of products available”

For convenience, the analysis was split into two different regression models, one which tries to find answer to the H1 (“H1 model”), and one which tries to find an answer to the H2 (“H2 model”). Both the models used a same dependent binomial variable, “Investment platform used” – 0 for traditional bank and 1 for other platforms.

The H1 model had independent variables as follows;

- Gender
- Age
- Portfolio size
- Investment experience

The H1 model was stressed by the high correlation between the different independent variables, as seen on the correlation matrix below, and so the H1 model was further split into three different parts to prevent the affects of multicollinearity.

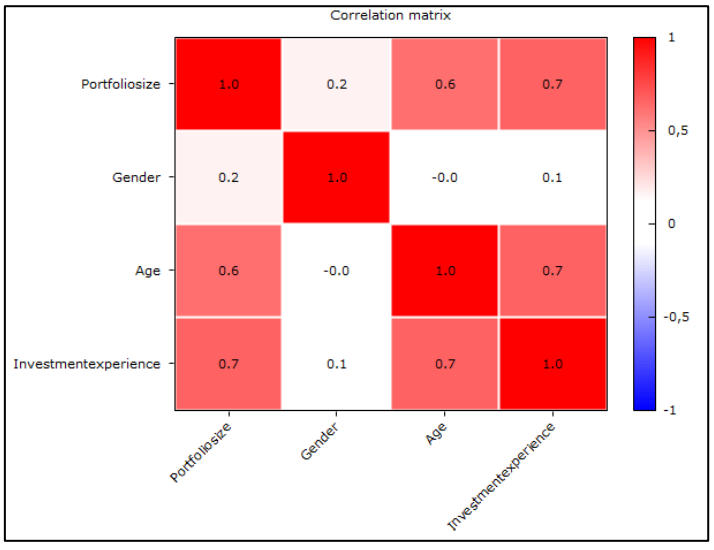

Figure 9. Correlation matrix for the H1 model
Source: Regression analysis run based on the data gathered by author

A female dummy was made so that it could be run with the three other independent variables, since gender was the least correlating with other variables, and to leave out those who don't want to reveal their gender.

What follows, is that a negative correlation between respondent's portfolio size and investment platform used was found (See table below), meaning that the wealthier individuals prefer traditional banks (string value 0), instead of other trading platforms (string value 1). The p-value is only 0,0233, so the result is significant on a 95% confidence level.

Table 2. H1 Model: Regression statistics of a female dummy, and portfolio size

Dependent variable: Investment platform used				
Independent variable	**Coefficient**	**Std. Error**	**P-value**	**Significance**
Female	0,131	0,37	0,724	Insignificant
Portfolio size	-0,299	0,132	0,023	Significant

Source: Regression analysis run based on the data gathered by author

While interesting, the results are not surprising due to traditional banks having significantly more sophisticated services, i.e. premium and private banking, for wealthier customers than do other trading platforms have in general. As seen with the P-value of female dummy, no significant data could be found that links gender to the choice of a preferred platform.

Investment experience was also found significantly correlating n with using traditional banks as a main investment platform, with a coefficient as follows.

Table 3. H1 Model: Regression statistics of a female dummy, and investment experience

Dependent variable: Investment platform used				
Independent variable	**Coefficient**	**Std. Error**	**P-value**	**Significance**
Female	0,211	0,366	0,564	Insignificant
Investment experience	-0,051	0,022	0,024	Significant

Source: Regression analysis run based on the data gathered by author

These results were not surprising either, considering the correlation between portfolio size and investment experience themselves, as seen on the correlation matrix presented earlier, and as

before, no significant result for gender affecting the choice of platform used was found on this model either.

Age's coefficient to the used platform was a negative one, aswell, but due to the high P-value, it has to be deemed insignificant. Still, below is presented a table with the coefficient, standard error and the P-value of age and the female dummy.

Table 4. H1 Model: Regression statistics of a female dummy, and age

Dependent variable: Investment platform used				
Independent variable	**Coefficient**	**Std. Error**	**P-value**	**Significance**
Female	0,3	0,363	0,41	Insignificant
Age	-0,225	0,015	0,145	Insignificant

Source: Regression analysis run based on the data gathered by author

While gender was in all these three deemed insignificant, what has to be noted is that as seen in all three tables, female respondents were positively coefficient on using other trading platforms, nonetheless.

What can be concluded from these findings is that with the increase in portfolio size, and investment experience, there is an increase in choosing traditional bank as the platform of choice. This, of course doesn't tell us the straight answer to our hypothesis 1, but at least tells us that in the higher sections of wealth and investment experience, the main platform used is that of a traditional bank, instead of other online trading platform.
Taking into consideration the answers to the survey questions where other trading platforms are seen as more favourable contradict our findings on regression, and thus failing the hypothesis is impossible, and a deeper study would be needed.

The H2 model had independent variables as follows;

- Customer service
- Range of products available
- Cost efficiency
- Visual look
- Functionality

Running these five factors through a regression analysis was to find a correlation between the main platform of choice and the answers on the survey question 9 using a Likert scale of 1= Strongly disagree, to 5 = Strongly agree, with a statement “Other trading platforms are better at/have better…”.

Below is a table on the analysis with the values of coefficient, standard error and P-value, and as seen, customer service, correlates with choosing a traditional bank instead of another trading platform, whereas all the other variables correlate with choosing an other trading trading platform. We have to bear in mind, however that due to the high P-values of variables “Customer service”, “Range of products”, and “Visual look”, they are deemed to be insignificant with a confidence level of 95%, and thus in the end we can only say with confidence that scoring high, i.e. agreeing on the statement that other platforms are more cost efficient and function better, correlates with choosing other trading platform as their main platform, instead of a traditional bank.

Table 5. H2 Model: Regression statistics on the five factors

Dependent variable: Investment platform used				
Independent variable	**Coefficient**	**Std. Error**	**P-value**	**Significance**
Customer service	-0,12	0,309	0,697	Insignificant
Range of products	0,163	0,286	0,569	Insignificant
Cost efficiency	0,704	0,244	0,004	Significant
Visual look	0,089	0,336	0,792	Insignificant
Functionality	0,94	0,319	0,003	Significant

Source: Regression analysis run based on the data gathered by author

Regarding the hypothesis 2, “Individual investors are mainly driven to choose platform by cost efficiency rather than other reasons, such as customer service, visual look, functionality or range of products available”, we can reject the hypothesis partly based on the answers of the regresion, because views on the functionality of other trading platforms correlates with investment platform used better than those of cost efficiency.

I am not confident on rejecting the hypothesis 2 completely basing on these answers, due to cost efficiency being ranked higher in importance than the other factors in question 6, where the respondents were asked to rank the five factors into an order of importance.

This could tell us that while consciously and as a mental image respondents favouring cost efficiency over other factors presented, subconsciously and in reality favour functionality – at least according to the coefficient presented above. One has to be careful, however, when summarising this, since based solely on this statistic and with so few questions regarding the matter, it is undoubtedly impossible to draw facts or assumptions.

3.3. Discussion of findings & possible solutions for traditional banks

While the question seven shows us that higher portfolio net worth correlates with the current or previous usage of different platforms, it is important to notice that larger portfolios might also correlate with longer investment experience in years. The answers of higher net worth respondents show us that they value customer service, visual look, range of products available and functionality higher than those respondents with lower net worth. Thus we can see tendency for both, price salient equilibria and quality salient equilibria (Bordalo, et al., 2016), on the answers to the most valued attributes of an online trading platform. The answers from the survey go well with the results from running the regression, as presented earlier.

Even though the percentage of answers "Neither agree or disagree" at the question 9 is relatively high on every statement, I would say it's safe to say public's view of traditional banks is worse than that of other online trading platform. That could be, as some of the respondents felt, because of allegedly good branding and reputation of Nordnet, the most popular non-bank trading platform of the survey, or it could be indeed true that for example investment related costs at other online trading platforms are lower and the range of products wider than those of traditional banks.

As the regression analysis shows us, there is a strong correlation with respondents thinking other trading platforms are cheaper and better functioning than traditional banks, and using in fact these other trading platforms as their main ones. This is interesting to see, and as above presented, it could be further studied whether lower costs of other trading platforms are a misconception or not.

The differences between genders on the questions were interesting. Female respondents seemed to be more careful, less likely to response with strong opinions and rather sticking to their preferred, many times first, investment platforms, whereas male respondents had a larger variety in answers with especially cost-effectiveness being the most important factor on choosing a platform. No

significant information regarding correlation between gender and main platform used was found running gender through a regression analysis, however.

Traditional banks according to the data are seen to public as first and foremost, expensive, stagnant and rather old fashioned. Other trading platforms are seen more visible where it matters, online.
To dust off the feeling of being old fashioned, expensive and undesireable, the banks should promote their platforms more, advertise where it matters the most – Online. Nordnet has a popular podcast "Rahapodi – Moneypod", eToro aggressively advertises on Youtube videos, Degiro and Lynx on Facebook. Many traditional banks have only recently started to shift into online advertising. Nordea has a social media team working on Snapchat and Instagram, but very rarely they focus on investing and promoting their platform, but rather their core banking services.

Not only modern websites are important, but also modern and functional applications. Many customers prefer their banking, investing and tracking their investments all be done through phone apps. This is where banks have a competitive edge already. When the daily banking needs are found in the same application that all the investment needs, it is most certainly convenient for a consumer to invest through the platform.
Sadly this is yet to be the case. While many banks in Finland have mobile bank applications, they are relatively new and still very much under development. As an example; Through Nordea's mobile bank you have access to your investments. You see the data of the different investment assets you own, but can only buy mutual funds through the app itself. No stocks or exchange traded funds or bonds can be traded through the app, but instead the user is transferred to a website.

Functionality and speed of the trading is also a key point. For example in Nordnet and Degiro, the money user gets from selling investments is added to their account balance instantly, and so is money deducted from account balance instantly when bought assets. In traditional banks such as Nordea, Danske Bank and Osuuspankki, the money flow is not instant and complicates trading for an active trader.

3.4. Limitations and further research

A greatly limiting factor for the research was that the survey had to be implemented as a "still" survey with no follow up for the years to come. The survey could be published in one year intervals

to see better the change in traditional banks' market share and how different operators join, or leave the market. Another limiting factor was the amount of answers gathered. With 131 answers the representation of smaller subgroups, for example users of some platforms were nonexistent, and the answers of high net worth respondents were scarce. With a larger N, the statistic could be even more precise. At this point of time, I would see the answers of this study directional rather than exact, due to a large marginal of error and a big part of variables having no significance on regression.

Traditional banks were mostly studied as a group rather than individual operators on the market, even though the services and platforms they provide are relatively far off from each other, to keep the questionnaire and research process simpler. In further research this could be expanded to find differences between how traditional banks do among themselves in the eyes of customers. One part of this study could also be that is there a visible trend on traditional banks quitting or supressing brokerage services provided, and whether all this correlates with othe trading platforms joining the market.

There could be a room for further research on whether other online trading platforms' mutual funds' and structured investment products' net profitability is indeed higher than those of traditional banks, and whether consumers would still extensively prefer other trading platforms' mutual funds even if their mental images of traditional banks being costly and underperforming are proven wrong. What is also interesting and could be worthwhile, is that what factors or matters provide the other online trading platforms a possibility to penetrate the market.

A study regarding the importance of IT-solutions and moreover the digital platforms on investors' deciding factor for their preferred online broker could be conducted to further study the decisionmaking behind choosing one's preferred platform. This could be, for example, be conducted through a survey or with the data of usage rate of mobile applications for investor customers of banks and other trading platforms.

As mentioned in theoretical framework, a question whether the lowest cost platform indeed saves money in all situations could be further studied into, since excess amount of trading easily leads into lower profitability. Thus, one could think that does lower trading costs lead into excess trading and thus overall lower profitability. Researched could be, for example, be that does implementing

higher costs per trade increase the profits gained of a customer on average, lightly forcing them to consider their trades more carefully.

CONCLUSIONS

The paper aimed to find views of consumers regarding online investment trading platforms. The hypothesis were formed to answer the questions that do:
H1. “Individual investors prefer other online trading platforms over traditional banks, and
H2. “Individual investors are mainly driven to choose the platform by cost efficiency rather than other reasons, such as customer service, visual look, functionality or the range of products available”.
Briefly studied were also different subgroups of the respondents, the high and low ends of monetary value on portfolios, and male and female respondents.

The responses show that consumers indeed find other online trading platforms more desireable than traditional banks when choosing a platform for main use.

Studying mental images of platforms, other online trading platforms were seen especially more cost efficient and having a greater range of products available than traditional banks, with 57,76% and 68,97% of respondents answering agree or strongly agree respectively.

Customer service was seen very slightly better at traditional banks with 26,69% of the respondents disagreeing or strongly disagreeing with the statement that other trading platforms had better customer service. 24,14% of the respondents answered agree or strongly agree and the rest, 49,14% the so called “middle” respondents neither agreed or disagreed. While also having a large number of “middle” respondents, functionality and visual look were also seen far greater at other trading platforms.

The costs of traditional banks’ investment services, transaction fees and especially the costs of mutual funds rose from the answers to the open ended questions.
A great majority of the respondents, 74,77%, see that banks will not quit offering consumer brokerage services in the next two to three year period. This was seen the case by many because banks rely so heavily on profits from not only straight brokerage activities, but also from asset

management and other investment services. Especially mutual funds were seen so profitable for banks that it would be waste for them to quit catering those to their customers.
Many respondents also noted that "getting everything under the same roof" is an important part of banking, and this involves investment services aswell. The brokerage activity, even when deemed unprofitable is so deep to the core of banking that at least the larger banks will not cease offering it in the near future.

Gender differences on the study could be seen and summed up by the fact that female respondents avoided extreme options on all the likert scale statements, positioning themselves more in the "neither agree or disagree" area. Differences were also seen on the trading platforms used where female respondents were slightly more keen on using other trading platforms than male respondents – 48,53% and 43,64% respectively, whereas male respondents more often used multiple platforms than their female counterparts. No significant results were able to be derived running the regression analysis, however. Coefficiency for female respondents to use other trading platform was positive, but the high P-value takes the credibility off.

Wealthier respondents and those with longer investment experience were found favouring traditional banks over other trading platforms. The views on the five factors of the survey; cost efficiency, customer service, visual look, functionality and range of products available correlated with the platform of use in the regression analysis. However functionality and cost efficiency were the only statistically significant ones, with coefficiency of 0,804 and 0,940 respectively to choosing other trading platform instead of a traditional bank.

Thus we can conclude that:

- Traditional banks serve as the most commonly used main trading platforms for individual investors
- Two out of three individual investors have used previously or parallel different platforms than their current one.
- Other online trading platforms are seen preferred over traditional banks' trading platforms
- Cost efficiency and functionality are seen the most important of the five factors presented to respondents

- Gender differences on the data and female respondents generally gave less strong opinions, but no sizeable difference between the usage of platforms was found
- The size of one's portfolio and investment experience also affected greatly on how different trading platforms were perceived and which platforms were used. Many higher net worth respondents, and those with longer investment experience preferred traditional banks and viewed them better
- Those who find other trading platforms more cost efficient and better functioning highly more likely use one of the trading platforms as their main one. Same can not be said of other factors with confidence
- The functionality, one example being slowness of transactions, is seen as one of the main factors turning customers away from traditional banks

While the H1 and H2 could be interpreted to be confirmed true according to the answers of survey, we can only partly reject the hypotheses, and at the same time accepted until further research is done.

The data from regression brought upon some contradictory to accepting H1, since especially the higher net worth consumers in fact use traditional bank as their main platform rather than other online trading platforms. This means that while views favour online trading platforms, in fact usage of traditional banks is still greater, and especially favoured by wealthier and more experienced respondents. As for H2, the regression shows a higher correlation between the usage of other trading platforms and view of those platforms having better functionality than the correlation between the trading platform and view on cost efficiency. This means in its' part that functionality is more associated than cost efficiency with choosing other trading platform, even the views on the question 6 tell us different. Thus would be suggested further research on the subject before either is accepted or rejected.

Further research could indeed be conducted on the matter of how differences of trading platforms are seen and also even deeper which matters provide the platforms a possibility to penetrate such a competed market. It could be also studied as to whether is a visible trend on traditional banks quitting or supressing brokerage services provided, and whether this is in correlation with other trading platforms joining the market. A comparison on the data of the amount of assets held, customers with investment activities and a change overtime to those, to find whether traditional banks are indeed losing, and are they soon completely out of foothold on the market.

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APPENDICE

Appendix 1. Funds used for the table 1

Fund name	**ISIN Code**	**Morningstar classification**
SEB Finlandia	FI0008802558	Finnish stocks
Taaleri Arvo Markka	FI4000013172	Finnish stocks
Nordea Suomi K	FI0008800016	Finnish stocks
EQ Suomi 1 K	FI0008812169	Finnish stocks
UB HR Suomi Kasvu	FI0008807334	Finnish stocks
FIM Fenno	FI0008800339	Finnish stocks
OP-Suomi A	FI0008800206	Finnish stocks
Evli Suomi Select A	FI0008801220	Finnish stocks
Elite Alfberg Suomi Fokus A	FI0008803564	Finnish stocks
POP Suomi	FI0008808456	Finnish stocks

Appendix 2. The complete survey

* 1. Gender

- ◯ Male
- ◯ Female
- ◯ Other
- ◯ Prefer not to say

* 2. Age

* 3. How long is your investment experience in years?

* 4. What is the size of your investment portfolio in euros?

- ◯ 1 - 25 000€
- ◯ 25 001 - 50 000€
- ◯ 50 001 - 100 000€
- ◯ 100 001 - 250 000€
- ◯ 250 001 - 500 000€
- ◯ 500 001 - 1 000 000€
- ◯ 1 000 000+

* 5. Which online investment platforms do you mainly use currently?

- ◯ Nordnet
- ◯ Degiro
- ◯ Lynx
- ◯ eToro
- ◯ Other, which one?
- ◯ Mandatum Trader
- ◯ Evli
- ◯ Traditional bank, such as Nordea, Osuuspankki, Danske Bank

* 6. Rank the following five aspects to an order of importance, with (1) being the most important and (5) the least important

- Cost efficiency
- Customer service
- Visual look
- Functionality
- Range of products available

* 7. Have you used other online trading platforms previously or parallel to your main trading platform?

- ◯ Yes
- ◯ No

8. If you answered "No" to the last question, you can skip this question. If you answered "Yes", please answer to this question aswell; Which online trading platforms have you used previously or parallel to your current one?

- [ ] Nordnet
- [ ] Degiro
- [ ] Lynx
- [ ] eToro
- [ ] Mandatum Trader
- [ ] Evli
- [ ] Traditional bank, such as Nordea, Osuuspankki, Danske Bank
- [ ] Other, which one?

* 9. If you were to compare other trading platforms to traditional banks as a mental image, would you see them having:

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Better customer service	○	○	○	○	○
Wider range of products	○	○	○	○	○
Better cost efficiency	○	○	○	○	○
Better visual look	○	○	○	○	○
Better functionality	○	○	○	○	○

10. On 27.1.2020 a Finnish bank S-Pankki notified their customers about them quitting consumer brokerage services. Do you see other traditional banks following their lead in the near future of 1-3 years period?

Yes, why?

No, why?

11. What traditional banks could do to better compete with other trading platforms in the current market?

Appendix 3. Table 2, presenting the figure 1, question 1

Gender	Number	Percentage
Male	55	41,98 %
Female	72	54,96 %
Other	2	1,53 %
Prefer not to say	2	1,53 %

Appendix 4. Table 3, presenting the figure 2, question 4

Investment portfolio size	Number	Percentage
1-25 000€	75	57,25 %
25 001 - 50 000€	16	12,21 %
50 001- 100 000€	16	12,21 %
100 001 - 250 000€	12	0,16 %
250 001 - 500 000€	5	3,82 %
500 001 - 1 000 000€	1	0,76 %
1 000 000€ +	6	4,58 %

Appendix 5. Table 4, presenting the figure 3, question 5

Online trading platform	Number	Percentage
Nordnet	51	40,48
Degiro	1	0,79 %
Lynx	1	0,79 %
eToro	0	0,00 %
Mandatum Trader	2	1,59 %
Evli	0	0,00 %
Traditional bank	68	53,97 %
Other, which one?	3	2,38 %

Appendix 6. Table 5, presenting the figure 4, question 6

Factor	1		2		3		4		5		Average score
Cost efficiency	47,6 %	60	26,2 %	33	15,1 %	19	5,6 %	7	5,6 %	7	4,05
Functionality	23,0 %	5	32,5 %	20	29,4 %	18	11,1 %	51	4,0 %	31	3,6
Range of products	16,7 %	11	20,6 %	6	29,4 %	14	22,2 %	26	11,1 %	69	3,1
Customer service	4,0 %	29	15,9 %	41	15,1 %	37	40,5 %	14	24,6 %	5	2,34
Visual look	8,7 %	21	4,8 %	26	11,1 %	37	20,6 %	28	54,8 %	14	1,92

Appendix 7. Table 6, presenting the figure 5, question 7

Answer	Number	Percentage
Yes	84	66,7 %
No	42	33,3 %

Appendix 8. Table 7, presenting the figure 6, question 8

Online trading platform	Number	Percentage
Nordnet	32	38,1 %
Degiro	6	7,1 %
Lynx	2	2,4 %
eToro	0	0,0 %
Mandatum Trader	2	2,4 %
Evli	2	2,4 %
Traditional bank	44	52,4 %
Other, which one?	10	11,9 %

Appendix 9. Table 8, presenting the figure 7, question 9

Factor	Strongly disagree		Disagree		Neither agree or disagree		Agree		Strongly agree		Weighted average
Customer service	3	2,6 %	28	24,1 %	57	49,1 %	24	20,7 %	4	3,5 %	2,98
Range of products	1	0,9 %	8	6,9 %	27	23,3 %	51	44,0 %	29	25,0 %	3,85
Cost efficiency	3	2,6 %	15	12,9 %	31	26,7 %	40	34,5 %	27	23,3 %	3,63
Visual look	2	1,7 %	11	9,5 %	54	46,6 %	41	35,3 %	8	6,9 %	3,36
Functionality	1	0,9 %	15	12,9 %	42	36,2 %	44	37,9 %	14	12,1 %	3,47

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