Investment behavior of bachelor level students

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Sammandrag:
En undersökning i studerandes investeringsbeteende på kandidatnivå. I forskningen ombedes studeranden delta i en undersökning som har för avsikt att kartlägga deras investeringsbeteende. Formuläret studerandena fyllde i distribuerade vi en blandning av digitala kanaler och genom att personligen be studeranden fylla i formuläret. Studien är av kvantitativt slag. Med förändringar i samhället gällande bl.a. pensionssystemet och den ökande personliga skuldsättningen är investerande och sparande en relevant fråga. Den förutsatta teorin är att detta beteende kan förknippas med vad den studerande studerar. Arbetets målsättning är också att undersöka om studielånet används för att finansiera möjliga investeringar. Arbetets teoretiskadel behandlar investeringsprocessen bakom investeringar och går igenom bl.a. investeringshorisont samt målsättningar för investerandet och hur man kartlägger vilket investeringsobjekt som passar för investeraren. Grundläggande information om hur studielån och studiestöd fungerar är även en del av teorin samt en detaljerad beskrivning av marknadens vanligaste investeringsobjekt. Statistisk signifikans av forskningsresultat har uppnåtts via analys i statistiska program. Korstabellering av resultat för att möjliggöra jämförelse och kunna räkna ut statistisk signifikans ar varit det huvudsakliga statistiska verktyget i användning. Konfidensintervall har räknats ut för vissa värden. Könsfördelningen i undersökningen var jämn och det framgår att största delen av respondenterna har lyft sitt studielån. De som lyft sitt studielån var även villiga att i alla fall delvis investera studielånet. Ur studien framgår det att ett mönster finns bland studerandena. Den stora merparten av respondenterna har någon form av investeringar eller besparingar. Respondenterna har med andra ord någon form av finansiell planering. Vidare forskning i ämnet skulle kunna göras med ett större sampel vilket skulle leda till en ökad statistisk signifikans och möjliggöra analys mellan olika skolor och studieprogram. Den framsatta teorin om att utbildningsprogram inverkar på investeringsbeteendet kunde inte inom denna forskning påvisas p.g.a. samplets storlek. Ingen korrelation mellan utbildningsprogram och investeringsbeteende kunde hittas.

Nyckelord:	Spar- och investeringsbeteende, kandistuderanen, Studielån, utbildningdprogram
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Abstract:
A study in the investment behaviour of bachelor level students. In the research students were asked to participate in research aiming at investigating their investment behaviour. The questionnaire students filled out was distributed through a mix of digital channels and personally asking students to fill in the questionnaire. The study was of quantitative nature. With changes in the society concerning the pension system among others and the increasing personal debt level investing and saving is a relevant topic. The proposed theory that investment behaviour can be associated with the students field of study. The aim of the thesis is also to research whether student loan is used to fund possible investments. The theoretical part of the dissertation includes the process behind investing and covers the investment horizon, the objective for investing and which investment objective is suitable for the investor. Fundamental information about student financial aid and also a detailed description of the most common Investment objects currently on the market also serves as part of the theory. Statistical significance of research results has been achieved by analysis in statistical programs. Crosstabulation of results to enable comparison and enable calculation of statistical significance has been the main instrument used. Confidence intervals has been calculated for some values. Gender equality of the research has been even and from the research it is clear that most of the respondents has taken out their student loan. From the study it is also clear that respondents with student loan would at least in part be willing to invest their student loan. The majority of the respondents have some form of investments or savings, i.e. respondents have at least in part a financial plan. Further research into the subject could be conducted with a larger sample size leading to an increase in statistical significance and enabling comparison between schools and field of study. The proposed theory of field of study
affecting investment behaviour could not be proven due to sample size. No correlation between field of study an investment behaviour could be found.

Keywords:	Savings- and investment behaviour, savings, investments, bachelor students, Study loan, study field
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Tiivistelmä:
Tutkimus kanditason opiskelijoiden sijoittamiskäyttäytymisestä. Tutkimuksessa opiskelijoita pyydettiin osallistumaan tutkimukseen jonka tarkoitus oli kartoittaa heidän sijoittamiskäyttäytymisensä. Kyselyä suoritettiin eri oppilaitosten digitaalisia kanavia pitkin. Tietoa kerättiin myös henkilökohtaisesti kyselylomakkeilla. Tutkimus oli laadultaan määrällinen. Muun muassa eläkejärjestelmän muutosten myötä sekä kansan kasvavalla henkilökohtaisella velkamäärällä sijoittamisesta ja säästämisestä on tullut ajankohtainen kysymys. Esitetty teoria on, että sijoittamiskäyttäminen ja opintosuunta kulkevat käsi kädessä. Väitöskirjan tarkoitus on myös tutkia mikäli opintolainaa käytetään mahdollisiin sijoituksiin. Teoreettinen puoli väitöskirjasta käsittelee sijoittamisprosessia, sijoittamishorisonttia, sijoittamisen päämäärää sekä sopivan kohteen löytämisen sijoittajalle. Tutkielma sisältää myös perustietoa opiskelijoiden opintotuesta, opintolainasta sekä tarkka kuvaus markkinoiden tavallisimmista sijoittamiskohteista. Tilastollisesti merkittävä tulos on saatu käyttäen tilasto-ohjelmia. Tuloksia on vertailtu keskenään ja luottamusvälit ovat laskettu tiettyihin tuloksiin. Sukupuolijakauma tutkimuksessa on ollut tasainen. Tutkimuksesta ilmenee, että suurin osan vastaajista on nostanut opintolainansa, ja heistä suurin osa olisivat valmiita sijoittamaan ainakin osan opintolainastaan. Suurimmalla osalla vastaajista on jo olemassa jonkinlaisia sijoituksia tai säästöjä. Heillä siis on taloudellinen suunnitelma. Tutkimukseen voisi syventyä tarkemmin, suuremmalla otannalla tilastollinen merkittävyys paranisi mahdollistaen koulujen ja opintosuuntien välisen vertailun. Teoriaan, että opintosuunnalla ja sijoittamiskäyttäytymisellä olisi korrelaatio ei voitu todeta tutkimuksessa johtuen otannan suuruudesta.

Avainsanat:	Sijoittamis- ja säästökäyttäytyminen, opintolaina, kandiopiskelijoita
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1 INTRODUCTION

> ”invest” invest *verb*
>
> **1:**to lay out money to earn a financial return <*invest* in bonds and real estate>
>
> **2:**to expend for future benefits or advantages <*invest* time and effort in a project>
>
> **3:**to involve or engage especially emotionally <were deeply *invested* in their children's lives>”
>
> Britannica Academica.

We invest in our future when we educate ourselves as students, a fact known. However, little or no research has been done on how students invest their finances during their studies. A few theses on the subject have been written but none comparing investment behaviour of students in different degree programs. Wennqvist (Wennqvist 2017), researched the savings- and investment behaviour among economic students in the greater Helsinki area. Hietanen (Hietanen 2017) focused on students' attitudes towards investing comparing students in Finland to their peers in the United Kingdom. Aakula (Aakula 2010) focused her thesis on what knowledge level the youth of today are at when it comes to investing but also how interested they are in it. Students in a Universities of applies Sciences is the most obvious choice for the dissertation considering the key focus is comparing degree programs between each other and students respective investing behaviour. Successfully carried out the research might have a positive influence on how students consider their financial situation during the time spent in chase of a higher qualification. Considering that aspect of the research should offer some insight for student looking to become investors while still in school.

1.1 Objective

The aim of the dissertation was to answer the following questions. First, when students invest what funds they use for investment? Is the student loan used for investing? Second, if they do invest, is there a difference between how students in different degrees programs invest?

1.2 Methodology

To research these questions students in University of Applied Sciences or universities studying at a bachelor level was invited to participate in an online questionnaire, e.g. quantitively approaching the research. Using a web platform, e.g. Limesurvey enabled swift and easy data collection. The questionnaire was of multiple-choice type enabling the user to select from pre-defined answers that were most suitable. The results from the questionnaire were analysed in SPSS to see if any conclusions could be drawn from the received sample. Expectations of the sample size was around 100 participants.

By definition, an invite to all the students Arcada University of Applied Sciences to participate in the research would have made for a significant sample size if everyone would have participated. Expectation was that only a fraction of the students would participate leaving a relatively and manageable sample size.

A bias was to be expected considering the size of the sample, it is still relatively small when considering all the students in Finland but should be large enough to generate data that in theory should be applicable to broader population (Bryman 2003 p.35). By applying a quantitative approach to the analysing process, a correlation between degree program and investing behaviour should appear. If there is a common thread between degree program and investing the results yielded from the questionnaire should deliver data that supports the proposed theory.

1.3 Relevance

Investing and wealth management is a current topic due many recent changes in the Finnish legislation. In 2017 the Finnish pension system went through a reformation (Veritas; Keva, 2017). As a result of that pension age was raised and collection of the pension from an employee's salary underwent changes, in this case the percentage was raised. Unemployment benefits were also cut and reformed with changes making it difficult for people with long stretches of unemployment (Erko; Te-palvelut 2018). This in combination with a volatile world economy should be reason enough for anyone to carefully plan ahead for the future.

As the Finnish youth is becoming increasingly aware of their economic situation thus resulting in a need for investing at an earlier age.

2 THEORY

The theoretical part of the dissertation accounts for a detailed guide of the most common and easily available investment options for the investor. These options can be divided into two specific groups, products for saving and products for investing which will be covered separately in their own chapters. Furthermore, the process behind consumer behaviour is included. The use of foreign capital available for students, i.e. student loan and the use of that for investing as well as the process behind investing is also included in this section.

2.1 Investment and savings process

When selecting the optimal source for investing every investor goes through a process to ensure the capital is placed correctly according to the investment scope. The scope differs from investor to investor and is dependent on many factors. The process is started by identifying the available amount of free capital for investing, risk tolerance of the investor and investment maturity, i.e. matching the timeframe to the investment. The free capital available for investment often defines what type of investment is available to the investor. Some instruments require a minimum investment making them a less attractive choice for the investor when speculating with smaller amounts since obtaining the desired diversification can be hard. Diversification becomes even more crucial when investing a larger part of your free capital (Tyson 2017, p. 42). Ensuring the right spread of the instruments in an investor's portfolio is the key.

Every investment is associated to time one way or another, therefore matching the timeframe to the investment important. The investor needs to keep in mind when the invested capital needs to become free capital again. Saving deposits are continuous while fixed rates deposits, bonds and BSP-accounts tie up the capital for a fixed time. Freeing invested capital from them before instrument maturity often comes with addi-

tional fees and in a worst-case scenario forfeits of the invested capital (Pörssisäätiö 2017b).

Risk tolerance of the investor furthers the process of selection of investment instrument. Instruments with improper risk profile for the investor is naturally culled out. The investor needs to assess current risk tolerance (Tyson 2017, p. 27-34). Selection of an instrument with elevated risk for a novice investor with minimal risk tolerance and little capital to invest might have dire consequences. While an experienced investor with deeper pockets should not invest in instruments that are unnecessary stabile.

An investors knowledge of the markets is the final piece of the puzzle. Certain investors can make investment decision independently and have an understanding and genuine interest of the market with associated instruments. Other investors chose to spend their time differently, therefore more suitable objects for them are instruments that require less input from the investor, e.g. professionally managed instruments or services handling the investors wealth.

Bearing these aspects in mind selecting the right investment instrument for the invest becomes an easier task.

2.2 Investor behaviour

The process behind making a decision before investing is a process that incorporates both a qualitative and quantitative aspect that is product specific before the actual decision is made. I.e. the decisions are based on past experiences, personal preference, and beliefs (Baker et al 2014, p. 7-11). Investors are inclined to invest in instruments familiar to them. A decision to invest is based on both internal and external influences. Internal consisting of emotional factors, experience, and preference. External influences are impressions from the investor's surroundings, i.e. information passed on to the investor from various sources. These information sources might consist of current field of study, advice from fellow students or general knowledge of the subject. This supports the fact

that there is a correlation between knowledge and investment behaviour (Baker et al 2014, p. 26-28). The assumption of efficient market theory (Knüpfer et Puttonen. p. 166-172) is based on the belief that investor behaves in a rational manner and all the necessary information need for making and investment decision is embedded in the process.

As defined by the Organization for Economic Cooperation and Development (OCED 2019) the financial literacy of an investor consists of a combination of skill sets. An investors financial awareness, knowledge, skills, attitude and behaviour are part of the skills need to make a rational financial decision ultimately resulting in individual financial wellbeing. As an investor undergoes financial education, i.e. the process in which the investor improves their understanding of different financial products, concepts or risks. This through gathering information, instructions or general advice develop their skills and financial awareness, thus becoming more aware of financial opportunities or risks. The process results in in an ability to make more informed choices and where to look when help is need.

2.3 Risk and return

An understanding of the concept risk and return is needed to understand the underlying motivation for investing and saving. There are many models for calculating risk and return on investments but Capital Asset Pricing Model or CAPM (Knüpfer et Puttonen. p. 152). for short is perhaps the most commonly used model for individual securities such as share and bonds.

$$\frac{E(R_i) - R_f}{\beta_i} = E(R_m) - R_f$$

when arranging the equation to solve the risk premium we get

$$E(R_i) = R_f + \beta_i(E(R_m) - R_f)$$

Where:

- E(R_i) is the expected return on the capital asset
- R_f is the risk-free rate of interest
- β_i(the beta) is the sensitivity of the expected excess asset returns to the expected excess market returns
- E(R_m)is the expected return of the market
- E(R_m)- R_f is sometimes known as market premium
- E(R_i) -R_f is also known as risk premium

This enables us to calculate the reward-to risk ratio for individual securities (Knüpfer et Puttonen. p. 153).

The reward-to risk ratio of mutual funds can be measured with the Sharpe ratio.

$$\frac{R_p - R_f}{\sigma_p}$$

where:

- R_p= return of portfolio
- R_f= risk-Free rate
- σ_p= standard deviation of the portfolio's excess return

Using these tools, the investor can evaluate investments and based upon that make qualified decisions to minimize risk while maximizing returns.

2.4 Financial aid for students

A student in Finland is eligible for three types of funding through social services. The first being the study grant and the second is a government guaranteed student loan (Kela 2019). The amount of the student grant is based on a few factors and make up for the base of a student funding from social services. Third and final type of funding is the housing supplement which is calculated as a percentage of the students rent.

Student	Grant EUR/Month	Affected by parent's income
Guardian of a minor child	325,28	No affect
Married or equivalent	250,28	No affect
Independently living over 18-year-old	250,28	No affect
Independently living under 18-year-old	101,74	Can increase from 101,34 - 203,48 EUR/Month
Living with parents over 20-year-old	81,39	Can increase from 81,39 - 183,13 EUR/Month
Living with parents 17-19-year-old	38,66	Can increase from 38,66 - 97,67 EUR/Month

Table 1 - Student grant

The student loan also varies depending on a few factors, as can been seen in the table below (Kela 2019). A student at a bachelor level living independently and is over 18 years old is in other words currently eligible for financial aid in a total of 900,28 EUR/Month plus housing supplement.

Student	EUR/Month
Under 18 year below bachelor level student	300
18-year-old other than bachelor level student	650
Bachelor level student	650
Adult education subsidy receiver	650
Student studying abroad	800

Table 2 - Student loan

2.5 Using student loan for investing

Investing borrowed funds is always a high-risk strategy. If the investments do not yield expected return the investor stands to lose invested capital but must also take interest of the loan into consideration when calculating possible profits or losses. Social services (Kela) has issued an incentive to graduate which also can be used as a great benefit when investing. If the student manages to graduate within the given time limit and has a minimum of 2500EUR in student loan the student is eligible for a compensation of the student loan (Kela 2018). The compensation is 40% of the student loan exceeding 2,500EUR. However, there is a maximum amount compensated depending on the amount of credits required to graduate. The higher amount of credits required, the higher the maximum amount is. The compensation is not subject to taxes to further the monetary gain.

Extent of the degree in credits (ECTS)	Maximum compensated loan (EUR)	Maximum compensated amount (EUR)
180	10,800	3,320
210	12,800	4,120
240	14,400	4,760
270	16,400	5,560
300	18,000	6,200
330	20,000	7,000
360	21,600	7,640

Table 3 - Compensated loan amounts

If a student chose to invest the student loan, they are getting an additional 40% profit out of the investment. Students have been taking advantage of this benefit (Luukonen 2016).

Since the reformation of student grants and loans in 2017 (Kela 2017) the granted amount of loans has been rising steadily reaching record high levels (Finlands bank; Johansson 2017).

2.6 Saving options

This chapter accounts for the most common savings instruments available on the current market.

2.6.1 Saving deposit

A saving deposit or saving account is perhaps the most common method used for saving money. Not a current account for daily use. This is an account specifically designed for saving money which means no added services such as a debit card or the use of different payment services can be attached to it (Aktia 2018a). You are however in most financial institutions free to complete transactions from and to the account without fees. A savings option that comes with essentially no risk since it is covered by deposit guarantee (Financial stability authority 2018; Aktia 2018a). The guarantee is put into place as a safety measure covering the deposited funds up to 100,000EUR in case of bankruptcy of the financial institution. The guarantee is personal and not account specific, e.g. dispersing funds to multiple accounts in the same institution will not raise the covered amount, however the guarantee is institution specific. E.g. dispersing funds in accounts of different institutions raises the total guaranteed amount.

The lack of risk is directly reflected in paid interest for deposits offered by most financial institutions. The interest rate varies among institutions, currently the offered rates are low. Due to low interest rates the only real risk directed at the savings deposit is risk of inflation or changes in exchange rates if funds a deposited in another currency. Inflation risk signifies that deposited funds stands to lose value over time if the paid interest is small than the current inflation rate.

Gained interest is subject to source tax 30%, which is paid annually (Skatteverket 2018a; pörssiäätiö 2018).

2.6.2 Fixed rate saving deposit

A fixed rate saving deposit brings a saving deposit account to mind. As they are similar, the biggest differences are that it is time-bound, and the deposit is a single deposit (Osuuspankki 2018). E.g. when the deposit is made withdrawals can only be made in two cases, when the agreed upon time lapses or withdrawing the whole deposit with repercussions that are in most case subject to heavy fees. Since the accounts are time-bound they yield a high interest rate which is based on the length of the time the deposit is bound to.

Fixed rate deposits are taxed in the same manner as saving deposits, on an annual basis (Skatteverket 2018a; Pörssisäätiö 2018). The risk associated with this account type is identical with the saving deposit.

2.6.3 BSP Account and loan

The BSP account is a specific saving account intended for acquiring your first residence. If you are between the age 15 to 39 and have not before bought an own residence you are able to open a BSP account. By entering a housing savings agreement with the financial institution one can start saving. The terms of the agreement dictate a personal savings plan and regulations corresponding to the account (Aktia 2018b).

The account is subsidized by the government and hence is heavily regulated (Statskontoret 2018). The loan however comes clauses that are highly beneficial. Legislation dictates that it has an 1% interest during the whole savings period, the financial institution will furthermore pay an interest of 4% when the savings goal has been reached and the residence has been acquired. The interest is not subject to tax.

For approval of the loan the minimum savings time is 24 months or 8 quarters. The total amount of the deposits and interest should equal a minimum of 10% of the residence to be acquired. The financial institution grants you a loan for 90% of the acquisition price of the residence.
Annulation of contract results in forfeiting the premium interest (Finanssivalvonta 2018). The contract can be annulated either through withdrawing the deposited funds or if the depositor acquires a residence before at least half of the agreed upon savings amount has been deposited.

2.7 Investment options

This chapter accounts for the most common investment instruments available on the current market.

2.7.1 Shares

Shares are essentially securities that grants the holder ownership in limited company. A limited company consist of shares that the company has issued on the market. Ownership also grants the holder return in the form of dividends from company profits and a chance to take part of the decision making in the company during the annual meeting of the shareholders. Historically returns from shares has been best over a longer period (Pörssisäätiö 2017a, p 4-5). On an average return is around five % higher than compared to almost risk-free options such as saving deposits. Diversification is a key aspect to successful minimizing risks. The shareholders economical risk is limited only to the amount invested in shares even in case of bankruptcy of the company

Shares are taxed through source tax. Taxes are calculated based on profits. 30 % for profits under 30,000EUR and 34 % for the exceeding part (Pörssisäätiö 2018). 85 % of dividend proceeds is taxable income. This translates to that the shareholders disburse 25.5 % taxes on dividend proceeds and 28.9 % on the exceeding part. Profits are the difference between purchase and sale price. If shares have been in the possession of the holder for more than 10 years an assumed acquisition cost can be used to assume original purchase price. The assumption is 40 % of the current value of the share and 20 % under 10 years of possession.

Market value for shares is based on the request and demand principle. Shares in higher demand fetch a higher value. The trading of shares requires a book-entry account (Nordea 2018) which can be opened in most financial institutions. Purchase and sale orders are completed through different financial institutions. The order specifies which share to acquire at what price and which number of shares.

2.7.2 Funds

Funds are at their core managed portfolios consisting of shares or other securities. Investing in a fund grants the investor a share of the fund (Pörssisäätiö 2015). This share essentially entitles the investor to a part of the wealth of the fund. Management of the fund is not handled by the investor; it is always handled by the manager of the fund. The manager is responsible for all decisions related to investments made by the fund.
Since funds are managed there are expenses related to the fund, management fees and transaction costs that are passed along to the investor. Taxation of funds falls under capital income, i.e. 30 % for profits under 30,000EUR and 34 % for the exceeding part.
The portfolio of a fund can be constructed from many different securities depending on the type of fund. Shares, saving deposits, fixed saving deposits and other market instruments. Depending on how the fund is constructed it comes with different risk profiles. Fund can be divided into roughly four different architypes.

Interest based funds, which invest in interest bearing instruments. A mixture of short and long interest bearing is commonly used, the risk profile for these types of funds are usually relatively low.

Share funds, as the name implies invest their wealth in shares. Some share funds only invest in shares listed on a certain exchange market, as OMX Helsinki while others choose to invest in certain region such as Europe or Asia. Share funds come with a higher risk profile.

Mixed funds who mix and match interest bearing instruments with shares for a lower total risk profile.

The final type is specialized funds which consist of hedge funds, capital protected funds, derivative funds, index funds, fund of funds to name a few. Exchange traded funds or ETFs for short are among the more commonly used specialized funds along with derivative and index funds. ETFs are in short funds that are trade at the stock market in the same matter as shares. They usually consist of the most actively traded shares on the market. Index funds are passively managed funds which strives to replicate a certain index. As they are passively managed the expensed related to them are lower. Derivative funds use derivatives actively in their portfolio and aim at a higher return than the average return yielded from shares. Their purpose is to try to predict stock prices and their development.

2.7.3 Bonds

Bonds represents a loan emitted by a borrower to an investor, in most cases the issuer is governmental, corporate, municipal or banks. It is a considerable loan, that is divided into equal size securities (Knüpfer et Puttonen. p. 57). The issuer of the bond is in other words a financial institution issuing a security. The issued bond includes all the terms related to the bond, when the maturity date is and interest to be paid. Bonds are investment instruments providing a fixed income at a specific date, i.e. when the loan matures. At the end date the principal and the coupon are due to be paid to the investor (Fabozzi p. 26-28).

Risks related to bonds are liquidity issues, inflation, fluctuation in currencies and interest risks. Bonds also have an insolvency risk, i.e. the issuer is incapable to repay the loan to the investor. If the risk is realized the investor stands to forfeit expected return. Either partially or completely.
Yielded return is taxed according to source tax regulations for interest return (Pörssiäätiö 2017b; Skatteverket 2018a).

2.7.4 Insurance based investment objects

Insurance based investment objects reminisce funds as they are also instruments functioning as a portfolio. When investing in this portfolio the investor invests in the underlying assets of the portfolio. The portfolio usually consists of funds, shares and interest-bearing instruments. As the two are similar there are however a significant difference. With insurance-based investments the investments are only subject to taxes when withdrawing the funds from the portfolio. The investor can reposition the funds inside the portfolio without repercussions such as taxes or fees. The option to withdraw positioned funds is also available during the savings time (Aktia 2018c; Pörssisäätiö 2017b).
Insurance based objects can be divided into classes which are pension-, savings- and retirement insurances. The first are aimed at all ages while the lather is to complement your pension when retired.
Taxation of insurance-based investment objects falls under the capital income clause (Pörssiäätiö 2017a; Skatteverket 2018a).

2.7.5 Wealth management services

In its essence wealth management services is a service with the intention of complete management of client assets. It strives to aid the investor in all aspects of financial plan-

ning according to the investors risk profile and investment objectives. These services are offered by financial institutions to their clients. The service gives the institution the freedom to invest the client's capital as they fit. These services however, require a substantial capital to become available to the client. In most cases it requires an investment capital from 200,000-1,000,000EUR (Mandatum Life 2018; Ålandsbanken 2018). Taxation varies from instruments used in the wealth management services.

2.7.6 Real estate

An investment form associated with the acquisition, ownership, management and rental of property, housing shares or land. It is highly cash flow dependent and capital intensive, e.g. it requires a high capital for initial investment and relies heavily on rents being paid in due time. Real estate comes with costs that are less visible, namely inspection and loan costs. These costs vary from financial institution. Real estate assets are often sold as a whole and is rarely split among many investors. As an investment form it has a limited liquidity compared with other investment forms, such as bonds or shares. Real estate owners are subject to asset transfer taxes and property taxes that vary according to the property (Skatteverket 2018b).

3 METHOD

The aim of the dissertation was to research how students from different degree programs invest and if they invest their study loan. Bearing that in mind, a large quantity of data was required to yield a sample reliable enough to draw conclusions from. Therefor the quantitative approach is considered most suitable for further analysis (Bryman et Bell, 2016 p. 239-245). An online questionnaire served as the most suitable way to carry out the research. The questionnaire was released through different online channels. The primary source for data gathering is through the student unions of Arcada University of applied Sciences and their online channels. The questionnaire was released through their channels accompanied by a brief explanation of the questionnaire and an invite to participate. A secondary source for data gathering was e-mails containing the link to the questionnaire sent out to students that has expressed their will to participate. The e-mail also included instructions on how to share the link with fellow students to further yield answers and invite to participation. The questionnaire was open from 15.3 to 31.3 and would have been reposted until the required amount of responses had been received. During this time the author carried out a smaller sampling with the same questionnaire sent through online channels on Arcada Uas premises. Students were randomly selected and asked to participate in the research by filling in the questionnaire. Invite, explanation of the questionnaire enclosed in the appendices.

An online questionnaire removed the human error part as it did not require gathered data to be manually entered into software used for statistical analysis, e.g. SPSS.

Questions in the sampling were standardized, e.g. all respondents were asked to participate in the same batch of questions. The order, questions and in which fashion the questions are asked from the respondents were equivalent (Vilkka 2007 p. 28-29).

A certain bias was to be expected with an online questionnaire open to the public through student union channels. That bias stemmed from the uncertainty of the respondent current status, e.g. is the respondent still a student in a University of applied Sciences. However, that bias should be marginal since student unions are intended for students, former and current. Even with a questionnaire personally handed out to the respondents of a random population there is no solution to completely ensure that the respondent belongs to the intended population for the research

There are however positive sides of using a questionnaire that is available online. The most obvious one is that responses will be ready and available analysis when the respondent has finished filling in the questionnaire. Respondents tend to be more honest when answering a self-completion questionnaire (Bryman et Bell, 2016 p. 239-245). When asking sensitive questions such as personal economy an honest answer is preferred. Usage of online questionnaires also enables respondents to respond in their own time. This can in many cases results in lack of participation or requiring long waiting times due to that respondents are slow participating in the questionnaire (Vilkka 2007 p. 28).

3.1 Selection of population

Students in Universities of Applied Sciences and universities at a bachelor level served as the population for the research. The main reason behind the choice of population was a broad selection of study programs and which would produce a difference among respondents, e.g. receiving answers from students in different degree programs. The familiarity of the Universities of Applied Sciences and universities at a bachelor level served as a secondary reason as a part of that population consists of friends, classmates and other acquaintances. In other words, convenience sampling was used for selection of population.

3.2 Gathering of data

The primary data was gathered through a questionnaire enclosed in the appendices. Respondents were asked to participate and take a self-completion questionnaire with a batch of questions. To improve reliability of gathered data, secondary data was gathered from different sources and compared with triangulation (Vilkka 2007 p. 30-31). Sec-

ondary data sources consist of online sources (Tilastokeskus 2016), online publications in credible journals and other data sources. Previous research of the topic, consumer behaviour and general statistics of the economics concerning households in Finland were part of the sources used in the study to form an accurate picture.

3.2.1 Source criticism

Used sources, publications, journals and books were subject to source criticism. The literature used as sources and references for the dissertation were inspected thoroughly. Their credibility was weighed as they are part of the theoretical framework used to explain terms and the research conducted. Criticism can be directed at the age of sources, debating if older information is still valid. Older sources used will be complimented with newer sources to ensure current information is used.

3.3 Structure and adaptation of the questionnaire

The purpose of the thesis was to research if there is an investment behaviour among students in Universities of Applied Sciences or universities at bachelor level. More specific if there is a correlation between field of study and investing, furthermore the intention was also to research whether students invest their student loan. To ensure that the questionnaire was easily understood and does not contain questions that are misleading a test run with a control group was carried out before the final version was released. The pilot included a discussion portion to enable feedback (Bryman et Bell, 2016 p. 272) Subsequently the questionnaire was improved as needed when the pilot was completed. The layout of the questionnaire was also discussed with peers to further clarify intent.

3.3.1 Structure

The structure of the questionnaire was a self-completion and a multiple-choice type (Bryman et Bell, 2016 p. 257-271).The questionnaire is enclosed in the appendices. The respondents were presented questions with multiple choices starting with a background of the respondent. Age, gender and degree program were the background of part. To ensure that the respondent belonged to the intended population they have been asked to enter current place of study, e.g. University of Applied Sciences or university. The structure of the questionnaire was formed to ensure complete anonymity of the respondents.

The respondents were then asked if they invest, upon negative response they were asked follow-up questions inquiring the possible reasons for not investing. Positive response took the respondents to the actual batch of questions inquiring about their investing habits. Investment frequency, investment objects, investing with borrowed finances, e.g. student loan. The final part of the questionnaire thanked the respondent for participating and allowed the respondents to enter their email for a change to enter in a lottery as compensation for lost a time when participating. Questionnaire attached in appendices.

3.3.2 Adaptation

To enable bivariate analysis of gathered data the questionnaire was adapted to at least in part consist of questions with a five-point Likert-scale. The respondents were asked to enter their level of agreement on a range from strongly disagree to strongly agree (Bryman 2003 p. 166). Replies were coded and scored accordingly, where as a strongly disagree received a low score, strongly agrees received a high score implying a high level of intensity, e.g. connecting the respondent's feelings on a matter on to a measurable scale.

Part of the questionnaire was adapted so it would display a dependent and independent variable. Independent variables being age and current school while field of study is a dependent variable.

3.4 Analysis

The selected method of analysis was a Bivariate analysis, a method concerned with analysis of two variables at a time to bring light on the possibility of the two variables being related (Bryman et bell 2016 p. 351-360.) The selected method might uncover relationships between two variables not causality. E.g. one variable is not the cause of the other. Analysis was carried out though Contingency table accompanied by chi-square test to establish a confidence level for possible relationships between variables.

Gathered data was also coded and input into Excel. For visualization and display of findings.

4 EMPIRICAL

The following chapter consists of the empirical part of the thesis. Presenting the research carried out by the author in the form of statistics. As a quantitative approach to the research was used findings will be displayed in numbers or percentages. Quantitative research can also be called a statistical method, requiring a much larger sample than a qualitative approach to ensure validity of the research. This chapter will display the objective, target group, validity and objectivity of the results.

4.1 Implementation

The questionnaire for "Investment behaviour of Bachelor level students" was open for respondents from 15.3.19 until 31.3.19. A total of 200 of answers was recorded during that time period. Of those answers 150 was complete and useable. Students from Arcada University of Applied Sciences, Hanken School of Economics, Helsinki University, Aalto University, Åbo Akademi University, Novia University of Applied Sciences, Laurea University of Applied Sciences, Haaga-helia University of Applied Sciences and Metropolia University of Applied Sciences participated in the research

4.2 Presentation of the results

The results of the questionnaire are presented in a neutral fashion in this chapter. The aid of various charts is used to easily describe respondents' answers. Key numbers from the questionnaire were entered into Excel to enable visualization of findings through selected charts.

4.2.1 Introduction

The first part of the questionnaire was an introduction part. In short describing the purpose of the questionnaire, who are part of the sample, what the aim of the research is, a brief presentation of the author and explaining to the respondent on how to participate in a lottery for a chance to win a gift certificate.

4.2.2 Background

The second part of the questionnaire is an inquiry about the respondent's background. The respondents were asked to state their age, gender, current school field of study, and if their student loan had been taken out.

In the first question the respondents were asked to state their age. To enable analyzation in SPSS the age needed to be specific. To enable easy presentation through visualization the answers of the respondents have been divided into age groups. 28 respondents or 19% belonged to the age group 18-20 making it the second largest. Most of the respondents (76 or 51%) belonged to the age group 21-23. In the 24-26 age group there were 23 respondents or 15%, while the 27-29 age group was the smallest one with only 6 respondents or 4 %. The 30+ age group was the third largest with 17 respondents and making up for 11% of the answers.

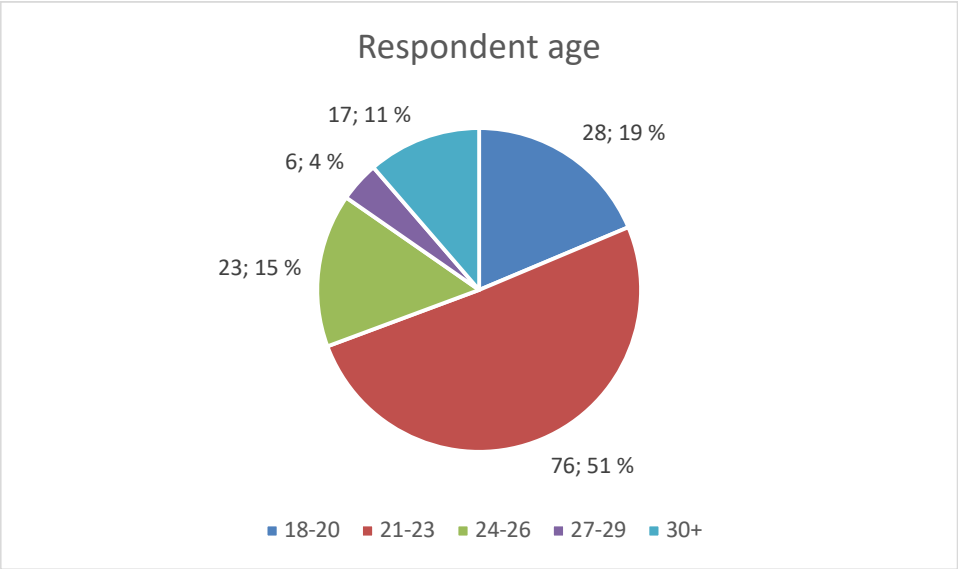

Figure 1 - Respondent age

In the second question of the questionnaire the respondents were asked to state their gender. Gender equality was equal in the research with 75 or 43% female respondents and 73 or 42% male respondents with 2 or 1% identifying themselves with other as their gender.

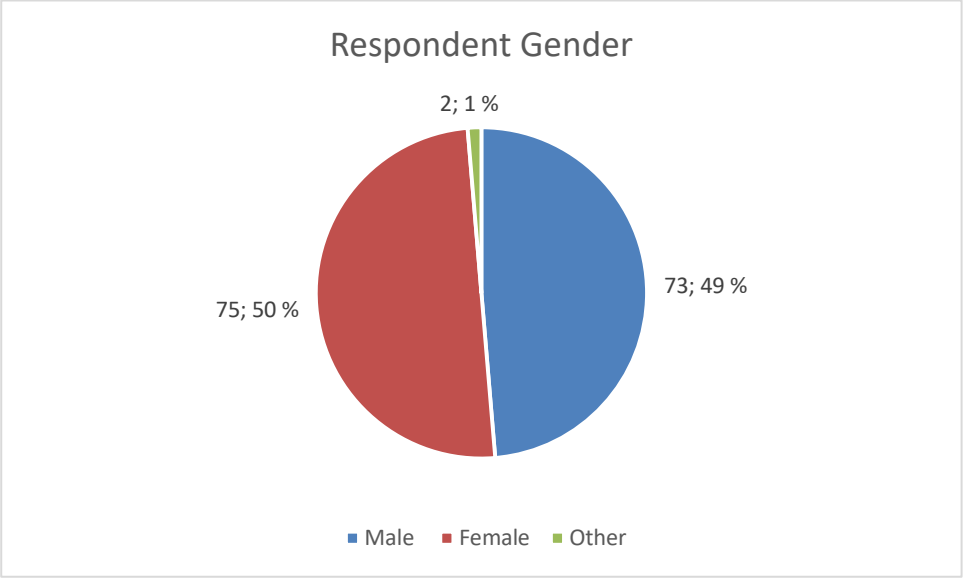

Figure 2 - Respondent gender

The third question inquired the current school of the respondent. Arcada University of Applied Sciences had the largest participation with 88 respondents followed by Hanken School of Economics with 36 respondents. Novia University of Applied Sciences had the third largest participation with 9 respondents. The remaining answers were divided

relatively even among the rest of the schools with only a few participants from each school.

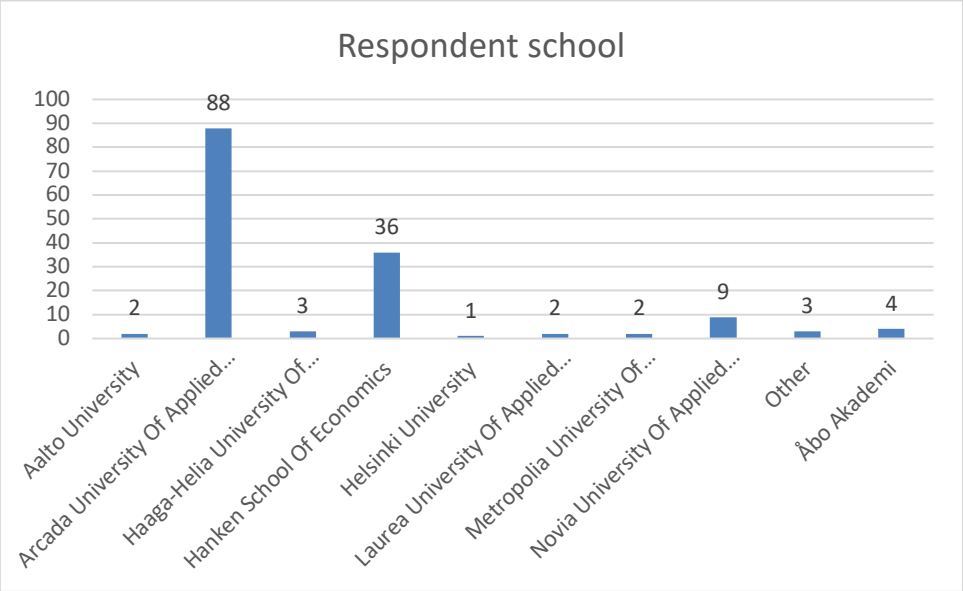

Figure 3 - Respondent school

The fourth question requested that the respondent stated their field of study. Most of the respondents (63 or 42%) stated Business and management analytics as their field of study. Health and welfare were the second biggest with 28 respondents or 19% followed by Culture and media with 26 respondents (17%). 13% or 20 of the respondents stated other as their field of study. Only 13 (9%) of the respondents stated technology as their field of study.

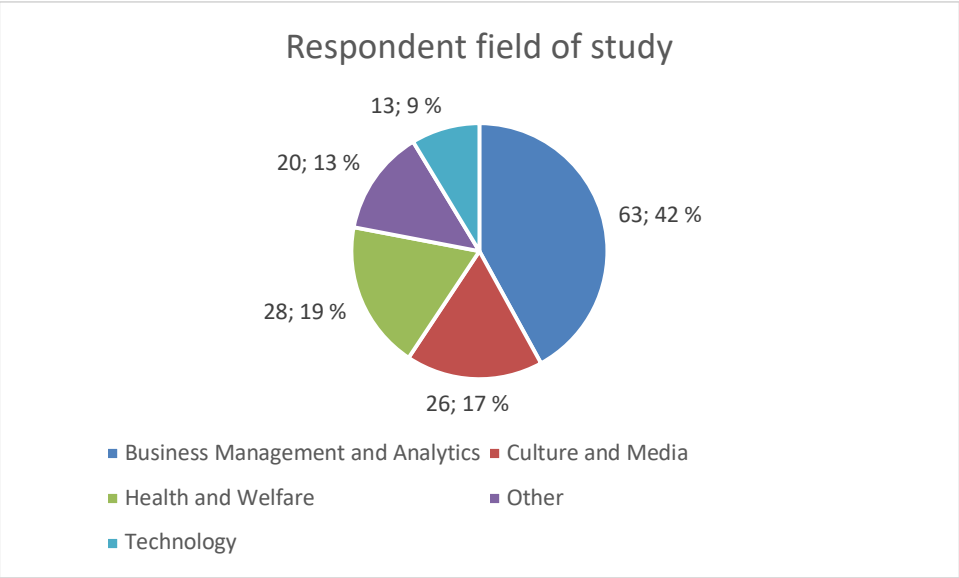

Figure 4 - Respondent field of study

The final question of the background part of the questionnaire inquired if the respondent had taken out their study loan. Most of the respondents replied "yes" to this question, i.e. 97 respondents or 65%. 53 or 35% of the respondents replied "no" to the question.

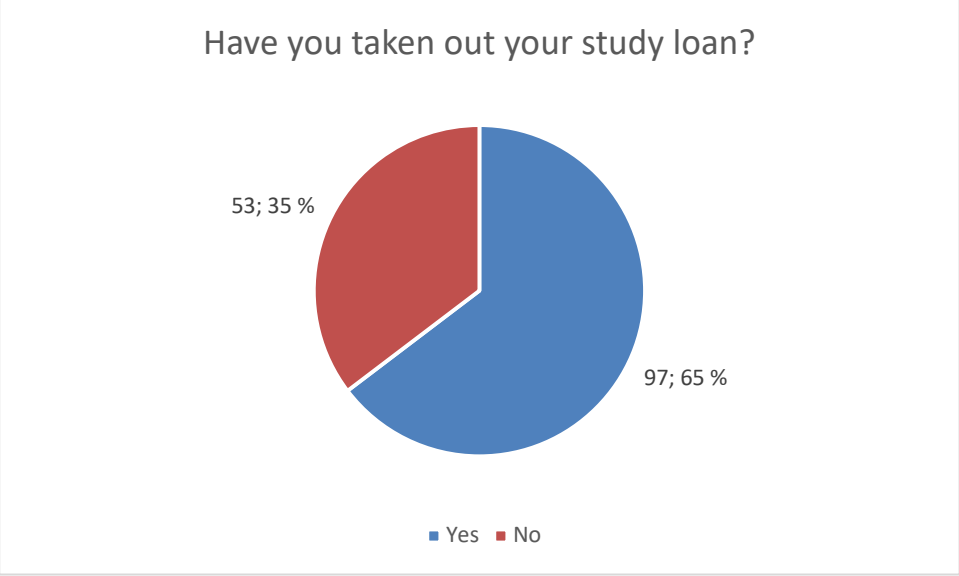

Figure 5 - Respondent study loan

4.2.3 Respondent investment behaviour

Using a Likert scale ranging from strongly disagree to strongly respondents were asked if they would use their study loan for investment thus enabling measurement of the respondent's feelings towards investing. 52 of the respondents with agreed with the statement and selected "agree" and 50 respondents selected "strongly agree" as their preference. 22 of the respondents neither agreed nor disagreed with the statement.

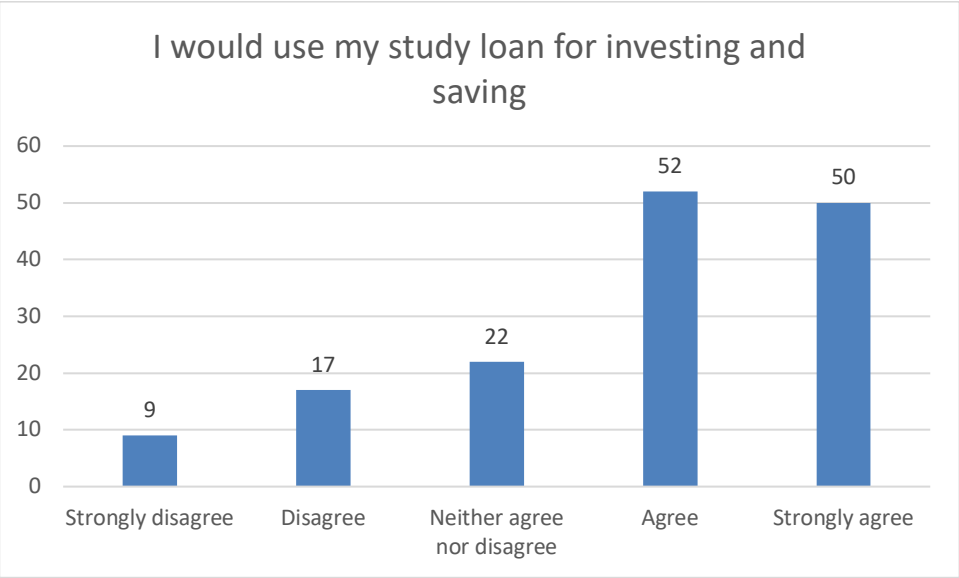

Figure 6 - Study loan for investing

Further researching the investment behaviour of the students, they were asked how much of their study loan they would be open to invest. This was also done with 5-point Likert scale dividing investments into 25% increments starting at 0% and ending with 100%. Of all the respondents 50 stated that they would invest 50% of their student loan, this being the predominant choice. 36 of the respondents stated that they would invest 25% of the student loan, second in preference. 75% and 100% investment of the student loan yielded 25 answers each while 0% investment only yielded 14 answers.

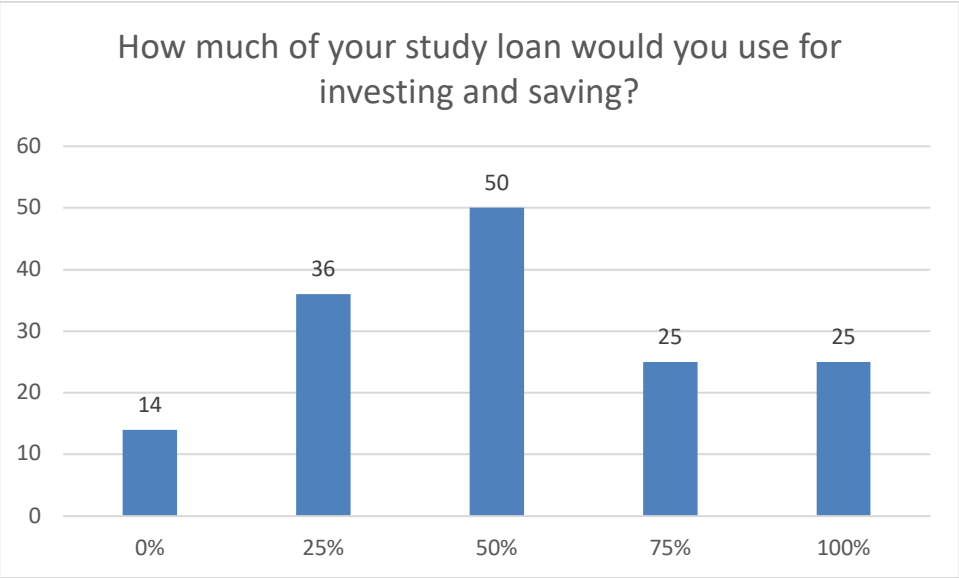

Figure 7 - Invested amount of the study loan

Respondents were furthermore asked if they invest on a regular basis, a minimum of 50 EUR on average. This question was also formulated with a 5-point Likert scale ranging from strongly disagree to strongly agree. The predominant choice of the respondents was "agree" with 44 answers. The second in choice was "disagree" with 33 answers followed by "strongly disagree" and "strongly agree" with 28 answers each. The final option "neither agree nor disagree" yielded 17 answers.

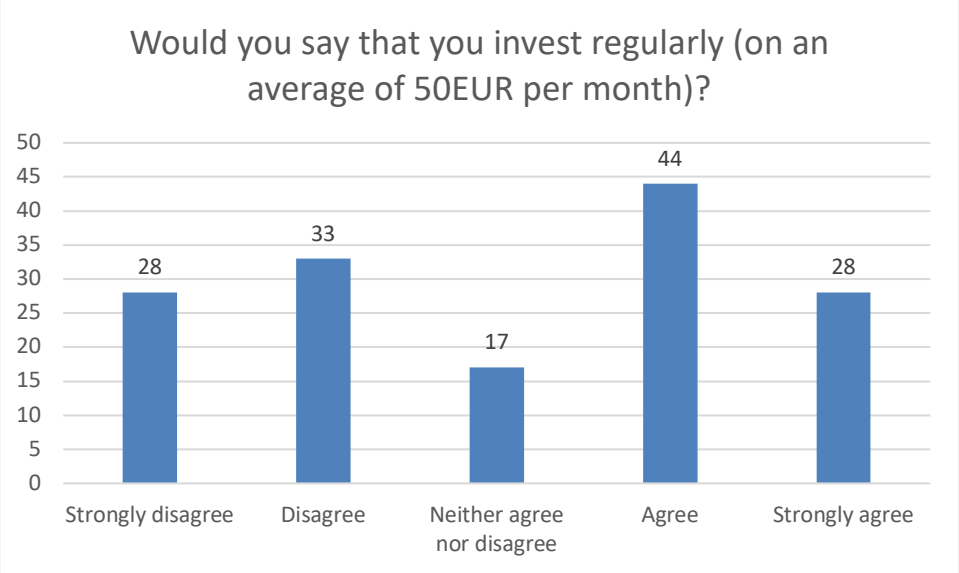

Figure 8 - Regular investment

Respondents who chose “strongly disagree”, “disagree” or “neither agree nor disagree” were asked a follow up question why they do not invest. The predominant choice of the respondents with 41 answers was “I cannot afford it” followed by “I do not have sufficient information on different savings alternatives” with 31 responses. The rest of the answers were divided evenly among the remaining options

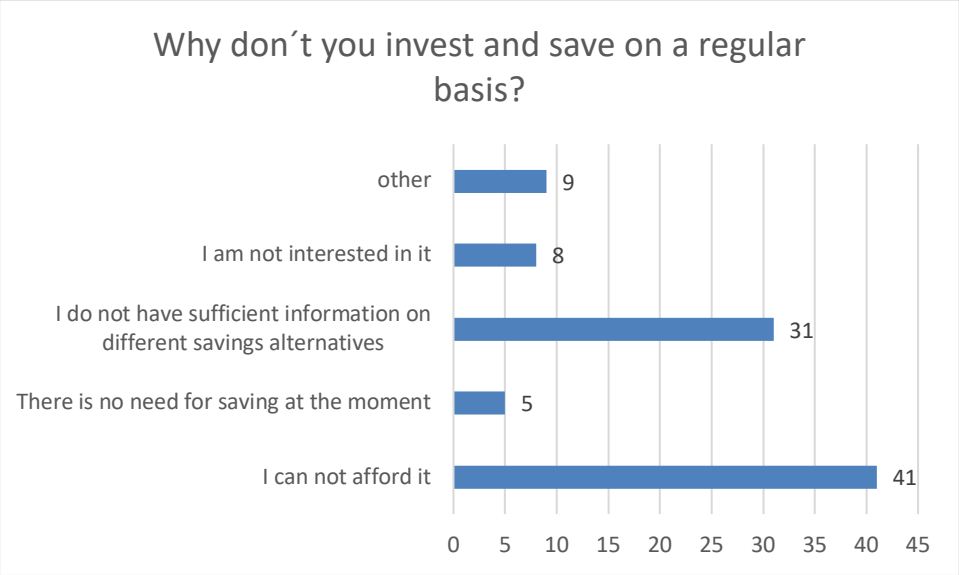

Figure 9 - No regular investments

4.2.4 Respondent investments

Researching the investment behaviour of students the respondents were asked if they had any investments. The question was of multiple-choice type giving the respondents the option to choose from predefined answers. 130 or 87% of the respondents stated that they had some sort of investments or savings. Only 18 or 12% stated that they did not have any type of investments, while 2 respondents or 1% claim they do not know if they have any investments at all.

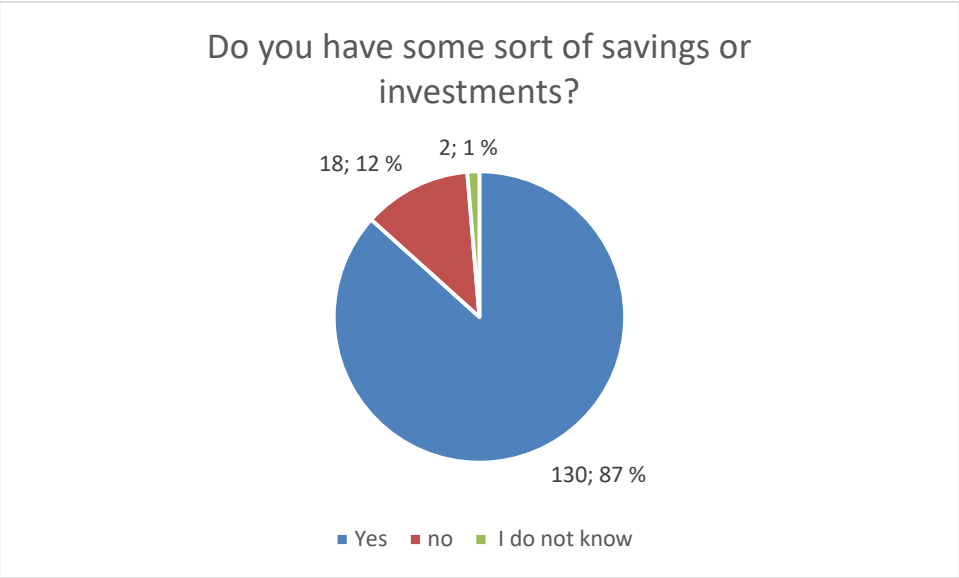

Figure 10 - Respondent investments

In the following question an inquiry about the type of investments the respondents were made. The question was formulated with predefined options, enabling the respondent to choose multiple options. This however results in unclear statistics, since the respondent could have many forms of investments or savings. Saving deposit was the predominate choice, followed by shares, BSP account and mutual funds.

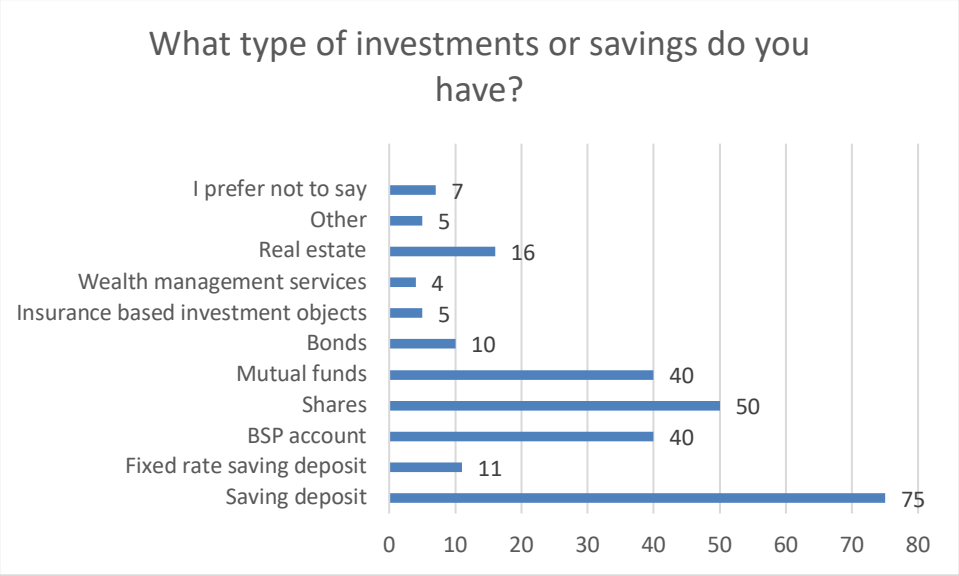

Figure 11 - Respondent investment types

The respondent was then asked to state the main reason behind their saving and investing. The question was of multiple-choice type but only allowing the respondents to

choose one reason. “General improvement of my financial situation “was the predominant choice with 69 respondents selecting that as their main reason. “Saving to buy my own apartment” was the second largest reason with 54 answers while “Short term goal” had 13 answers. 8 of the respondents stated, “Saving for my retirement” as their reason behind saving ang investing while 5 chose “It interest me”.

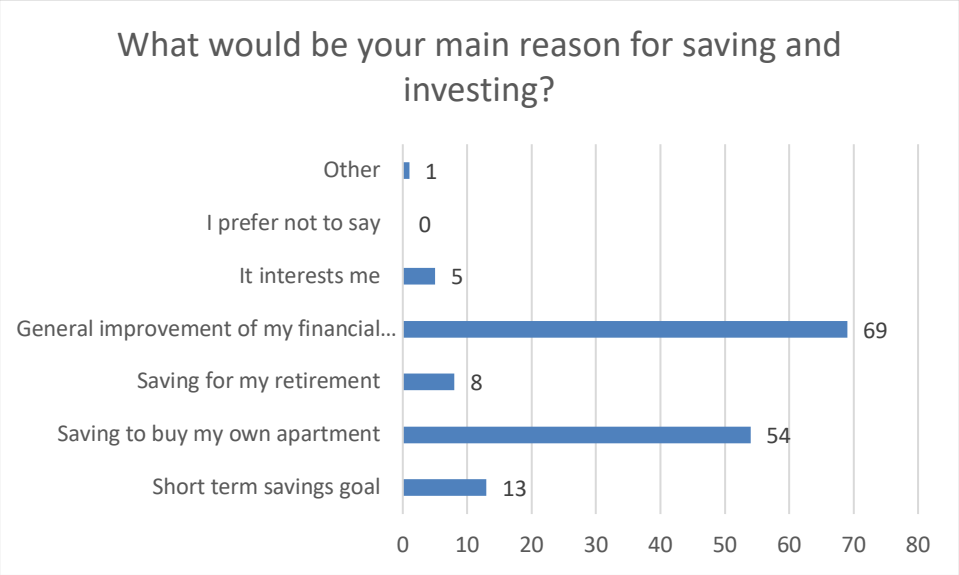

Figure 12 - Main savings goal

An inquiry about the respondent’s possible secondary savings goals was also made. The question was formulated as the previous question allowing for only one option. 41 respondents stated “General improvement of my financial situation “as their secondary reason for investing and saving followed by “Saving to buy my own apartment” with 38 answers. “Short term goal” ranked high with 31 respondents selecting it as their preference. “It interests me” superseded “Saving for my retirement” with 22 and respective 17 answers.

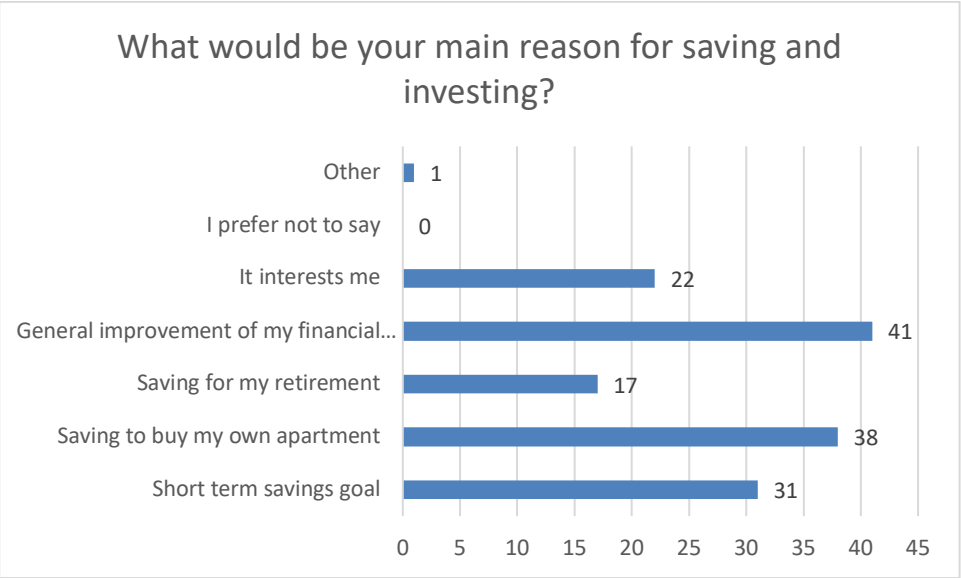

Figure 13 - Secondary savings goal

In the final part of researching the respondent's investments they were asked to state from where the funds used for investing and savings originated. Respondents were given the possibility to select multiple sources of funding from the predefined answers. Salary was the predominate choice and student loan as a secondary choice. Financial help from parents and gifts followed. Respondents also stated that the funds originated from inheritance.

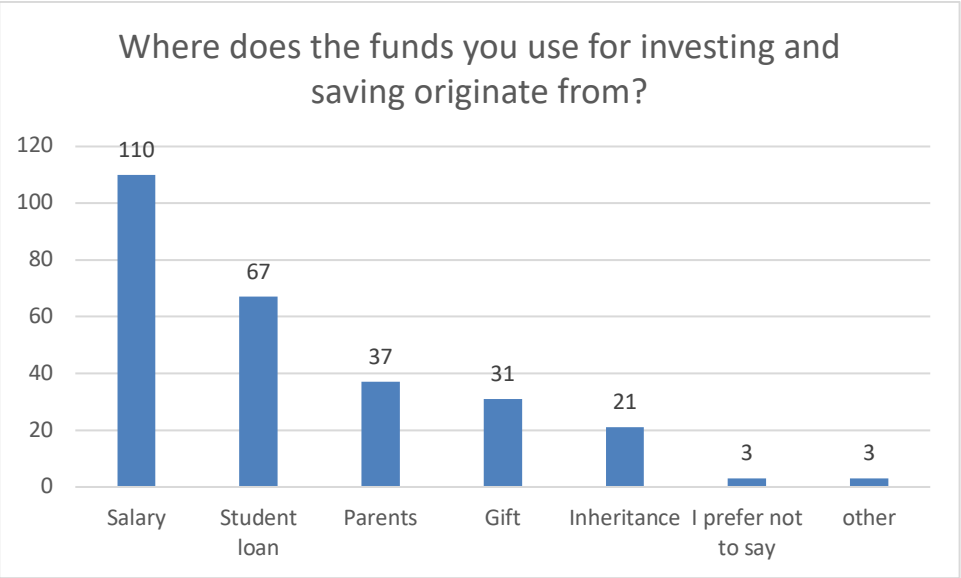

Figure 14 - Funds for investing

4.2.5 Respondent external influence and risk profile

The final part of the questionnaire compromised of questions researching the risk profile of the respondents and what type of external influenced affects their decision making when investing and saving.

Respondents were asked if they have had help investing their wealth. The question was again of multiple-choice type with predefined answer allowing the respondent to choose multiple answers. The predominate choice among respondents was “I have invested it myself” followed by “Parents” and “The Bank” taking the third position among answers.

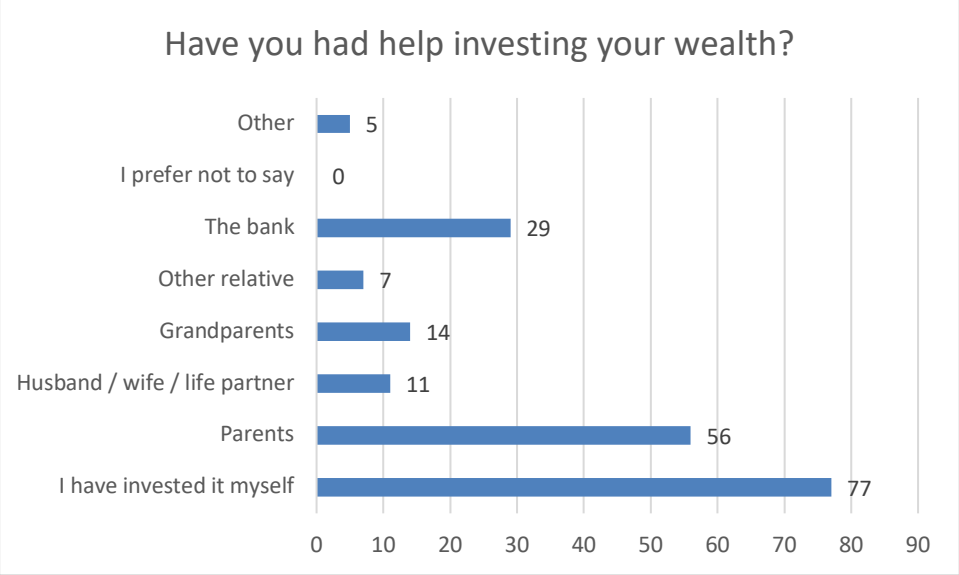

Figure 15 - Guidance

Respondents were the asked what they value most when making an investment and savings decision. The question again offered the possibility to select multiple answers. Four of the answers had almost the same amount of answers sharing the predominant choice with only a few answers to separate them. Respondents value “Simplicity”, High yield or return”, “low management costs” and “Low risk” the most when making an investment or savings decision.

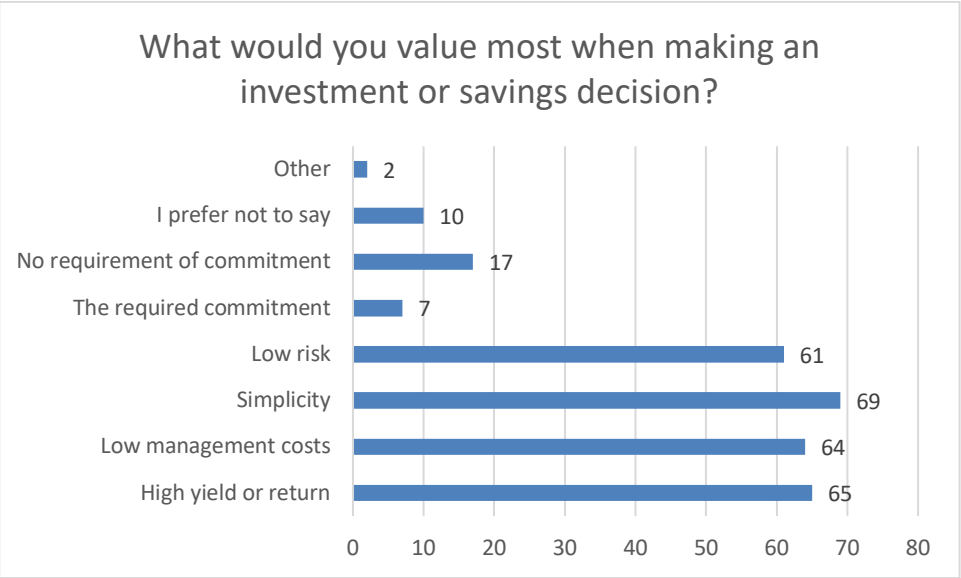

Figure 16 - Effect on decision

An inquiry on how willing the respondents were to take risk when making an investment decision followed. The question was formulated as a 5-point Likert scale ranging from strongly disagree to strongly agree. 62 of the respondents answered "disagree" and thus making it the predominant choice. "neither agree nor disagree" yielded 34 answers making that the third biggest group while 12 entered "Strongly disagree" as their preference. 38 respondents selected "agree" and 4 "Strongly agree" making them the only unwilling to take risks of the group.

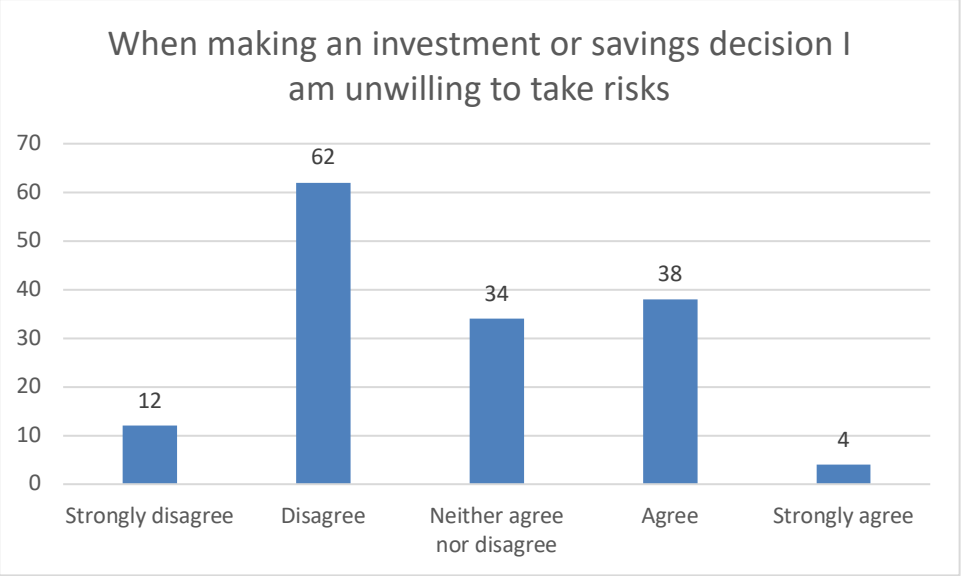

Figure 17 - Risk avoidance

The final part of the questionnaire asked the respondents how different external sources affect their decision making, i.e. friends, relatives or media. The question was formulated as a 5-point Likert scale ranging from strongly disagree to strongly agree giving the respondents an opportunity to express their emotional response to each external source.

5 ANALYSIS

5.1 Introduction

200 respondents participated in the questionnaire and of them 150 were complete answers usable for analysis, although a larger sample would have been preferred. The possibility to send and an email with the questionnaire to every student at Arcada or other schools was not available due regulations of internal email use in the schools making it difficult to yield a larger sample. Due to the gap between number of participants in different schools' comparison between schools was rendered impossible. An even response between all schools would have been preferred. Comparison between fields of study was still possible.

5.2 Background

Gender equality among respondents was equal as wished for, divided into 50% female and 49% male respondents with and 1% identifying themselves with others as their gender. Largest of the age groups was 22-23 with 51% of all the respondents, which was expected given the population of sample. Since convenience sampling was used for selection of population most of the respondents were from Arcada Uas. The selection also affected students' field of study with business management and analysis being the largest with 41% of the participants. 68% of the participants had taken out their study loan. A high percentage was expected since students often have very limited funds and quite commonly need to rely on study loans to make ends meet.

5.3 Respondent investment behavior

Before any analysis and comparison was carried out the data was inspected for missing parameters in SPSS. More specific the “current school” and “field of study”. Both fields were modified when needed, e.g. if a student had specified current school as “other” and then typed in “Arcada Uas” the respondents answer was then changed to “Arcada Uas” instead of “other”. The same procedure was carried out for “field of study”, inspecting values and arranging them according to available options, e.g. “forestry” into “technology” or “international business” into “business management and analytics”.

Comparison of field of study and “I would use my study loan for investing” using Crosstabulation and Chi-square the Chi-square test was statistically significant ($p=0.03$). However, 60% of expected count of cells were under 5 rendering the test invalid, i.e. no difference between field of study and investing could be found with a sample of current size.

Recoding the Likert-scale from “Strongly disagree”, “Disagree” and “neither agree nor disagree” into the variable “1” furthermore, “Strongly agree” and “Agree” were recoded into the variable “2” in an attempt to improve expected count of cells with value under 5. “1” was named “no” and “2” named “yes” and the frequency was inspected. When inspecting the new variable, it was clear that 68% ± 7,5% of the respondents would invest their student loan with 95% confidence interval.

A pattern emerged when inspecting field of study through Crosstabulation and Chi-square with different variables such as “How much of your study loan would you invest” or “Would you say that you invest regularly (on an average of 50€ per month)” in both cases the Chi-square test would turn out statistically significant ($p<0.05$) however the expected cell count would be under 5 for 60% of the cells, i.e. not validating the proposed theory of field study influencing the respondents investment behaviour.

5.4 Respondent investments

Analysing respondent investments through Crosstabulation and Chi-square, starting with the question “Do you have any investments” again yielded a Chi-square test that was statistically significant (p=0.05). However, the expected cell count once again was under 5 for 58,3 % of the cells, i.e. no correlation between study field and if the respondent had investments could be found. Inspecting the values from another angle by analysing the frequency yielded a result. By recoding the answers “No” and “I don´t know” into “1” while” Yes” was given the value “2” a conclusion could be drawn. With a 95% confidence interval 86,7% ± 5,4% of the respondents have some form of investments or savings.

Crosstabulation with Chi-square of study field with a specific investment in mind, e.g. “savings deposit” or “mutual funds” allowed for individual examination of the values. Upon closer inspection all investments followed the same pattern. Expected cell count was under 5 for 0.0% of the cases but at the same they were not statistically significant (p=0.149-0.842). For all cases except one, Crosstabulation with Chi-square of “Business management and analytics and “Shares” yielded a value (p=0.000451), Expected cell count was under 5 for 0.0%. Which in this case could be considered significant.

Respondents were asked for the main reason behind their investing and saving. Inspecting field of study with the main reason in focus was statistically significant (p=0.033), expected cell count for 62,5% of the cells was under 5, i.e. no correlation between field of study and main reason could be found.

However, the main reason among all respondents for saving and investing was “General improvement of my financial situation” with 46% of the total answers, the second most popular alternative was “Saving to buy my own apartment” receiving 36% of respondent’s answers.

An inquiry of secondary reason behind respondents investing and saving was also made. Upon closer inspection no statistical significance could be found (p=0.102). Respondent answers were divided quite equally among three alternatives. “General improvement of my financial situation” with 27,3%, “Saving to buy my own apartment” with 25,3% and “short time savings goal” with 20,7% of the total answers.

Crosstabulation of fund origin and field of study yielded no answer so frequencies were analysed instead. 51,5% ± 7,9% of the respondents with a 95% confidence interval stated that they have their study loan for investing. With same confidence interval 84,6% ± 5,8% of the respondents stated that their salary was a source of funding for their investments.

5.5 Respondent external influence and risk profile

To inspect whether respondents had help during their investment process frequencies were examined. All the calculations were made with a 95% confidence interval. The three predominant alternatives were “I have invested it myself “with 59,2% ± 7,8%, “Parents” with 43,1% ± 7,9% and “The bank” with 22,3% ± 6,6% of the recorded answers. Furthermore, respondents were presented with different attributes related to investing and asked to enter their preferences accordingly. Answers were divided evenly among four different attributes. Frequencies were examined and sample errors were calculated for each alternative with a 95% confidence interval .“High yield or return” with 43,3% ± 7,9%,“Low management costs” with 42,7% ± 7,9%,“Simplicity” with 46 % ± 7,9% and .“Low risk with 40,7% ± 7,8% of the answers. The questions were of multiple-choice type enabling multiple answers to be selected.

Respondents were asked to rate their willingness to take risks when investing and saving. Through a Crosstabulation no correlation between field of study and risk taking could be found, (p=0.673). The frequency of all answers was examined for further research, the frequencies of “Strongly agree”, “Agree” and “Neither agree nor disagree” were added to a receive a total. 50.7% ± 8,0% of the respondents agreed upon them being unwilling to take risks when making an investment or savings decision, an expected number since most investors are trying to take minimal risks.

When comparing field of study with external influences such, i.e. studies that affect the respondent when making an investment or saving decision Crosstabulation and a Chi-square was used. No statistical significance could be found (p=0.493). The frequencies of answers were then examined. Of all the responses “Studies “with 60% ± 7,8%, “Current profession” with 51,4% ± 7,9% and “Friends” with 50,6% ± 8,0% had the highest response rate.

6 DISCUSSION

The average response rate with complete answers of the questionnaire was 75% but with 150 respondents from 10 different schools and most of them from Arcada Uas, the sample was limited and a generalization of students on a Bachelor level on a national scale was not possible. A certain bias was to be expected since convenience sampling was used, most likely presenting itself in a sampling error, i.e. a lack of representation of the population in the sample. As the distribution method of the questionnaire was a mix of personally asking students to participate and sharing it on digital channels for students the risk of such a sampling error was reduced. Even though the rate of participation through the used mix was not 50/50 the sample size received from personally asking students to participate would alone have been sufficient to carry out the research, i.e. the sample received could be generalized to the target population. Because of convenience sampling the reliability and validity of the survey can be discussed. Since a bias might have occurred through convenience sampling, randomly asking students to participate in the questionnaire also reduces that bias, the same reduction also improves on the validity and reliability of the research.

A larger sample with respondents from different schools and an equal distribution in field of study would have had an impact on the results. In many cases a larger sample would have at least corrected expected cell count in SPSS to an acceptable level, i.e. no cell counts under 5. Apart from that the questionnaire was tested before release with a version including feedback to ensure no questions or answers alternatives were unclear to the respondent. With a clearly defined sample there should be no discussion about the validity of the research, especially since the gathered data has brought forward information that answers the research question. No clear correlation could be found between field of study and investment behaviour. There were however behavioural patterns that cannot be a complete coincidence. With no previous research in the area a comparison could not performed. As mentioned earlier studies in the investment behaviour of students with an economical major have been carried out, so at least in part the research can be supported by previous findings (Wennqvist 2017) and also research brought forward by Aakula (Aakula 2010) is of relevance. As the theoretical part implies investment behaviour is an extensive process with external and internal influences. The sup-

posed theory proposes that field of study would impact investment behaviour. However, a statistical significance could not be found with a sample of this size, research into the field of investment behaviour clearly states that financial literacy affects how, and investor invests. Financial literacy can be improved on in many ways and maybe one of the most obvious solutions is to study the subject in school, i.e. business management and analytics related studies. This does however not exclude the fact that financial literacy can be higher for a student studying in the field of health and welfare than a business student, chances however are the opposite.

The aim of the dissertation was to research the investment behaviour of students at a bachelor level, comparing fields of study for differences and researching whether students invest their study loan. The questionnaire was built accordingly. Inquiring the respondents about their study loan, if it had been taken out, if they could picture themselves investing it and how much of it, they would invest. While no clear pattern between field of study and investing could be found there however was a pattern with students investing and saving in general. Most of the respondents have some form of savings or investments. Most of the respondents claimed that main reason they invest and save is to improve their general financial situation or are saving for an apartment. A common factor for the origin of the funds used was that they either come from the respondent salary and at least in part from their study loan.

Most of the respondents claimed that they have had no help investing their funds, but parents and the bank did rank highly on external factors helping them invest. No correlation between studies as external factor could be found when comparing that with field of study, however when viewing the whole sample, the majority, i.e. around 60% of the respondents claimed that their studies influenced their investment behaviour. This closely followed by current profession and fiend as an external factor of influence.

How much information a student on a bachelor level have about investing and savings is something to guess about. The process behind investing is complex process requiring a good understanding of many components as previously mentioned in the theoretical part of the thesis. A decision that requires to take the investment horizon, sum to be invested, the investors risk tolerance and general knowledge behind the product into consideration. All that considered would an obligatory course on personal finance for students at a bachelor level be an option to consider. After all, helping students making qualified decisions about their economy at an early stage could be considered a win-win situation.

Proper planning of your personal finances will help during those hard times everyone goes through once and a while.

Further research into the area could be interesting to carry out with a much larger sample, defining the sample to students at a bachelor level in Uusimaa and be able to compare fields of study between schools, if a correlation could be found, if there is a difference between where and what you study.

> "An investment in knowledge pays the best interest."
>
> (Benjamin Franklin, scientist 6 January 1705 – 17 April 1790)

When it comes to investing, nothing will pay off more than educating yourself. Do the necessary research, study and analysis before making any investment decisions.

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APPENDICES

Investment behaviour of bachelor level students

Hi,

My Name is Johan Mattsson. I am studying International Business at Arcada University of Applied sciences and majoring in Financial management. I am currently writing my thesis that aims to research the investment behaviour of bachelor level students.

All answers are treated confidentially and are only presented in the form of statistics. Respondents are kept anonymous. The questionnaire takes about 2-5 minutes to answer and consists of two parts, one background part and a second part with the main batch of questions.

A 50€ gift card to Stockmann is randomly drawn among participants. For a chance to participate in the lottery please enter you email in the final part of the questionnaire.

Any questions or comments regarding the questionnaire can be sent to Johan.Mattsson@arcada.fi

Thank you!

There are 19 questions in this survey.

Please state your age *

Only numbers may be entered in this field.
Please write your answer here:

Please state your gender *

Choose one of the following answers
Please choose **only one** of the following:

- ◯ Male
- ◯ Female
- ◯ Other

Please select your current school *

Choose one of the following answers
Please choose **only one** of the following:

- ◯ Arcada University Of Applied Sciences
- ◯ Hanken School Of Economics
- ◯ Helsinki University
- ◯ Aalto University
- ◯ Åbo Akademi
- ◯ Novia University Of Applied Sciences
- ◯ Laurea University Of Applied Sciences
- ◯ Haaga-Helia University Of Applied Sciences
- ◯ Metropolia University Of Applied Sciences
- ◯ Other

Please select your field of study *

Choose one of the following answers
Please choose **only one** of the following:

- ◯ Business Management and Analytics
- ◯ Health and Welfare
- ◯ Technology
- ◯ Culture and Media
- ◯ Other

Have you taken out your student loan? *

Choose one of the following answers
Please choose **only one** of the following:

- ◯ Yes
- ◯ No

I would use my study loan for investing and saving *

Please choose the appropriate response for each item:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	◯	◯	◯	◯	◯

How much of your study loan would you use for investing and saving? *

Please choose the appropriate response for each item:

	0%	25%	50%	75%	100%
	◯	◯	◯	◯	◯

Would you say that you invest regularly (on an average of 50€ per month)? *

Please choose the appropriate response for each item:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	◯	◯	◯	◯	◯

Why don´t you invest and save on a regular basis?

*

Please choose **all** that apply:

- [ ] I can not afford it
- [ ] There is no need for saving at the moment
- [ ] I do not have sufficient information on different savings alternatives
- [ ] I am not interested in it
- [ ] Other:

Do you have some sort of savings or investments? *

Please choose **only one** of the following:

- ◯ Yes
- ◯ No
- ◯ I don´t know

What type of investments or savings do you have? *

Please choose **all** that apply:

- [ ] Saving deposit
- [ ] Fixed rate saving deposit
- [ ] BSP account
- [ ] Shares
- [ ] Mutual funds
- [ ] Bonds
- [ ] Insurance based investment objects
- [ ] Wealth management services
- [ ] Real estate
- [ ] I prefer not to say
- [ ] Other:

What would be your **main** reason for saving and investing? *

Please choose **only one** of the following:

- ◯ Short term savings goal (For example to be able to purchase a car or travel)
- ◯ Saving to buy my own apartment
- ◯ Saving for my retirement
- ◯ General improvement of my financial situation
- ◯ It interests me
- ◯ I prefer not to say
- ◯ Other

What would be your **secondary** reason for saving and investing? *

Please choose **only one** of the following:

- ◯ Short term savings goal (For example to be able to purchase a car or travel)
- ◯ Saving to buy my own apartment
- ◯ Saving for my retirement
- ◯ General improvement of my financial situation
- ◯ It interests me
- ◯ I prefer not to say
- ◯ Other

Where does the funds you use for investing and saving originate from? *

Please choose **all** that apply:

- [ ] Salary
- [ ] Student loan
- [ ] Parents
- [ ] Gift
- [ ] Inheritance
- [ ] I prefer not to say
- [ ] Other:

Have you had help investing your wealth? If so by who? *

Please choose **all** that apply:

- [ ] I have invested it myself
- [ ] Parents
- [ ] Husband / wife / life partner
- [ ] Grandparents
- [ ] Other relative
- [ ] The bank
- [ ] I prefer not to say
- [ ] Other:

What would you value most when making an investment or savings decision? *

Please choose **all** that apply:

- [ ] High yield or return
- [ ] Low management costs
- [ ] Simplicity
- [ ] Low risk
- [ ] The required commitment
- [ ] No requirement of commitment
- [ ] I prefer not to say
- [ ] Other:

When making an investment or savings decision I am unwilling to take risks *

Please choose the appropriate response for each item:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	◯	◯	◯	◯	◯

Rate the following options on how they affected your decision making when investing or saving *

Please choose the appropriate response for each item:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Studies	◯	◯	◯	◯	◯
Current place of work or profession	◯	◯	◯	◯	◯
Advice from a financial institution	◯	◯	◯	◯	◯
Relatives	◯	◯	◯	◯	◯
Friends	◯	◯	◯	◯	◯
Internet	◯	◯	◯	◯	◯
News	◯	◯	◯	◯	◯

Thank you for you time. If you want to participate in a lottery and a have chance to win a 50€ giftcard to Stockmann please enter you mail here.

All the answers in this questionnaire are treated as confidential and only presented in the form of statistics.

Please write your answer here:

Submit your survey.
Thank you for completing this survey.