

Challenges of a Finnish Equity Savings Account

Rosa Baarman

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Abstract

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The purpose of this thesis was to recognize and research challenges of a Finnish equity savings account, which became an investment option recently in 2020. More precisely, the subject was issued from the perspective of special features of an equity savings account. The main emphasis of the thesis is set on equity investing.

Research was carried out through a qualitative research method by calculating different investment situations and forming figures to provide a deeper understanding on how the challenges affect the portfolio profit. Research material was mainly formed by different sources such as public authorities' websites and professional interview. Sources were mainly electronic due to the lack of current information about the account.

Research findings indicated and is to be concluded that equity savings account does not serve more passive investors investing larger annual amounts or longer shareholding period with less trading nor wider geographical diversification due to the special features of the account.

Account quantity restriction and deposit ceiling limits diversification possibilities through many ways and special political taxation features set boundaries on many investment possibilities. The account in general encourages to high risk active investing and requires share expertise and further consideration before opening an account.

Keywords: Equities, Equity Savings Account, Equity Savings Account Taxation, Investing in Equities, Investments

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Suomalaisen osakesäästötilin haasteet

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Tämän opinnäytetyön tarkoitus oli tunnistaa ja tutkia vuonna 2020 tulleen uuden sijoitusmahdollisuuden osakesäästötilin haasteita. Tarkemmin työn aihetta käsiteltiin osakesäästötilin erikoisominaispiirteiden näkökulmasta. Työn tutkimus painottuu pääosin osakesijoittamiseen.

Tutkimus suoritettiin laadullista eli kvalitatiivista menetelmää käyttäen, laskemalla erilaisia sijoitus tilanteita, joista muodostettiin hahmottavia kuvioita tuomaan syventävää ymmärrystä, miten tilin haasteet vaikuttavat salkun tuottoon. Tutkimusaineisto muodostui pääosin erilaisista viranomaisten internet-lähteistä ja asiantuntevan haastattelusta. Käytetty aineisto oli pääosin sähköisessä muodossa vähäisen olemassa olevan tiedon takia.

Tutkimuksen tulokset osoittivat ja on tehtävissä johtopäätös, että osakesäästötili ei palvele enemmän passiivisen ja isoilla vuosittaisilla summilla sijoittavan henkilön, pidemmällä osakkeenomistus ajalla ja vähemmän kauppaa tekevällä tai laajemmin maantieteellisesti hajauttavan sijoittajan etuja.

Tilin määräsääntö ja talletuskatto rajaavat hajauttamisen mahdollisuuksia eri tavoin ja erityisverotukselliset piirteet rajaavat sijoitusmahdollisuuksia. Näin ollen, osakesäästötili kannustaa korkeamman riskin aktiiviseen sijoittamiseen ja vaatii asiantuntevuutta sekä pidempää ja syvempää harkintaa ennen tilin avaamista.

Avainsanat: Osakesijoittaminen, osakesäästötili, osakesäästötilin verotus, osakkeet, sijoittaminen

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1 Introduction

1.1 Research Subject and Research Problem

The subject of the research is challenges of a Finnish equity savings account. The account is yet very new and unfamiliar investment option in Finland and so far, not much is known about it. The research is performed as a case study to understand the function of equity savings account and identify special features of it. This subject is very interesting and current because of the fact that the account has been a possible way to invest now only for 11 months in Finland. These kind of investment changes are rare in Finland and not often is possible to be one of the first ones to get to research it.

The subject is very current since the account is very young investment option in Finland. The research carried out in this thesis offers deeper perspective on already existing public data on the internet and gives guidance for investors who the account serves the most. It is interesting to see the possibilities that this new account has to offer Finnish investors in the future when these challenges are recognized and if it has an effect on future account changes. Yet there are no further researches about this account, hence this thesis will be useful due to the lack of information there currently is.

In addition, this is the first thesis in English that deals with equity savings account. Still, there are many investors living in Finland that do not speak Finnish at all, or skills to speak the language are average. The information search can be exhausting due to the lack of information available in English. Therefore, this thesis provides useful and practical information also for people that do not know how to read or speak Finnish.

The subject of the research is not to compare equity savings account to a basic investment account, book-entry account. The main subject concentrates on equity savings account and to find answers to a research problem and to provide information for investors about this yet new investment account and what kind of pitfalls there are to know about before opening one. So far, the challenges of this account have not been investigated or researched deeply, due to the account 11 months age. This thesis is based on the research problem, where the intention is to find and acknowledge these account challenges and how they affect portfolio profit. When challenges are identified it is easier to conclude for whom the account is not suitable for.

A topic of this research is very limited to investing and more specifically into equity investing. Primarily, the thesis concentrates in equity savings account and its special features. In addi-

tion, the special features are highlighted by bringing out few features of a book-entry account, about fund investments, for example. Other investment options are not mentioned. The purpose of the concise research topic delineation is to provide a more accurate picture of the research and subject as well as to offer deeper information on equity investing.

The theory section of this thesis is going to clarify some general terms and issues to support the subject in general, such as where and how they are traded and taxation as well as history of equity investing is covered. The theory of the study is going to open up the subject for the reader and give base for the research section. The theory section, as in chapters 2-4, are going to answer the following questions: What are Equities? What is the idea of investing? How the profit and risk are formed? What are an equity savings account and a book-entry account? How are investments taxed in Finland? What kind of special features does equity savings account include?

The research is based on research questions to answer and solve research problem. This thesis provides answers to following research questions: What challenges does equity savings account include? How these challenges affect portfolio profit in different situations? What kind of investor does or does not get the most use out of the account?

1.2 Research Purpose and Objective

Equity savings account is very different investment option. Merely opening the account requires different conditions, not to mention taxation features. Equity savings account has brought itself many new useful features with it into investment markets yet also many challenges. The purpose of the study and research is to discover these challenges in the account and research the effects of those in portfolio profit and what type of investors cannot make the most use out of this account. These challenges are only little named and researched. There is no wider information, public or not published yet available, since the account is recently become an investment option this year. This thesis hereby aims to give deeper interpretation about the challenges that currently are identifiable in equity savings account.

All investors are different and so are their investing styles. This research aims to conclude, what kind of investor an equity savings account is not and is suitable for. The effects of account challenges are analyzed from many points of view in the research. Thus, it is possible to understand their impact on portfolio profit. Investor can evaluate how the account is suits for personal needs and requirements, hence is able to decide whether the account is suitable or not.

In this research intention is not to compare exclusively different service providers, their general terms or conditions about the equity savings account. The objective of this thesis is to

provide general impartial information concentrating into special features and challenges found in the account, without comparing exclusively different service providers.

1.3 Research Methods and Materials

The thesis research is carried out as a case study by using qualitative research method. The objective of a case study is to generate development suggestions and ideas as well as to produce deepening and detailed information. Qualitative research aims to give a good understanding of the topic or phenomenon. This research aims to give deeper statement and clarification about the special feature of equity savings account and how they affect in different situations. Qualitative research method offers a possibility to see the subject from very profound point of view (Ojasalo, Moilanen, Ritalahti, 2009).

Topics are researched by calculations and pictured with figures. Based on the theory, the observed findings are addressed qualitatively by opening the account challenges by calculating, to give deeper understanding on the subject. Figures are then analyzed and to help the reader to perceive what is happening in different investment situations.

The research part includes an interview, which is performed as half-structured theme interview. The interview was carried out with one professional interviewee. The interview contains accurate and deepening questions about the subject regarding this thesis. A half-structured interview is used to provide the exact information about certain issues desired (Saaranen-Kauppinen & Puusniekka, 2006).

Due to the young age of the account, exclusive research material is yet very few available. In order to maintain the research reliable and decent, only research material from reliable sources are used. Different articles, investment literature and public authority's internet sources are used in this thesis. Lastly, a professional interview is performed to support and argument the research topic.

Research materials are theory oriented. Some literature sources used are older, yet only relevant and still valid information is used. The main emphasis is on electronic sources as there is very little information in the literature on equity savings account. Electronic sources are also updated more quickly than literature. Used source material used is necessary and essential for the research that is carried out in this thesis.

A layout of the thesis is formed to be as easy reading and reasonable as possible, with the aim that the interpretation of the research is easy for the reader. First theory is covered to open up the thesis subject for the reader, and then move on to the research itself. Chapters 2-4 deal with theory and chapters 5 and 6 are dealing with the actual research and finally chapter 7 gives a conclusion on the research with few development ideas.

2 Investing in Equities

This chapter is going to cover the basics of equity investing in theory. Subjects such as trading, compound interest, risks and return on investment, diversification as well as service expenses and capital income taxation will be introduced. Investing in equities means buying a share of a company and becoming a shareholder. The share gives a right to have a voice in company's shareholders' meeting and influence in decision making. A share is a unit of ownership of a company and the ownership is tradable (Visma, 2020). According to Euroclear's statistics (2020a), at 31st of March in 1996, there was 489 012 private equity shareholders in Finland and the amount since has grown 55,1 percent. By 31st August in 2020, there was 887 713 private equity shareholders and 33 percent of them were female (2020b).

2.1 Trading

In order to list shares publicly for trading the company must be a listed company (Visma, 2020). Stock exchange operates as a public trading venue for equities and currently there are Nasdaq Helsinki and First North operating in Finland. Nasdaq Helsinki is the main trading venue for Finnish listed companies and First North is an optional trading place for smaller growth companies (Financial supervisory authority, 2018a). First North companies have lighter regulations what comes to financial reporting than for companies listed in Nasdaq Helsinki. A company listed in First North is not obligated to prepare an IFRS-statement (International Financial Reporting Standards) which is incorporated in EU legislation on all listed companies (Financial supervisory authority, 2018b). According to Pörssisäätiö, a first listed company from First North to main trading venue Nasdaq Helsinki was Taaleri Oyj in 2016 (2020a).

All private persons as well as companies can invest in equities. Signing into stock exchange happens through a bank or a brokerage firm either online or physically in the brokers location. To be able to buy and sell shares, either a book-entry account or an equity savings account must be created (Pörssisäätiö, 2017). A book-entry account is the basic general investment account for different investment instruments. The equity savings account is exclusively for equities (Laitinen, 2020). These investment accounts are exclusively for investment instruments and cannot be used as normal payment accounts to receive or make payments (Bergman, 2020).

To buy shares of one company, an order must be submitted though the service provider. In the order the company, quantity of shares and a price per share is set as well as the duration of the order. If the order has not been executed the order will expire. (Nordea, 2018). The general terms and conditions or orders depend on service providers.

2.2 Compound Interest

Compound interest is a phenomenon that is a main factor in profits what comes to saving on equities or investments in general. It means the profit gained from the initial capital will also grow interest (Malkiel, 2007). It is an interest added on already earned interest, therefore invested amount will work more money itself. (Heikinheimo, 2018).

In the table 1 below is shown an example of compound interest phenomena. The table shows how compound interest affects an original capital investment during five years of investment period. In this example below, a starting capital is 2000,00 euros and the investment will grow annually seven percent of interest, according the average stock exchange annual interest rate. The capital investment remains the same and there will be no further deposits.

Years	Annual starting capital	Annual interest	Annual ending capital	Change in value
1	2 000,00 €	7 %	2 140,00 €	140,00 €
2	2 140,00 €	7 %	2 289,80 €	149,80 €
3	2 289,80 €	7 %	2 450,09 €	160,29 €
4	2 450,09 €	7 %	2 621,59 €	171,51 €
5	2 621,59 €	7 %	2 805,10 €	183,51 €

Table 1. Example of Compound Interest

The column of change in value indicates how much the annual interest rate has raised the annual starting capital. In this example with assumed seven percent of interest rate, the investment has gained 805,11 euros profit in total with a deposit of 2000,00 euros. It can be observed from the table 1 above that the growth of compound interest is exponential (Yli-Korhonen, 2020).

2.3 Risk and Return on Investment

Risk is defined as uncertainty or threat of an unknown outcome of return. Therefore, the result is always unpredictable, and the return can lead to profits or losses (Chen, 2020). According to Lindstöm, K. and Lindström, M (2011), investments on equities always include a risk and the risk goes hand in hand with expected earnings. The more risk in portfolio, the more is expected return on investment. Return on investment comes from earnings that result from increase in value of investment and share dividends altogether (Oksaharju, 2015). Dividend is a part of profit of a limited liability company that is paid to company's shareholders, usually paid out once a year (Vero, 2020a)

Shares come with two kinds of risks, systematic and unsystematic risk (Malkiel, 2007). Systematic risk means the risk to the entire market of stock exchange. Systematic risk includes

several factors such as inflation, general economic situation or interest rates that affect share prices (Lindström & Lindström, 2011). If the market is phasing a bear market period it will affect the share prices as a decline in general. Vice versa during a bull market period, the share prices are rising in general. All shares include a market risk and it cannot be eliminated through diversification (Fontinelle, 2019).

Unsystematic risk in the other hand is a risk that comes along with a certain company and the share deviation is independent from the market. The economic and market status, profitability as well as growth and business insights are included in unsystematic risk (Lindström & Lindström, 2011). Unsystematic risk includes the unknown outcome of success of a company and the risk is mitigatable through diversification, which will be covered in the following section (Malkiel, 2007).

2.4 Diversification

Controlling the risk of a portfolio is an essential component in equity investments to avoid possible major losses. Diversification of investments is the main principal in protecting the portfolio from risks. There is an old saying "do not put all the eggs into same basket", which means investments should be divided into many targets instead of one. In case one company goes bankrupt, other investments compensate the portfolio losses. (Lindström & Lindström, 2011).

There are several ways to control the unsystematic risk of a portfolio. Diversifying investments on businesses in different industries, geographical locations and making sure of timing diversification as well (Lindström & Lindström, 2011). Investing in several fields of business allows to make counterbalanced investments. If one industry falls, not all investments collapse due to counterbalanced companies. Geographical diversification means investing shares all around the globe to minimize the risk in case one country is going through a bad economic situation. Geographical risk includes a political risk as well (Lindström & Lindström, 2011) Regularly investing gives a chance to buy shares in different prices more than one time a year and lowers the risk to buy stocks at wrong time with one large fixed amount (Malkiel, 2007).

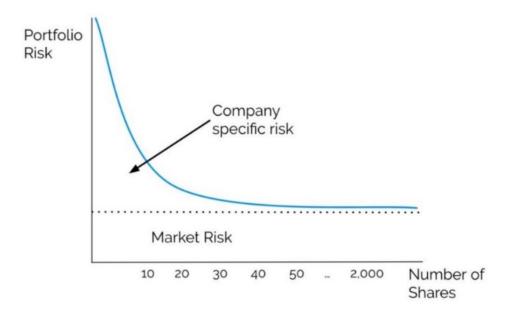


Figure 1. Example of Diversification (Rask Education, 2020)

Figure 1 illustrates the importance of controlling the unsystematic portfolio risk. As seen, diversifying into many shares with different industries will lower the overall risk. Instead of one share investment, investing in ten different companies affects significantly into portfolio's volatility and risk. Volatility is defined as a rate to share price movements, which gives an assumption of risk (Capital, 2020). Diversification reduces possible asset losses and helps to accomplish the financial goals faster (Lioudis, 2019).

2.5 Service Expenses

One of the most essential part of creating a profitable portfolio is minimizing expenses (Sijoittaja, 2020a). There are certain service expenses what comes buying, selling and custody of shares and they can be either fixed or percentual and usually they are graded according to the investor trading activity level. These expenses depend on the service provider (Pörssisäätiö, 2017). In the table 2 below is an example of two service providers to illustrate how the total cost is affected by service expenses when buying shares. In this example price is 25 euros per stock and there are 100 share units to buy.

Share price		Expense (Percentual)	Expense (Fixed)	Total cost
Service provider 1	25,00 €	1,00 %	- €	2 525,00 €
Service provider 2	25,00 €	-	9,00 €	2 509,00 €

Table 2. Example of Percentual and Fixed Service Expenses

The column of total cost of buying shares indicates that in this case fixed expense of service provider 2 is a better option, since the total cost is 16 euros less than the cost of service provider 1. Table 3 indicates how the form of expense affects the total cost of purchase if the amount of bought shares is smaller.

	Share price	Expense (percentual)	Expense (Fixed)	Total cost
Service provider 1	25,00 €	1,00 %	- €	252,50 €
Service provider 2	25,00 €	-	9,00 €	259,00 €

Table 3. Example of Total Cost of Purchase Affected by Service Expense

As in table 3 above, buying only 10 stocks with the same price and expenses as in table 2, the total cost result differently and service provider 1 would be a better option. The total cost result always depends on the form and amount of expense determined by each service provider. In this case it can be observed that service expenses affect the cost of buying shares hence affects the portfolio profit. The more shares buying at once, the less it affects to profit, depending on the form of expense. Consequently, invested amount has an effect on profit and with smaller amounts of investment, the expenses have a bigger role. To cut all the irrelevant costs it is profitable for an investor to compare and tender out different service providers (Sijoittaja, 2020a).

2.6 Capital Income Taxation

Income that is generated through investments that the taxpayer has made is taxable capital income in Finland, according to the Finnish Tax Administration (2018). Capital income is defined as the income generated through the possession of wealth. Such possessions include income of profits from selling shares, dividend income, or interest income for example. Tax rate on capital income is 30 percent and the rate increase to 34 percent, if more than 30 000 euros of return is withdrawn (Vero, 2018). If, however, the investor has sold investments for a total of 1000 euros at maximum during a calendar year, the investor does not have to pay taxes from the sales profit (Vero, 2020b).

Book-entry account and equity savings account are investment accounts, consequently the return derived is taxable capital income. (Vero, 2018). Although taxation in these investment accounts are based on Finnish capital income tax rates, their taxation policies differ from each other.

3 Book-Entry Account

In this chapter a basic investment account, a book-entry account is covered to give contrast on the equity savings account. Some of history, general information and taxation policy of book-entry account is being considered in subsections.

3.1 History of Equity Investing

Equity investment history is still quite young in Finland compared to other countries. The Nasdaq Helsinki, formerly known as the Helsinki Stock Exchange, was founded in 1912 however there has been business of securities in Finland since 1860 (Roine, 2010). Securities used to be traded physically as paper documents in a marketplace at stock exchange, yet currently trading occurs mainly online since the Finnish stock exchange became electric in 1990 (Nasdaq) The book-entry system was introduced recently in 1992 (Euroclear, 2020c). Use of a physical security certificate is elective yet can be formed by request nowadays, according to Minilex (2020).

3.2 General

Book-entry account is an account to hold non-physical domestic or foreign equities and other securities such as warrants, bonds, funds and other exchange traded products. The account itself is a portfolio of different investment instruments. Diversification is comprehensive, since funds can be allocated into many investment options (Bergman, 2020). Book-entry register is managed by Euroclear Finland oy and activity is monitored by Ministry of Finance, the Finnish Financial Supervisory Authority as well as the Bank of Finland (Euroclear, 2018).

The account can be opened by a private person or a company and there can be several ones by each (Laitinen, 2020) thus there are no limitations on the amount of book-entry account. There is no deposit limitation on book-entry account. To submit a purchase order, the account must contain funds. Funds can be transferred to the account solely electrically.

An opponent bank account is required in book-entry account due to the possible dividend payout. Dividends are paid directly to the attached bank account instead of book-entry account (Nordea a).

3.3 Taxation Policy

Book-entry account follows regular capital income tax rates, set by the Finnish Tax Administration (2019). Owning of securities is not taxable yet selling of them is, meaning that sell-

ing has immediate tax consequences. Same policy applies to the taxation of selling shares regardless of whether they are shares of Finnish or foreign company nor listed or non-listed company does not affect taxation either (Vero, 2020b).

Dividends are also taxable capital income. Dividends are paid directly to a bank account attached to book-entry account (Nordea a). The tax rate differs between listed, unlisted and foreign company. Dividends from a listed company for example, 85 percent is taxable capital income and 15 percent of the dividend is tax-exempt income. For example, 85 percent share of dividend 30 percent is paid to Tax Administration if the amount is less than 30 000 euros (Vero, 2020c).

Selling shares can result either capital gain or loss. When calculating the amount of profit or loss, the taxpayer should deduct a paid purchase price of shares as well as service expenses such as brokerage and handling fees. In case there incurs a loss due to the sale of shares it is deducted from annual capital gains, in accordance with the Tax Administration tax policy of selling shares. If such gains do not exist, the deduction is made from all annual capital income. This meaning that during the calendar year the sale of shares purchase price was not more than 1000 euros altogether. (Vero, 2020b)

In case of capital profit or loss is incurred, the taxpayer can optionally deduct the deemed acquisition cost from the selling price of shares, instead of deducting the purchase price of the shares as well as the expenses incurred in making profit, this meaning service expenses. When the deemed acquisition cost is used, share purchase price or any expenses incurred in making profit cannot be deducted. (Vero, 2020b) The formation rule of the deemed acquisition cost is shown below in figure 2.

The deemed acquisition cost rule:

Ownings of shares for less than 10 years -> 20 % of share selling price

Ownings of shares for more than 10 years -> 40 % of share selling price

Figure 2. The Rule of Deemed Acquisition Cost (Vero, 2020b)

Taxpayer can choose which one to deduct in taxation from capital gains, either the total costs of buying shares or the deemed acquisition cost. (Vero, 2020b) The option makes it possible

to calculate which option would be more profitable, hence the usefulness depends on the increase in value of investment and the ownership time (Salkunrakentaja, 2013). Example of used deemed acquisition cost is illustrated below in Figure 3.

The deemed acquisition cost example:

An investor has made a purchase of shares with 5 000 euros, over 10 years ago. Now he has sold the shares in value of 25 000 euros. The investor calculates the capital gain from the purchase price, which is 20 000 euros and he pays capital gain taxes for 6 000 euros $(30 \% \times 20\ 000\ \odot)$.

In this situation though, it is more profitable to use the deemed acquisition cost. Then the taxable capital income is 15 000 euros (25 000 \leq - 40 % x 25 000 \leq). In this case the investor pays capital income tax for 4 500 euros.

Figure 3. Example of Used Deemed Acquisition Cost (Salkunrakentaja, 2013)

4 Equity Savings Account

This chapter is going to be cover equity savings account in theory. Some general information and background of the account and further information such as possible investment instruments, deposits and withdrawals and dividends as well as special taxation policy features are being considered.

4.1 General

Equity savings account a new tax efficient way of investing in the general investment market. Equity savings account legislation 680/2019 came into effect at 1st July in 2019 and trading in the account was possible from 1st of January 2020. The law is valid until further notice. (Määttä & Manninen, 2020). The account is provided by several banks of brokerage firms. First ones to provide equity service account as their product was Danske Bank, Nordea, Nordnet and Mandatum (Sijoittaja, 2020b). Due to the legislation of equity savings account 680/2019, features are the same regardless of service provider. Pricing of service expenses although differ between providers. (Koskinen, 2020).

The account is exclusively intended for private persons and there can be only one account per each. No company can open an equity savings account, nor a person have more than one at a

time. The account is transferable within service providers without any direct tax consequences (Nordea b). During January there was already more than 60 000 equity savings account opened with a share capital of 116 million euros. In May the share capital value was recognized to increase up to 335 million euros by 100 000 active savings accounts, according to Euroclear statistics. The proportion of female equity savings account holder is smaller than male. In May there was 26 481 accounts of female and 72 652 of male. The age group most popular owning the account was 18-29-year old. (2020d, e).

4.2 Background

In 2018, Finnish government made a proposal of equity savings account HE 279/2018 for parliament. The proposal was to represent further argumentation on why equity savings account should be introduced to Finnish investment market. The argument emphasized the impacts on household investment activity and possibilities in investment markets. According the proposal, equity savings account would encourage households to invest assets from basic low interest savings accounts to equities, since the average savings account interest is 0,1 percent that as itself is losing to inflation. (HE 279/2018).

In several member states of European Union has already enabled a model of equity savings account model. Sweden, Denmark, Norway, Estonia as well as United Kingdom have utilized the account for longer time already. The account policies differ between states since there are multiple other investment instruments inside the account rather than just equities. The terms can also differ from the transferable funds accepted to the account, whether it is capital or existing formerly held securities. (HE 279/2018).

4.3 Investment Instruments

An equity savings account differs from a general book-entry investment account since it is intended only for trading of shares (Nordea b). There are four investment options. Funds can be invested and held as such in the account or to be invested in equities of Finnish and foreign publicly listed companies in stock exchange. Equities listed in an optional trading venue First North Grow Market are also acknowledged as approved investments. In accordance with the legislation of equity savings account (680/2019), it is not possible to buy or hold any other investment products than equities. Exchange Traded Funds, equities of unlisted companies, derivatives and bonds for example, are not investment options. (Nordnet).

In accordance with the legislation of securities 746/2012 subsection one of section two, investment options include securities of which terms of disclosure of obligation have committed to make securities traded within one year, this meaning issues of shares in stock exchange or First North Market. (Nordnet).

In addition to issues of shares, marked securities based on corporate events are countable investments, of which terms of disclosure of obligation have committed to make securities traded within one year. These securities can be shares divided as dividends, when divided shares are equities of unlisted subsidiary of a listed company. (Nordnet).

4.4 Deposits and Withdrawals

Deposits to equity savings account are accepted only in a form of electric money transfer. Any existing shareholdings cannot be transferred to this account from previous book-entry account, except in the transfer of existing equity savings account to other bank (Koskinen, 2020). The deposit limit is between 0-50 000 euros. As an opposite feature to a basic bookentry account the overall deposit limit is up to 50 000 euros. The limit is only valid on the deposits and the total value of funds can exceed 50 000 euros. There is no limit on the overall value on the portfolio. A decrease or increase of value does not have an effect on the deposit. (Nordea b). Figure 4 below shows an example of deposit in equity savings account.

Deposit example:

An investor makes a deposit of $40\ 000\ \in$ to the account and the value of investments increases to $60\ 000\ \in$, the maximum limit of deposits is still not reached. Therefore, there is still $10\ 000\ \in$ to invest to the account.

Figure 4. Example of deposit to Equity Savings Account (Sijoittaja)

Equity savings account provider carries the responsibility to monitor and verify maximum deposit limit does not exceed that is up to 50 000 euros. In case of excess, the deposit limit of 50 000 euros is exceeded, the service provider should immediately take action and transfer the exceeding amount of funds away from the account. Withdrawal of exceeding amount of deposit limit is taxable as capital income. (Määttä & Manninen, 2020).

Withdrawals of account funds are possible in one or more instalments with no limitations on the amount or moment of time. This meaning the withdrawals are not limited to specific deposit period (Vero, 2020d). The withdrawal can be made only through the account holder's name to the opponent account. In accordance with the currently valid legislation, the bank shall levy tax deductions on the withdrawn return. (Nordea c; Nordnet). Funds are only withdrawable in form of money (Vero, 2020d).

When calculating the overall deposits of the account, all the earlier capital withdrawals are counted. The amount of funds deposited may increase or decrease depending on the direction and amount of transactions. (Määttä & Manninen, 2020). See figure 5 below. The calculation of deposits follows the same formula as the taxable share of capital income. The formula is shown in the figure 7.

Deposit calculation example:

An investor makes a deposit of 50 000 € to the account and the value of investments increases to 80 000 €. 40 000 € is withdrawn from the account. From the withdrawn amount 25 000 € is calculated as capital and 15 000 € of increase in value. Therefore, there is 25 000 € capital left and 15 000 € as increase in value in the account. There is still 25 000 € to deposit to reach the maximum limit of deposit.

Figure 5. Example of deposit calculation after withdrawal (Pörssisäätiö)

4.5 Dividends

Dividends are paid directly to the equity savings account, tax-free in that moment. Tax consequences come into play recently in withdrawals from the account, since dividends are counted as profits (Koskinen, 2020). Dividends received will not affect the deposit limit in the account (Nordea b). The dividend payment to the account encourages to reinvest shares thus makes the compound interest effect more efficient (Laitinen, 2020). To illustrate the efficiency of compound interest effect on equity savings account, when dividends are reinvested for ten years, see figure 6 below.

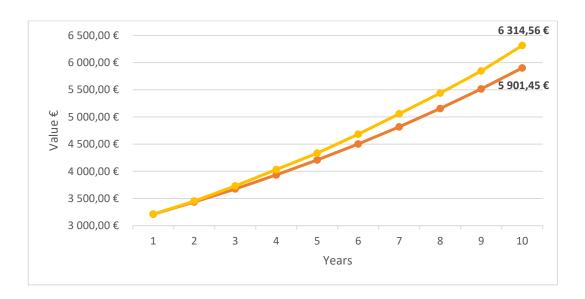


Figure 6. Example of Dividends Paid to Equity Savings Account

In this example, there has been an accepted purchase order of 200 shares at 15 euros price per share, altogether 3000 euros. Hypothetically there was no service expense when buying, to illustrate the power of compound interest. The annual growth interest is seven percent, hence compound interest is included in the increase in value. A company has decided to pay dividend annually 15 cents per share with an annual growth of three percent. The purchase order was issued after a general meeting yet for first year no dividend was paid. The yellow line illustrates the value of investments when dividends are reinvested. The orange line shows the only the value of investment with only annual growth interest, when dividend is not reinvested. Table 4 shows the growth of value of equity investment in longer term, in 30 years.

Initial Investment 10 000€	10 Years	After Tax Deduction
Book-Entry Account	18 736 €	18 736 €
Equity Savings Account	23 674 €	19 572 €
Initial Investment 10 000€	20 Years	After Tax Deduction
Book-Entry Account	35 104 €	35 104 €
Equity Savings Account	56 044 €	41 589 €
Initial Investment 10 000€	30 Years	After Tax Deduction
Book-Entry Account	65 772 €	65 772 €
Equity Savings Account	132 677 €	92 167 €

Table 4. Example of Dividends Reinvested in Equity Savings Account (Koskinen, 2020)

It shall be observed that reinvested tax-free dividends have a major impact on the value of investment in long term. Table 5 illustrates the impact on compound interest in longer term when dividends are reinvested (Koskinen, 2020). The Return on dividend is 4 percent and annual increase in value is 5 percent. The starting deposit is 10 000 euros, which was invested in

equities. The table includes a normal book-entry account with direct tax consequences and equity savings account with tax consequences deductions in the withdrawals to give contrast on the amount that can be earned.

4.6 Taxation Policy

Equity savings account is intended to be a tax efficient and less bureaucratic security investment option for investors. Taxation is different from a normal book-entry investment account. The idea of taxation in the account is quite simple, tax deductions come into play only when funds are withdrawn from the account (Pörssisäätiö, 2020b).

Transactions inside the account are not tax deductible, meaning that all transactions on selling of equities do not have any direct tax consequences. All profit earned as a sequence of selling can be entirely reinvested into equities or held as such in the account. All profit is paid directly to the account. Dividends, interest and capital income and other possible profits are calculated as earned return. (Määttä & Manninen, 2020). Dividend from foreign shares although have special features what comes to taxation in equity savings account and they will be introduced in the next subsection.

As mentioned earlier, the service provider of equity savings account holds the right to levy any tax deductions on the withdrawn profit in accordance with the valid legislation (Nordea c). Withdrawal of return is counted as liable capital income to taxation and withdrawal of original capital is exempt from taxes. Return is counted as share that exceeds the amount of deposits, as shown in the example in figure 5. Earlier deposits and withdrawals are deducted from the overall account value. (Määttä & Manninen; Nordnet). The formula to calculate taxable capital income goes as in figure 7. The calculation of taxable share of profit indicates the amount that is taxable.

Calculation formula for the taxable share of capital income:

Return € / Total value of investments in the account € x Amount withdrawn €

Figure 7. Calculation Formula for the taxable share of capital income (Nordnet)

Taxpayer is allowed to have only one equity savings account. The Tax Administration receives annually the information on starting and ending dates of the accounts from the service providers. Therefore, the Tax Administration keeps track on the amount of accounts per investor. If tax authority recognizes simultaneously more than one account, follows increase in

taxes. It is determined by the amount of existing accounts in force at the same time. The determination of the tax increase is not affected by the amount of deposited amount on the equity savings account (Määttä & Manninen, 2020). Increase in tax is 10 euros per day of existing accounts. If investor has three accounts for one year at the same time for example, the increase in tax is 10 950 euros (= $3 \times 10 \in x \times 365$ days) (Koskinen, 2020).

4.6.1 Tax at Source

Foreign shares follow different taxation policy on dividend receiving. The tax at source exemption for equity savings account is regulated to a limited extent (Määttä & Manninen, 2020). Dividend taxation depends on the country, from which the payment comes (Vero, 2020e). Foreign businesses must pay income tax on their receipts of income from Finnish sources, according to the Tax Administration (2020f). Therefore, an investor must pay tax at source on dividends that come from foreign companies. Meaning that investor pays tax at source on foreign shares in the country where the dividend paying company is registered (Vero, 2020e).

According to the senior inspector from Tax Administration, taxation is decided by the domicile of the company paying the dividends. Tax at source taxation policy in equity savings account differs from normal book-entry account, when owning foreign shares. The reason is that tax at source credit withholding system does not apply to equity savings account. In book-entry account tax at source is refunded to investor. (Saarinen, 2020).

In equity savings account there occurs double taxation on foreign dividends. Foreign shares' dividends tax payment is immediate in equity savings account unlike domestic shares, when reinvesting dividends fully is possible. Refunding tax at source in equity savings account does not apply since there are no immediate tax consequences on dividend payments. The investor only pays income taxes recently when withdrawing capital from the account. In this case, the 15 percent tax at source is not refunded. (Saarinen, 2020).

Finland has a tax agreement with EU countries, to which the source state has the right to levy 15 percent tax at maximum on dividends (Kontola, 2019). According to income taxation policy, 85 percent of dividends is taxable and 15 percent tax exempt. In equity savings account dividends are 100 percent taxable, because they are treated as normal capital profit. Therefore, the taxation is double on foreign shares. (Taloussuomi, 2020; Kontola, 2019). The tax at source withholding is explained in practice in the figure 8 below.

Tax at source example (Telia company) in equity savings account:

Investor receives dividends for $1000 \\\in$ from Telia, from which Sweden withholds $150 \\in \\enumber$ tax at source immediately. There is left $850 \\in \\enumber$ that is taxed as capital income as $30 \\in \\enumber$. Therefore, the investor pays taxes for 255 euros (Effective tax rate is 25,5 %). As a result, the investor has paid ($255 \\in \\enumber$ + $150 \\in \\enumber$) / $1000 \\in \\enumber$ 40,5 % taxes.

Figure 8. Tax at Source Example in Equity Savings Account (Kontola, 2019)

4.6.2 Capital Loss and The Deemed Acquisition Cost

In accordance with the income tax legislation 30.12.1992/1535, subsection 6 of 45\$, sales profit or loss is not deductible in the moment of disposition (Finlex, 2020). Consequently, selling or changing shares on loss in equity savings account it is not deductible capital loss in taxation as in book-entry account investments. Sales losses are only deductible when the account is being closed (Määttä & Manninen, 2020). Hereby, an investor cannot take an advantage on sales loss to deduct it as capital loss in yearly taxation as in book-entry account (Koskinen, 2020).

Withdrawal of funds do not form tax-deductible capital loss in any case, when account exists. Due to this policy, the tax exemption rule of 1000 euros for small annual capital gains does not apply to the income taxation in equity savings account (Määttä & Manninen, 2020). Thus, capital loss in equity savings account is recently deductible not until the year account is closed and funds are withdrawn. If the funds withdrawn are less in value than original invested capital, the difference results as loss in close of equity savings account. In case of closing the account and loss is incurred, loss is deductible from taxable capital income for the next 10 years, if the loss is calculated higher than capital income (Heikinheimo, 2020a). A figure 9 below shows the procedure of capital loss in equity savings account taxation policy.

Capital loss example in equity savings account:

An investor makes an equity investment of 20 000 €. Later, he decides to sell all shares and close the account. The value of investment has decreased to 15 000 euros. The shares are sold at 15 000 euros altogether. As a result the account is operating loss of 5 00 euros. Due to the remaining capital (15 000 euros) of earlier investment is not taxable, since it is less than initial capital.

Figure 9. Example of Capital Loss in Equity Savings Account (Määttä & Manninen, 2020)

The deemed acquisition cost concerning capital income, is not applied in relation with the termination of equity savings account (Määttä & Manninen, 2020). In a normal book-entry investment account the deemed acquisition cost is deductible. In equity savings account it is not possible and cannot be used in any case of selling, withdrawal or closing the account (Pörssisäätiö b). The deemed acquisition cost means in relation with selling shares deducting either 20 or 40 percent from profit as the deemed acquisition cost depending on the time of share ownership (Vero, 2020b).

If the investment has increased majorly in its value during the share ownership period, the deemed acquisition cost is useful and economical what comes to taxes. In equity savings account the use is not yet possible (Hämäläinen, 2020).

4.6.3 Effects on KELA's Benefits

Kela, the Social Insurance Institution of Finland released an article on 15th January 2020 that they have assessed the effects of equity savings account on various benefits. Shares, account funds and dividend profits are considered as well as in normal equity investing. So far, there is little information about the effects on social benefits, since the account is recently launched as an investment method in Finland. (Kela, 2020).

Dividends are counted as profits in most of the benefits, even though no funds are withdrawn from the account. Therefore, dividends are treated the same way as in book-entry investments. The investor is required to inform Kela about the income and funds in the account. (Kela, 2020).

Equity savings account affects differently in benefits such as housing allowance for pensioners, allowances in child home care and private day care, supplement of window's pension,

basic social assistance, labor market subsidy as well as general housing allowance (Kela, 2020).

According to the latest guidelines within capital gains received in equity savings account, they are not being considered in control of the student income (Heikinheimo, 2020b). Student allowance as an exception is only affected by the account if there occurs profit and funds are withdrawn from the account. Therefore, if there occurs loss in capital in relation with a withdrawal, the account has no effect on the allowance. The income control of student allowance differs from others due to the student's tax decision in accordance with taxable earned income and capital income (Kela, 2020).

In the housing allowance for pensioners and basic social allowance in addition to dividend profits, the total funds in the account are taken into account. In pension housing allowance the applicants and his/her spouse or cohabitant's personal interest and dividend profit are considered if they exceed 60 euros per year. The same value in annual income is considered when calculating a supplement to widow's pension. In basic social allowance the amount affecting the benefit is not separately mentioned. (Kela, 2020).

To allowances in child home care and private day care, labor market subsidy as well as general housing allowance the effect occurs differently. In child home care and private day care allowance the applicants and his/her spouse or cohabitant's personal limit of interest and dividend profit is at least 10 euros per month. The family income includes also income of children. What comes to labor market subsidy, there is a means test, in which the applicant's interest and dividends are considered as income. Means test includes income received during other periods too tan just unemployment period. Income in this case is usually divided over for a year. If the income exceeds 311 euros a month it reduces labor market subsidy. In general housing allowance the income of interest and dividends are considered if household member's personal interest and dividend income exceeds 10,87 euros a month. (Kela, 2020).

4.6.4 Account for A Child

Equity savings account is also available for children, from the moment on they are born. Any individual, a natural person is able to open the account for a child. The guardians manage the minor child's account with a parental authority until the child turns 18 years (Nordnet, 2020a).

In addition to capital income taxation, gift taxation is being considered. Since former shares cannot be donated or transferred between the accounts only money can be transferred. Account is personal, for that reason the child is the general account holder and if a parent transfers money to child's account, it is being considered as a gift. Up to 4 999 euros can be deposited to the account without a gift tax in a time period of three years. The limit is per

parent, hereby each can donate 4 999 euros to the account, during the period of three years. (Heikinheimo, 2020b).

Other limit that guardians should follow is 20 000 euros all funds in the account altogether. If funds exceed the limit of 20 000 euros, should a parent register himself/herself as a guardian of interest, according to the Digital and Population Data Services Agency (2020). A legal guardian of interest register means that the guardian is required to report annually about financial issues of the child. After the registration, the guardianship is removed from the register if the value of funds is decreased to 15 000 euros or less. If the assets are reduced due to the actions of the guardian of interest, the registration is not removed. (Digi- ja väestövirasto, 2020).

4.6.5 Account Holder's Death

Taxation policy is different from normal income taxation when there is a case of account holder's death. In such case the contract of equity savings account is suspended immediately and the right to the assets is transferred to the right holder of the account holder. (Määttä & Manninen, 2020; Nordnet b).

The termination of the equity savings account agreement due to the death of account holder, does not form taxable capital income nor deductible loss in income taxation. Funds in the account are included in inheritance taxation. Some payments that are not yet paid to the account are included in inheritance taxation. Such payments are dividends detached from shares at the time of death and other payments received on the basis of assets in the account that have not yet been paid into the account. The acquisition cost of the shares in the account is considered to be the taxable value used for inheritance taxation. At inheritance taxation assets are valued according to the fair value at the time of death. (Määttä & Manninen, 2020; Nordnet b).

5 Research Outcomes

This chapter goes through the findings and research outcomes, covering challenges that were noticed based on the theory. Challenges are looked deeper into with calculations and assumptions are made. Calculation examples are to point out the challenge occurring in equity savings account, not to compare the account to a book-entry account or to indicate which one is the better option for investor. The investor should always observe different options and figure out which is the best choice for own investment plan and strategy.

5.1 Account Quantity Restriction

Investor can have only one account at a time and any earlier shares cannot be transferred to equity savings account from previous book-entry account, except in the transfer of existing equity savings account to other bank (Koskinen, 2020). Therefore, investing starts from zero if the account is recently opened, not transferred from another bank. Due to the account quantity limit and restriction of transferring earlier shares to the account means that investor cannot use former investments to earn more. Investing always starts from scratch. Meaning that investor is not able to utilize the compound interest profit from earlier investments without paying taxes in between, since the funds must be converted to net capital income when depositing the money to equity savings account. Former shares are only transferable in a change of bank.

5.2 Diversification and Asset Allocation

Investor always carries a risk. In accordance with the current legislation, equity savings account allows investor only to invest in equities. The question an investor should ask itself before investing through equity savings account is that what kind of risk will be carried when the option is to invest only in equities.

Buying an equity and becoming a shareholder of a company includes a risk, because all shares carry unsystematic and systematic risk. Shares are the most profitable but most risky investment there is in the finance market (Erola, 2009). As it can be observed from the theory section of the thesis, diversification is an essential part what comes to controlling the portfolio return and losses. Risk is mitigatable through diversification yet not fully removed. Diversification is limited in equity savings account, since the only investment option is buying shares and asset allocation within the account is limited. Therefore, the risk is higher in equity savings account.

Diversification depends on the investor profile, investment time horizon and investment plan. Investor makes the decision of asset allocation, whether to invest all funds to shares or diversify funds into different investment options there are available in finance market. The more risk the portfolio carries the more is expected return on investment hence there is a possibility to major losses. The figure 10 below is to illustrate the formation of portfolio risk from expected return on investment when assets are allocated differently into shares directly and a indirectly to shares through a share fund.

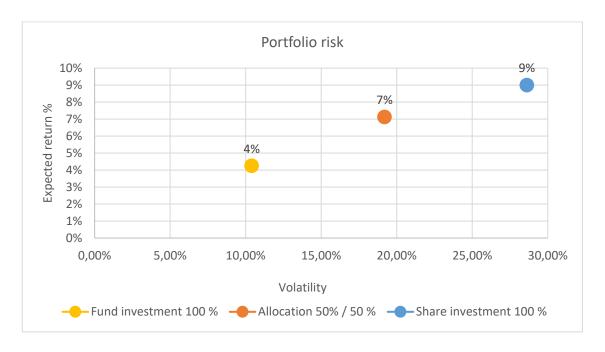


Figure 10. Portfolio Risk and Expected Return

In this example above the volatility is used a measure of risk. This is a simple example of portfolio volatility calculated based on expected return forming a volatility percent. Expected return is calculated based on probability of outcome. The yellow dot illustrates a situation where investor has allocated 100 percent of available investment assets into a ready share fund in a normal book-entry account. Expected annual return is 4 percent and volatility 10,40 percemt based on the lower variation that a ready share fund includes, since there is less risk due to existing diversification inside the fund. The blue dot illustrates a full asset allocation to direct shares and therefore bigger expected return which is 9 percent including volatility of 28,6 percent. It can be observed that when all assets are invested in shares the higher is the volatility of a portfolio and as an opposite the less risk there is the lower is expected return on investment. The orange dot illustrates the combination of a share fund and direct share investment together with half and half allocation of assets with a volatility of 19,2 percent.

Allocation combination of different investment options is not yet possible in equity savings account. It can be observed that combining both high risk and low risk offers a better possibility to lower the risk while still maintaining an average expected return on investment through diversification through asset allocation. The account encourages to higher risk investing. Portfolio profit variance and volatility are higher when investing all assets to shares. This meaning that an investor has less options what comes to diversification and lowering the risk of the portfolio.

5.3 Foreign Shares and Lack of Tax at Source Reimburse

Equity savings account encourages to invest in domestic high dividend yield companies due to the taxation regulation in the account, when all transactions inside the account and dividends are encouraged to reinvest back to shares to get the most out of compound interest. However, there is no tax at source refunding system in the account. Owning foreign equities, the investor pays 15 percent more taxes on top of effective tax rate 25,5 percent. The tax rate for foreign dividends is altogether 40,5 percent. The tax at source is deducted from the dividend once it is being paid to equity savings account. There is still more to reinvest back to shares without paying directly 25,5 percent of dividend tax yet after converting account funds and withdrawing money from the account the total tax rate is 40,5 percent. Table 5 below demonstrates the tax at source deduction process in equity savings account compared to a book-entry account. In this example the dividend is withdrawn from the account. This example is based on the same example of tax at source in equity savings account as in figure 8 (Kontola, 2019).

Equity Savings Account, withdrawal		Book Entry Account	
Gross dividend	100,00€	Gross dividend	100,00€
Tax at source 15 %	15,00€	Tax at source 15 %	15,00 €
Dividend tax rate 25,5 %	25,50€	Dividend tax rate 25,5 %	25,50 €
Taxes altogether	40,50€	Taxes altogether	40,50 €
Dividend less taxes	59,50€	Dividend less taxes	59,50 €
Tax at source refund + 15 %	- €	Tax at source refund + 15 %	15,00 €
Net dividend	59,50€	Net dividend	74,50 €

Table 5. Tax at Source Deduction Equity Savings Account, Withdrawal

In this table above investor earns 100 euros of dividend. Tax at source rate deducts 15 percent of the dividend and dividend tax rate 25,5 percent is also deducted. Since tax at source is not reimbursable in the account, the investor receives net dividend for 59,50 euros. On the right side of the table is shown the refund process of the tax at source rate when the share is owned in a book-entry account. It is to be observed in the case when dividends are withdrawn from the account, net dividend received is bigger in book-entry account.

When equity savings account funds are withdrawn, the tax at source and dividend tax deduction seems to be bigger. Yet, if the dividend is reinvested there is still more to invest than in a book-entry account. In the table 6 below is an example of not withdrawn dividend that can be reinvested back to shares.

Equity Savings Account, no withdrawal		
Gross dividend	100,00€	
Tax at source 15 %	15,00€	
Dividend tax rate 25,5 %	- €	
Taxes altogether	15,00€	
Dividend less taxes	85,00€	
Tax at source refund + 15 %	- €	
Net dividend	85,00 €	

Table 6. Tax at Source Deduction Equity Savings Account, No Withdrawal

This table indicates that there is more to reinvest back to shares when there is no withdrawal from the account. Still, it does not indicate whether it is most profitable option to own foreign companies in equity savings account. To research the profitability of dividend yield of foreign companies owned in equity savings account calculations are needed.

The following figures 11 and 12, are based on calculations of dividend yield in different investment horizons and shareholding period to demonstrate the difference of owning foreign shares in a book-entry account and equity savings account. The dividend received is reinvested every year and the bars show the progress of compound interest of dividend yield. The case is same on both figures, earned dividend is 100 euros in the first year and the company has decided one percent annual dividend growth. Annual interest rate on investment is seven percent, as the average stock exchange annual interest rate. Figures show only the dividend yield during investment time. The bars are related to the total growth in value of investment, which is shown in euros on the left side of the figures. The blue line addresses the annual dividend growth, of which value is shown in euros on the right side. The investment time meaning the years invested is shown below the bars as single numbers. Equity savings account is shortened to term ESA and book-entry account to BEA.



Figure 11. ESA vs. BEA Dividend Yield in 10 Years, Tax at Source Deduction

The orange bar shows the same situation as in table 5, when dividends received are withdrawn from the account and the net dividend is reinvested. The bar appears as increasing since all the tax deductions have been already made in the withdrawal. The darkest bar shows the dividends always reinvested back to shares in equity savings account and the withdrawal occurs recently after 10 years, where the bar appears as decreasing. The tax at source has been deducted every year when dividend is received, and the rest is reinvested as in table 6. No dividend tax rate is yet paid until the withdrawal. The yellow bar shows foreign shares owned in book-entry account and the tax deductions have been made when dividends are received. In book-entry account tax at source is refunded therefore investor pays dividend tax for 25,5 percent as demonstrated in table 5.

It is to be observed that equity savings account has less growth in value of investment in total when all the dividends received from foreign companies are reinvested. If there is no withdrawal when dividends are received, there is more to reinvest yet since the tax at source is not refundable in the account, consequently investor will lose a proportion of dividend yield profits in long term.

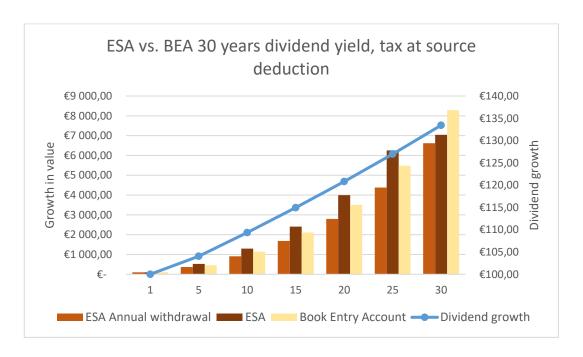


Figure 12. ESA vs. BEA Dividend Yield in 30 Years, Tax at Source Deduction

In figure 12 above the dividend one percent annual growth is more visible since the share ownership time is longer, 30 years in this case. This example approves the true appearance of compound interest phenomena when 100 euros of initial dividend received can grow up to 8000 euros in 30 years when annual dividend yield is reinvested. It is still discoverable that equity savings account does not reach the same profits when tax at source is refunded, even though there was more to reinvest at the beginning. This is due to the dividend tax rate deduction when equity savings account funds are withdrawn and the tax at source rate is not reimbursed.

What comes to owning dividend paying foreign shares in equity savings account, investor should acknowledge the lack of tax at source refund. If the account funds are meant to be withdrawn every year, in this case of owning foreign shares equity savings account is not the most profitable option since the taxation on foreign dividend are taxed higher, with 40,5 tax rate.

Equity savings account enhances the dividend reinvestment, it is not profitable for the investor to withdraw the dividends when they are received. The use of the account is based on the power of compound interest, thus reinvesting all dividends received, when earned profit can increase in value without any immediate tax deductions. If dividends are withdrawn, the dividend tax is higher since all profits are taxed as capital income in equity savings account. In a book-entry account 15 percent of the dividend is tax exempt, hence the dividend taxation percent is 25,5 percent, which is 15 percent smaller than dividend tax rate of foreign shares in equity savings account.

5.4 Deposit Limit

The maximum deposit limit in equity savings account is 50 000 euros and deposits are accepted only in a form of electric money transfer (Koskinen, 2020). The total value of funds can exceed 50 000 euros and there is no limit on the overall value on the portfolio. A decrease or increase of value does not affect the deposit limit as itself (Nordea b). Therefore, investor must calculate the amounts altogether within the investment horizon and share holding period in order to confirm the effect of different amounts invested to the account. Since the account has a deposit limit, it will affect differently on the value of investment on longer term. It determines the amount that can be deposited to the account hence affects the rhythm of funds invested.

There are two figures 13 and 14 below, demonstrating 30 years of investment horizon holding same shares, followed by withdrawal at the end of last year of investment. Figures include the same domestic share investments in equity savings account and book-entry account and the annual dividends are always reinvested. In equity savings account dividends are reinvested without taxation and in book-entry account the dividend tax 25,5 percent is deducted Since all the funds are withdrawn in the final year and the withdrawal exceed 30 000 euros, the capital income tax rate is 34 percent.

In both figures the case is otherwise the same, except the number of bought stock is different due to the effect of deposit limit of equity savings account. Dividend percent per share is five percent. Annual interest is the average interest rate of stock exchange, seven percent and the annual growth for dividend is one percent. The bars are related to the total growth in value of investment, which is shown in euros on the left side of the figures. The dark bar demonstrates the equity savings account and orange one the book-entry account. The blue line addresses the annual dividend growth, of which value is shown in euros on the right side.

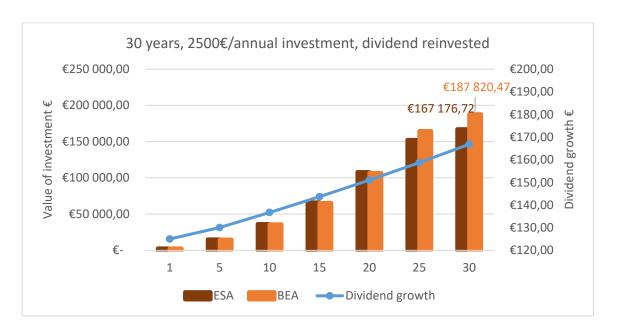


Figure 13. Ownership for 30 years, case 2500€ annual investment

In figure 13 above an investor buys 125 shares in price of 20 euros per share, altogether 2500 euros of initial capital and continues to invest 2500 euros annually. Since the maximum deposit limit is 50 000 euros in equity savings account the investor cannot deposit after 20 years. Hence after 20 years the investment will only grow by the power of compound interest. In book-entry account the annual deposit continues until the last year of investment horizon. It is to be interpreted that the more investor desires to invest, the faster the deposit limit is reached. In this case funds in equity savings account is 20 643,75 euros less than in a normal book-entry account.

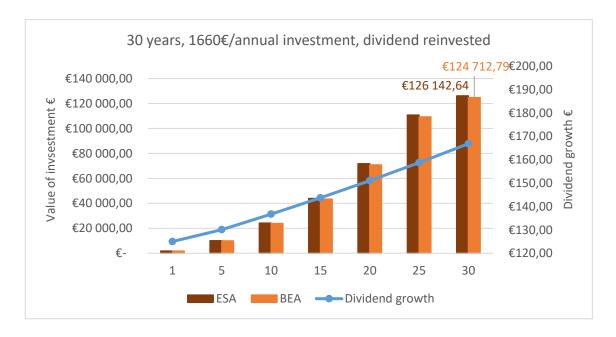


Figure 14. Ownership for 30 Years, case 1660€ annual investment

Figure 14 illustrates the effect of the total deposit limit divided into 30 years of investment horizon hence the number of bought shares is smaller, 83 shares bought in the same price of 20 euros per share. In this case it is observable that equity savings account increases more in value due to the continuing deposits. Yet the value of investment does not reach the same value than the annual deposit of 2500 euros in the same investment time. Equity savings account funds have increased 5645,95 euros more in value than the normal book-entry account.

In these cases, same shares were hold and bought more units in time of 30 years. The benefit of using equity savings account depends on the time of shareholding period. If the holding time was shorter, 10 years for example and new shares were bought, equity savings account would increase more in value due to the taxation that will only occur when funds are withdrawn from the account, not in relation with selling. Table 7 below demonstrates the values in the accounts if shares are sold every 10 years and after 30 years the funds are withdrawn. In book-entry account capital income taxes are paid every time selling of shares occur.

	ESA	BEA
10 years	36 513,06 €	32 744,68 €
20 years	163 070,65 €	109 426,80 €
30 years	304 924,14 €	232 193,72 €

Table 7. Shareholding Period of 10 Years

This results as equity savings account has higher value due to the taxation that only occurs when funds are withdrawn. It is noticeable that with shorter ownership period the account is more profitable. Therefore, the account does not prefer longer owning times and demands more activity from the investor. The account does not encourage to buy and hold -strategy, where investor is more passive, thus desires to be shareholder for longer time.

5.5 Lack of the Deemed Acquisition Cost

The deemed acquisition cost means in relation with selling shares deducting either 20 or 40 percent from profit as the deemed acquisition cost depending on the time of ownership. The 20 percent is deductible when shares are owned less than 10 years and 40 percent is for the ones owned more than 10 years (Vero, 2020b). Equity savings account does not allow the use of the deemed acquisition cost. It is not possible to use its advantage in taxation since the taxation occurs recently when funds are withdrawn from the account.

Investment that has increased in its value during the share ownership period, the deemed acquisition cost is useful and economical what comes to taxes hence the investor should observe the most profitable opportunities to invest what comes to the own investment plan and strategy. In equity savings account the use of the deemed acquisition cost is not yet possible.

Table 8 shows the net values of investment, which means that all taxes and deductions have been made accordingly with the amount that has been withdrawn from the account. Table includes equity savings account and two columns of book-entry account, left side is the value when capital income tax rate has been deducted accordingly with the amount withdrawn and the right side shows value when the deemed acquisition cost would be used. The deemed acquisition cost is shortened as DAC. The numbers are based on same investment example that has been demonstrated in figures 13 and 14, the shareholding period is 30 years.

5 years	ESA	BEA	DAC
2500€/annually	15 066,81 €	14 929,67 €	12 137,93 €
1660€/annually	10 004,36 €	9 913,30 €	8 059,59 €
10 years			
2500€/annually	34 161,94 €	33 844,69 €	30 567,23 €
1660€/annually	23 052,22 €	22 828,80 €	20 908,60 €
20 years			
2500€/annually	93 275,61 €	92 301,09 €	90 817,68 €
1660€/annually	61 935,01 €	61 287,93 €	60 302,94 €
30 years			
2500€/annually	167 176,72 €	187 820,47 €	207 624,73 €
1660€/annually	126 142,64 €	124 712,79 €	132 501,91 €

Table 8. Example 1. Lack of the Deemed Acquisition Cost in Equity Savings Account

The green values show the values of investment that is the most profitable choice for the investor. The red ones show the less profitable investments. Table 8 demonstrates that equity savings account thus gives more profit for the investor in 5 to 20 years even though the amount invested differs annually. It is noticeable that equity savings account serves the investor less when the investment time and ownership of same shares is longer. The deemed acquisition cost gives an advantage for the investor recently after 30 year of ownership time, yet the difference is massive when amount invested is bigger, 2500 euros annually. This is due to the deposit limit that is reached in 20 years in equity savings account and that the only form of taxation is capital income tax rates and other deductions cannot be made.

When the amount invested in 30 years is lower and the deposits are divided equally for every year resulting 1660 euros annual investment, the table shows that equity savings account would have increased more in value than a book-entry account. Yet in a book-entry account the deemed acquisition cost gives an advantage for the taxpayer to not pay as much tax, therefore book-entry account results as higher profit.

Table 9 below follows the same example thus invested annual amount is higher and no dividend is distributed nor reinvested. The company invested is classified as a growth company

since it does not distribute any dividend. Due to the deposit limit in equity savings account investor cannot deposit more than 5000 euros annually for 10 years and in book-entry account the annual invested is continued for 30 years. The table demonstrates the different outcomes again in equity savings account and book-entry account also when the deemed acquisition cost would have been used.

5 years	ESA	BEA	DAC
5000€/annually	29 036,52 €	29 036,52 €	23 382,50 €
10 years			
5000€/annually	65 785,88 €	65 785,88 €	58 838,73 €
20 years			
5000€/annually	129 969,21 €	178 755,08 €	174 583,40 €
30 years			
5000€/annually	193 435,47 €	362 720,59 €	375 953,93 €

Table 9. Example 2. Lack of the Deemed Acquisition Cost in Equity Savings Account

As the table shows there is no difference in withdrawn value when the amount invested is the same until 10 years due to the growth company that does not pay any dividend. Because of the deposit limit in equity savings account the return of investment after 10 years depends on the power of compound interest. It is to be observed that when the amount invested is higher, the quicker equity savings account will lose on investment value compared to bookentry account and also the longer is the ownership period, the more it will lose on value due to the deemed acquisition cost deduction.

5.6 Tax Exempt Withdrawal

The tax exemption rule of 1000 euros for small annual capital gains does not apply to the income taxation in equity savings account (Määttä & Manninen, 2020). In a book entry-account it is possible to sell shares for 1000 euros per calendar year without paying any capital income tax. In equity savings account tax is paid every time of withdrawal accordingly with the amount withdrawn from the account.

A following figure 15 will demonstrate the effect of lacking feature of capital income tax exempt 1000 euros withdrawal per calendar year in equity savings account. The example follows the same investment situation than in figure 14. Annual investment is altogether 1660 euros for 30 years, 83 shares bought. Dividend is five percent per share and annual dividend growth is one percent. Dividend is always reinvested. Annual interest rate for the investment is seven percent. Investor desires to make 1000 euros withdrawal every five years.

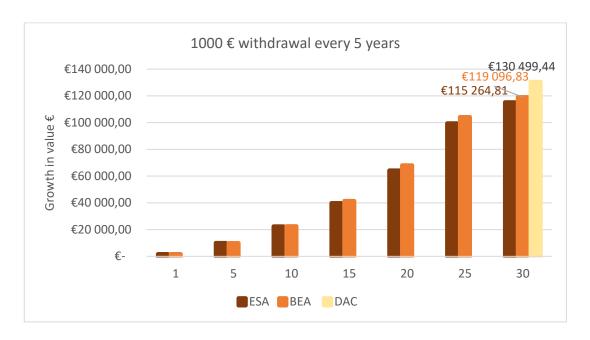


Figure 15. 1000€ Withdrawal Every 5 Years

Figure 15 above indicates that equity savings account results less in value since the 1000 euros withdrawal occurs every five years. This is due to the fact that in equity savings account every time of withdrawal, capital income tax is deducted. Even though in a book-entry account dividend is reinvested with 25,5 percent dividend tax deduction, equity savings account will lose in value, since capital income tax is paid every time of withdrawal. Also, it is noticeable that the use of deemed acquisition cost will increase the earned profit with 15 234,63 euros.

5.7 Capital Loss Deduction

Transactions within equity savings account are not taxable, hence sales loss is not deductible in the moment of disposition (Finlex, 2020). This meaning that selling shares on loss in the account is not deductible capital loss in taxation as in book-entry account investments. Sales losses are only deductible recently when the account is being closed. Therefore, investing through equity savings account investor cannot take the advantage on sales loss to deduct it as capital loss as in book-entry account.

In book-entry account, if there is a need to deduct capital loss from not profitable bad investments, it is possible to deduct the loss from other capital income. Thus, investor can deduct share capital loss from rental income, for example in yearly taxation. In equity savings account such case is not possible. Yet, it is possible to close equity savings account in the same year to utilize the capital loss from shares to compensate other capital income. This would need further activity by the investor and playing tricks with accounts. It would also probably lead to further speculation if more accounts would be closed on loss and again account would

be reopened in the following year. In such case, where investor "needs" the capital loss for the deduction equity savings account does not provide the best use.

5.8 Savings for a child

Savings for a child are meant to provide financial support and increasing wealth in the future. A minor child's equity savings account is managed by the guardians with a parental authority until the child turns 18 years and all the deposited funds are considered as a gift. Each parent is able to deposit 4 999 euros, thus altogether 9998 euros at maximum within three years. Six times can be deposited until the child turns 18. In 18 years, there could be altogether 59 988 euros saved at maximum for a child according to the gift taxation. Due to the deposit limit of the account parents are able to deposit only 50 000 euros. Meaning that after the child has turned 18, any further deposit could not be made.

If the equity savings account portfolio was filled with shares of growth companies that do not pay any dividend, the deposit limit would have met the ceiling with maximum deposits. The use of the account is based on investments of high dividend yield companies, which sort of gives more flexibility to the deposit limit once dividends can be reinvested without any tax deductions, if larger deposit amount are desired to be transferred to the account.

Guardian maintaining the account should also think about the shareholding period, because more activity is required in order to gain more value compared to book-entry account. If same shares were intended to hold for a longer time, equity savings account might not be a better option. Especially what comes to owning growth companies that do not pay any dividend.

Table 10 below demonstrates a situation where guardians save for a child for 50 000 euros in 18 years divided into annual deposits of 2777 euros. Each parent deposits 1388,5 euros per year into the child's account. After 18 years no further deposits are made due to the deposit limit. Table shows tax deducted values in equity savings account and book-entry account when funds are withdrawn when child turns 18 or holds same shares until turning 30 and withdraws all the funds. The impact on net investment value is also shown when the deemed acquisition cost is used. Annual interest rate is 7 percent.

18 years	ESA	BEA	DAC
2777€/annually	79 309,35 €	79 309,35 €	75 154,59 €
30 years			
2777€/annually	157 338,55 €	157 338,55 €	169 262,53 €

Table 10. Shareholding for 18 vs. 30 Years

It is noticeable that there is no difference on the value between equity savings account and book-entry account in shareholding time of 18 years, when child withdraws the funds. This is due to the shareholding period. If there occurred selling during the saving time the equity savings account would have increased more in value due to the tax-exempt transactions inside the account. In case the child chooses to maintain the investments still for 12 years after turning adult, 30 years of shareholding indicates also that there is no difference in value between the accounts. Yet in book-entry account it is possible to use the deemed acquisition cost, of which use leads to more profits.

Parents saving for a child through an equity savings account should also think about the future of the child as a student. Income in the account is capital income that effects on KELA's social benefits. Therefore, the account influences on the benefits that the child might receive during studies. If the child receives only student allowance, the capital income in equity savings account will only effect on the benefit when funds are withdrawn from the account. If the child receives general housing allowance the situation is different and capital income of both equity savings account and book-entry account effect on the benefit.

5.9 Cost Bidding

Only one account is restricted to be existed per one person. This meaning that existing account must be closed or transferred between banks to open the account in another bank or broker. These service providers report annually to the Tax Administration the information on starting and ending dates of the accounts to notify the amount of accounts per investor. If there is simultaneously recognized more than one account, follows increase in taxes, of which determination is explained in section 4.5 Taxation Policy.

Service providers have priced the expenses of equity savings account differently, meaning that some providers may have higher prices than others. Account number restriction requires the investor to further look and research all expenses that are related to the account, since expenses decrease earned profit.

Yet, the opening of the account is cost free however there might be costs related to the closing of the account. In such case, when there are costs related to the closing of the account, investor should acknowledge that if using capital loss is desired to compensate other capital income, cost of closing the account is not counted as capital loss when account is closed. Some providers offer closing of the account totally cost free, still some providers charge expenses.

Transfer of equity savings account to another service provider does not come cost free either and the expenses differs quite a bit between providers. Therefore, it is noticeable that inves-

tor should do some cost bidding and tender out different service provides before opening equity savings account and always research expenses related to the account depending on the investment strategy and personal requirements and needs.

6 Interview

6.1 Conducting the Interview

The interview was formed to give argumentation and give further perspective on the research subject. Selected interviewee is a known young face of Finnish investment world and a digital producer of a Finnish company called Inderes, Verneri Pulkkinen. He has yet a quite long background of investing and in finance analyses in general. Pulkkinen is responsible for the digital content of Inderes community and InderesTV and therefore follows recent new of finance markets aside of stock market analysts.

Inderes is a finance analysis and investor relations service company in Finland. The company provides the most recent and popular information on shares. Their mission is to connect the listed companies and investors through company monitoring service, digital content, analyzes, consulting and databased investor communications service.

The interview questions were purposed to clarify and give better as well as comprehensive understanding on how an investor sees an equity savings account. The interview was performed as written half-structured theme interview to widen the subject. Due to the tight schedule of working life, the interview was conducted and organized as written by email. The questions were focused on the challenges of the equity savings account. The original questions and answers were formed in Finnish, yet they were translated in English.

6.2 Interview results

Have you opened/Will you open an equity savings account and what kind of shares have you bought/will you buy to the account?

"No, I have not, and I am not planning to open one, for now."

Does equity savings account encourage to invest in all kind of shares? Foreign or domestic shares, growth or dividend-increasing companies, for example.

"It is assumed to encourage investing in all kinds of shares, although 15 percent tax at source is paid of foreign shares' dividends. Meaning that in case of owning foreign shares the benefits of equity savings account are weaker. In

such case the account favors domestic dividend yield companies. In equity savings account companies that do not pay dividend seems to be indifferent whether they are domestic or foreign ones."

What kind of shares should be bought in equity savings account in your opinion?

"Well, I would rather think that it is always worth to invest in explosively growing companies, that have major competitive advantage and if share can be bought on reasonable price. Equity savings account is not an exception in this case. But this is only my style, I think we should always follow and enhance our strengths and preferences, in equity savings account too."

Does the equity savings account mitigate possibilities of diversification due to its features? Because of the deposit limit, for example.

"Hardly, substantially, because it is possible to diversify 50 000 euros efficient enough, unless the diversification occurs through one company only, but let's hope no private person does that."

Is the deposit limit of 50 000 euros equal and reasonable for all investor types? Should the limit be increased or decreased?

"Taking into consideration, that Finnish median portfolio is around 4000 euros, which means that half of investors have less than 4000 euros portfolio, the deposit limit of the account seems adequate. Sure, if an investor has major amount of money compared to the average portfolio, the account is not suitable, yet such investor barely needs tax benefits or incentives so desperately."

What kind of investor is the account suitable for? Small investor, trader or investor with long investment horizon, for example.

"Definitely for long term small investor. It is also suitable for those kinds, that like to wave around and trade a lot, when no taxes are paid, but yet, on the other hand, if you lose money as many traders crave, the benefits are more limited."

Would you recommend rather to invest only through equity savings account or to combine it with a book-entry account?

"It depends on the investor, of course. For a regular saver it is a convenient tool to increase savings."

Is there something to develop in equity savings account in your opinion?

"I have not yet so far got familiar with equity savings account to give constructive feedback. As it is today, it is a brisk step forward and an encouraging outreach to private investor."

7 Conclusion

This chapter will give further reflections of the results and findings based on the research and interview to give a deeper understanding on the subject and a final conclusion. In addition, some development and further research ideas are introduced.

The subject of this thesis research was to find challenges in equity savings account and look deeper into them to provide practical information for people considering opening the account. Research was based on the theory that was gathered by the public information available about the account. Methods used for the research were qualitative, such as observations based on the theory and subject opening practical figures made from calculations, some based on existing examples from earlier research and some were calculations made from scratch by the theory. Lastly there was conducted an interview to give deeper understanding on the subject from practical point of view of one interviewee.

Based on the research carried out in the thesis, several challenges were able to be found. The challenges that were found and looked deeper into give further understanding of those effect on portfolio profit. Also based on the found challenges it is to be concluded the suitability of the account for the investor based on the personal investment strategy, plan, requirements and need as well as the investment horizon. One of the first findings was that the equity savings account restriction that earlier shareholdings cannot be transferred to this account requires investor to start investing always from scratch. Former holding in the account are only transferrable the account is moved from bank to another, resulting that earlier investments and capital income cannot be used to earn more profit in this account or this possibility is limited.

There was another challenge found on the account amount restriction. Since only one account per person is allowed, the cost bidding between the accounts is yet difficult. The account is transferrable from bank to another, but service providers have different service expenses even on closing the account and these costs that will affect the portfolio profit. This leads to the result that investor should always do some cost bidding and tender out service provides and their expenses before opening equity savings account and make fast decisions.

Findings also showed that possibilities of diversification and asset allocation in equity savings account are scarce due to various challenges. Only equities can be purchased in the account, which encourages to only higher risk investing and assets within the account cannot be allocated to different investment products to mitigate the risk. Hereby, investing through equity savings account means that investor is prepared to lose a proportion of capital and in a worst-case scenario all the capital invested.

Based on the thesis research mainly domestic companies are favored in equity savings account due to the challenge found that there is no tax at source refund system. Investor pays higher taxes when holding dividend paying foreign shares resulting less profit. Due to this account feature, compound interest of dividend yield is misleading and can confuse investor. Dividend received appears higher but when account funds are converted and withdrawn, investor loses a part of dividend yield profits. Thus, lower dividends do not provide the most use out of compound interest. It is to be concluded that foreign shares are not profitable in equity savings account leading yet to less possibilities to diversify the portfolio geographically since only domestic shares are favored.

Investor opening an equity savings account should also consider the purpose of the investment, whether the funds in the account are intended for living or to be saved for retirement, for example. There is no withdrawal without capital income tax, consequently no 1000 euros withdrawal without tax deductions. If investor desires to withdraw funds up to 1000 euros per calendar year from the account every now and then, the account is not suitable due to the higher taxation in such case, because in a book-entry account the amount can be withdrawn without tax consequences.

Several challenges on the political deposit limit of the account was also found by the research. As a result, the deposit ceiling of 50 000 euros limits quite much the account possibilities in different ways. Investing larger amounts are not encouraged, because the deposit limit is met quickly, and no further deposits are allowed. If investor desires to invest annually larger amounts, equity savings account in such case is not the best option. When total invested amount is desired to be more than 50 000 euros, investor does not get the most benefit out of the account, thus investing through a book-entry account is required.

The deposit limit in general sets boundaries on diversification. The account is designed to make most out of compound interest thus with smaller deposits divided into many years of investment time. Timing diversification is yet possible with smaller annual deposits that gives the most benefit of the account and therefore account is convenient for a small investor. With larger deposits the limit is quickly met hence in that case timing diversification is narrow unless investor trades actively and uses tax exempt capital income on other investments within the account.

Overall, the growth shares that do not distribute any dividend are not the most profitable ones to have in equity savings account, because the most benefit is gained from dividend paying ones. This is due to the same reason that the deposit limit is met more quicker if there is no dividend to reinvest and to give flexibility on the limit. Hereby, investor should consider whether to buy growth shares or dividend paying ones into equity savings account.

It all comes together into the time of owning the shares. The more time investor plans to hold shares in equity savings account, different investment accounts should be compared. It is to be observed that when the amount invested is higher, the quicker equity savings account will lose on investment value compared to book-entry account and also the longer is the ownership period, the more it will lose on value due to the deemed acquisition cost deduction. Investor should consider the use of the deemed acquisition cost what comes to the holding period. If the ownership time is set or planned in 30 years for example, should investor recognize the benefit of deemed acquisition cost. Hereby, the account does not encourage to buy and hold -strategy, where investor is more passive, thus desires to be shareholder for longer time. The account requires some level of activity in order to benefit more from the account.

As a result of the research and challenges that were found, it is possible to be concluded what kind of investor profile the account is the most and is not suitable for. Investor type that will not make most use out of the account is more passive and plans to hold the same shares for longer time for a few decades or more, hereby a less active and not too familiar with share investments in general. This type of investor does not trade often, does not have much expertise on shares, makes larger deposits and over 50 000 euros altogether, desires to use dividends received for living or withdraw some amounts every now and then, purchase foreign shares and desires to use capital loss deductions on other capital income.

Investor type that will make most use out of the account is active, knowledgeable and expert what comes to trading of shares and shareholding hence able to take higher risk. This investor type invests in high dividend yield companies, who's investment horizon is long to make the most out of compound interest and trades share more actively.

When it comes to saving for a child through an equity savings account these investor types and challenges of the account is useful to be acknowledged before opening one. Guardians should consider in what way the account will serve the child's interests and what the account requires from the guardians when saving. Based on challenges and findings found, guardians are required to select shares precisely that will make most use out of the account to compete with a book-entry account. This means that equity savings account requires some level of expertise what comes also to the guardian of the account. Parents should also know that the de-

posits made to the account until the child turns 18 will have an effect on the amount of future possible deposits and that is the reason a guardian should know how different shares will affect the profit of the account.

7.1 Ideas for Further Research and Development

After this thesis it would be useful to update and research equity savings account features after few years, if they have changed and how. Is the deemed acquisition cost useable in the account, has the deposit limit totally removed or increased or is tax at source refund system applied into this account, for example. If the challenging features have changed, it is a useful subject to make research about, how these changes have affected the Finnish investment habits or investing in general in Finland compared to these current features in 2020, when the account was recently introduced in investment markets. It is also possible to make research about what kind of investor types the account is then suitable for and for who not or is it possibly suitable for all kinds of investors.

As development ideas for equity savings account few most important ones are named. The political deposit limit that could be either increased or removed. This would give more possibilities and flexibility on savings for all kinds of investors and entice more investors to invest. Also, more investment opportunities than just equities should be allowed to have and buy to enable yet scarce diversification possibilities within the account. That would also lower the risk currently recognized in the account. On top of these development ideas, use of the deemed acquisition cost and tax at source refund system should be applied to the account. Then longer owning periods would make the most use out of this account thus increase personal wealth and wider possibilities to geographical diversification rather than just domestic equities. These ideas would equalize equity savings account in the same level with a bookentry account.

References

Printed

Erola, M. 2009. Paras sijoitus. 6th version. Helsinki: Talentum Media Oy. 2011. Kariston Kirjapaino Oy.

Lindström, K & Lindström, T. 2011. Helsinki :Talentum media Oy and Cardia Invest Oy Ab. 2nd version. Onnistu Osakemarkkinoilla. 2012 BALTO Print, Lithuania.

Malkiel, B. G. 2007. Helsinki: Talentum Media Oy. 4th version. Sattuman kauppaa Wall Streetillä. 2012. Hansaprint.

Ojasalo, K. & Moilanen, T. & Ritalahti, J. 2009. Helsinki: Sanoma Pro Oy. Kehittämistyön menetelmät - Uudenlaista osaamista liiketoimintaan. 2015. Sanoma Pro.

Electronic

Arvopaperimarkkinalaki 14.12.2012/746. Available at https://www.finlex.fi/fi/laki/ajantasa/2012/20120746#a746-2012

Bergman, S. 30 August 2020. Sijoitusrahastot. Mikä on arvo-osuustili? Accessed 5 October 2020. Available at https://sijoitusrahastot.org/arvo-osuustili/

Capital. 2020. Volatility. Accessed 1 October 2020. Available at https://capital.com/volatil-ity-definition

Chen, James. 27 of March 2020. Investopedia. Risk. Accessed 30 September 2020. Available at https://www.investopedia.com/terms/r/risk.asp

Digi- ja väestövirasto. 9 January 2020. Alaikäisen lapsen edunvalvonnan rekisteröinti. Accessed 12 October 2020. Available at <a href="https://www.suomi.fi/palvelut/alaikaisen-lapsen-edun-vaalvonnan-rekisterointi-digi-ja-vaestotietovirasto/b19ff019-62d3-4b3e-b47e-f775232eb6bb#:~:text=Alaik%C3%A4isen%20lapsen%20edunval-vonta%20rekister%C3%B6id%C3%A4%C3%A4n%20silloin,alaik%C3%A4isen%20lapsesi%20taloudellisten%20asioiden%20hoidosta.

Euroclear. 4 May 2018. Suomen Arvopaperikeskus Euroclear Finlandin lausunto hallituksen esitysluonnoksen huoneistotietojärjestelmää koskevaksi lainsäädännöksi. Accessed 5 October 2020. Available at https://www.euroclear.com/finland/fi/news-and-insights/news/Euroclear-

<u>Finlandin-lausunto-esitysluonnokseen-huoneistotietojarjestelmaa-koskevaksi-lainsaadan-noksi.html</u>

Euroclear a. 31 August 2020. Statistics. Accessed 2 October 2020. Available at https://www.euroclear.com/finland/en/statistics.html

Euroclear b. 2020. Statistics - Male and female investors. Accessed 5 October 2020. Available at https://www.euroclear.com/finland/en/statistics/male-and-female-investors.html

Euroclear c. 2020. Osakerekisteri digitaaliseksi. Accessed 5 October 2020. Available at https://www.euroclear.com/finland/fi/issuer_services.html

Euroclear d. 6 May 2020. Suomessa yli 100 000 aktiivista osakesäästötiliä joille on karttunut 335 miljoonan euron osakevarallisuus. Accessed 8 October 2020. Available at https://www.euroclear.com/finland/fi/news-and-insights/news/Suomessa-yli-100000-ak-tiivista-osakesaastotilia.html

Euroclear e. 5 February 2020. Tammikuun aikana yli 60 000 osakesäästötilille karttunut 116 miljoonan euron osakevarallisuus. Accessed 8 October 2020. Available at https://www.euroclear.com/finland/fi/news-and-insights/news/Tammikuun-aikana-yli-60000-osakesaastotilille-karttunut-116-milj-eur-osakevarallisuus.html

Financial Supervisory Authority a. 5 December 2018. Stock exchange and other trading venues. Accessed 2 October 2020. Available at https://www.finanssivalvonta.fi/en/capital-mar-kets/stock-exchange-and-other-trading-venues/

Financial supervisory authority b. 5 December 2018. IFRS regulatory framework. Accessed 2 October 2020. Available at https://www.finanssivalvonta.fi/en/capital-markets/issuers-and-investors/ifrs/ifrs-regulatory-framework/

Fontinelle, Amy. 30 of September 2019. Investopedia. Systematic Risk. Accessed 30 September 2020. Available at https://www.investopedia.com/terms/s/systematicrisk.asp

Heikinheimo, H. 13 January 2018. Sijoittaja. 10 vuoden säästämisellä 40 vuoden eläkesäästöt? Accessed 30 September 2020. Available at https://www.sijoittaja.fi/53597/korkoa-korolle/

Heikinheimo, H. a. 6 January 2020. Sijoittaja. Osakesäästötili - usein kysytyt kysymykset. Accessed 9 October 2020. Available at https://www.sijoittaja.fi/186732/osakesaastotili-ky-symykset/

Heikinheimo, H. b. 20 February 2020. Sijoittaja. Osakesäästötili lapselle. Accessed 12 October 2020. Available at https://www.sijoittaja.fi/201469/osakesaastotili-lapselle/

Hämäläinen, K. 8 January 2020. Taloustaito. Osakesäästötili on ikuisuustili - vältä nämä viettelevät virheet. Accessed 9 October 2020. Available at https://www.taloustaito.fi/Ra-hat/osakesaastotili-on-ikuisuustili--valta-nama-viettelevat-virheet/#77c6cede

Kela. 15 January 2020. Uusi osakesäästötili vaikuttaa osaan etuuksista. Accessed 12 October 2020. Available at <a href="https://www.kela.fi/-/uusi-osakesaastotili-vaikuttaa-osaan-etuuksista?re-direct=https%3A%2F%2Fwww.kela.fi%2Fajankohtaista-henkiloasiak-kaat%3Fp_p_id%3D3%26p_p_lifecycle%3D0%26p_p_state%3Dmaxim-ized%26p_p_mode%3Dview%26_3_redirect%3D%252Fajankohtaista-henkiloasiakkaat%252F-%252Fasset_publisher%252Fkg5xtoqDw6Wf%252Fcontent%252Fuusi-osakesaastotili-vaikuttaa-osaan-etuuksista%26_3_key-words%3Dosakes%25C3%25A4%25C3%25A4st%25C3%25B6tili%26_3_groupId%3D10180%26_3_strut s_action%3D%252Fsearch%252Fsearch&inheritRedirect=true

Kontola, S. 21 October 2019. Miten osakesäästötili eroaa arvo-osuustilistä? Tässä olennaiset erot. Accessed 12 October 2020. Available at https://www.kauppalehti.fi/uutiset/miten-osakesaastotili-eroaa-arvo-osuustilista-tassa-olennaiset-erot/345ffa69-d999-42ed-b3b0-247ce1a21d91

Koskinen, K-H. 18 May 2020. Osakesäästötili, mikä se on ja mitä sinun pitäisi siitä tietää. Accessed 6th October 2020. Available at https://tilisanomat.fi/sijoittaminen/osakesaastotili-mika-se-on-ja-mita-minun-pitaisi-siita-tietaa

Laitinen, O. 10 January 2020. Salkunrakentaja. Osakesäästötili vs arvo-osuustili. Accessed 10 October 2020. Available at https://www.salkunrakentaja.fi/2020/01/osakesaastotili-vs-arvo-osuustili/

Lioudis, N, K. 15 of August 2019. Investopedia. The Importance of Diversification. Accessed 30 September 2020. Available at https://www.investopedia.com/investing/importance-diversification/

Minilex. 2020. Mikä on osakekirja? Accessed 5 October 2020. Available at https://www.minilex.fi/a/mik%C3%A4-on-osakekirja#:~:text=Osakekirja%20tu-lee%20p%C3%A4iv%C3%A4t%C3%A4%2C%20ja%20yhti%C3%B6n,osakekirjan%20an-tamista%2C%20voidaan%20k%C3%A4ytt%C3%A4%C3%A4%20nk

Määttä, T. & Manninen, P. 1 February 2020. Vero. Osakesäästötilin verotus. Accessed 8 October 2020. Available at https://www.vero.fi/syventavat-vero-ohjeet/ohje-haku-sivu/81118/osakes%C3%A4%C3%A4st%C3%B6tilin-verotus/#3-rahavarojen-tallettaminen-osakes%C3%A4%C3%A4st%C3%B6tilile

Nasdaq. Tietoa pörssistä. Accessed 5 October 2020. Available at http://www.nasdaqomxnor-dic.com/tietoaporssista

Nordea. October 2018. General Terms and Conditions of Orders to Buy and Sell Securities. Accessed 2 October 2020. Available at https://www.nordea.fi/Images/147-90138/General%20terms%20and%20conditions%20of%20orders%20to%20buy%20or%20sell%20securities.pdf

Nordea a. Kaupankäynti verkossa. Accessed 5 October 2020. Available at https://www.nordea.fi/henkiloasiakkaat/palvelumme/saastaminen-sijoittaminen/sijoittaminen/kaupankaynti-verkossa.html#tab=Ehdot

Nordea b. Equity Savings Account. Accessed 5 October 2020. Available at https://www.nordea.fi/en/personal/our-services/savings-investments/investments/equity-savings-account.html

Nordea c. Special and General Terms and Conditions of Equity Savings Account. Accessed 5 October 2020. Available at https://www.nordea.fi/Images/147-341037/osakes%C3%A4%C3%A4st%C3%B6tili_ehdot_EN.pdf

Nordnet a. 2020. Lisätietoa osakesäästötilistä. Accessed 6 October 2020. Available at https://www.nordnet.fi/fi/palvelut/tilit/osakesaastotili/lisatietoa-osakesaastotilista#sallitut

Nordnet b. 2020. Osakesäästötilin haltijan kuolema - osakesäästötili ja kuolinpesä. 12 October 2020. Available at <a href="https://www.nordnet.fi/faq/3229-osakesaestoetilin-haltijan-kuolema-osakesaestoetili-ja-kuolinpesae#:~:text=osakes%C3%A4%C3%A4st%C3%B6tili%20ja%20kuolinpes%C3%A4,Osakes%C3%A4%C3%A4st%C3%B6tilin%20haltijan%20kuolema%20%E2%80%93%20osakes%C3%A4%C3%A4st%C3%B6tili%20ja%20kuolinpes%C3%A4,sopimus%20lak-kaa%20osakes%C3%A4%C3%A4st%C3%B6tilin%20haltijan%20kuollessa.&text=Osakes%C3%A4%C3%A4st%C3%B6tilisopimuksen%20lakkaamisesta%20verovelvollisen%20kuoleman%20johdosta,veronalaista%20tuloa%20eik%C3%A4%20v%C3%A4hennyskelpoista%20tappiota

Oksaharju, J. 5 April 2015. Nordnet. Miten osakkeiden kokonaistuotto muodostuu? Accessed 30 September 2020. Available at https://www.nordnet.fi/blogi/miten-osakkeiden-kokonaistu-otto-muodostuu/

Parliament. 10th December 2018. HE 279/2018. Accessed 8th October 2020. Available at https://www.eduskunta.fi/FI/vaski/HallituksenEsitys/Documents/HE_279+2018.pdf

Pörssisäätiö. 10 December 2017. Näin aloitat osakesijoittamisen eli nyrkkisääntöjä aloittelijalle. Accessed 2 October 2020. Available at

https://www.porssisaatio.fi/blog/2017/12/10/nain-aloitat-osakesijoittamisen-eli-nyrkkisaan-toja-aloittelijalle/

Pörssisäätiö a. 1 July 2020. Listautumiset Pohjoismaissa viime vuosina. Accessed 2 October 2020. Available at https://www.porssisaatio.fi/blog/statistics/listautumiset-pohjoismaissa-viimevuosina/

Pörssisäätiö b. Oppitunti 9: Miten osakesäästötili toimii? Sijoitukoulu. Accessed 7 October 2020. Available at https://www.porssisaatio.fi/sijoituskoulu/miten-osakesaastotili-toimii/

Raszkiewicz, O. 1 Septmber 2020. Rask education. What is Diversification. Accessed 30 September 2020. Available at https://education.rask.com.au/2020/01/09/what-is-diversification/

Roine, S-L. February 2010. Pörssisäätiö. Mitä arvopapereista tulisi tietää? Accessed 2 October 2020. Available at https://www.porssisaatio.fi/wp-content/uploads/2012/01/matt2010_2.pdf

Saaranen-Kauppinen, A. & Puusniekka, A. 2006. Strukturoitu ja puolistrukturoitu haastattelu. KvaliMOTV. Accessed 9 November. Available at https://www.fsd.tuni.fi/menetelmaopetus/kvali/L6_3_3.html

Saarinen, M. 7 January 2020. Tankkasitko näitä suosittuja osinko-osakkeita osakesäästötililesi? Verottajalta ikävä yllätys: tuplaverot osingoista. Accessed 12 October 2020. Available at https://www.kauppalehti.fi/uutiset/tankkasitko-naita-suosittuja-osinko-osakkeita-osakesaas-totilillesi-verottajalta-ikava-yllatys-tuplaverot-osingoista/8b03b9a6-15d3-4a81-8b1d-26b3b7b92d88

Salkunrakentaja. 17 September 2013. Sijoittaja, hyödynnä hankintameno-olettama myyntivoitoissa. Accessed 9 October 2020. Available at https://www.salkunrakentaja.fi/2013/09/nin-hydynnt-hankintameno-olettamaa-myyntivoitoissa/

Sijoittaja. Osakesäästötili. Accessed 5 October 2020. Available at https://www.sijoittaja.fi/osakesaastotili/

Sijoittaja a, 2020. Paranna tuottoa. Accessed 6 October 2020. Available at https://www.si-joittaja.fi/sijoittaminen/paranna-tuottoa/

Sijoittaja b. 13 July 2020. Oakesäästötilin hyvät ja huonot puolet. Accessed 7 October 2020. Available at https://www.sijoittaja.fi/105775/osakesaastotilin-hyvat-ja-huonot-puolet/

Taloussuomi. 27 January 2020. Osakesäästötili. Accessed 12 October 2020. Available at https://www.taloussuomi.fi/sijoitus/osakesaastotili

Tuloverolaki. 30.12.1992/1535. 45§ subsection 6. Available at https://www.finlex.fi/fi/laki/ajantasa/1992/19921535?search%5Btype%5D=pika&search%5Bpika%5D=tuloverolaki

Vero. 2 of March 2018. Capital income. Accessed 7 October 2020. Available at https://www.vero.fi/en/individuals/tax-cards-and-tax-returns/income/capital-income/

Vero a. 19 March 2020. Dividends. Accessed 8 October 2020. Available at https://www.vero.fi/en/individuals/property/investments/dividends/

Vero b. 29 April 2020. Selling shares. Accessed 8 October 2020. Available at https://www.vero.fi/en/individuals/property/investments/selling-shares/

Vero c. 19 March 2020. Dividends from a listed company. Accessed 8 October 2020. Available at https://www.vero.fi/en/individuals/property/investments/dividends/dividends-from-a-listed-company/

Vero d. 19 March 2020. Equity savings account. Accessed 8 October 2020. Available at https://www.vero.fi/en/individuals/property/investments/equity-savings-account/

Vero e. 19 March 2020. Foreign dividends. Accessed 12 October 2020. Available at https://www.vero.fi/en/individuals/property/investments/dividends/foreign-dividends/

Vero f. 8 April 2020. Return of tax withheld at source. Accessed 12 October 2020. Available at https://www.vero.fi/en/businesses-and-corporations/about-corporate-taxes/foreign_business_in_finland/refunds_of_tax_withheld_at_sourc/

Visma. 2020. Osake - Mikä on osake? Accessed 1 October 2020. Available at https://www.visma.fi/epasseli/kirjanpidon-sanakirja/o/osake/

Yli-Korhonen, J. 9 of July 2020. Financer. Accessed 30 September 2020. Available at https://financer.com/fi/oma-talous/laskuri/korkoa-korolle/

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Appendix 1: Interview Questions

- 1. Have you opened/Will you open an equity savings account and what kind of shares have you bought/will you buy to the account?
- 2. Does equity savings account encourage to invest in all kind of shares? Foreign or domestic shares, growth or dividend-increasing companies, for example.
- 3. What kind of shares should be bought in equity savings account in your opinion?
- 4. Does the equity savings account mitigate possibilities of diversification due to its features? Because of the deposit limit, for example.
- 5. Is the deposit limit of 50 000 euros equal and reasonable for all investor types? Should the limit be increased or decreased?
- 6. What kind of investor is the account suitable for? Small investor, trader or investor with long investment horizon, for example.
- 7. Would you recommend rather to invest only through equity savings account or to combine it with a book-entry account?
- 8. Is there something to develop in equity savings account in your opinion?