LAPPEENRANTA-LAHTI UNIVERSITY OF TECHNOLOGY LUT
School of Business and Management
Master’s Degree Program in International Business and Entrepreneurship

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RISK MANAGEMENT, DECISION-MAKING AND INVESTMENT STRATEGIES OF REAL ESTATE INVESTORS

Master’s thesis

Examiners: Professor Henri Hakala

Post-Doctoral Researcher Anna Vuorio

ABSTRACT

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Keywords: Risk, risk management, uncertainty, decision-making, real estate investing, investment strategy, portfolio, diversification

This master's thesis studies the risks related to real estate investing and how these risks can be minimized. It also discusses the decision-making processes of real estate investing and investment strategies. Business and investing always include risks. It is important to manage risks and be aware of them in advance. Before making an investment decision, it is essential to find out what kinds of risks are associated with the investment target and the business in general and how the risks can be reduced. The aim is to obtain as high a return as possible compared to the existing risks.

Real estate has become a popular form of investment in Finland, especially over the last ten years. More than half of the studio apartments for sale go to investors. In the largest cities, apartment prices have risen rapidly in the last few years, partly due to the growing number of investors. Conversely, apartments are cheaper in smaller towns, but finding tenants can be more difficult, and the apartments may be more difficult to sell in the future. Therefore, making profitable investment decisions requires knowledge of the business and the region.

This study used qualitative methods. In the semi-structured thematic interviews, seven Finnish real estate investors were interviewed. Based on the results, real estate investors can reduce risks by thoroughly researching properties and housing associations in advance and selecting good, reliable tenants. Centrally located apartments with good transport connections make finding a tenant easier and faster. Investors also look for apartments below the market price, which enables immediate profits when purchasing. Real estate investors feel that they can find good investment targets and reduce risks through their own expertise and analysis. Good advanced knowledge of the area reduces risks and speeds up decision-making.

TIIVISTELMÄ

Lappeenrannan-Lahden teknillinen yliopisto LUT

School of Business and Management

Master’s Degree Program in International Business and Entrepreneurship

Kaisa Vääräniemi

Asuntosijoittajien riskienhallinta, päätöksenteko ja sijoitusstrategiat

Pro gradu -tutkielma

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78 sivua, 5 kuvaa, 1 taulukko ja 1 liite

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Hakusanat: Riski, riskienhallinta, epävarmuus, päätöksenteko, asuntosijoittaminen, sijoitusstrategia, sijoitussalkku, hajauttaminen

Tässä pro gradussa käsitellään asuntosijoittamiseen liittyviä riskejä, riskien minimoimista, asuntosijoittamiseen liittyviä päätöksentekoprosesseja ja sijoitusstrategioita. Liiketoimintaan ja sijoittamiseen liittyy aina riskejä. Siksi riskienhallinta ja niiden tiedostaminen on tärkeää jo etukäteen. Ennen sijoituspäätöksen tekoa on tarpeen selvittää millaisia riskejä sijoituskohteeseen ja alaan ylipäätään liittyy sekä kuinka riskejä voitaisiin pienentää. Sijoituksista pyritään saamaan mahdollisimman hyvää tuottoa riskeihin nähden.

Asuntosijoittamisesta on tullut suosittu sijoittamisen muoto Suomessa, erityisesti viimeisen kymmenen vuoden aikana. Myyntiin tulevista yksiöistä jopa yli puolet päätyy sijoittajille. Suurimmissa kaupungeissa asuntojen hinnat ovat nousseet nopeasti viime vuosina ja osasyynä on sijoittajien kasvanut määrä. Toisaalta pienemmillä paikkakunnilla asunnot ovat halvempia, mutta vuokralaisen löytäminen voi olla vaikeampaa ja asunto saattaa olla vaikeampi myydä tulevaisuudessa. Siksi kannattavien sijoituspäätösten tekeminen vaatii alan ja alueen tuntemista.

Tutkimus toteutettiin laadullisin menetelmin. Puolistrukturoiduissa teemahaastatteluissa haastateltiin seitsemää suomalaista asuntosijoittajaa. Tutkimuksen tulosten perusteella asuntosijoittajat pystyvät vähentämään riskejä tutkimalla kohteita ja taloyhtiöitä perusteellisesti ennakkoon ja valikoimalla hyvät, luotettavat vuokralaiset. Keskeisillä sijainneilla olevat kohteet, joista on hyvät kulkuyhteydet helpottavat ja nopeuttavat vuokralaisen löytymistä. Sijoittajat yrittävät löytää alle markkinahintaisia asuntoja, jolloin heti asunnon ostotilanteessa on mahdollista tehdä voittoa. Asuntosijoittajat kokevat, että omalla osaamisella ja analysoimisella voi löytää hyviä sijoituskohteita ja vähentää riskejä. Alueen hyvä tunteminen etukäteen ennen asunnon ostopäätöstä vähentää riskejä ja nopeuttaa päätöksentekoa.

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The past two years have been an interesting time in my life. I learned a great deal about business and the kinds of opportunities it can offer. Today I am more interested in business news and more open to finding alternatives around me. Every day offers me new business aspects to consider. I am truly grateful that I had the chance to study at LUT.

I would like to thank my family and friends for all their support and advice. And, of course, I want to thank the other students in the MIBE program. The journey would have not been the same without you, and we have supported and advised each other. I would also like to thank all the real estate investors I interviewed. I really enjoyed our conversations.

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I hope the future will be full of surprises and success in my business journey and that I can use the knowledge I received at LUT.

Helsinki

6.12.2021

Kaisa Vääräniemi

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LIST OF ABBREVIATIONS

ARA – The Housing Finance and Development Center, Asumisen rahoitus- ja kehittämiskeskus

BRRRR – Buy, rehab, rent, refinance, repeat strategy

HYPO – The Mortgage Society of Finland, Suomen Hypoteekkiyhdistys

MPT – Modern portfolio theory

PTT – Pellervo economic research, Pellervon taloustutkimus

1 INTRODUCTION

This study researches how Finnish real estate investors estimate risks and how they try to manage and minimize them. It also studies how real estate investors make their investment decisions and what factors they prioritize when investing in apartments.

Risks are possibilities of losses and gains, including expenses compared to available opportunities. Crises also create opportunities in business. Historical data can be used to forecast the future. (Walker, 2013.) An investment strategy is a combination of expected returns and risks that must be considered. Investment philosophy describes how general principles and individual experiences and thoughts influence each investor’s strategy. It summarizes an investor’s financial and other available resources. Investment philosophy determines how large a risk an investor is willing to accept for an expected return. (Pyhrr, Cooper, Wofford, Kapplin & Lapides, 1989.) The more information investors have, the more control they have to reduce risks. Learning and discovering the business are the key issues for controlling and reducing risks. When the risks are completely understood, better decisions can be made. (Walker, 2013.) Risk-taking is a relevant part of investors’ choices. Investors aim is to maximize profits and minimize risks. Investors will accept increased risk only if the expected returns are high enough. All investors have the same target: the expectation of a financial return as a reward for the risk included in the business. (Manganelli, 2015.)

Real estate investing includes many risks, including renovation risks, finding reliable tenants and attractive locations, changes in taxes, and changes in interest rates. Tziralis, Kirytopoulos, Rentizelas & Tatsiopoulos (2009) state that investors have limited capital for investments. For this reason, they must decide on which alternatives to invest in. Markowitz (1952) states that, according to modern portfolio theory (MPT), investors should allocate their resources and advantages based on the risk-return relationship. They should estimate how much asset returns they will achieve from each investment. It is relevant that the portfolio is diversified, to reduce too high risks.

Real estate has become a popular way to invest. In the 2010s, the number of real estate investors in Finland increased significantly. In 2018, there were approximately 210,000 private real estate investors in Finland (Kannisto, Korhonen, Rämö & Vuorio, 2020). In 2006, the number of apartments owned by investors was only 115,000 (Kannisto, 2019). The director of the Housing Finance and Development Center (ARA), Jarmo Linden, thinks that prices and rents of apartments have increased in the 2010s because of the increased number of real estate investors. There has been more demand for apartments due to the large number of investors in the market. (Kempas & Tegelberg, 2021.) Many new studios are sold to real estate investors because they see small studios as profitable. For this reason, many studios are rental apartments. Of people who live in rental apartments, 87 % are small households with only one or two persons (Tilastokeskus, 2020). Construction of small apartments, especially studios, has increased since 2010, especially in large cities. In Finland, over 1.2 million people live alone, which is almost 45 % of all Finnish households (Riuttamäki, 2020). According to Rantavaara (2020b), the prices of studios have increased in Helsinki over 18 % between 2015–2019, and the main reason for that is the increased demand.

Prices of apartments have been increasing fast in recent years, especially in the Helsinki metropolitan area, Tampere, and Turku. The reasons for this are increased demand, urbanization, and the increased number of investors in the market. However, urbanization has created challenges in other Finnish cities and areas. If the location is attractive, it is easier to find a tenant. In addition, increasing/decreasing future value of an apartment is essential when considering attractive locations for investments. For investors, it is easier and safer to invest in the cities and areas which they already know in advance.

1.1 Background

Real estate investing can be profitable but challenging business. Apartments are expensive, and investors have to decide which kinds of apartments and what locations they prefer. Their capital is limited, and they are looking for the best possible portfolio and return.

According to Rantavaara (2020a), approximately 33 % of all Finnish households live in rental apartments. In Helsinki, the number is 50 %. PTT forecasts that in upcoming years over 50 % of the households in Tampere and Turku will be living in rental apartments. According to Kannisto (2019), in 2017 there were approximately 32,000 rental apartments in Helsinki owned by private investors, 16,000 in Tampere, 14,000 in Turku, 10,000 in Oulu, and 8,000 apartments in Jyväskylä. 70 % of real estate investors possess only a single apartment. According to OP's statistics (2020), 50 % of all apartment deals are made in Helsinki, Espoo, Vantaa, Tampere, Turku, or Oulu. In the Helsinki metropolitan area prices of apartments have been increasing fast but rents are increasing more slowly. Between 2015–2020, prices of apartments increased on average 18.5 % but rents only 8.5 %. Conversely, in other Finnish regions, prices of apartments decreased on average 0.5 % but rents increased 6.5 %.

The Covid-19 crisis has impacted the real estate business. In spring 2020, there were few buyers on the market because of the strict restrictions and increased uncertainty. During summer and autumn 2020, business has been invigorated. Many Finns have been looking for larger apartments because of remote work and lack of activities and hobbies. The circumstances of state of emergency have diverted investors' interest to less risky investments with stable cash flow. Covid-19 has slightly increased the demand for larger apartments and areas with lower rents. (KTI, 2020.) Hypo (2020) states that risk-taking will be lower during the crisis. After the crisis, the market will quickly normalize. The crisis has the most significant effect on the Airbnb business, which has stopped almost completely. Many Airbnb investors in Helsinki have rented their apartments for the long-term. Before the crisis in Helsinki, almost 10 % of the rental apartments were short-term rentals.

According to Karikallio, Keskinen, Kiviholma, Reijonen, Ruuskanen, Vuori, Härmälä & Lamminkoski (2019), statistics show that the number of small apartments has increased, especially in big cities. The reasons for that are the large number of small households, urbanization, and increased living costs. Urbanization is expected to increase, and demand for small apartments is estimated to stay high. Construction companies have responded to the demand, and many of the new apartments are studios. Kaarto (2015) states that when investing in smaller towns, an investor has to obtain background information about the area. There might be significant differences between suburbs that affect the attractiveness of an apartment. When an apartment is attractive, it is easier to find a good tenant. In smaller towns, there might be only a few large firms, which increases risks in investments.

1.2 Research questions

The goal of this thesis is to study how real estate investors estimate risks, how the risks can be minimized, what kinds of investment strategies they use, and what factors affect their investment decision-making. This study focuses on real estate investing in Finland.

The main research question:

How do real estate investors estimate the risks of their investments?

The sub questions:

How do real estate investors try to minimize the risks?

What kinds of strategies do real estate investors use for their investments?

Which factors affect real estate investors' purchasing decisions?

1.3 Limitations

There are some limitations regarding this study. It was not closely examined how many loans the interviewees have and how much leverage they use. It was not studied if there are differences in risk-taking and investment strategies between the genders or different age groups. Six interviewees out of seven are not working as full-time investors. It was not studied if the results would differ when interviewing full-time real estate investors. However, all the interviewees have large portfolios and high loan amounts. It was not studied how risk-taking differs from investors with only a few apartments.

1.4 Key concepts

The key concepts of this thesis are introduced below. The most important definitions are risk, risk management, uncertainty, decision-making and portfolio.

Risk

Risk is the probability of financial losses and a threat where return is less than expected (Pyhrr et al., 1989). In every business, there are risks which have to be considered (Baker & Filbeck, 2015). Risks can be measured to some extent (Müllner, 2016). A risk is a combination of the likelihood of an occurrence and its unpleasant consequences (Lemos, 2020).

Risk management

Investors have to manage risks to reduce and control them. In the risk management process, it is essential to evaluate which risks are the largest and most crucial. The aim is to minimize the threats and concentrate on the most profitable sides of the business (Hillson & Murray-Webster, 2012).

Uncertainty

Investors make many of their decisions based on the probability of uncertain occurrences (Tversky & Kahneman, 2004). The biggest difference between risk and uncertainty is that uncertainty cannot be estimated or measured (Brown, 2005). Uncertainty includes occurrences where the outcomes are unknown (Olsson, 2007).

Decision-making

Investors have limited capital. For this reason, they must decide which alternatives they want to invest in (Tziralis et al., 2009). There are differences between individuals. Risk-averse investors choose investments that are less risky (Fabozzi & Markowitz, 2011). Risk-seekers accept that risks are part of the business and are willing to take greater ones (Hillson & Murray-Webster, 2012).

Portfolio

Investors allocate their resources to the best possible investments. They must estimate how much return they will receive from each investment. A portfolio should be diversified to reduce risks. (Markowitz, 1952.) An efficient portfolio consists of investments that give the best possible revenue and a tolerable amount of risks (Fabozzi & Markowitz, 2011).

1.5 Theoretical framework

The theoretical part of this thesis consists of risk management, decision-making, and real estate investment strategies. Risks must be noted when making investment decisions. Investors have limited capital, and they must choose which targets to invest in. A profitable investment portfolio can consist of different kinds of investment strategies. Diversification helps reduce risks. This thesis studies how risks in real estate investing can be estimated, managed, and minimized.

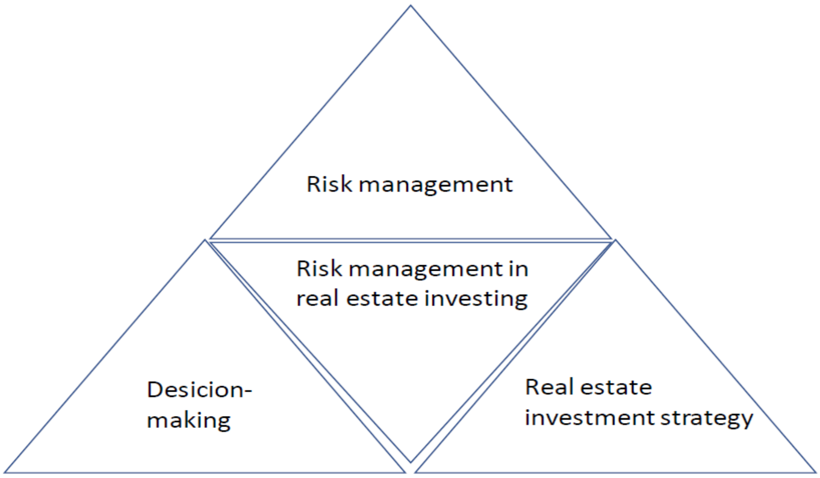

Figure 1. Theoretical framework

1.6 Structure of the thesis

This thesis consists of two parts: theoretical and empirical. The first chapter introduces the theme by describing real estate investing in Finland and the risks related to the business. The second chapter reviews the literature on risk management, prospect theory, uncertainty, and decision-making. The third chapter presents real estate investment strategies, diversification, different kinds of risks in real estate investing, and effects of urbanization. The fourth chapter consists of research methodology, qualitative research, case study, data collection, and data analysis. The fifth chapter introduces the results of the study. The sixth chapter consists of discussion, and the seventh chapter presents the conclusions of this thesis.

2 RISK MANAGEMENT

This chapter introduces risk management processes and the differences between risk and uncertainty. In addition, prospect theory and the factors affecting investors' decision-making, processes are presented.

2.1 Definition of risk

According to Goddard & Marcum (2012), a risk can be defined in many ways. It can be the probability of loss, the probability of not obtaining what was expected, differences between expectation and reality, that is, the real rate of return is lower than expected. Viezer (1999) defines risk as the uncertainty that the expected revenue will not be gained. However, a risk can be either positive or negative. Positive risk means that the investment exceeded the anticipated profit, and negative risk means that the return is less than expected. Expected rate of return is usually forecasted from the historical data.

Pyhrr et al. (1989) suggest these five descriptions for risk:

1. The probability of financial losses.

2. The probability of not obtaining as much return as expected.

3. The difference between expectations and the reality.

4. Imbalance between the received returns and the expected or most likely return, and.

5. The probability that the investor cannot obtain the return that is expected for the investment.

According to Baker & Filbeck (2015), risks and uncertainties must be taken into account when reaching for economic success. Risk means there are threats which may disturb the business. Quantifiable risk means profit and loss relation. A business portfolio should have a risk management plan. When buying or selling investments, the return distribution of the portfolio should be acceptable. The operations should come at low expenses. Müllner (2016) states that risks can be measured to some extent, while uncertainty is not measurable.

Pyhrr et al. (1989) state that a risk is a variance of expected revenue. If there are no risks in an investment, there is no variance. The result is that the return is secure. If an investor is willing to buy investments with risk, she/he expects higher return than received from risk-free investments. The higher the risk, the greater the investor's expected returns are. However, this does not mean that investments with high expected returns always include high risks. According to Lemos (2020), a risk is seen in the classical literature as the probability of negative results, and the risk can be measured. The probability that risk will occur is 50 %. A risk is a combination of the likelihood of an occurrence and its unpleasant consequences. If an investor understands risk accurately, it is more likely that she/he will be successful.

According to Hillson & Murray-Webster (2012), a risk is related to uncertainty, and it has consequences. However, risk is not the same as uncertainty. The greatest difference between these definitions is the consideration of consequences. Uncertainty that includes no consequences is not a risk. Lemos (2020) states that it is remarkable how risks are being communicated. It is significant how each investor understands risks and what kind of impact they have in an investor's decisions.

2.2 Risk analysis

Pyhrr et al. (1989) state that there are risks in any business because investors cannot forecast completely events occurring in the future. If they could, there would not be any unsuccessful investments or financial losses. According to Aven (2008), analyzing the risk helps when making decisions. The conclusions support what should be done and what should be avoided.

Right timing is essential when making decisions. However, decisions sometimes have to be made with only limited information.

Wolke (2017) suggests that risks related to an investment will be measured, and the best actions will be implemented. The level of risk-taking depends on the investor. Some investors are completely risk-averse, and some investors are willing to take large risks. The extent of a risk also specifies how much profit can be expected. The higher the expectations are, the higher the risk might also be.

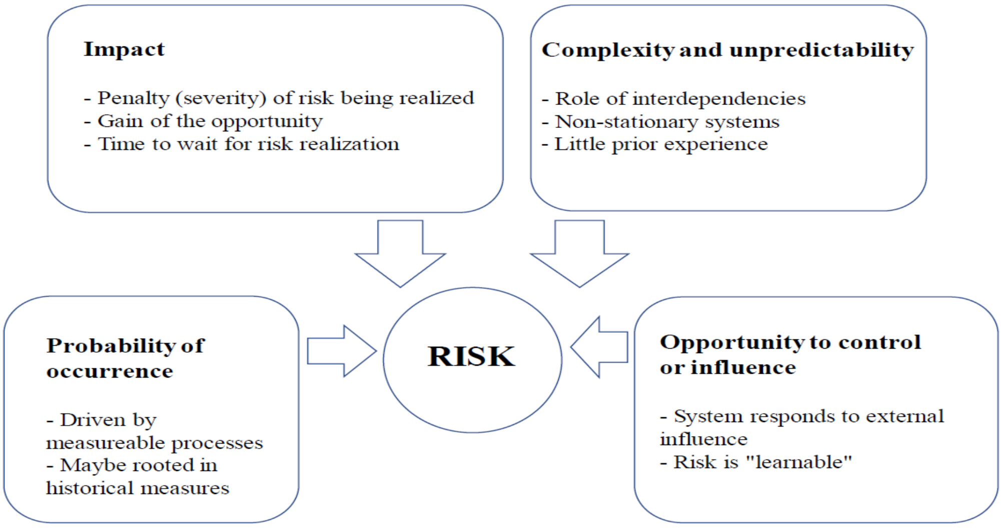

Figure 2. Concepts of risk in business (Walker, 2013)

According to Walker (2013), probability of occurrence describes how likely the risk is to occur. Probability can be estimated from past data and past incidents. The future development can also be forecasted by experts. Past events can help to estimate future ones and how the markets will develop. However, random events can happen. Randomness creates the risk for the future.

According to Walker (2013), the impact of risk means what kinds of expenses or losses can be expected if the risk occurs or what kinds of profits can be expected for an upside risk. When estimating the future, investors often have biases and negative experiences that affect their decisions.

According to Walker (2013), complexity means that risks might affect many parts of the business. An event can create many risks. When estimating probability of a risk, only limited information, which is available at the moment, can be used. The future events are unknown and are somewhat unpredictable. Broadness of the risk can be reduced when using the available information.

Figner & Weber (2011) state that investors perceive investments as more attractive if expected revenues are high. Higher perceived risks make investments less attractive for investors. In financial literature these can be named as “greed” and “fear.” A person’s risk attitude describes how much risk an investor is willing to take for her/his investments. According to Odean (1998), profits of investments will be realized more readily than losses. Investors might sell their profitable properties to rebalance their portfolios. If properties are sold at high prices, it is likely that investors buy new properties. Reference points are the prices for which they are willing to buy or sell properties.

Walker (2013) states that the more information investors have, the more control they have to reduce the risks. Learning and discovering the business are key issues for managing and minimizing the risks. When the risks are completely understood, better decisions can be made. A competitive advantage can be created when recognizing the risks well. According to Pinto, Magpili & Jaradat (2015), investors can reduce risks if they search information from the past. Any relevant statistics can be utilized when forecasting the future.

2.3 Prospect theory

Prospect theory was created by Daniel Kahneman and Amos Tversky in 1979. According to Barberis (2013), the theory is still seen as one of the best descriptions of how risks are experienced and evaluated. High returns and low losses do not mean the same to each investor. Investors might have different kinds of expectations for their investments. Kahneman (2012) states that people prefer risky options if all the options are unfavorable.

Kahneman & Tversky (1979) state that prospect theory is a well-known theory for decisions under risk. People expect to experience the outcomes that are more likely than the outcomes that are less likely. This is called certainty effect. Investors try to avoid risks and seek to obtain profits. According to Levy (1992), people accept risks according to losses. A reference point is the ideal situation for the decisions. Tversky & Kahneman (1986) introduce two stages: framing and valuation. Investors make their decisions based on the information received on the framing stage. In the valuation stage, an investor estimates the value of each investment and selects the one which she/he thinks is the most optimal. According to Abdellaoui, Bleichrodt & Paraschiv (2007), prospect theory assumes that investors emphasize probabilities. However, emphasizing probabilities for profits might be different than probability underlining for losses.

According to Kahneman (2012), utility theory compares two choices: is the probability of winning low or high? Instead of avoiding risks, Kahneman and Amos Tversky noticed that people were targeting risks. When the goal is attractive enough, greater risks can be accepted. For example, investors could choose from two options: are they willing to take 900 euros for sure or if they will choose 1,000 euros if the probability to receive the amount is 90 %.

Kahneman (2012) researched which option people would choose if they received 500 euros for sure or the probability of 50 % to obtain 1,000 euros. Most people would choose 500 euros for sure. Another dilemma is that a person receives 2,000 euros. Which option would a person choose if there is a possibility of 50 % to lose 1,000 euros from 2,000 euros or lose 500 euros for sure? Most people prefer gambling in this kind of situation and choose 50 % of losing 1,000 euros. They know, in any case, they will not lose all the money.

2.3.1 Loss aversion

Loss aversion is a concept first introduced by Kahneman and Tversky in 1979. It is a part of prospect theory (Schmidt & Horst, 2005). De Giorgi (2011) states that investors focus on the profits and losses of their investments. They allocate their capital to their investment targets and decentralize their assets to avoid risks. Investors who try to avoid large risks are mostly focusing on long-term investments. When trying to avoid risks as much as possible and the expected profits are not high, short-term investments can also be considered. The optimal strategies for each investment should be used. Risk can be reduced when buying investments on a large time scale. Investors must allocate their resources to create the best portfolio. According to Abdellaoui et al. (2007), many studies have indicated that loss aversion is essential. Investors interpret returns as profits and losses relative to a reference point. They are more sensitive to losses than to profits.

Tversky & Kahneman (1991) define loss aversion as the fear that losses are bigger than the expected returns. Profits might turn into losses or vice versa. Investors have to decide the minimal prices they are willing to accept from their properties and what the maximum amounts they are willing to pay for attractive properties. Kahneman, Knetsch & Thaler (1990) state that if an investor finds the deal attractive, she/he is willing to sell or buy properties. If she/he thinks that the offered price is not enough, she/he is not willing to sell the property. If a price of a property is too expensive, the investor does not find it attractive and sees it as a loss. Research has found that the reluctance to sell is much higher than the reluctance to purchase.

2.4 Uncertainty

In 1921, Frank Knight described the difference between risk and uncertainty (Brown, 2005). The greatest difference is that a risk can be estimated and measured but uncertainty cannot be. It is easier to estimate and accept risks and challenges in the future if they can be anticipated and measured in advance. However, uncertainty will always remain in investment decisions. Tversky & Kahneman (2004) state that investors make many of their decisions based on the probability of uncertain occurrences.

Knight (1985) introduces three types of probabilities in occurrences: priori, statistical and estimated. Priori probabilities are “absolutely homogeneous classification of instances completely identical except for really indeterminate factors.” Statistical probability is based on the data received from the past. From this data, the most relevant information must be obtained. Estimated probability means “there is no valid basis of any kind for classifying instances.” Estimates are the most difficult part because there is no guarantee what will happen in the future. This creates the greatest uncertainty.

A small amount of uncertainty does not absolutely mean there is a low risk (Lemos, 2020). Similarly, a large amount of uncertainty does not necessarily mean that risks are high. A result can be unattractive to some investors and attractive to others. There are two aspects: threats and possibilities. Olsson (2007) introduces epistemic uncertainty, which means there is uncertainty because of missing knowledge. Uncertainty includes occurrences where the outcomes are unknown. However, unexpected possibilities might arise from uncertainty. Possibilities are a positive effect of uncertainty. They create new chances for investors to make more profit or expand the business.

2.5 Decision-making

Investors have limited capital for investments. For this reason, they have to decide in which available alternatives they want to invest (Tziralis et al., 2009). According to Pyhrr et al. (1989), investors' decisions are affected by many biases and incoherent preferences. These have to be identified and understood when creating a successful investment strategy. Many investors overreact to present knowledge and facts. They might become too optimistic in their decisions if the received data is beneficial. Undesirable data can make investors become too pessimistic when making decisions. The investors try to forecast the future by the aid of the current market situation. Shepherd, Williams & Patzelt (2015) state that, even when there is high uncertainty and time pressure, the investors must make decisions related to the business. It is important to understand how the investors make their decisions for future actions. The decision-making process includes these important factors: how the investors experience the possibilities, what kinds of opportunities there are to entry or exit markets, biases, investor's personality, and the business environment aspects.

According to Davidsson & Honig (2003) and Florin, Lubatkin & Schulze (2003), entrepreneurs and investors have individual differences in their human capital. Human capital includes education, background, and experiences. These features have a meaningful influence on recognizing opportunities. If they have prior knowledge and if few competitors exist in the same field, investors are usually willing to invest in properties where they see high potential value (Mitchell & Shepherd, 2010). These possibilities are based on customer demand and market-focused business operations (Shepherd et al., 2015; Casson & Wadeson, 2007).

According to McKelvie, Haynie & Gustavsson (2011), environmental conditions have influence on decisions. Uncertainty and circumstances in the market must be considered when making decisions. For example, technological modifications and uncertainty of demand reduces willingness to invest. The final decision is a combination of individual and external factors (De Carolis & Saparito, 2006). Emotions play also a role in decision-making (Shepherd et al., 2015). For example, fears or hopes can influence decisions. Fears might reduce interest to invest, and delighted feelings increase attractiveness to invest (Welpe, Spörrle, Grichnik, Michl & Audretsch, 2012). An individual's characteristics influence financial perceptions and decision-making. Gambetti & Giusberti (2019) state that socioeconomic factors also influence decisions, for example, gender, age, marital status, and education. It has been researched that rich older men who are married and have a good education are willing to take higher financial risks compared to many other groups. Many research also show that men are willing to take more risks than women (Figner & Weber, 2011). However, researchers think that differences between genders are more affected by cultural behavior than differences in risk attitude (Weber, 2010). Risk attitudes do not usually differ between women and men (Figner & Weber, 2011).

According to Fabozzi & Markowitz (2011), risk-averse investors choose less risky investments. When two options provide the same expected revenue, investors choose the one with lower risks. Hillson & Murray-Webster (2012) state that risk-averse investors are very sensitive to risks and want to avoid all large risks. Such investors are very careful in their decisions. However, being too careful, they might also miss good opportunities. Risk-averse investors refrain if all the given options are less preferred than their expected values (Wakker, 2010). According to Hillson & Murray-Webster (2012), investors seeking risks are not afraid about uncertainty and large risks. They might also see risks as opportunities. They think that successful business includes a certain number of risks, and they are willing to take them. These kinds of investors might sometimes be overconfident and might not see challenges early enough. According to Tversky & Kahneman (1992), it is obvious that investors try to avoid large risks when making decisions under uncertainty. Investors usually prefer a small likelihood to win high profits over the expected value of the investment. Risk-seekers are a dominant group if investors have to select between a doubtless loss and a remarkable likelihood of a greater loss.

Private investors invest their own money, and they have to face the results of their own risk. Active investors look for new investments annually. Occasional investors invest less frequently. Investors might face many challenges, for example, lack of market and business knowledge, unrealistic targets, lack of a long-term plan, and comprehensive controlling of the investments. To avoid these challenges when investing, it is important to know the business and markets well. Financial targets should be realistic, and potential attractive investments should be sensed. (Feeney, Haines & Riding, 1999.)

2.5.1 Affordable loss

Affordable loss means how much loss investors can afford and how much they are willing to lose with their investments. The aim is to minimize potential losses. One option is to begin investing step-by-step to lower the risks. If the achieved result is as planned, the business can proceed with larger steps and financial efforts. Investors need to decide how much of their time and money they are willing to invest on each investment. They also have to predict which investments are the most profitable and put effort into them. Positive aspects, such as passion, commit the investors more to the investments. In addition, included risks might be larger in these investments. (Martina, 2020.)

Affordable loss describes decision-making under uncertainty to achieve the best possible result. There are three views in the entrepreneurial process: recognition, discovery, and creative. In the recognition stage, the existing supply and demand resources are considered and combined to obtain the best possible result. The future is unpredicted and investors have to trust on the knowledge what they have at the moment. In the discovery process, there are risk and rationality. There is demand or supply, but not both. Risk arises when an investor is searching for unknown features. In the creative process, new opportunities are created. (Dew, Sarasathy, Read & Wiltbank, 2009.)

2.6 Risk management process

Curcio, Anderson & Guirguis (2014) state that risk management is critical for every business. Risk management consists of analysis, identification, and quantification of the uncertainty and potential unprofitable business in the portfolio. It must be considered if an investor prefers to stay in the current financial situation or tries to reduce risks with proper actions. The actions create buffer, highlight the investment targets, and increase resilience against risks. According to Hillson & Murray-Webster (2012), a risk might include uncertainties with many-sided effects. Some uncertainties are, however, not relevant or meaningful for the business. In the risk management process, it is essential to estimate the largest and most relevant risks to the business.

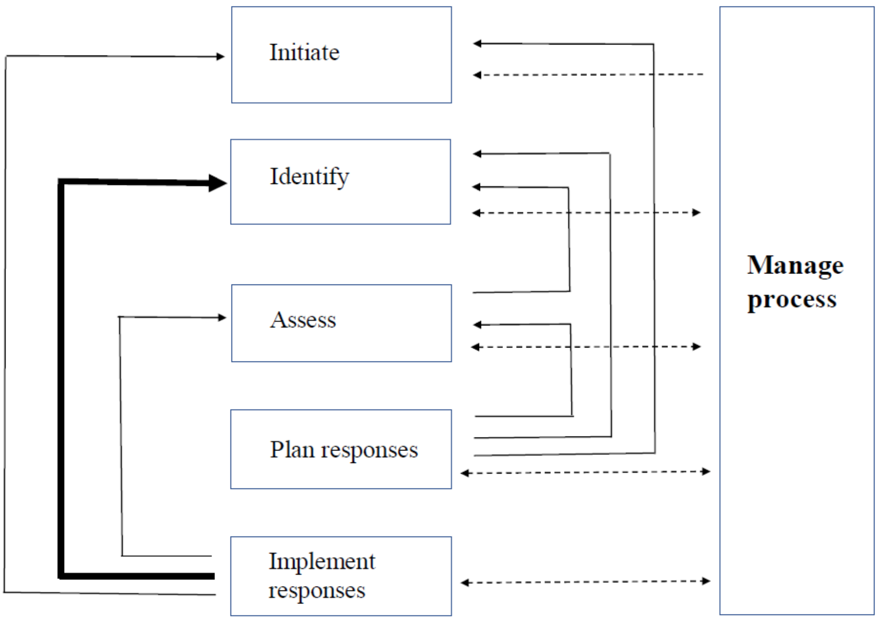

Figure 3. Typical risk management process (Hillson & Murray-Webster, 2012)

When managing risks, Hillson & Murray-Webster (2012) emphasize that individuals' decisions play the major role in the process. The attitudes of individuals have great influence on the final results and conclusions. Initiation is the first step in the risk management process. In this stage, the investors and business acquaintances discuss the risks and agree which are the most critical. Different kinds of strategies can be used. The strategy must be tailored for each process. A limited, quick process might be a good choice for a minor challenge. If a challenge is larger, a more detailed and longer process should be considered. In the beginning of the process, it is essential to concentrate on the perceived riskiness and the most important factors. Individuals might experience a certain risk in different ways. An investor might consider something as a big risk, but another investor might experience it as just a minor problem. These differences influence decision-making. Therefore, the details and the goals must be clear to all team members.

Identification is the second step is the process. Hillson & Murray-Webster (2012) suggest that as much information as possible should be collected from the business or branch. Risks should be identified and the largest risks prioritized. When identifying, all the potential risks should be discussed. As already mentioned, people might have different opinions concerning what kinds of risks are the most essential ones and how much uncertainty is acceptable. According to Aven (2008), it is important to identify the risks; otherwise, it is difficult to protect the business from them. Therefore, this stage is crucial. The information should be reviewed critically and not just appraised from the previous experience or knowledge.

According to Hillson & Murray-Webster (2012), the identified risks are assessed in the third stage. The greatest risks are researched more closely. The appraisals can be qualitative or quantitative. Risk assessment includes risk analysis and risk evaluation. In this stage, different options are compared. Aven (2008) states that different alternatives to reduce the risks should be considered. In this stage, according to Louisot, Condamin & Naim (2014), an investor estimates the most critical risks and decides which are the most essential to take into account. This stage is an important phase in the strategy. When an investor has extensive knowledge about the business and its risks, the amount of uncertainty decreases. There is not so much randomness left in occurrences.

According to Hillson & Murray-Webster (2012), qualitative risks include two sides: the probability of the risk happening in the future and the consequences if the risk realizes. A risk can either be a threat or a possibility. Quantitative risks are calculated with computer programs and techniques. The data is researched more closely. The aim is to support the decision-making.

According to Hillson & Murray-Webster (2012), the fourth stage is the response planning. The essential operations are planned. The strategy must be effective, executable, and economical. The best strategies are chosen. The aim is to avert hazards and maximize possibilities in the business. According to Aven (2008), some limitations may affect the results, for example, limited resources, strict schedule, or limited information.

According to Hillson & Murray-Webster (2012), the final stage is implementation. The agreed actions are realized. The detected risks should be reduced after these actions. When the actions have been completed, the risks should be restricted. The aim is to minimize the threats and concentrate on the sides of the business with most potential.

3 REAL ESTATE INVESTING

This chapter discusses real estate investing and the risks related to it. In addition, different kinds of investing strategies are introduced. Diversification of portfolio is a key element for reducing risks, and different types of investment risks are introduced.

3.1 Real estate investment strategies

Real estate is one option for investing portfolios. Manganelli (2015) states that the rental market is diversified from the sales market. Investors buy apartments to receive rental income from tenants. The profit rate depends on the number of rented apartments and the level of rentals. According to Roque (2011), the most important considerations when buying an apartment are property valuation, existing and future target groups as tenants, good location, past experiences, and lending options. It is important to know the market and the area before investing. The growth potential and future prospect of the area must be considered.

According to Haight & Singer (2005), the real estate business has two main purchasing strategies: purchasing apartments at market price for long-term renting or purchasing apartments below market price and renovating (flipping) them. After renovation, the value of the apartment usually increases. Pagliari (2020) states that there are three general strategies in real estate investing: core, value-added and opportunistic. Core strategy usually leads to a low-risk/low-return result. Opportunistic strategy offers a high-risk/high-return result. Value-added strategy lies between these two.

According to Kaarto (2015), profit in real estate investing consists of two main factors: increase in value of an apartment and/or cash flow. These factors do not exclude one another, meaning that profit can be obtained from both at the same time. An investor who prefers a strategy with cash flow is targeting to reach wealth. An investor who concentrates on increasing value usually targets for short-term investments. Vuokranantajat (2019b) states that increasing value has traditionally been a significant part of real estate investing. It is important to pay attention to the different kinds of suburbs and cities. The city centers and other popular parts of the city are more expensive, while prices are much lower in some suburbs. The prices are influenced, for example, by transportation improvements, new construction projects, new schools, or new large firms in the area.

According to Haight & Singer (2005), markets are efficient if there are many buyers and sellers. All of them try to maximize profits and are looking for the best deals. If all of them have the same information, apartments are probably sold for their true value. If some buyers do not have the same information, it is possible to reach more profit. It takes effort to find good deals. Pyhrr et al. (1989), emphasize that investors aim is to maximize profits. The goal is to maximize returns relative to risks. Creating a successful investment strategy helps to decrease mistakes when making decisions. Careful planning is an essential part of investing.

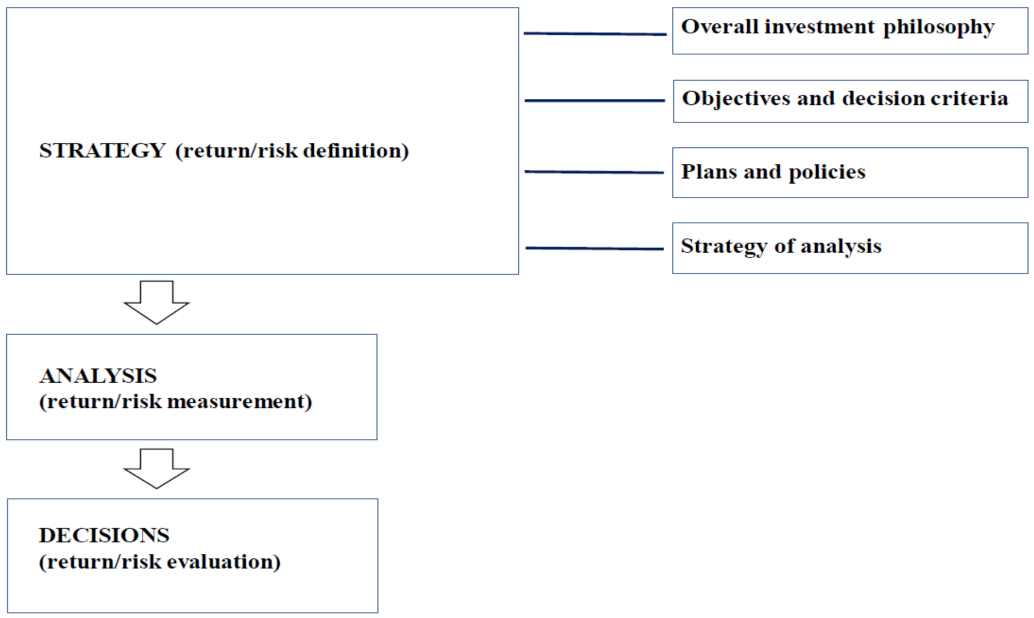

Figure 4. Framework for an investment strategy (Pyhrr et al., 1989)

An investment strategy is a combination of expected returns and risks that have to be considered. According to Pyhrr et al. (1989), investment philosophy describes how general principles and individual experiences and thoughts influence each investor’s strategy. The philosophy summarizes investor’s financial resources and other available resources and capacities. The philosophy defines how large of a risk the investor is willing to accept for expected returns. Objectives are the targets that should be achieved. In general, investors have many targets: general and individual, economic and noneconomic, and short-term and long-term projects. Investors must decide what kinds of actions to use for the targets. Tziralis et al. (2009) state that the goal is to achieve the best possible solution for each project. This definition seems simple; it is actually quite ambiguous. An investor should choose the investment option that has the best value of the criterion. However, there might be some restrictions for projects (e.g., budget limitations).

Appropriate investment plans must be made. If the first plan does not work properly, another plan must be used. Policies control the plan implementation and reduce the number of choices. Investment philosophy describes how much time and effort an investor is willing to give. An investor can invest directly or indirectly. When choosing indirect investing, there is a firm or a partner with whom the deals are made. Investing takes time and effort, and an investor should consider if she/he is willing to invest lightly or if investing becomes a full-time job. An investor can be passive or active. A passive investor is constantly observing the business and planning new deals. It has to be considered if the investor is willing to handle all the issues related to the business by herself/himself or if she/he will use external support for taxes, accounting and legal work from consultants and experts. (Pyhrr et al., 1989.)

3.2 Demand for apartments

Glaeser, Gyourko & Saiz (2008) state that apartment prices result from supply and demand. However, in the short-term, the supply of apartments is inelastic. Prices are volatile to changes in demand. The more inflexible the supply is, the more changes in demand increase prices. A housing bubble means that demand is in shock and affects the prices. It is a temporary increase in optimism about prices in the future. The situation impacts more on prices and less on the construction business. In the construction business, the housing supply is more inflexible. According to Eerola & Lyytikäinen (2015), circumstances with fewer uncertainties usually result in higher selling prices of apartments. If the value of an apartment is overestimated, owners will set too high a price. In that case, it is likely the apartment is not sold quickly. If value is underestimated, the apartment will be usually sold fast. If sellers receive new, positive information, prices of apartments become higher. If potential buyers also see the new information, it is likely that the apartments will be sold quickly.

According to Alho, Härmälä, Oikarinen, Kekäläinen, Tähtinen & Vuori (2018), urbanization and changes in the labor market are the most relevant factors affecting the demand for apartments. Sizes of families have been decreasing, people are aging, people prefer to move closer to diverse services, and many people move to large cities because of jobs. For small studio apartments, the demand is high because of their cheaper prices and rents. 45 % of Finnish households consist of only one person, but only 15 % of all the apartments are studios. People who want to buy their first apartment are mostly interested in studios. However, many real estate investors also want to invest in studios. The high demand for studios increases the prices, especially in the most popular areas. According to Kannisto et al. (2020), 16 % of apartments bought by investors in 2019 are located in Helsinki, 12 % in Tampere, 7 % in Oulu, 6 % in Turku, and 6 % in Espoo. More than 50 % of all studios sold in 2019 were purchased by real estate investors. More than 85 % of the apartments bought by investors were studios or one-bedroom apartments.

In 2019 there were more than 3 million apartments or houses in Finland. However, about 300,000 apartments or houses were without permanent residents. The number of empty apartments has increased by 130,000 in the last 20 years. The cities with the highest number of empty apartments were Pori (13.8 %), Vaasa (13.3 %), Rovaniemi (12.3 %), Hämeenlinna (12.2 %), Mikkeli (12.0 %), and Kotka (11.5 %). Such a large number of empty apartments around Finland is alarming, especially since the empty apartments are not just in the countryside but also in the middle-sized towns. (Paavilainen, 2020.) The shortest selling times of apartments in 2020 were in Helsinki, Espoo, Tampere, Turku, and Vantaa. The longest selling times were in Kouvola and Hämeenlinna. 31 % of the apartments for sale in Kotka and 21 % in Pori were listed for sale for more than a year. Kymeenlaakso, Etelä-Savo, and Lapland had the most apartments listed for sale for over 12 months. In the Helsinki metropolitan area, only 2.6 % of the apartments were on sale for as long. (Tilastokeskus, 2021.)

3.3 Portfolio and diversification

Markowitz (1952) states that, according to modern portfolio theory (MPT) investors should allocate their resources and assets based on the risk-return relation. They should estimate how much asset return they will achieve from each investment. It is relevant that the portfolio is diversified to reduce excessive risks. According to Kevenides (2002), a portfolio consists of different kinds of assets. A portfolio usually consists of many assets, but it is possible to have only one asset. A portfolio should consist of relevant assets which include an appropriate amount of diversification. If there is enough diversification, a portfolio contains less risks. In diversified portfolios, the returns are usually expected to be average but not maximal.

According to Fabozzi & Markowitz (2011), investors with an active portfolio strategy utilize available data and forecasting techniques to create the best possible value for their investments. It is important to identify all the factors that impact portfolio performance. Investors with a passive portfolio strategy do not put much effort in different kinds of options. They think that diversification is enough to create a successful portfolio. They think that market prices reveal the actual situation on the market. However, many investors use both strategies. Considering which strategy to use depends on how price-efficient the market is, how large the risks are, and what the amount of debt is. Price-efficiency means how much effort the investor must take to obtain more revenue than by staying with the passive portfolio strategy. Possible risks and transaction costs must be considered when choosing the active strategy. An efficient portfolio consists of investments that give the best possible revenue and a tolerable amount of risk.

According to Kannisto et al. (2020), risks related to real estate investing can be estimated by the price and rental income relation, for example, how many years of rental income it takes to pay the whole price of the apartment. In the city center of Helsinki, it takes almost 28 years, on average, but only 13 years in the eastern suburbs of Helsinki. In other big city centers, paying the whole price of an apartment takes approximately 15–20 years. The estimated time will be even longer if the prices of apartments increase faster than rents. De Wit (2010) states that an investor can focus on a single geographical region or select many regions. It is important to know the areas before investing. Real estate returns are strongly influenced by geographical and property features. It is essential to specify which factors can be utilized to achieve the highest benefits and expected return. It can be determined which regions and property types are the most effective ones to reduce the volatility of the portfolio.

Huisman & Kort (2015) state that the right timing is essential in investing. When the portfolio grows, an investor takes a risk in case of uncertain demand. If there is not enough demand, the returns might stay low, but expenses are still running. According to Viezer (1999), real estate investment portfolios are usually built one by one. It takes significant time and effort to find all the best properties. Many portfolios are a combination of the best bargains. However, investors may see the best features differently. Investors should calculate minimum acceptable rates of return for each property before purchasing. It should be considered individually how to maximize profits and minimize risks for each investment. The investor should allocate her/his resources for the best deals on the market. She/he has to decide what kinds of apartments should be purchased in which locations.

According to Viezer (2000), diversifying means that the portfolio should consist of different kinds of properties in different locations. For example, it is risky if all the apartments are located in the same area. Diversifying the investment portfolio decreases risks if something unexpected occurs, for example, a university campus closes or relocates. Other potential risks can be lease terms, leverage, and tenants. Seiler, Webb & Myer (1999) state that the most important reason for diversification is to reduce revenue volatility if there are changes in the market. If the revenue of the investments is foreseeable, weights of the portfolio can be changed, and investors can purchase new properties that offer better profits. Kay (2021) states that the best way to diversify any portfolio is to invest in multiple types of properties in different locations. Investors should not invest in only one category or class of property. They should purchase properties in different locations, ideally in different cities around the country.

3.4 Risks in real estate investing

According to Kaiser & Clayton (2008), risk in investing is based on the uncertainty and expected revenue in the future. Risk can be seen as probability distributions of future returns, and investors can measure risk based on the expected revenue. Standard deviation of revenue is the most used barometer in investing. However, standard deviation is probably not the best option for analyzing risks in private real estate. It is important to control the risks. Long time horizons, diversification, hedging, and a well-planned strategy can all reduce investment risks.

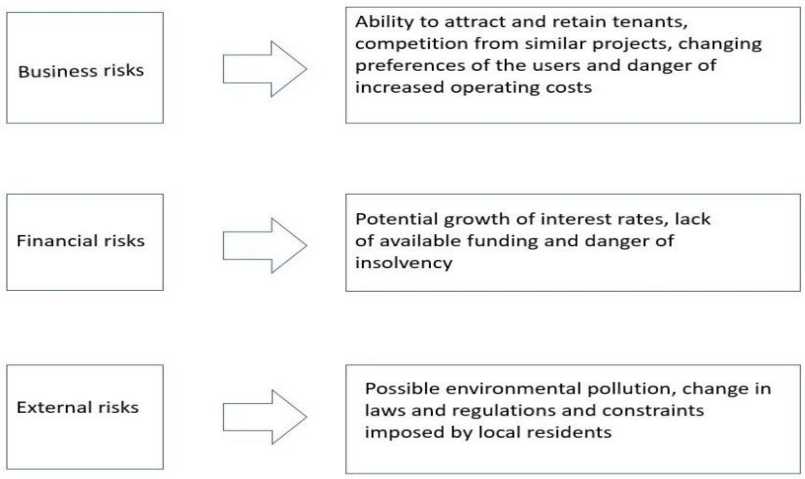

Figure 5. Risk classification of real estate investing (Manganelli, 2015)

According to Pyhrr et al. (1989), there are several risks related to real estate business. Business risk is a risk when expected returns will not be received. These kinds of risks are, for example, credit losses, changes in operating expenses, and changes in the value of the property. Financial risks are related to debt financing. There is a risk if charges in debt increase and interest rates are higher than in the past. Increased expenses reduce the profit and cash flow received from the investment. Orava & Turunen (2020) admit that external risks are often hard to predict. These include political risks such as changes in taxes or in housing benefits.

Manganelli (2015) states that risk-taking is a relevant part of investors' choices. Some investors are looking for greater risks, and some try to avoid them. Most investors are probably between those two variables. They will accept increased risk only if the expected returns are high enough. Investors' aim is to make profit. All investors have the same target, the expectation of a financial return as a reward for the risk, which is included in the business. The expected return and risk level depends on the aim of the individual investor.

3.4.1 Different types of risks in real estate investing

If an investor's main investment strategy is to receive cash flow, Orava & Turunen (2020) state that the current price of an apartment is not very relevant. When apartments are purchased for the long-term, even for decades, and at good locations, it is likely that the prices of the apartments will increase. The current value is important if apartments will be sold or bought. A price risk can usually be avoided by investing in continuous cash flow and not for increase in value. Another choice is to minimize the amount of debt. Market risk means that market prices are changing in an unwanted direction (Baker & Filbeck, 2015).

According to Kevenides (2002), changes in interest rates will also affect real estate investing. In addition, investors' expected returns increase if interest rates rise. The use of leverage increases risk. Orava & Turunen (2020) state that investors might feel attracted to taking on debt when interest rates are low. If the interest rates increase, a large amount of debt increases the risk. Rental income provides a stable return during low interest rates (Vuori, Karikallio & Keskinen, 2019).

According to Orava & Turunen (2020), it is important to know what kinds of renovations are coming in the future. The largest and most expensive renovation is pipe repair. The other renovations include facade repair, balcony repair, and new window installation. During a pipe repair, it is usually not possible to live at an apartment, and rents are not received from those months. It is important to consider these expenses before buying an apartment. These risks can be avoided by buying an apartment in a new building. When buying an old apartment, documents about the building must be read carefully. The documents include the past renovations and the renovations planned for the next five years.

Orava & Turunen (2020) admit that political risks are difficult to forecast. Risks to real estate investors include increased taxes, decreased tax deductions, and changes in study grants or in housing benefits. Additionally, closure of a university campus must be considered as a risk. Goddard & Marcum (2012) state that legislative risks might include changes in the laws which affect real estate investors' returns or make the business less attractive. Investors have to follow possible changes in tax laws or rent controls that may affect their rent revenue.

According to Rymarzak & Sieminska (2012), market conditions define the value of a property. A good location has an important impact on the value. The decision for location can mean success or a failure to an investor. When considering the location, elements such as previous knowhow and the earlier experiences of other people can influence the decision. The attractiveness of the location is defined by the market, employment, or transportation infrastructure. Haight & Singer (2005) state that location is an important factor when defining the value of a property. Location defines the demand. For example, apartments close to a university attract students.

3.4.2 Urbanization

Lieser & Groh (2014) state that urbanization has a relevant impact on real estate investors' decision-making. Many residents will be living in urban areas in the near future, and more rental apartments are needed. This attracts many investors but also makes it harder to find apartments on the market at a reasonable price.

According to Loikkanen & Laakso (2016), although the share of population and livelihoods in rural areas has decreased, Finland is still fragmented in the sense that urban areas are relatively far apart and many functional urban areas are quite large. Concentration has meant population and job growth covers a relatively small area in the largest urban areas. The largest concentration is in the Helsinki metropolitan area, where the combined area of the four cities (Helsinki, Espoo, Vantaa, and Kauniainen) is only 0.2 % of the total area of Finland, yet 20 % of Finns live there. Urban areas are attractive because of available jobs, education possibilities, social networks, functional public transport, and diverse services and activities.

Finland is a large country with only 5.5 million inhabitants. Tervo (2016) states that this fact affects many issues regarding real estate. Fast economic expansion and textural modifications have been characteristic to Finland. These factors have affected centralizing of economic activity and the inhabitants. The trend has been that large cities in southern Finland attract people. In the 1990s after the depression, the most attractive areas to move were cities with universities. Employment possibilities were the best in these areas. Approximately 70 % of new jobs were created in Helsinki, Tampere, and Turku. People have to live in areas where there are enough available jobs. According to Kempas & Tegelberg (2021), prices of apartments in Finland started to diverge rapidly in the 2010s. The most important reason is the megatrend of urbanization. Vuori et al. (2019) state that the regional differentiation of the housing market in Finland has intensified in the 2010s. Rapid urbanization is currently the main driving force behind the development of the housing market.

Ylä-Outinen (2019) states that 70 % of Finns will be living in the six largest cities by 2040. Urbanization is a trend that cannot be slowed. It is forecasted that the number of inhabitants will increase only in Uusimaa, Aland islands, Pirkanmaa, and Varsinais-Suomi in 2019–2040. According to Hypo's statistics (2020), there are over three million apartments and houses in Finland, but 500,000 apartments are in wrong locations when considering households' needs and future aspects. This will make apartments difficult to sell in some parts of Finland. Prices are becoming too high for many people in the most expensive cities. Paananen (2019) sees that differentiation is a big issue in real estate. Ari Pauna, CEO of Suomen Hypoteekkiyhdistys, comments that only the Helsinki metropolitan area, Tampere, and Turku have effective real estate markets. Even in smaller towns in Uusimaa, there might be difficulties finding buyers. District researcher, Timo Aro, states that in Finland it is not common to move to another region for work. When people own an apartment, it is not easy to move.

After the Helsinki metropolitan area, the other most populated areas are Tampere, Turku, Oulu, Jyväskylä, Lahti, and Kuopio. Rehunen, Helminen & Honkatukia (2019) state that the urbanization rate will increase because of the aging population and a labor market focused in the large cities. Conversely, remote work has increased, creating possibilities to live farther from work. Even though apartments in the Helsinki area are much more expensive, it seems that people still want to live in the center of growth. Even job opportunities and cheaper apartments are not attractive enough reasons to move. Demand and supply of apartments is disproportionately divided in parts of Finland. Small towns must consider how to attract people to stay in their area.

Hypo (2021) categorizes Finnish municipalities according to risk rating. None of the municipalities are categorized at AAA level. The second highest AA level includes only Helsinki. Level A includes Espoo, Tampere, Turku, Vantaa, Kaarina, Lempäälä, Liminka, Naantali, Oulu, Pirkkala, and Sipoo. Only 32 municipalities have a good credit rating, BBB or better. Approximately 50 % of Finns live in these areas. All Finnish cities with at least 50,000 inhabitants have at least a B rating. However, Kouvola, Kotka, and Mikkeli are losing inhabitants, which will affect the value of their apartments. Approximately 50 % of the municipalities have a C rating, which means risk rating. About 100 municipalities (e.g., Kuopio, Lahti, and Lappeenranta) are between good and risk credit rating. This rating by Hypo informs investors about which areas are attractive and how risky the regions are.

4 RESEARCH DESIGN AND METHODS

This chapter describes the research methods used in the study. In addition, the interviewees are introduced. The data collection methods are presented, and reliability and validity of the research are described.

4.1 Research design

This study researches how Finnish real estate investors estimate risks, what kinds of risks they face, what kinds of investment strategies they prefer, and how they make their investment decisions. Real estate investors have to estimate the risks before buying and renting properties. This study researches how real estate investors try to reduce the risks.

Seven Finnish real estate investors were interviewed for this study. These interviewees were chosen in order to receive different kinds of views and strategies. All of them own numerous apartments and have many years of experience in real estate investing. However, they work full-time elsewhere and manage real estate investing in their free time. Only one (Investor D) is a full-time investor working for her properties. All the interviewees are active in the real estate business and are constantly developing their knowledge. With this experience and breadth, real estate investing could be described as their part-time job.

According to Hirsjärvi & Hurme (2000), interviewing is one of the basic forms of information acquisition. A research interview is one of the most used methods. As a highly flexible method, the interview is suitable for a wide range of purposes, can be used almost anywhere, and can provide in-depth information. In the interview, there is a direct linguistic interaction with the interviewee, and this situation creates an opportunity to direct the acquisition of information to the situation. It is also possible to identify the motives behind the responses. Tuomi & Sarajärvi (2002) see that the advantage of the interview is flexibility. The interviewer can repeat questions, correct misunderstandings, clarify the wording of the expressions, and have a discussion with the interviewee. The most important thing is to gain as much information as possible. For the success of the interview, it is recommended that the interviewees familiarize themselves with the questions or themes in advance.

4.2 Introduction of the interviewees

All of the interviewees own numerous apartments and have many years' experience in real estate investing. I wanted to interview different kinds of investors from both genders and from different age groups to receive a broader overview of how they estimate risks and what kinds of strategies they use.

Investor A is a 51-year-old male from Joensuu. He owns 27 apartments: 26 in the Joensuu area and one in Tampere. He bought 15 apartments in new buildings and 12 in old buildings. He buys only studios or one-bedroom apartments. Recently, he has been concentrating in new buildings. He owns a row house (five apartments), but the other apartments are in apartment buildings. He has been a real estate investor since 1993. He thinks that supply and demand meet well in the Joensuu area and that marketing time is usually short. However, during Covid-19, demand has been lower and marketing times longer.

Investor B is a 34-year-old female who currently lives abroad. She owns 26 apartments in the Tampere area. She purchased six apartments in new buildings and 20 in old buildings. She buys all of the apartments without seeing them. She makes conditional offers. If the apartments are like in the pictures, she buys them after one of her family members has checked them in Tampere. Previously, she bought many studios, but during Covid-19 she has concentrated more on apartments with one or two bedrooms. She has been investing since 2014.

Investor C is a 45-year-old female living in Helsinki. She owns 21 apartments with another person. Ten apartments are located in Helsinki, 10 in Vantaa, and one in Tampere. She bought four apartments in new buildings and 17 in old buildings. The apartments are studios or one-bedroom apartments in locations with good public transport. She flipped for the first time recently and is interested in flipping more apartments. She has been investing since 2009.

Investor D is a 41-year-old female from Pirkanmaa. She owns 11 apartments in Tampere with another person and three apartments in Tampere on her own. All apartments are in old buildings, and 13 of them are studios. She is on the board of housing associations in nine buildings. Her strategy is to create additional value by renovating apartments and being active on the board. She is looking for housing associations that are not in good condition. She knows many housing associations in certain neighborhoods in Tampere and has concentrated her investments in the area. She has been a real estate investor since 2013.

Investor E is a 44-year-old female from Helsinki. She owns 13 apartments with another person and two on her own. Seven apartments are located in Vantaa, three in Espoo, and the rest in Helsinki, Järvenpää, Lohja, Tampere, and Mikkeli. Most of her apartments are studios, some are one-bedroom apartments, and a few are larger apartments. Three apartments are in new buildings and 12 in old buildings. She prefers apartments located close to train or subway stations. Her target is to be financially independent. She has been investing since 2010.

Investor F is a 28-year-old male from Jyväskylä. He owns 21 apartments. They are located in Jyväskylä, Oulu, Vaasa, Rauma, and Lahti. Twelve of the apartments are located in Jyväskylä. The apartments are in old buildings, only one was purchased new. He tries to find apartments under market price in cities where the population is growing. He has been investing since 2018.

Investor G is a 36-year-old male from Helsinki. He owns 25 apartments with another person in Jyväskylä, Helsinki, Kerava, Porvoo, and Hyvinkää. In addition, he owns two apartments in Helsinki and three apartments in Jyväskylä. Four apartments were bought in new buildings and 26 in old buildings. All of his apartments are studios. In future, he will buy apartments only in the Helsinki area. He has been investing since 2006.

4.3 Data collection methods

The empirical part of the study was done using semi-structured interviews. According to Hirsjärvi & Hurme (2000), in semi-structured interviews, all interviewees are asked the same questions. They can answer in their own words without being given options. It is characteristic of semi-structured interviews that some, but not all, aspects of the interview are the same.

The interviews were conducted online in Teams, 24.5.–1.6.2021. The questions (Appendix 1) were sent to the interviewees so they could go through the themes before the interview. The interviews were recorded in Teams, with the permission of the interviewees, and transcribed later the same day. The interviews were conducted in Finnish and translated into English. Because of Covid-19, the best solution was to hold the interviews in Teams. The interviewees live around Finland, and one of them lives abroad; therefore, it was easiest to schedule the interviews online. In Teams, the meetings could be recorded, which made it a reliable means to conduct the interviews.

Table 1. Information about the interviews

Investor	Gender	Date of the interview	Duration
A	Male	24.5.2021	1 h 5 min
B	Female	25.5.2021	30 min
C	Female	26.5.2021	38 min
D	Female	26.5.2021	1 h 18 min
E	Female	27.5.2021	44 min
F	Male	28.5.2021	26 min
G	Male	1.6.2021	46 min

4.4 Data analysis methods

Qualitative analysis was used in this study. According to Hirsjärvi, Remes, & Sajavaara (2007), qualitative research seeks to describe real-life situations. Reality is diverse, and qualitative research aims to study a subject as comprehensively as possible. The purpose of qualitative research is to find or reveal facts rather than verify existing claims. Qualitative research is a holistic acquisition of information, and material is collected in real situations. The researcher relies on her own observations and discussions with her interviewees. The researcher seeks to uncover unexpected facts. The research plan can be edited during the process. The cases are treated as unique.

Hirsjärvi & Hurme (2000) state that factors that emerge from the material which are common to several interviewees are examined in the analysis phase. The results may be based on the themes of the theme interview, or at least the main themes will be highlighted. In addition, numerous other themes are often more interesting than the original ones. The themes raised in the analysis are based on the researcher's interpretations of what the interviewees have said.

The data received from the interviewees was analyzed and similarities from the answers were collected. Seven interviews were enough to provide some similarities but also different perspectives. After the transcript became available, it was easy to make notes about the most interesting aspects of each interview.

4.5 Reliability and validity

According to Hirsjärvi et al. (2007), reliability and validity of the results vary in different studies. Therefore, all studies aim to assess the reliability of the study conducted. Reliability means the repeatability of the results. The target is to achieve results that are not random and ensure that other researchers will receive similar results. Reliability means that when the same person is interviewed, similar results are attained in two studies (Hirsjärvi & Hurme, 2000).

According to Hirsjärvi et al. (2007), another concept related to research evaluation is validity, the ability of a meter or research method to measure exactly what it is intended to measure. For example, interviewees may have understood some questions contrary to what the researcher thought. Validity refers to whether the study has examined what has been promised (Tuomi & Sarajärvi, 2002). Soininen (1995) states that reliability and validity are connected. Reliable measurement always requires high validity, which is confirmed by high reliability.

The aim is that the reliability and validity of this study are as high as possible. The interviewees are anonymous in this study, which might have encouraged them to speak more openly. The questions were sent to them beforehand, and they had time to go through the questions. The interviews were conducted via Teams, and there were no disturbing factors such as background noises. The interviewees had enough time to answer the questions, and they could ask the researcher if any questions were unclear. When analyzing the results, the researcher’s own experience of the subject helped to process the answers. When the subject is familiar, it is easier to analyze the data.

5 EMPIRICAL FINDINGS

This chapter introduces the results of the study. The results were received from seven real estate investors operating in Finland. At the beginning, they were asked general questions about their background and investments. The interview consisted of 12 questions related to real estate investing, risks, decision-making, and investing strategies.

5.1 Investment strategies

Investor A concentrates on studios or one-bedroom apartments in the Joensuu area. He knows the area well. He lives in Joensuu and takes care of the rentals by himself. He expects good cash flow from his apartments, but he is not expecting much increase in value. He is looking for apartments that are easy to rent and effortless to manage. He prefers apartments in good condition, which helps in finding good tenants.

Investor B invests only in the Tampere area because she has lived there and knows the suburbs well. She uses mostly a buy-and-hold strategy, which means that she buys apartments for the long-term. She buys apartments without seeing them. She is always looking for apartments under the market price. Many of her apartments are located in the Tampere suburbs, not in the city center. She always renovates the apartments, if necessary, to attract better tenants.

Investor C invests in Helsinki and Vantaa. She thinks that good cash flow is important. However, if an apartment is in the Helsinki city center, it might be acceptable even if the cash flow is negative. She lives in Helsinki, which is why she owns apartments nearby. She takes care of the rentals by herself, and it would be difficult for her if the apartments were in other cities. Helsinki and Vantaa are growing cities. Even if profits in the area might be a bit lower than in other areas, she still prefers to take care of everything by herself. She recently flipped an apartment for the first time and succeeded beyond her expectations. She is interested to flip and sell renovated apartments if she can find suitable ones.

Investor D bought apartments in a few Tampere suburbs that she knows well. Her strategy is to renovate apartments and increase their value. She is looking for small housing associations that have development potential. Her target is to be selected to the board so that she can take part in development decisions and plan renovations. She has a great deal of experience in renovating and wants to increase the value of the buildings based on her own knowledge. She takes care of the rentals by herself. She is interested in buying entire buildings, and they might be located outside of Tampere because of lower prices.

Investor E prefers to buy apartments in the Helsinki metropolitan area. However, she owns a few apartments in smaller towns. She is looking for apartments with good public transport connections, close to subway or train stations. In the beginning, she expected increasing value, but her apartments in Vantaa have not increased in value. She regrets somewhat that she bought so many apartments in the same Vantaa suburb. She thinks that she should have done more diversification. Recently, she has bought apartments in Espoo, close to upcoming subway stations. She has also flipped apartments, but increased value after the renovations was not high enough. She has decided to keep the apartments in her portfolio for now.

Investor F concentrates on a buy, rehab, rent, refinance, and repeat (BRRRR) strategy. He buys apartments in bad condition, renovates, then rents them. After renovation, the value of an apartment usually increases, and he can get more loan money from the bank. Through appreciation of the apartments, he was able to buy more apartments. He has also flipped apartments. It is easier to receive capital faster through flipping than renting. With the BRRRR strategy, he prefers good cash flow. He takes care of most of the rentals by himself. He looks for old apartments in middle-sized towns. His target is to find apartments under a market price and renovate them. He often makes low offers to be able to increase the value after renovating. He is also willing to sell apartments if they are not profitable enough.

Investor G has bought apartments in middle-sized towns. However, during the last few years, he has concentrated only in Helsinki. He is looking for apartments in prestigious areas a few kilometers from the city center. He thinks that increase in value is so high in Helsinki that it is worth buying only there. He has sold many apartments, for example, in Jyväskylä and Hyvinkää, to buy apartments in Helsinki. He is looking for apartments in good condition. He thinks that renovating decreases too much profit from returns for the first years.

The investors prefer good cash flow compared to increase in value. However, they do not want the value to decrease. They are looking for apartments that will attract tenants, and they try to avoid empty months in their apartments. When an apartment is attractive and in a good location, it is easier to find a good tenant. The study shows that the investors are looking for tenants by themselves. They are not willing to use agents for renting. They think that it is less risky if they can control who rents their apartment. That is one of the reasons they prefer apartments located close to their homes. They also know the suburbs well in their hometown. They want to meet the tenant before renting or at least talk to them on the phone. They think that these acts reduce risks when selecting tenants.

Most apartments owned by the interviewees are in old buildings. The investors think that apartments in new buildings are too expensive, and it is likely that the value will not increase in the near future. The study shows that the investors buy apartments for long-term. However, if they think an apartment is not profitable enough, they are willing to sell it. Exceptionally, Investor F buys and sells apartments often. He is constantly looking for attractive apartments to buy. He is also willing to sell apartments quickly.

All the investors think it is too risky to buy apartments in areas they do not know in advance. Investor C lives in Helsinki; she owns apartments in Helsinki and Vantaa. Only one apartment is located in Tampere. She thinks that knowing the area is essential and reduces risks.

"Good regional knowledge is a must. You have an advantage because you know better the housing associations. Micro-location is important. In the same area, there are bad housing associations and good housing associations. You will learn which are the good ones. If you are going to an unfamiliar area, then how can you find out which micro-location is good? You get an advantage when you know the area." (Investor C)

All the investors look for apartments below a market price. They make several offers before purchasing, sometimes very low offers. They think that apartments below a market price are the best way to reduce risks and increase value. The apartments can be renovated to increase their value. However, real estate investing has become popular, and many investors are looking for inexpensive apartments. For that reason, it is not easy to find suitable apartments with low prices. Usually, the investors have done many offers before closing deals.

"The price of an apartment needs to be below a market price because it protects against so many risks. If there is, for example, depreciation or if there are unexpected renovations, then the price will protect you if you bought the apartment below a market price." (Investor B)

"Our aim is to buy apartments in poor condition so that self-made renovation can increase their value. The housing association should also be such that there is development potential. The housing association does not have to be in top condition. There may be some renovations that should have been done, and things may not have been handled in the best possible way. It may even be more interesting to us because our goal is that I will be selected to the board of the housing association. Through it, we start to improve the housing association and make value for our own investment." (Investor D)

The investors buy mostly studios because they think that small apartments are profitable and the cash flow is good. There is always demand for studios in good locations. They mentioned that studios should have good public transport connections nearby. Many tenants living in small apartments do not own a car. Covid-19 decreased the demand of studios slightly, but the investors think the change is only temporary. However, they might prefer buying larger studios, 25–30 m^2 instead of 20 m^2. When universities and other schools fully reopen, many students will be looking for studios. They mentioned that good location is essential. Studios close to the city center, universities, and other schools attract young people. A studio located far away in a suburb is unattractive for many tenants.

Investor G invests only in studios because he thinks they are the most profitable investments. He intends to buy apartments only in Helsinki. He has sold some of his apartments, for example, in Jyväskylä and Hyvinkää. He thinks there will be demand for studios, especially in large cities. There are many small households in Finland, and they are looking for inexpensive, small apartments in good locations.

"Before Covid-19, 75 % of people moving to Helsinki were single households. I don't think Covid-19 would change it significantly so that a lot of families would suddenly move to Helsinki. I believe that most of the households moving to Helsinki in the future will be single households. However, single households are most likely to live in studios or in one-bedroom apartments. There is also demand for studios in the future." (Investor G)

5.2 Decision-making for the investments

Decision-making is one of the most important factors in investing. Apartments are expensive, and wrong decisions might cause major challenges. Factors which may reduce investment risks include checking tenant credit information, obtaining information about the development plans of the area, and forecasting the future attractiveness of the area. The more knowledge the investors have, the less risk they experience in their business. All the interviewees have a long history in real estate investing, up to 28 years. When they know the city or suburb well, they can make fast purchasing decisions. When they started to invest in properties, they were more uncertain and considered carefully before buying. After years of investing experience, they are more confident and able to react quicker to attractive deals.

Before purchasing, the investors calculate whether the property is profitable enough. However, profitability depends on the age and location of the building. In new apartments, profitability is lower on average, approximately 4 %. In old buildings, expected returns are higher, and the average target is around 6 %. However, the target depends on the property, and the interviewees mentioned that in some properties it can be 8–12 % or even 20 %. The higher the profit margin is, the higher are the risks. The properties with very high returns are located in smaller towns. In large cities, it is not usually possible to obtain high profits. For example, returns on investments in Helsinki are approximately 4 %.

The investors think that the apartments should be in good condition. If they buy apartments in bad condition, they always renovate them. It is easier to find good tenants when apartments are attractive. It also reduces risks when good tenants are willing to take care of the apartments. If the apartment is not in a good condition, it is more likely that riskier tenants are interested, for example, tenants who receive housing benefits. The investors are looking for apartments that are easy to rent and effortless to manage because of good tenants.

The investors are interested in apartments in good housing associations. They always review carefully the documents of housing associations before making purchase decisions. The most important issues are past and near future renovations, for example, if major repairs such as pipe repair have already been done or will be done in a few years. It is important that the housing associations take care of the buildings and repairs are done on time. If repairs are done too late, the buildings will be damaged, and possibly more expenses will have to be paid. It is essential that the housing associations are well-organized.

Location is important. The investors are looking for properties located in their hometowns or in areas they know well. Many of the investors are not willing to buy apartments in cities that they do not know in advance. They also prefer apartments with good public transport connections, close to train or subway stations. They also try to find out any future development plans in the area or if new buildings will be built nearby.

"I am purely seeking rental income. As such, it has come true because there has not been much increase in value at all. Afterwards, I think that the high rental income should have been given up for a short time to have accepted a lower rental income and possibly received an increase in value in better locations." (Investor E)

"You have to be patient. You shouldn't be nervous if there are not attractive apartments on the market. You shouldn't buy apartments that do not meet your own criteria, then mistakes will usually be made." (Investor D)

Decision-making also includes decisions about tenants. All the investors are looking for good tenants who are satisfied to live in the apartment. Most of the interviewees want to meet the applicants face-to-face. The first impression is important. They want to find good tenants who are reliable and take care of the apartments. They feel that apartments in good condition attract good tenants. They are seeking long-term tenants. Investor D puts much effort into finding good tenants who really want to live in her apartments.

"What I'm especially looking for in tenants, is that they fall in love with the apartment. Because if the apartment is just ok, it will never feel as a home for the tenant. And if it's only a place to sleep, the tenant probably won't stay there for a long time. So, we are looking for tenants who feel that this will become their own home and want to live there for a long time." (Investor D)

"I never actually rent apartments in basic condition because I don't think I can find good tenants for them. Actually, I always do small renovations for my apartments to be able to find better tenants." (Investor B)

The investors are especially looking for apartments below a market price. However, this is not easy because many other investors are doing the same. They must search actively and be quick if a suitable apartment is found. Investor C has also bought apartments below a market price. The apartments have had poor sales advertisements online. Pictures might be of poor quality, or the introductory text is imperfect. Good deals can also be found from estates. Investor C bought an apartment after there had been water damage. The apartment had already been renovated, but potential buyers were afraid of the damage. These kinds of factors scare off many buyers, making it is easier to find apartments below a market price.

"I am especially trying to find apartments below a market price. It has definitely been the basis of the purchase decision that the apartment is relatively cheap compared to other apartments. I think I have succeeded. When I have found this kind of apartment and it has been on public sale, I have been extremely fast. I have bought the apartment before an open house." (Investor E)

Investor B carefully reviews the received information from the housing association before purchasing. She has done many good deals because other potential buyers have not noticed relevant information. If something in the documents is unclear, she always calls a property manager. She asks for example how the pipe repair will be done and how much it is expected to cost. Expenses can vary. Upcoming pipe repairs might put off some buyers. It is possible to find good deals if there are not too many potential buyers interested in the same apartment.

With large portfolios, it is important that the big picture works well. In addition, investors might experiment outside their comfort zones. For example, Investor A bought an apartment in Tampere because of urbanization and the possibility of increased value. However, he is more satisfied with his 26 apartments in the Joensuu area. These are more profitable than the apartment in Tampere. Investor E bought an apartment in Mikkeli, outside of her strategy. Even though cash flow is good from the apartment, she still prefers to own apartments in Uusimaa. These kinds of experiments are possible when a portfolio is large. Risks are not very large if one or two of the apartments are outside of the investor's comfort zone. If an investor notices later that the apartment is not profitable enough or she/he is otherwise not satisfied with it, the apartment can always be sold. Usually, investors have a strategy for making investment decisions, but exceptions can be done.

5.3 Risks in real estate investing

The investors believe that the more they know about the business, the easier it is to reduce risks. When the investment portfolio is 14–30 apartments, it is essential to reduce risks as much as possible before decision-making. The interviewees are looking for effortless apartments and effortless tenants. Returns might be higher in apartments with higher risks, but higher risk apartments also mean more effort. With so many apartments in the portfolio, it is not possible to manage them with a high risk level. High risks mean, for example, apartments located in suburbs with bad reputations or areas which do not attract many people. Such apartments attract tenants with higher risks, the unemployed or people living with housing benefits, for example. Usually, such tenants do not attract real estate investors.

The investors are looking for reliable tenants working full-time or studying. The target is that leasing works as effortlessly as possible. Risks must be identified before renting, and a trustworthy tenant is a key factor in risk management. All of the investors agreed that finding a good, reliable tenant is one of the most important things to reduce risks. Good tenants pay their rents on time and take care of the apartment. Good tenants are effortless, and the investors feel that they can trust their tenants. The investors want to take care of the renting process and find tenants by themselves. They feel that they have more control when they look for tenants by themselves and meet them face-to-face. They feel that renting apartments via agents is riskier for them. When the investors meet applicants, they can feel if the person is the right one for the apartment. They also want to feel if she/he is trustworthy and how she/he acts. They feel that these face meetings-to-face meetings with tenants reduce risks. They think that the deposit for an apartment should be between 1–3 months, usually two months. However, if they have to rent an apartment to someone who they feel is not so reliable, they require a deposit of three months. If the tenant does not pay rent or if the apartment has been damaged, compensation can be taken from the deposit.

Investor A thinks that too many construction projects with too many small apartments built decreases demand. However, new buildings can only be built in specific locations. It is not possible to build in the city center because it is already full. Usually, new apartments increase the value of old apartments in the area. Suburbs can also be more attractive if new buildings are built. In some locations, demand decreases if too many apartments are built at the same time.

"The biggest risk in real estate investment is the excessive construction of new properties. It brings so much supply to the market that the limit will be met." (Investor A)

All the investors emphasized that increasing interest rates are a big risk. They all have a great deal of debt, and higher interest rates affect their profits and risk level. If the amount of debt capital is high, increasing interest rates will affect their returns. Debt of capital should be at such a level that it can be controlled if changes in interest rates happen. Fixed interest rates or an interest rate cap can be useful to reduce risks. They are also worried that if the government removes tax deductions from new apartments, it would affect the attractiveness of new apartments. The possibility of a tax deduction is one of the main reasons investors purchase new apartments. If deductions change, new apartments will not be so attractive to investors and construction companies. New apartments are expensive, but the possibility of obtaining a tax deduction has made them attractive to many investors.

There can always be unexpected expenses, especially with large portfolios. There might be unexpected renovations, home appliances might be broken, or some of the tenants may not pay rents. It is useful to save extra capital to cover unexpected costs.

"In real estate investing, if something goes wrong when there is a high leverage in the background, then it can really put your finances in a difficult position. I am kind of prepared for those risks. I have financial buffer. However, one day something unexpected will happen

in one of my apartments, especially when we have so many apartments. If it happens in many apartments at the same time, then it can cause financial troubles." (Investor E)

"I try to find profitable apartments where there is good cash flow, so it protects against crises and risks because the biggest crisis that can come is the cash crisis. If you don't have money to pay loan repayments or considerations, that is the worst situation that will force you to sell the apartments. In the worst case, a lot of money is lost through it. It has been my strategy to acquire properties that are profitable and have a good cash flow." (Investor F)

Challenges with housing associations are also risks in real estate. A good housing association is a large part of successful real estate investing. There might be housing associations where residents are against investors and tenants. There might be disagreements with investors. Good housing associations take care of buildings and ensure that large renovations are made on time. All the investors review the documents of housing associations carefully before buying properties. They review if renovations are already done or if there will be major renovations coming soon, pipe repair, for example. Pipe repairs are expensive, and it must be known in time when they will be done.

"I go through the documents of the housing association very carefully. It doesn't matter even if there are some renovations coming if you have examined the condition details and that the housing association knows what it is doing. All the actions should be planned. All the renovations should be done on time, without delays." (Investor B)

5.4 Key factors to successful real estate investing and ways to reduce risks

The investors think that successful investing is effortless. The apartments should be easy to rent and good tenants should be found easily. If the apartments are less attractive and not in good locations, it is harder to find good tenants. High occupancy rate is important. All the investors are looking for apartments that are below a market price. However, it is not easy to find them, especially in good locations.

As already said, the investors are looking for apartments in good locations, for example, small studios are attractive in city centers and near universities. They rent the apartments by themselves without agents. They feel it is easier, more reliable, and cheaper to choose tenants themselves. The investors prefer locations close to their hometowns or cities where they have lived before. Most of them want to invest only in areas that they know well in advance. They consider it risky to invest in cities or suburbs which they do not know. The better they know the areas, the easier it is to make investment decisions. They prefer locations with good public transport connections, and they consider what kinds of tenants would be attracted to the apartment. It is useful to think in advance what the target group for the apartment is.

"There is usually a good reason for an apartment below a market price. If it is not found in the apartment, it may be found in the housing association, location, or micro-location. However, I am looking for value for money and not just a cheap price. An apartment can be more expensive than average if it is in a better-than-average housing association or is an above-average apartment." (Investor G)

"I use micro-market thinking rather than being where everyone else is. It might get a lot easier when you have your own little segment. I concentrate in those few streets where housing associations are familiar to me." (Investor D)

The investors think that good cash flow and a close to 100 % occupancy rate are important factors. Most of them did not have any empty months. Investor A thinks that high returns are not the most important factor. If returns are very high, risks are also high. He feels that it would be difficult to own many apartments where returns are over 10 %. It would mean high risks and more effort because these kinds of properties attract riskier tenants. When he has to find a new tenant to this kind of property, he always feels some uncertainty. His most important criteria is that there should not be any empty months.

"The occupancy rate is, of course, a significant indicator. The occupancy rate tells you whether the apartments and the landlord have been successful. There should not be any empty months." (Investor A)

Many investors network with other investors. They receive tips and advice from others, which can also reduce their risks. A few investors have purchased apartments from other investors, which is cheaper than if agents are involved. They have also received tips about available apartments in new buildings, which might be cheaper when there are many investors buying them at the same time. Networking is an important way to receive information from others and obtain new aspects to their own businesses.

5.5 Urbanization

Urbanization affects the investors' decisions to some extent. They are not willing to buy apartments in small towns or in the countryside. They prefer big cities or cities with increasing population. They think that there are too high risks if they buy apartments in an area with decreasing population. In these areas, it is not easy to sell apartments if needed. Investor A lives in Joensuu and Investor F in Jyväskylä. They prefer to purchase apartments in their hometowns because management is easier there. Investor F also thinks that prices of apartments in Helsinki are too high, and his strategy is to receive high cash flow, which is not possible in Helsinki.

Investor A will not change his strategy because of urbanization. He thinks it is easy to find tenants in the Joensuu area and that profit margins are good. Because he lives in Joensuu, it is easy for him to rent in his hometown and take care of the business.

Investor B will invest in the Tampere area because she knows the area very well. Her family members live in Tampere, and they can take care of the renting. Because she lives abroad, she cannot easily invest in other cities.

Investor C has already concentrated on apartments in Helsinki and Vantaa. She has considered investing in smaller towns. However, cash flow would be quite high because the value of apartments might decrease in smaller towns. She thinks that she could make a low offer if she finds an attractive apartment in a small town.

Investor D has concentrated to invest in Tampere because she knows the area so well. She is interested in buying an entire building including many apartments. However, she thinks that prices of buildings are too high in Tampere, so she should consider other towns. She should find out more about other towns and suburbs before purchasing. She has also been responsible for the rentals so far.

Investor E once thought she could invest in smaller towns. Currently, she thinks it is a good idea to concentrate in larger cities and centers of growth. She thinks it is a big risk to invest in towns experiencing migration loss. Even if tenants could be found, it is still a risk that those apartments could not be sold easily if needed. She owns an apartment in Mikkeli with good cash flow. However, she plans to sell it in a few years.

"Urbanization does affect my investment strategy. Earlier, I thought I could buy apartments in smaller towns but the more I have followed urbanization, I have noticed that more and more people focus on cities and want to live in cities. It feels like it's a pretty big risk to buy from towns with migration loss. Even if an apartment could be rented, how can you get rid of it in the future if you want to? I increasingly believe that I will concentrate on buying in cities or centers of growth." (Investor E)

Investor F is looking for apartments in towns with migration gain. He concentrates in middle-sized towns. He is not currently interested to invest in larger cities or the Helsinki area. He thinks that apartment prices in big cities are too high. For example, in the Helsinki city center, it is difficult to have good cash flow when using leverage.

Investor G has bought apartments in Helsinki since 2017. He plans to buy apartments only there. He has sold many apartments in other towns, for example, in Hyvinkää and Jyväskylä. He thinks that the values of apartments will be the highest in Helsinki, and in the long run, total return will be the highest in Helsinki.

5.6 Real estate investing as a form of investment

All of the interviewees think that real estate investment is a nice, interesting, and concrete form of investing. All of them have many years of experience in real estate investing. All of them use high amount of leverage. Risks, for example, in stock exchange are higher. Investor D thinks that the best thing about real estate investing is renovating. She is excited to increase the value of her apartments and see the results. All of the investors are interested in real estate and are constantly looking for more knowledge about the field. Many of them are also on the boards of housing associations. They think that it is possible to influence and create value with their own effort.

Investor E started real estate investing because of leverage. Their target was to own 10 apartments in 10 years; however, they reached the goal in six years. Their loans are for 20 years. She had expected that values of their apartments would increase, but this did not happen. However, cash flow is good. She is thinking about reorganizing investments in a few years and might sell some of her apartments. Her goal is to be financially independent.

The investors think that a large number of apartments is not an absolute value. They are looking for good investments that are not too risky. Investor G will buy apartments only in

Helsinki. He thinks that values in Helsinki will increase, and he wants to invest there. To buy in Helsinki, he has to sell his apartments in other cities.

"At the beginning, we invested in Jyväskylä because we knew the area well and rental income was better there. Our investments were strongly based on leverage. It would not have been possible to have more apartments with leverage if the rental income had been low. With a small rent, it would not have been possible to pay the compensation, interest rates, and loan repayment. Recently, however, we have purchased apartments with lower cash flow or even negative cash flow. I think that apartments in Helsinki are good investments in the long run and we are concentrating on them." (Investor G)

6 DISCUSSION

This chapter discusses the research and synthesizes the theory and the empirical findings. It also answers the research questions.

Risk management is important to every business. It is especially essential in real estate where investments are expensive. Real estate investments are usually made for the long-term, which means that risks must be also estimated for the future. Business portfolios should have a risk management plan. When buying or selling investments, the return distribution of the portfolio should be acceptable (Baker & Filbeck, 2015). The higher the risks are, the higher the expected returns from the investments (Pyhrr et al., 1989). According to this study, the largest risks in real estate investing are bad tenants, wrong location, interest rate risk, and housing association problems. Apartments in good condition at good locations attract many tenants. It is easier to find a good, reliable tenant if there are many applicants applying for the same apartment. Choosing a good tenant is one of the biggest factors in successful real estate investing. There will be challenges if tenants do not pay rent or if they do not look after the apartment. All the investors are looking for tenants by themselves. They think that risks are lower when they meet the applicants face-to-face and get the first impression of the person. Credit reports of the tenants are checked and, preferably, the person is working or studying. The study shows that the investors are not willing to take too high risks. They purchase properties in the areas they already know well. They buy properties in the cities where they currently live or have lived. It is difficult and risky to buy apartments in the areas which are not known in advance. Familiar cities or suburbs reduce risks. The investors also know what kinds of tenants will be interested in apartments in certain suburbs.

Investments are seen as more attractive if expected profits are high. However, risks might also be higher in these kinds of properties. Some investors are willing to take higher risks than others (Figner & Weber, 2011). Investors can use only a limited amount of capital for their investments. For this reason, they must decide which available properties they are willing to invest in (Tziralis et al., 2009). According to MPT, investors should allocate their resources based on the risk-return relation. It must be estimated how much return they can expect from each property. Portfolios should be diversified so that risks are not too high (Markowitz, 1952). Most of the investors are looking for small apartments (studios) in good locations. They are searching for apartments below a market price; however, this is not easy because so many other investors are looking for the same thing. The investors have so much experience that they can make quick purchasing decisions. They know what they are looking for, and they can sometimes make decisions even without seeing the apartments. They carefully review the documents of the housing association. Risks can be avoided by reviewing the documents and finding out what kinds of renovations will be done in the future. All the investors are very experienced and can see from the documents if there are red flags in the housing association. Apartments are cheaper in smaller towns, but many of the investors are still not interested in them. Expected cash flow would be good there, but they think that the apartments include too high risks. However, the investors think that it is fine if there are a few apartments with higher risks in the portfolio. It is also more difficult to find good tenants for apartments that are in bad condition or in unattractive areas far away from services.

Successful investing requires a great deal of information about the business. The more knowledge the investors have, the better opportunities they have to reduce risks. When they have enough information, they can make better decisions (Walker, 2013). All buyers and sellers are trying to find the best deals. Their aim is to maximize profits. Investors are looking for properties below a market price. If they have information that other buyers do not, it is possible to make good deals (Haight & Singer, 2005). The study demonstrates that the investors are looking for apartments below a market price, which is not easy in large cities due to high demand. However, it is possible to find apartments below a market price if enough information is received from the property. For example, pipe repairs or other renovations drive away many buyers. The investors carefully review the documents of the housing association. If they are unsure about something, they contact the property manager before purchasing.

Market conditions define the value of apartments. An attractive location is one of the largest factors when defining value. Choosing the location can mean a successful decision or a miss to an investor. Knowledge of the area increases successful decisions. (Rymarzak & Sieminska, 2012.) The investors purchased most of their apartments in good locations where they can find good tenants. Many of their apartments are close to the city center or a few kilometers from it. If an apartment is in a suburb, it must be close to public transport, for example, a subway or a train station. If an apartment is close to a university, it is easy to find a student as a tenant. The investors described how they think about what kinds of tenants would be interested in the apartment. If an apartment is in a suburb with a bad reputation, it is more difficult to find a reliable tenant. These kinds of apartments attract tenants who receive housing benefits or tenants who have downgraded their credit ratings. These kinds of tenants may cause problems, and they should be avoided if possible.

Three strategies can be used in real estate investing: core, value-added, or opportunistic. Core strategy usually means properties with low risks but also low returns. Opportunistic strategy means high risks and high returns. Value-added is between those two. (Pagliari, 2020.) In this study, the investors mostly use the core strategy. They use the opportunistic or value-added strategy with some of their properties. A few apartments with higher risks in their portfolio usually do not cause problems. However, they think that it is too risky if all the apartments would be for example with 10 % profit. These kinds of apartments are in smaller towns or suburbs far away from city centers. The investors target approximately 6 % profit from their apartments. However, from new apartments, profit is around 4 %. The profit also depends on the apartment, and all the profits are estimated before purchasing decisions. For apartments with more risks, profit can be 10 % or more. These kinds of apartments usually need more effort with renovations and tenants. It must also be considered how difficult it is to sell this kind of apartment in the future if needed. A few investors have done flipping (renovating) to increase apartment value. Many also renovate apartments after buying to attract better tenants. They think that if an apartment is in good condition, it is easier to find a better tenant and she/he will more likely stay longer.

6.1 Answers to the research questions

This master's thesis focuses on real estate investing, risk management, and decision-making. The aim of this thesis is to examine how Finnish real estate investors prepare to take risks and how they try to reduce them. The main research question and three sub questions are answered below.

The main research question:

How do real estate investors estimate the risks of their investments?

Real estate investing can include many risks and uncertainties. The investors spend much time estimating the risks before making purchase decisions. However, they have many years of experience in real estate investing and can quickly estimate which properties are attractive and profitable. They know the areas and even micro-locations beforehand, which is an advantage when investing. In the beginning, they calculate the expected return and estimate if the property is sufficiently profitable. They also estimate if there is increased value expected in the future. They carefully review documents of housing associations and check to see if renovations are expected in the future. Each investor estimates the risks from her/his point of view. They estimate the risks from their own experience and knowledge. The investors are not willing to take too high risks. They estimate the property, the building, the area, and the development plans of the area. They are looking for apartments below a market price. If they can find one, it reduces risks because an increase in value can be expected. When they know the market and the target group, it is easier and quicker to make decisions.

Networking with other real estate investors is a good way to reduce risks. They can share advice and knowledge about suburbs. Cheaper apartments might include bigger risks. In the countryside or in small towns, apartment prices are lower, but many investors think it is risky to buy there. They consider how the apartment could be sold in the future if needed. They prefer to invest in large cities or middle-sized towns to find good tenants and avoid empty months. The more information the investors have, the easier it is to estimate risks and avoid them. The investors have many years of experience in real estate investing, and they have knowhow concerning which kinds of apartments are attractive and profitable. The investors want to find effortless apartments, but usually these are not the cheapest ones. Attractive location is very important in their strategy.

The investors estimate risks from the past experiences. They have knowledge and experience with certain suburbs or towns and certain apartment types. Usually, they prefer to buy similar properties. For example, if they know there is demand for studios close to the city center or close to a university, they rely on their previous strategy. They look for apartments in areas where there is enough demand and tenants can be easily found. The investors want to handle the rentals themselves, not via an agent. They think this reduces risks. Good communication is always a key to more satisfied tenants. Tenants are the investors' customers, and they should be informed and treated well. Satisfied tenants help the investors' business, making it less risky and more effortless.

The first sub question:

How do real estate investors try to minimize risks?

The study concluded that the main risks in real estate investing are finding good tenants, changes in interest rates, changes in taxes, unexpected renovation expenses, problems with housing associations, and bad locations. The investors are always looking for trustworthy, effortless tenants. The greatest risks are if rents are not paid on time or if an apartment is damaged. To reduce the risks, the investors want to meet applicants face-to-face and interview them. They feel that it is less risky to rent by themselves rather than via agents.

Interest rates are currently low, but there is a risk they will increase. This would cause problems because the investors have a large amount of debt for their apartments. Ways to reduce risk include fixed interest rates or an interest rate cap. Currently, owners of new apartments can gain tax relief. However, there is a risk that the government will rescind the tax relief. In that case, relief would not be received until the apartment is sold. Major renovations are always expensive, and investors should be aware of what kinds of renovations are planned for the apartments. Renovations are sometimes more expensive than expected. Housing associations are one of the biggest factors in real estate investing. Good housing associations take care of renovations on time and are interested in keeping the building in good condition. Sometimes, housing associations are against real estate investors, which may cause problems. The right location is a very important factor in successful investing. Good location attracts more applicants and makes it easier to find good tenants. There should not be any empty months. If the location is good, it is easier to sell the apartment if needed.

Risks can be minimized by collecting as much information as possible from the housing association: future renovations, public transportation possibilities, and the future plans for the city or suburb. It is not enough that an apartment looks good. All the other external aspects must be considered. The investors calculate whether potential apartments are profitable enough. Profitability depends on the city, suburb, age of the building, the level of rents, and the expected future value of the property.

The investors try to minimize risks by buying apartments below a market price. They know market prices in their favorite areas and look for apartments which are cheaper than expected. The investors also concentrate on the cities or suburbs they already know well. The investors mostly invest in the areas where they are living at the moment or where they have lived. It is easier to know good micro-locations if they have experience in the location.

The second sub question:

What kinds of strategies do real estate investors use for their investments?

The investors mostly invest in studios in good locations. Some of their holdings are somewhat larger, one-bedroom apartments. They look for apartments in good condition but are willing to renovate if necessary. They think that apartments should be in good condition. The investors buy mostly apartments in old buildings. They think that cash flow is better in older apartments. They prefer more cash flow than increase in value. Cash flow is a continuous return every month, but an increase in value is not sure. They are active in the real estate business and look for tenants by themselves. They look for apartments that are effortless, meaning easy to rent and with a good housing association. The investors are looking for apartments that are effortless to take care of. Overly risky investments cause more problems and take more time and money. The investors can buy apartments outside of their core portfolio and buy one or two apartments outside of their core strategy or at other locations. The portfolio still remains secure even if some new experiments are done.

The investors want to buy apartments in their hometown or in other familiar areas. Most of them want to buy studios or other small apartments. They believe small apartments are profitable and that there is always demand for them at good locations. The apartments must be in good condition when purchased, or the investors will renovate. They think it is easier to find good tenants for apartments in good condition. The investors look for long-term apartments with good cash flow. Long-term apartments are less risky investments, and values of the apartments are not as relevant because there is no plan to sell the apartments in the near future.

The third sub question:

Which factors affect real estate investors' purchasing decisions?

Real estate investors expend time and effort before making purchasing decisions. They try to find out as much information as possible about the apartment, the building, the housing association, the renovations, the area, and the development plans of the area. Usually, they are looking for properties for long-term leasing and must consider future occurrences. Many of the investors are looking for small apartments in good locations. They think that studios are profitable and easier to take care of. Renovations are cheaper in small apartments because there have fewer square meters.

The investors can make quick decisions if they already know in advance the area or the housing association. The more information they have in advance, the faster they can make decisions. They usually concentrate on city centers or certain suburbs. Before purchasing decisions, they calculate if an apartment is profitable enough. They estimate if there will be an increase in value or if there will only be cash flow. If they expect only cash flow, the return should be higher. The expected return is higher from old apartments than from new ones. However, new apartments are more effortless and there are no renovations expected.

The investors are looking for apartments below a market price. They might send many low offers before they close a deal. Apartments below a market price include less risks because they are expected to increase in value immediately after purchase. The investors always calculate expected return from each property before purchasing. From new properties, return should be around 4 % and from older ones at least 6 %. However, good profit depends on the property and location. It must be take into account if increased value can be expected. The investors are looking for properties that are easy to rent and easy to manage. The investors have many apartments, and they aim for effortless apartments.

7 CONCLUSIONS

The final chapter of this thesis includes the research summary and presents theoretical and practical implications. The limitations of the research are pointed out and future research topics are suggested.

Every business and investment include risks. However, risks can be estimated and minimized with good planning and knowledge. Different risks must be identified and evaluated. Investors have limited capital, and they must decide where to invest it. Some investors are willing to take larger risks, but they also expect more return. Some uncertainty always remains after investment decisions. Risks can be minimized by studying the targets and the business in general.

This research examined risks and decision-making in real estate investing. Real estate investing has become popular in Finland, especially during the last ten years. Real estate investors can reduce risks by calculating the expected return. There are two real estate investing strategies: increase in value and cash flow. Profit is usually lower from new apartments in big cities, especially close to city centers. However, risks are lower in these kinds of apartments. The investors are looking for apartments in large or middle-sized cities because they feel these are less risky investments.

This study found that risks in real estate investing can be minimized by analysis, knowledge, and information searching. The best ways to minimize risks are by finding reliable tenants, purchasing apartments below a market price, finding good housing associations, and buying apartments in attractive locations. The apartments should be located in cities or suburbs that are already familiar to the investor. It is always a risk if an apartment is purchased in an unfamiliar area.

Real estate investors prefer long-term investments. They think that long-term investments are less risky and good cash flow is more important than potentially increased value. The investors want to buy apartments in their hometowns, so they can take care of the rentals by themselves. The investors are looking for apartments below a market price. This is the best way to reduce risks. They make many low offers for apartments until an offer is accepted. However, apartments below a market price are not easy to find due to the increased number of real estate investors in the market.

7.1 Theoretical implications

Even though this study was limited with only seven investors, some implications can be made. The theory and study illustrate that risk can be managed and that there are many ways to reduce risks. The investors should learn background information and follow the business to do better and make profitable decisions.

The level of risk-taking depends on the investor. Some investors are completely risk-averse, and some investors are willing to take large risks. The extent of a risk specifies how high the expected profits will be. The higher the expectations are, the higher the risk might also be (Wolke, 2017). The investors in this study are not willing to take too high risks. They prefer long-term investments with effortless tenants. They think that apartments with high cash flow (approximately 10 %) include more risks. These kinds of apartments are located far away from the city center or in the countryside. The investors' target return from new apartments is around 4 % and from older apartments at least 6 %. The investors are willing to add a few riskier apartments in their portfolio. However, they prefer staying within their core strategy and seek apartments close to their hometown or in areas which know well.

Markets are efficient if there are many buyers and many sellers. All of them try to maximize their profits and are looking for the best deals. If they all have the same information, apartments will probably be sold for their true value. It takes effort to find good deals (Haight

& Singer, 2005). The study confirms that the investors can take advantage of their knowledge. The more investors know about the business, the target, the housing association, and the area, the better and more profitable decisions they can make. With their knowledge and past experiences, they can reduce risks. They always review the documents of the housing association before a purchasing decision and ask the property manager if there are any unclear issues. They want to know all of the past and upcoming renovations of the building. Investors follow the news about the towns and the suburbs if there are development plans expected in the future. For example, in Espoo there will be new subway stations in a few years, and the prices of the apartments close to the stations will likely increase.

If an investor's main investment strategy is to receive cash flow, a current price of an apartment is not very relevant. When apartments are purchased for long-term, even for decades, and at good locations, it is likely their prices will increase. The current value is important if apartments will be bought or sold. A price risk can usually be avoided by investing in continuous cash flow. (Orava & Turunen, 2020.) According to the study, the investors prefer long-term investments. They think that good cash flow is more important than increased value. The investors are looking for apartments that are easy to rent and effortless to manage. They want to avoid empty months. They want to purchase apartments that have good transportation connections and are in attractive suburbs. A few investors have renovated and sold apartments. In the flipping strategy, value can be increased with renovation. However, the flips must be in good locations that have enough demand.

Prospect theory is a well-known theory for making decisions under risk. People expect to experience the outcomes that are more likely to happen than the those that are less likely. This is called certainty effect. The aim is to obtain profits and avoid risks. (Kahneman & Tversky, 1979.) An example of prospect theory is urbanization. Investors expect that increasing urbanization will affect Finland. They think that large cities or middle-sized towns are more secure to invest in than small towns. They think that small towns are riskier investments because the population will decrease, making it difficult to find good tenants. The value of apartments might also decrease. It is more likely that big cities will grow and small towns lose residents. It is essential to know the features of different cities, suburbs, and even micro-locations.

Private investors invest their own money and face the results on their own risk. Active investors look for new investments annually. Occasional investors invest less frequently. Investors might face many challenges, including lack of market and business knowledge, unrealistic targets, lack of a long-term plan, and comprehensive controlling of the investments. To avoid these challenges, it is important to know the business and markets. (Feeney et al., 1999.) Most investors in this study aim for good cash flow but not too high risks. They study real estate investing and network with other investors. They have a specific strategy about the kinds of apartments they want to buy and at which locations. They think it is better to wait if suitable apartments are not found for their portfolio. They do not want to buy constantly but only when good, profitable apartments are found. The investors look for apartments below market price because it is easier to avoid risks if apartments are cheaper than expected.

Utility theory compares two choices: if the probability to win is low or high. Instead of avoiding risks, Kahneman and Amos Tversky noticed that people were targeting risks. When the goal is attractive enough, larger risks can be accepted. (Kahneman, 2012.) Timing is essential in investing. When the portfolio grows, an investor takes a risk in case of uncertain demand. If there is not enough demand, the returns might stay low, but expenses are still running. (Huisman & Kort, 2015.) The interviews show that most investors will take higher risks if they have enough information about the targets. Investors think it is easier to control their portfolio if they have enough information, and they take care of their properties and tenants as much as possible. A large portfolio should be stable and not include too high risks. However, the interviewees think there can be some riskier properties in the portfolio if most of the properties are less risky. They think that too many apartments with a 10 % return increase risk levels. Investors who are investing for long-term try to avoid high risks. Investors calculate expected return before making purchasing decisions. It is essential to calculate if the apartments are profitable enough for their portfolio. Investors think that financial risks are external risks that cannot be estimated exactly. The biggest external risk is increasing interest rates.

7.2 Practical implications

Even though the results of the study are limited, some practical implications about real estate investing and risks can be made. There are many ways real estate investors can reduce risks. As real estate investing has become popular in recent years in Finland, there are more investors looking for apartments. However, it is still possible to find profitable apartments with low risks. The increased competition in certain areas has complicated the investors' purchasing plans and expected profits. It is harder to find apartments at good locations with reasonable prices. Investors can use their own network when looking for more apartments. Another way is to buy an apartment in bad condition and renovate it. In this way, value of the apartment can be increased.

The investors mostly follow their strategy and stay in their comfort zone. They want to know the area well where they are investing and what the pros and cons are of the town or suburb. Even micro-location is important when looking for profitable apartments. The more experience and knowledge investors have, the more confident they are with their decisions. When they have bought many apartments, they know what kinds of apartments and what kinds of locations are suitable for their portfolio and what kinds of apartments are profitable. After years of experience, they can make purchasing decisions more quickly. They want to buy apartments in the areas where they live or have lived. Unfamiliar areas are seen as too risky.

Investors should get advance information about the target, the area, and the business to make good decisions. The more information they have, the more they can reduce risks, which also helps them to better control their portfolios. They want to be in touch with their tenants and be aware of actions in the housing associations. They think that with their own activity and analysis, they can reduce risks and increase the value of their apartments. Investors should follow news and articles about the business and network with other investors. Investors think they can make better deals with their knowledge. Investors want their tenants to be satisfied with the apartments. Long-term, satisfied tenants make real estate investing more effortless. Investors are looking for effortless apartments that save time and money.

7.3 Limitations and future research

Seven Finnish real estate investors were interviewed for this study. If the data had been larger, the results might have been different. The interviewees have different backgrounds, one of them started to invest 28 years ago and one of them three years ago. The differences between female and male investors were not examined. It was also not studied whether different age groups had differences in risk-taking, decision-making, and investment strategies.

For future research, it would be productive to study risk-taking and strategies between the genders. Another interesting topic would be if young investors, with less experience, take fewer or more risks than older ones. It could also be interesting to study risk-taking and strategies of full-time investors. Full-time investors are more financially dependent on their investments. Six out of seven investors interviewed for this study are part-time investors. They have full-time jobs where they receive a monthly salary, meaning they are not fully dependent in their rental income.

Real estate investing is a broad topic, and there are many options which could be studied. Real estate investing has become a popular way to invest. Many real estate investors in Finland have only one or a few apartments. Their opinion about risk-taking might be different compared to investors with 15 or more apartments.

LIST OF REFERENCES

Abdellaoui, M., Bleichrodt, H. & Paraschiv, C. (2007) Loss Aversion Under Prospect Theory: A Parameter-Free Measurement. *Management Science*. Vol. 53 (10), pp. 1659-1674.

Alho, E., Härmälä, V., Oikarinen, E., Kekäläinen, A., Noro, K., Tähtinen, T. & Vuori, L. (2018) Vuokra-asuntosijoitusalan kannattavuus, kilpailutilanne ja kehittämistarpeet. Valtioneuvoston selvitys- ja tutkimustoiminnan julkaisusarja 9/2018. [Online document]. [Accessed 28.2.2021]. Available https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/160708/9-2018-Vuokra-asuntosijoitusalan%20kannattavuus%20kilpailutilanne%20ja%20kehittamistarpeet.pdf?sequence=1&isAllowed=y

Aven, T. (2008) Risk analysis assessing uncertainties beyond expected values and probabilities. Chichester, England. John Wiley & Sons Ltd.

Baker, H. K. & Filbeck, G. (2015) Investment Risk Management. New York, USA. Oxford University Press.

Barberis, N. C. (2013) Thirty Years of Prospect Theory in Economics: A Review and Assessment. *Journal of Economic Perspective*. Vol. 27 (1), pp. 173-196.

Brown, R. J. (2005) Private real estate investment. Data analysis and decision making. Burlington, USA. Elsevier Academic Press.

Casson, M. & Wadeson, N. (2007) Entrepreneurship and macroeconomic performance. *Strategic Entrepreneurship Journal*. Vol. 1 (3-4), pp. 239-262.

Curcio, R. J., Anderson, R. I. & Guirguis, H. (2014) Managing Risk in the Real Estate Portfolio Through the Use of Leveraged and Inverse ETFs. *Real Estate Finance*. Vol. 31 (2), pp. 63-77.

Davidsson, P. & Honig, B. (2003) The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*. Vol. 18 (3), pp. 301-331.

De Carolis, D. M. & Saparito, P. (2006) Social capital, cognition, and entrepreneurial opportunities: A theoretical framework. *Entrepreneurship Theory and Practice*. Vol. 30 (1), pp. 41-56.

Dew, N., Sarasathy, S., Read, S. & Wiltbank, R. (2009) Affordable loss: behavioral economic aspects of the plunge decision. *Strategic Entrepreneurship Journal*. Vol. 3 (2), pp. 105-126.

De Giorgi, E. G. (2011) Loss aversion with multiple investment goals. *Mathematics and financial economics*. Vol. 5 (3), pp. 203-227.

De Wit, I. (2010) International Diversification Strategies for Direct Real Estate. *The Journal of Real Estate Finance and Economics*. Vol. 41 (4), pp. 433-457.

Eerola, E. & Lyytikäinen, T. (2015) On the role of public price information in housing markets. *Regional Science and Urban Economics*. Vol. 53, pp. 74-84.

Fabozzi, F. J. & Markowitz, H. M. (2011) The Theory and Practice of Investment Management. Asset Allocation, Valuation, Portfolio Construction and Strategies. 2nd ed. New Jersey. John Wiley & Sons, Inc.

Feeney, L., Haines, G. H. Jr. & Riding, A. L. (1999) Private investors' investment criteria: insights from qualitative data. *Venture capital (London)*. Vol. 1 (2), pp. 121-145.

Figner, B. & Weber, E. U. (2011) Who Takes Risks When and Why? Determinants of Risk Taking. *Current Directions in Psychological Science*. Vol. 20 (4), pp. 211-216.

Florin, J., Lubatkin, M., & Schulze, W. (2003) A social capital model of high-growth ventures. *Academy of Management Journal*. Vol. 46 (3), pp. 374-384.

Gambetti, E. & Giusberti, F. (2019) Personality, decision-making styles and investments. *Journal of Behavioral and Experimental Economics*. Vol. 80, pp. 14-24.

Glaeser, E. L., Gyourko, J. & Saiz, A. (2008) Housing supply and housing bubbles. *Journal of Urban Economics*. Vol. 64 (2), pp. 198-217.

Goddard, G. J., & Marcum, B. (2012) Real Estate Investment. A Value Based Approach. Berlin. Springer-Verlag. E-Book.

Haight, G. T. & Singer, D. (2005) The real estate investment handbook. Hoboken, New Jersey, USA. John Wiley & Sons.

Hillson, D. & Murray-Webster, R. (2012) Understanding and Managing Risk Attitude. 2nd ed. Hants, England. Gower Publishing Limited.

Hirsjärvi, S., Remes, P. & Sajavaara, P. (2007) Tutki ja kirjoita. 13th ed. Helsinki. Kustannusosakeyhtiö Tammi.

Huisman, K. J. M. & Kort P. M (2015) Strategic capacity investment under uncertainty. *The Rand Journal of economics*. Vol. 46 (2), pp. 376-408.

Kaarto, M. (2015) Sijoita asuntoihin: Aloita – Kehity – Vaurastu. Helsinki. KM Growth Oy.

Kahneman, D. (2012) Ajattelu, nopeasti ja hitaasti. Helsinki. Hakapaino.

Kahneman, D., Knetsch, J. L. & Thaler, R. (1990) Experimental Tests of the Endowment Effect and the Coase Theorem. *Journal of Political Economy*. Vol. 98 (6), pp. 1325-1348.

Kahneman, D. & Tversky, A. (1979) Prospect Theory: An Analysis of Decision under Risk. *Econometrica*. Vol. 47 (2), pp. 263-291.

Kaiser, R. W. & Clayton, J. (2008) Assessing and Managing Risk in Institutional Real Estate Investing. *Journal of Real Estate Portfolio Management*. Vol. 14. (4), pp. 287-306.

Kannisto, O. (2019) Sijoittaja suosii yksiötä maakuntakeskuksessa. [Online document]. [Accessed 4.3.2021]. Available https://www.tilastokeskus.fi/tietotrendit/blogit/2019/sijoittaja-suosii-yksiota-maakuntakeskuksessa/

Kannisto, O., Korhonen, M., Rämö, A. & Vuorio, E. (2020) Yli puolet viime vuonna myydyistä yksiöistä meni sijoittajille. [Online document.]. [Accessed 2.3.2021]. Available http://www.stat.fi/tietotrendit/artikkelit/2020/yli-puolet-viime-vuonna-myydyista-yksiosta-meni-sijoittajille/

Karikallio, H., Keskinen, P., Kiviholma, S., Reijonen, J., Ruuskanen, O., Vuori, L., Härmälä, V. & Lamminkoski, H. (2019) Pienten asuntojen osuus asuntotuotannossa ja vaikutukset asuinalueiden eriytymiseen. [Online document]. [Accessed 3.4.2021]. Available https://www.ptt.fi/julkaisut-ja-hankkeet/kaikki-julkaisut/pienten-asuntojen-osuus-asuntotuotannossa-ja-vaikutukset-asuinalueiden-eriytymiseen.html

Kay, D. (2021) Five Steps to Portfolio Diversification. *National Real Estate Investor*. Q1, Vol. 1 (1), p. 39.

Kevenides, H. A. (2002) International real estate investment risk analysis. *Journal of Real Estate Portfolio Management*. Vol. 8 (4), pp. 61-73.

KTI Kiinteistötieto (2020) KTI Markkinakatsaus syksy 2020. [Online document]. [Accessed 8.3.2021]. Available https://kti.fi/wp-content/uploads/KTI-Markkinakatsaus_syksy-2020.pdf

Lemos, F. (2020) On the definition of risk. *Journal of risk management in financial institutions*. Vol. 13 (3), pp. 266-278.

Levy, J. S. (1992) An Introduction to Prospect Theory. *Political Psychology*. Vol. 13 (2), pp. 171-186.

Lieser, K. & Groh, A. (2014) The Determinants of International Commercial Real Estate Investment. *The Journal of Real Estate Finance and Economics*. Vol. 48 (4), pp. 611-659.

Loikkanen, H. A. & Laakso, S. (2016) Tiivistyvä kaupunkikehitys – Tuottavuuden ja hyvinvoinnin kasvun perusta. Tehokkaan Tuotannon Tutkimussäätiö. Julkaisumonistamo Eteläranta Oy. [Online document]. [Accessed 19.4.2021]. Available http://www.kaupunkitutkimusta.fi/wp-content/uploads/2016/02/Tiivistyv%C3%A4-kaupunkikehitys-TTTS_5.pdf

Louisot, J., Condamin, L. & Naim, P. (2014) Risk quantification: Cornerstone for rational risk management. In: Louisot, J. & Ketcham, C. H. (2014) ERM - Enterprise risk management: Issues and cases. Croydon, UK. John Wiley & Sons Ltd.

Manganelli, B. (2015) Real Estate Investing. Market Analysis, Valuation Techniques, and Risk Management. Springer International Publishing. Cham, Switzerland. E-Book.

Markowitz, H. M. (1952) Portfolio selction. *The Journal of Finance*. Vol. 7 (1), pp. 77-91.

Martina, R. (2020) Toward a theory of affordable loss. *Small Business Economics*. Vol. 54 (3), pp. 751-774.

McKelvie, A., Haynie, J. M., & Gustavsson, V. (2011) Unpacking the uncertainty construct: Implications for entre-preneurial action. *Journal of Business Venturing*. Vol. 26 (3), pp. 273-292.

Mitchell, J. R. & Shepherd, D. A. (2010) To thine own self be true: Images of self, images of opportunity, and entrepreneurial action. *Journal of Business Venturing*. Vol. 25 (1), pp. 138-154.

Müllner, J. (2016) From uncertainty to risk – A risk management framework for market entry. *Journal of World Business*. Vol. 51 (5), pp. 800-814.

Odean, T. (1998) Are Investors Reluctant to Realize Their Losses? *The Journal of finance*. Vol. 53 (5), pp. 1775-1798.

Olsson, R. (2007) In search of opportunity management: Is the risk management process enough? *International journal of project management*. Vol. 25 (8), pp. 745-752.

OP (2020) Asuntomarkkinakatsaus 2020/Q4. [Online document]. [Accessed 27.3.2021]. Available https://www.op.fi/documents/20556/28168687/Asuntomarkkinakatsaus-Q4-2020/d365a985-6bec-2b57-ee6a-03ffcc4faa6b

Orava, J. & Turunen, O. (2020) Osta, vuokraa, vaurastu. Helsinki. Alma Talent.

Paananen, V. (2019) Sadattuhannet kodit uhkaavat menettää arvonsa – Suomeen on kehittynyt kahdet asunto-markkinat, ja asian-tuntijan mukaan enää kolme aluetta on turvassa. [Online document]. [Accessed 8.6.2020]. Available https://www.hs.fi/talous/art-2000006236645.html

Paavilainen, P. (2020) Tyhjillään olevien asuntojen määrä kasvanut merkittävästi 2000-luvulla – mistä tässä on kyse? [Online document]. [Accessed 2.3.2021]. Available http://www.stat.fi/tietotrendit/artikkelit/2020/tyhjillaan-olevien-asuntojen-maara-kasvanut-merkittavasti-2000-luvulla-mista-tassa-on-kyse/

Pagliari, J. L. Jr. (2020) Real Estate Returns by Strategy: Have Value-Added and Opportunistic Funds Pulled Their Weight? *Real estate economics*. Vol. 48 (1), pp. 89-134.

Pyhrr, S. A., Cooper, J. R., Wofford L. E., Kapplin, S. D. & Lapides, P. D. (1989) Real Estate Investment. Strategy, Analysis, Decisions. 2nd ed. New York, USA. John Wiley & Sons, Inc.

Pinto, C. A., Magpili, L. M. and Jaradat, R. M. (2015) Operational Risk Management. New York, USA. Momentum Press. E-Book.

Rantavaara, M. (2020a) Jo kolmasosa suomalaisista kotitalouksista asuu vuokralla: ”Omistusasuntoon käsiksi pääseminen on monelle hankalaa”. [Online document]. [Accessed 6.6.2020]. Available https://www.hs.fi/koti/art-2000006413382.html

Rantavaara, M. (2020b) Asuntojen hinnat karkaavat Helsingissä ja Tampereella, tulot eivät pysy perässä. [Online document]. [Accessed 6.6.2020]. Available https://www.hs.fi/koti/art-2000006387965.html

Rehunen, A., Helminen, V. & Honkatukia, J. (2019) Alueiden dynamiikan uusi vaihe: kuinka asukkaiden ja työntekijöiden Suomi jäsentyy 2020-luvulla. [Online document]. [Accessed 6.6.2020]. Available https://labour.fi/t&y/alueiden-dynamiikan-uusi-vaihe-kuinka-asukkaiden-ja-tyontekijoiden-suomi-jasentyy-2020-luvulla/

Riuttamäki, M. (2020) Niukat neliöt. [Online document]. [Accessed 1.6.2020]. Available https://www.hs.fi/koti/art-2000006523215.html

Roque, L. (2011) How to Buy Commercial Real Estate-Commercial Real Estate Investing Tips. *Real Estate Finance*. Vol. 28 (3), pp. 3-4.

Rymarzak, M. & Sieminska, E. (2012) Factors affecting the location of real estate. *Journal of Corporate Real Estate*. Vol. 14 (4), pp. 214-225.

Schmidt, U. & Horst, Z. (2005) What is Loss Aversion? *Journal of Risk and Uncertainty*. Vol. 30 (2), pp. 157-167.

Seiler, M. J., Webb J., R. & Myer, F. C. N. (1999) Diversification issues in real estate investment. *Journal of Real Estate Literature*. Vol. 7 (2), pp. 163-179.

Shepherd, D. A., Williams, T. A. & Patzelt, H. (2015) Thinking About Entrepreneurial Decision Making: Review and Research Agenda. *Journal of Management*. Vol. 41 (1), pp. 11-46.

Soininen, M. (1995) Tieteellisen tutkimuksen perusteet. Turku. Turun yliopiston täydennyskoulutuskeskus.

Suomen Hypoteekkiyhdistys (2020) Hypon asuntomarkkinakatsaus Q2/2020. [Online document]. [Accessed 4.6.2020]. Available http://www.hypo.fi/wp-content/uploads/2020/05/Hypo_Asuntomarkkinakatsaus_toukokuu2020.pdf

Suomen Hypoteekkiyhdistys (2021) Hypon asuntomarkkinakatsaus Q1/2021. [Online document]. [Accessed 24.2.2021]. Available: https://www.hypo.fi/wp-content/uploads/2021/02/Hypon-Asuntomarkkinakatsaus_01_2021.pdf

Suomen Vuokranantajat (2019) Vuokramarkkinakatsaus 2019. [Online document]. [Accessed 3.4.2020]. Available https://vuokranantajat.fi/wp-content/uploads/2019/10/Vuokramarkkinakatsaus_2019syksy.pdf

Tervo, H. (2016) Do People Follow Jobs or Do Jobs Follow People? The Case of Finland in an International Context. *Journal of Regional Analysis & Policy*. Vol. 46 (1), pp. 95-109.

Tilastokeskus (2020) Asuntokunnat ja asuinolot 2019. [Online document]. [Accessed 4.3.2021]. Available https://www.stat.fi/til/asas/2019/01/asas_2019_01_2020-10-14_tie_002_fi.html

Tilastokeskus (2021) Vanhojen asuntojen markkinointiajat lyhenivät suurissa kaupungeissa edellisvuodesta. [Online document]. [Accessed 1.3.2021]. Available http://www.stat.fi/tup/kokeelliset-tilastot/asuntojen-myynti-ja-vuokrailmoitukset/2021-01/index.html

Tuomi, J. & Sarajärvi, A. (2002) Laadullinen tutkimus ja sisällönanalyysi. Helsinki. Kustannusosakeyhtiö Tammi.

Tversky, A. & Kahneman, D. (1986) Rational Choice and the Framing of Decisions. *The Journal of Business*. Vol. 59 (4), pp. S251-S278.

Tversky, A. & Kahneman, D. (1991) Loss aversion in riskless choice: a reference-dependent model. *The Quarterly journal of economics*. Vol. 106 (4), pp. 1039-1061.

Tversky, A. & Kahneman, D. (1992) Advances in Prospect Theory: Cumulative Representation of Uncertainty. *Journal of risk and uncertainty*. Vol. 5 (4), pp. 297-323.

Tversky, A. & Kahneman, D. (2004) Judgment under Uncertainty: Heuristics and Biases. In: Tversky, A. Preference, Belief, and Similarity: selected writings. Cambridge, Massachusetts. The MIT Press.

Tziralis, G., Kirytopoulos, K., Rentizelas, A. & Tatsiopoulos, I. (2009) Holistic Investment Assessment: Optimization, Risk Appraisal and Decision Making. *Managerial and decision economics*. Vol. 30 (6), pp. 393-403.

Viezer, T. W. (1999) Building real estate portfolios one deal at a time, with an eye on diversification. *Real Estate Finance*. Vol. 16 (3), pp. 44-54.

Viezer, T. W. (2000) Evaluating "Within Real Estate" Diversification Strategies. *Journal of Real Estate Portfolio Management*. Vol. 6 (1), pp. 75-95.

Vuori, L., Karikallio, H. & Keskinen, P. (2019) PTT-ennuste: Alueelliset asuntomarkkinat 2019. [Online document]. [Accessed 3.4.2021]. Available http://www.ptt.fi/ajankohtaista/uuti-set/asuntomarkkinat-2019-ennuste.html

Wakker, P. P. (2010) Prospect Theory: For Risk and Ambiguity. New York, USA. Cambridge University Press.

Walker, R. (2013) Winning with Risk Management. Singapore. World Scientific Publishing.

Weber, E.U. (2010) Risk attitude and preference. Wiley Interdisciplinary Reviews. *Cognitive Science*. Vol. 1 (1), pp. 79–88.

Welpe, I. M., Spörrle, M., Grichnik, D., Michl, T., & Audretsch, D. B. (2012) *Entrepreneurship theory and practice*. Vol. 36 (1), pp. 69-96.

Wolke, T. (2017) Risk Management. Berlin. Walter de Gruyter GmbH. E-Book.

Ylä-Outinen, J. (2019) Kaupungistuminen on supertrendi, jota ei voi kiihdyttää tai hidastaa - mutta sitä voi järkevöittää. [Online document]. [Accessed 16.4.2020]. Available https://www.kauppalehti.fi/uutiset/kaupungistuminen-on-supertrendi-jota-ei-voi-kiihdyttaa-tai-hidastaa-mutta-sita-voi-jarkevoittaa/015be028-4714-482d-b64c-b68c6fe18009

APPENDICES

APPENDIX 1

The interview questions to the investors

Age

Location

How many apartments do you own?

How many of them are in new buildings and how many in old buildings?

In which cities do your apartments locate?

When did you buy your first apartment for investing?

What kind of profit are you targeting for real estate investing?

1. Please, tell me about your decision-making process when making investment decisions.
2. What kind of strategy do you use in your real estate investments?
3. What are the most important criterions in successful real estate investing?
4. What kinds of apartments have you purchased and what kinds will you purchase in the future?
5. How does incresing urbanization affects your investing strategy?
6. What factors do you see as risks in real estate investing?
7. How do you try to manage risks of your real estate portfolio and manage decision-making in uncertainty?
8. How do you find out risks related to an apartment in advance before purchasing?
9. How do you analyze housing associations before decision-making when purchasing apartments?
10. What kinds of tenants are you looking for? How do you try to avoid risks when selecting tenants?
11. How Covid-19 and increased remote work have affected rentability of your apartments and your investment decisions?
12. Why did you choose real estate investing as your investment form?