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Capital Investments in the Presence of Tenancy Relations - a case study on farmers that lease land from institutional landowners

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Abstract

The agricultural sector is one of the most important industries in Sweden. About 40% of Sweden's agricultural land is leased out, which means that leased farming is a significant part of Swedish agriculture. Since Sweden joined the EU in 1995, the prices of leasing land have almost doubled. This means that leasing farmers must organize and streamline their businesses to achieve similar results. Therefore, farmers must invest in their businesses.

Problems may arise between the landowner and the tenant farmer when the tenant wants to invest in the property that does not match the landowner's vision of the future or vice versa. In the long term, this can lead to lower profitability in the industry if a large part of Swedish agriculture is not optimally farmed.

This study aims to give the reader a greater understanding of tenant farmers, willingness, and opportunities to invest in their business. In the form of farm buildings or land improvement measures. The study examines farmers that lease land institutional landowners. Moreover, the study examines how the relationship between the actors affects the decision-making process and what factors are crucial for a decision to be made.

In order to study this issue, a qualitative research method has been applied consisting of several case studies with tenant farmers and institutional landowners in the areas of Götalands Norra slättbygder (GNS) and Svealands slättbygder (SS). The interviews are semi-structured and based on thematic issues where origin comes from the literature review and are related to the theoretical synthesis. To create a contextual understanding of farming through tenancy and factors that affect the opportunities for investing in the business are identified.

Good relationships, trust, and communication are three factors that the study has found to have a major impact on the investment processes. The study also notes that the willingness of both farmers and institutions to invest is high, which facilitates the decision-making process. Furthermore, influencing factors on an investment are profitability, tenancy prices, family, friends, colleagues, and age of the tenant farmer.

Sammanfattning

Jordbrukssektorn är en av de viktigaste industrierna i Sverige. Cirka 40 % av Sveriges jordbruksmarker utarrenderade, vilket innebär att arrendelantbruk är en signifikant del av det svenska jordbruket. Sedan Sverige gick med i EU 1995 har priserna på att arrendera mark nästan fördubblats. Detta innebär att arrenderande lantbrukare måste organisera och effektivisera sina verksamheter för att nå liknande resultat som tidigare. Därför måste lantbrukarna investera i sina verksamheter.

Det kan uppstå problem mellan jordägaren och arrendatorn när arrendatorn vill genomföra en investering på fastigheten som inte matchar jordägarens vision av framtiden, eller tvärt om. Detta kan på sikt leda till lägre lönsamhet i branschen eftersom en stor del av det svenska jordbruket inte drivs optimalt.

Denna studie syftar till att tillgodose läsaren en större förståelse för arrenderande lantbrukares, som driver sin verksamhet via gårdsarrenden hos institutionella jordägare, vilja och möjligheter att investera i sin verksamhet. I form av ekonomibyggnader eller markförbättrande åtgärder. Samt att undersöka hur relationen mellan aktörerna påverkar beslutsprocessen och vilka faktorer som är avgörande för att ett beslut ska tas.

För att undersöka detta har en kvalitativ forskningsmetod tillämpats bestående av flera fallstudier med arrenderande lantbrukare och institutionella jordägare i områdena Götalands norra slättbygder (GNS) och Svealands slättbygder (SS). Intervjuerna är semi-strukturerade och är baserade på tematiska frågor var ursprung kommer från litteraturgenomgången samt med anknytning till den teoretiska syntesen. Med målet att skapa en kontextuell förståelse för hur det är att driva sitt lantbruk via gårdsarrende och vilka faktorer som påverkar möjligheterna till att investera i verksamheten.

Goda relationer, tillförlitlighet och kommunikation är tre faktorer som studien har konstaterat har stor bidragande påverkan på hur investeringsprocesser kommer att se ut. Studien konstaterar även att viljan hos både lantbrukarna och intuitionerna till att investera är hög, vilket underlättar beslutsprocessen. Ytterligare påverkande faktorer för att en investering ska bli av är; lönsamheten, arrendepriserna, familj, vänner, kollegor och ålder på den arrenderande lantbrukaren.

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Abbreviations

Code of Land Laws – Swedish legislation for tenancy agreement (Jordabalk, 1970).

Farm buildings – Buildings included in the agricultural business.

Non-freehold property – The land that the tenant lease, but do not own.

Tenancy tribunal – Landowner and tenants' option for resolving disputes.

Investment rate – Interest from the institutions on the investments made by the tenant.

1 Introduction

The first chapter introduces the topic and describes what an agricultural lease is, and how it works, what advantages and disadvantages it causes, to give the reader an introduction to the chosen field. Furthermore, a problem background is presented, and the problem statement, followed by the study's goals and delimitations.

1.1 Problem Background

One of the most important industries in Sweden is the agricultural and food sector (Johansson *et al.*, 2014). The Swedish farmers face increased exposure towards markets with harder competition, which results in lower product prices (Lantbrukets lönsamhet, 2018). In addition, more extreme weather affects the profitability of the sector. The sector is also considered to be a capital intensive industry compared to other industries (Johansson *et al.*, 2014). The complexity of the agricultural sector makes it interesting to further investigate the business.

In order to remain in the market, agricultural companies, like other companies in other industries, need to expand and invest in their business to be competitive over time (Ulväng, 2014). Today, there are two options for farmers to expand arable land, either by buying or leasing land. In agriculture, the price of buying land and leasing land has increased significantly since 1995 when Sweden joined the European Union (EU). Almost with 50 % for leasing land, as *figure 1* show below (Enhäll, 2015; Jordbruksverket 2, 2015; Jordbruksverket 4, 2017). However, over the last five years, the price increase has levelled off. The price development of the lease, forces the farmers to organise their operations in order to maintain profitability. Therefore, farmers need to invest in their business to remain to be competitive.

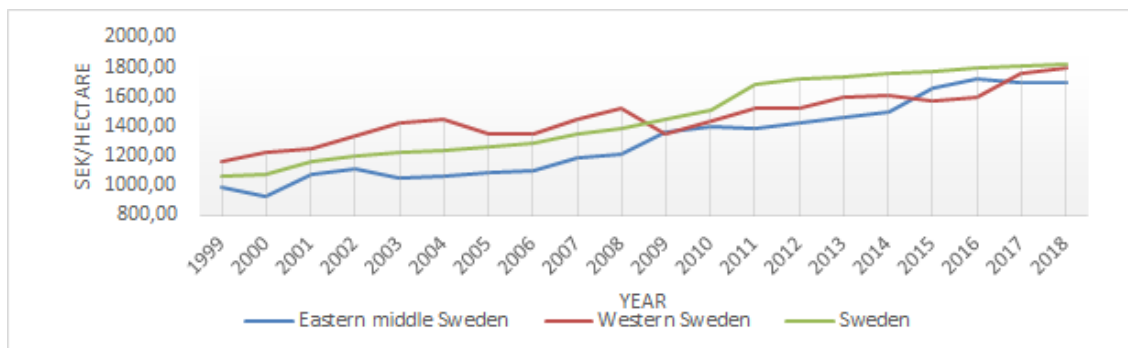


Figure 1: Tenancy price levels in SEK/hectares. Source: (Jordbruksverket 2, 2015; Own modification)

According to Swedish law, a lease is defined as the granting of land for use for compensation (8 chapter. 1 § Code of Land Laws). Leases intended to carry out agricultural activities are characterised as an agricultural lease. To be classified as a lease, a specific sum of money must be established (9 chapter. 29 § Code of Land Laws). Otherwise, the compensation is not classified as a lease payment.

In 2015, approximately 40 % of Sweden's agricultural land was leased, which demonstrates that tenancy is a significant institution in Swedish agriculture (Jordbruksverket 1, 2012; Moll, 2015). 40 % includes both farm leases and side leases. The farm lease includes housing for the tenant. A side lease refers to renting only tillable land (9 chapter. 2 § Code of Land Laws). A further difference between these tenure forms is the lease term. With a farm lease, the lease agreement is valid for at least five years. On the contrary, a side lease agreements can be written annually. In the case of a farm lease, the tenant has stronger protection of the contract than in

the case of a side lease (9 chapter. 7 § Code of Land Laws). Both physical and legal persons can grant an agricultural lease, but the lease to the legal person always classifies as side lease since legal persons cannot have a dwelling according to Swedish law (Arrendenämnden 1, 2015).

Contract protection implies that the tenant has the right to extend the lease agreement when the contract period has expired (SJA, 2019). These rules apply in large part to all leases, as well as to all side leases that have been written for a longer period than one year. The rules for contract protection are extensive and irresistible. These rules provide greater security for both landowners and tenants. The leasing right can be forfeited if the tenant neglects the agricultural land, buildings, or if the leased land is used for other purposes than what has been written in the agreement as well as whether the tenant assigns the lease rights in violation of the Code of Land Laws or is significantly late with the payment of the lease. Oral agreements concerning agricultural lease are classified as non-valid. If the tenant has entered the agricultural lease without a written contract. And it is not due to him or her that the parties have not signed a contract, the tenant is entitled to damages for the costs incurred in the property and for any non-profit (Arrendenämnden 2, 2015).

The landowner, together with the tenant has a joint responsibility for the lease (Arrendenämnden 3, 2015). It is the responsibility of the tenant to take care, maintain the lease, and to conduct on maintenance activities. The tenant has a maintenance obligation for the tenancy. It is the landowner's responsibility to ensure that new buildings and remodelling is conducted on the property. The landowner has a building obligation. This means that the landowner is obliged to repair buildings, coverings, or other facilities on the property if it is so worn out that rebuilding is required. However, this rule does not apply if the tenant is responsible for the wear, or if there is no financial incentive for the investment. The tenant may have the right to invest in buildings, land facilities, or land if it is considered profitable in the long term. Alternatively, if the tenant's interest in the investment is greater than the landowner's interest, and no action is taken. However, this does not apply, for leases of one year or less. This can lead to a conflict of interest between the landowner and the tenant. If the parties cannot agree, it is up to the tenancy tribunal to examine the question (9 chapter. 17a & 18 §§ Code of Land Laws). If a request is made by the tenant's, the board can determine a calculated cost for the investment which the landowner owes the tenant when the work is completed.

As an investor makes investments, he/she wants guarantees that it will be beneficial, and a return on the investment is obtained (Waldenström, 2005). Otherwise, there are few incentives to carry out the investment. It entails substantial risk to risk of investing heavily in a project where there is no guarantee of a return. Hence there is a need for possession protection or another form of security for a tenant to justify an investment. This is a problem, not only for the tenant but also for the landowner. It is in the interest of the landowner that the leased land is maintained and investments are conducted in a long-term and sustainable manner.

In a study conducted by Abdulai & Goetz (2013), they note that landowners tend to choose longer-term investments in land-based productivity-enhancing measures. While tenant farmers tend to make their investments in shorter-term inputs. In the study, Abdulai & Goetz (2013) note, that this depends on the security of the agreement. Moreover, farmers are not considered completely rational in their decision-making processes, according to Hansson *et al.*, (2013). They perceive other values than just profit in their agricultural firm as long the profit is sufficient. This can affect their decision-making processes. Therefore, farms are complex to analyse because the farmers often view their farming activities as more than one workplace. Therefore, more aspects need to be taken into consideration when analysing a farm, such as

social prestige, power, and family happiness. This may be influencing factors why investments are made and or not, in agriculture as well as in a landowner's farms and tenant's farms.

1.2 Problem Statement

Problems arise when the tenant believes that investments need to be made that do not match the landowner's vision. In addition, investments may not be conducted due to a lack of ownership protection. This may lead to that a large part of the productive capacity in Swedish agriculture is left unused because about 40 % of Sweden's agricultural land is leased and might not be used optimally. If the landowner perceives that these investments are not necessary, or not economically justifiable, problems arise for the tenant. In that case, the tenant must pay for the investment himself, which can be rather capital-intensive. Furthermore, it is difficult for the tenant to invest since he/she does not have the same ability to offer collateral as the landowner.

According to the problem background, around 40 % of the arable land in Sweden is farmed through tenancy. There are about 5000 farm-leases. *Figure 2* displays the change in agricultural firms over time in Sweden (Moll, 2015; Jordbruksverket 3, 2017). These farms represent a significant part of the arable land in the country. Therefore, it becomes natural for farmers who operate their farms through tenancy that they at some point in time, want or need to conduct investments to develop their business (Ulväng, 2014). The characteristics of these investments are in farm buildings land improvements to develop the business.

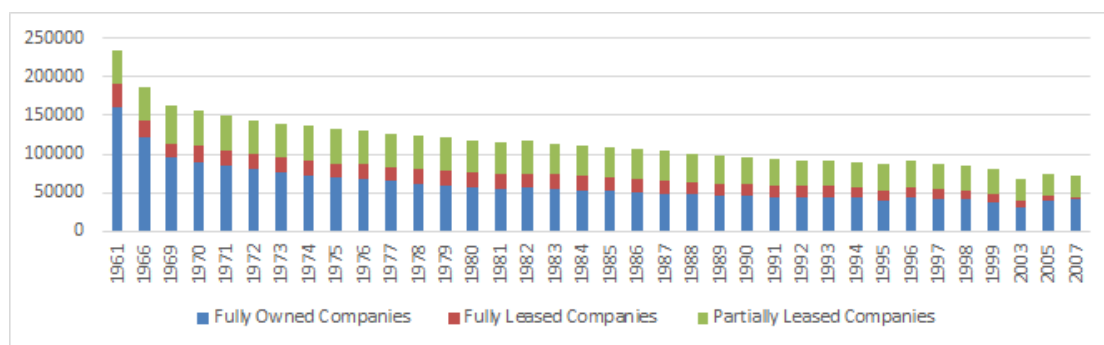


Figure 2: Agricultural Companies Change. Source (Jordbruksverket 3, 2017; Own modification)

A farmer who carries out all or parts of their farm activities through tenancy can meet hindrance in developing their business. The reason is that the agricultural market is capital intensive and there is a need for substantial capital in order to buy land (Stoneberg, 2017). The tenant farmer who does not own any land may have difficulties obtaining capital due to a lack of land to serve as collateral for a credit (*ibid*). The tenant farmer needs approval from the landowner to build or change existing buildings on the leased land. The investment could either be a land improvement or a new building. These investments can be capital intensive and difficult to motivate for the landowners because they might not perceive the economic benefits of the investment. When deciding who is going to pay for the investment, there can be different opinions between the landowner and the tenant farmer. The law states that the tenant farmer is obliged to maintain land in at least the same condition as when the farmer entered the tenancy contract (9 chapter. 32 § Code of Land Laws).

A study by Hansson *et al.* (2013) concludes that farmers are not fully rational entrepreneurs. The farmer can feel satisfaction without being profit maximising if the profit is large enough to continue the business and have a decent life. This means that analyses of an agricultural business can be made from more perspectives than solely profit maximisation. The farmer views the farm as more than a workplace because it is also a place for living everyday life.

Svensson (2014) carried out a case study among farmers in Småland, Sweden, to compare investments at owned farms and leased farms. He found that most investments with an economic life span more than one season are made by farmers who own their land and do not rely on leasing land. Huffman & Just (2004), examined the importance of a good relationship between the tenant farmer and the landowner. A study performed by Grubbström & Eriksson (2018) concludes the importance of social values and a good relationship between the tenant and the landowner.

McConnell (1983), Sklenicka *et al.* (2015) and Gebremedhin & Swinton (2003) have all studied different types of relationships between tenants, landowners and why certain measures are made and others not. However, none of them has chosen to focus on the underlying communication between these parties. They have not examined how decisions are made on investments, or how it will be financed, who will finance it, and what factors affect that an investment will be made. These are approaches that this study will state in order to contribute to the already existing research field.

1.3 Aim and Research Questions

This study aims to create a better understanding of the willingness and ability of tenant farmers to succeed with investments in farm buildings or arable land improvements and to understand the decision-making factors behind them.

- How does the relationship between the tenant farmer and the landowner affect major investments¹ in the farm business?
- What factors affect the decision-making process of a tenant farmer that wants to invest in the farm?

1.4 Delimitations

The study focuses on examining the willingness and ability of tenant farmers to invest in their business. However, the study focuses on investigating only tenancy through farm lease. The reason is that if the researcher chooses to also focus on the side tenancies, it might be too complex, since leasing farmers who usually expand their farm operation through side leases may enact on several different lease arrangements with different landowners. Hence, it may be difficult to draw conclusions from cases that are of quite different nature.

The study is limited to solely farms owned by institutional landowners. The tenant farm should be based on a farm lease. The boundary for the tenant farmers should be a farmer whose main occupation is in the agricultural firm, where a majority of the land is farmed through a lease. The fact that the demarcation is set to the main occupation should be in agricultural firms is since researchers want to avoid hobby activities and only focus on farmers that work full-time with agriculture. Additionally, farmers who participate in the study should recently have concluded or considered making a comprehensive investment in agricultural buildings and land improvement.

¹ Major Investment, is an investment that ties up a larger amount of capital. So as an investment in farm buildings or a grain dryer etc.

1.5 Structure of the Report

Chapter one contains the introduction to the problem, along with a problem background. Thereafter follows a problem formulation, goal of the study, together with the research questions. Furthermore, an explanation of the study's delimitations is provided. A summary of previous literary literature and research follows in the area of *chapter two*. *Chapter three* presents the chosen theories for the study. *Chapter four* deals with what methodology the researchers have applied and how the theories have been implemented in the study. Literature and the collection of empirical data is presented in *Chapter four*. *Chapter five* presents the empirical study and background to the selected respondents and their farm in order to create an image of the situation. The results that follow are based on the empirics. *Chapter six*, analyses and compares the data based on the theories presented in chapter three. *Chapter seven* presents the conclusions from the findings followed by a discussion of the results in relation to earlier studies. The conclusion is provided in *chapter eight*. *Chapter nine* presents suggestions for further studies. An overview of the structure, with a graphical figure 3.

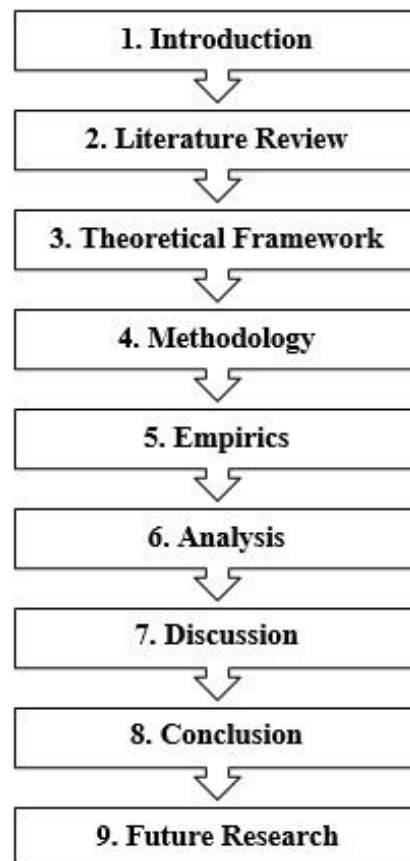


Figure 3: Outline of the study. Source: Own modification

2 Literature Review

Chapter two presents an overview of previous research within the chosen field of study. Furthermore, the economic and legal conditions to invest in tenancy, that affect the decision-making process and incentive problem regarding access to land.

2.1 Investment in Tenancy Land

As mentioned in the introduction, there are two main options for a farmer to expand and acquire more land, to buy more or by leasing land (Andersson, 2014). Given that a large amount of capital is required to expand by buying more land, leasing is a more common alternative to gain access to land. The chosen structure in the agreement of a lease agreement plays a major role in how the business will work. A tenancy agreement is associated with a certain risk in the form of production prices and the return on the crops (Pålsson, 2014). A tenant may not take part in price developments on the agricultural land because they do not own it. This fact affects long-term planning and requires that they must be flexible and to act on manage fluctuations in agricultural markets. In comparison, if the land is owned and enables planning in the longer term and an opportunity to take advantage of an increase in value. However, a leasing farmer faces no risk exposure due to borrowed capital to buy land if it would not go as planned. Not renewing the lease arrangement after the current contract period has expired is an option for a tenant farmer. *Figure 4* below illustrates the differences in risk exposure between a landowning farmer and a tenant farmer. With the different risks taken into consideration, Andersson (2014) states that around 40-50 % of leased land is optimal.

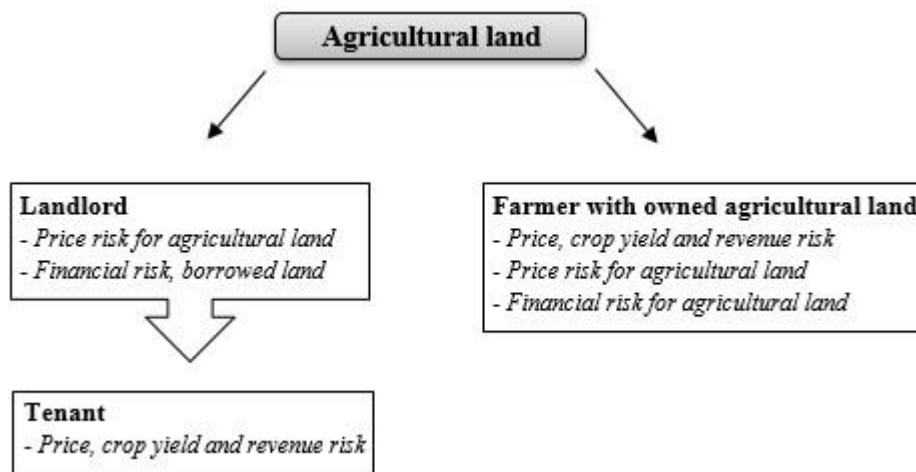


Figure 4: Differences between risk for landowning farmers and tenants. Source: (Andersson, 2014; Own modification)

Much of the research previously conducted concerning investments and agricultural leases address the problem with a short-term lease with great uncertainty about the agreements. The research focuses mainly on the disadvantages of leasing, in the form of quality deteriorations of the soil due to profit maximising behaviour as the tenant has (McConnell, 1983). Since the tenant is considered to only focus on the productive capacity of the land today and not in the longer term, the relationship largely benefits the tenant and not the landowner. The landowner interest is to preserve the value of the land to increase the value of the farm prior to a prospective future sale (McConnell, 1983; Sklenicka *et al.*, 2015).

Furthermore, McConnell (1983) notes that the productive capacity of the land is an important factor in determining whether an investment will take place. If an investment in the land would result in a positive outcome for the tenant, the investment will take place. In summary, there must be an underlying profitability that benefits the tenant, regardless of whether the investment itself is necessary (*ibid*). This leads to the legal conditions that exist, according to Gebremedhin & Swinton (2003). Farmers' motivation to invest increase with greater security. With a farm lease, the tenant has considerably stronger contract protection, which can justify an investment. This will promote preservation of the land quality in the long term and serves as a need for more sustainable investments.

2.2 Incentive Problems

An existing argument against the agricultural lease is that a high proportion of leased land can create incentive problems (Deininger & Binswagner, 1999). These problems include the fact that the tenant is not considered to utilize the leased land to its full capacity, due to the uncertainties and risks as a lease contract entails (Andersson, 2014). This can lead to limited opportunities and willingness to invest in the soil in the form of cover thickening, liming, or other production-enhancing measures. However, Sadoulet & de Janvry (2001) notes that leased land may increase productivity of land because tenant farmers are more committed and productive.

The literature over the chosen area yields different results in these respects. Andersson (1992) shows that if owned land is characterized by higher productivity due to incentive structures, it will lead to an increasing share of land owned. On the other hand, another study of specialised crop farm's shows that the technical and economic efficiency tends to decrease with a higher proportion of land owned (Larsén, 2008). The result may indicate that tenant farmers that have access to land might be more committed as Sadoulet & de Janvry (2001) states.

The problems presented above concern the agricultural sector and especially leased farms, where the incentives for making investments are less motivating. Hence, if investments in land improvement measures fail, this will affect agriculture in the long term. Hence, land will be facing reduced productivity. Therefore, it is interesting to investigate how leasing farmers view investments of this kind.

2.3 The Environments Effect on the Decision-Making Process

The environment and the industry's image of the future are factors that can influence farmers' decision-making. A general finding is that social networks create contexts, which in turn affect decisions. These contexts are part of expectations of how to act in a given situation (Hansson & Ferguson, 2011).

Hansson (2007) notes the importance of utilizing external networking in decision-making processes, to disclose any production problems and concerns regarding their production. In a study of dairy farmers, Hansson (2007) states that those who disclose their problems more regularly have higher economic efficiency than those who do not use their network. However, it is not shown that a higher degree of economic efficiency originates from the fact that these discussions lead to concrete solutions to the problems or a higher involvement.

The argument that these discussions lead to a higher degree of economic efficiency is supported by Nordström-Källström (2002). Björklund & Nilsson (2014) state that the information that farmers receive during these discussions leads to a higher commitment and motivation to solve

the problem. This commitment may be enhanced if the farmer is operating in a region where more farmers choose to invest in their leases despite the uncertainty that prevails. The increase in economic efficiency may be due to increased involvement. This can lead to an increase in the motivation to invest in their agricultural firm, especially if the farm is located in a region where other farmers invest. In the long term, this can lead farmers to disregard the risks of investing in their business due to the positive atmosphere.

3 Theoretical Framework

Chapter three presents the theoretical framework and relevant theories for the study. The first selection introduces the Principal Agent Theory, followed by Decision-Making processes and Bounded Rationality in the other sections.

3.1 Principal Agent

The principal-agent theory is a theory that exists both in the political and economic fields. The problem arises between the principal and the agent when one is to decide or perform an assignment for the other (Eisenhardt, 1989). The decision made by the agent affects the principal, and a dilemma arises. This depends on the agent motivating his action to guard his interests in the first hand and therefore becomes a moral hazard.

The theory bases itself on the difference between ownership and control in the relationship between the principal and the agent (Abdullah & Valentine, 2009). The dilemma occurs when the agent acts on behalf of another party, the principal (Eisenhardt, 1989). Normally, it is the principal who owns an asset that the agent manages for the principal, in order to increase the value of the asset. The principal is the one who decides how the agent will perform the assignment. It is the agent's responsibility to perform it (Eisenhardt, 1989). If it turns out that the agent has his or her interests and goals when executing the assignment in contrast to the principal, it affects the result. Hence, there is a risk that the result reached by the agent does not correspond to the result that the principal expects or the result that the agreement between the two parties states it should be (Royer, 1999). The contract can explicitly regulate the execution of the assignment and state what legal conditions are set and valid. The contract may also address which retaliations occur if the contract is not completed. The relationship between the principal and the agent can be the relationship between a company supervisor and its employees (Eisenhardt, 1989).

When a dilemma between the principal and the agent arises, two criteria are required. The first criterion is that a conflict of interest arises between the principal and the agent. The principal wants to see the greatest possible benefit from the investment and requires the agent to fulfil it. The second criterion is that the principal does not have full transparency in the agent's actions, which means that the principal does not have complete information. In many cases, the agent can hide the work he or she enacts on to guard their interests until fulfilling the contract. A possible solution for the principal to monitor the agent is by having intermediate goals during the process. However, this solution can be complicated and expensive because it requires so much monitoring to ensure that the agent completes the tasks. Therefore, it is most common for reconciliation to take place informatively between the agent and the principal (Eisenhardt, 1989). It is possible to eliminate the problems that arise within the Principal Agent relation by making the agent agreeing on a contract that both want to fulfil (Royer, 1999). It is common for the contracts not to be completed. However, this creates the opportunity for the agent to shirk because it is almost impossible for the principal to observe everything. The result of the entire process is that the focus is placed on incentives and measurement. In *figure 5* below an illustration of the relationship between the landowner and the tenant is presented.

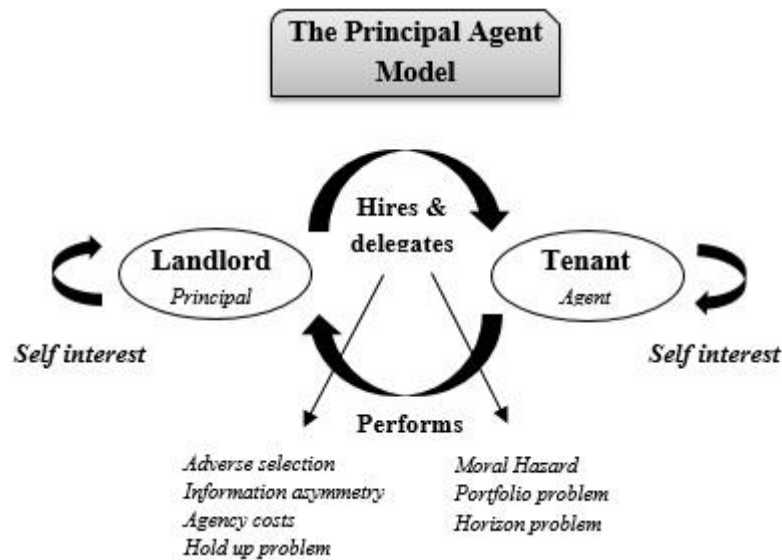


Figure 5: The Principal-Agent model. Source: (Abdullah & Valentine, 2009; Own modification)

3.1.1 Transaction Cost

Transaction costs arise due to an economic exchange or friction in the system, that might be due to changes in an organisation, performance, or a contractual relationship (Royer, 1999). These costs originate from friction or exchange. It might be costs in the form of negotiation of a contract until the contract is executed (Coase, 1960), and some costs arise in addition to the cost of the purchased/sold product (Nilsson, 1991). When investing in assets with high site specificity, it is likely that this will lead to complex agreements that lead to higher transaction costs (Williamson, 1987). The reason for this is that investments in locked assets entail a higher risk of information asymmetry, which creates higher transaction costs because the assets' possibilities are then limited.

Transaction cost is a vital part of understanding how the economic system works and to establish an economic policy, according to Coase (1960). Without considering these costs, it is impossible to get a correct picture. Coase (1960) notes that the costs for who intends to make the deal, on what terms they intend to make the transaction and costs that arise in connection with negotiations and decision-making are costs that must be included. When establishing a lease agreement, these aspects are important to consider when providing a correct picture.

3.1.2 Adverse Selection

Adverse selection is based on the fact that there is information asymmetry before a contract is written between two parties that are to enter into an agreement with each other (Groenewegen *et al.*, 2010). This happens when information is missing or withheld between the parties, and thus receives information benefits compared to the other party (Groenewegen *et al.*, 2010; Royer, 1999). The information itself is often related to various circumstances and risks that may originate from the agreement. However, if there is heterogeneity between the principal and the agent, this phenomenon can be avoided. They will instead act according to their preferences (Fraser, 2015). The result of the agreement may have varied consequences since the principal and the agent often have different preferences to risk (Saam, 2007).

The origin of adverse selection problems between the principal and the agent is related to the insurance industry, where it is important to distinguish different offers with respect to the level

of risk (Groenewegen *et al.*, 2010). An example is the car market, where a dealer of new cars offers a guarantee to their customers, which a used car salesman cannot match because the cost of it will be too high. In this way, sales of new cars are especially attractive in the market they can charge a higher price for their cars. In the same manner, it works in other markets. Initially, when you know little about the customer, the incentives to provide insurance are the same for all companies.

3.1.3 Information Asymmetry

Information asymmetry can develop between the principal and the agent who can influence their relationship. The reason is the power of the agent towards the principal. These can be solved by a forced phenomenon, which means that one of the parties is offered or adjusted its preferences towards the other as a result of their actions or influence on each other (Saam, 2007; Royer, 1999). Information asymmetry can develop when there is no information between the parties or that the information has reached the two parties so that they can maintain the agreements enacted. This creates an imbalance between the parties, which, in the long run, can lead to incorrect decisions but also to enhanced market failure (Wilson, 2008). The most common problem due to information asymmetry arises concerning information in the communication processes between the principal and the agent (Royer, 1999).

3.1.4 Hold-up Problem

When two parties have entered into an agreement with each other, some may abuse the other party's vulnerability and inflexibility. This situation is a hold-up problem and arises at the time when one party acts opportunistically towards the other and uses the enhanced negotiating position to rewrite the contract (Groenewegen *et al.*, 2010; Royer, 1999). This hold-up relationship can lead to additional transaction costs and the contract may become more difficult to adhere to and in turn, lead to more negotiations (Royer, 1999).

3.1.5 Moral Hazard

Moral hazard may occur in all types of business when one party changes its behaviour to the agreement after the contract has been signed (Groenewegen *et al.*, 2010; Royer, 1999). The behaviour is difficult to control since there is no mentioning in advance in the contract. One of the actors faces a lack of information about the other. The lack of information is often occurring after the contract is written. Hence, the actor no longer risks being fully affected by the potential negative effects of its actions. Therefore, the incentives for this party to act more carelessly increase. This may be due to that one pair in the relationship is more likely to maximize their own welfare and take advantage of the situation.

These situations, where a party acts opportunistically, can affect the effectiveness of the agreement. Hidden actions where one party uses his or her advantage of information towards the other and exploits the contract differently than has been agreed (Groenewegen *et al.*, 2010; Saam, 2007). These actions are difficult for the principal to control over time, and a moral hazard dilemma may arise.

One way to prevent this phenomenon is to maintain continuous contact, but also that the principal visits and evaluates the agent at regular intervals. To check and ensure that both meet the agreed criteria is important. Moral hazard dilemmas are a widespread phenomenon that exists in several sectors of the market (Groenewegen *et al.*, 2010; Holmström, 1982).

3.1.6 Portfolio Problem

Portfolio problems usually arise within cooperatives, where operators invest in proportion to their use. This entails an increased risk level, which they must accept (Cook, 1995). This means that the members do not have the opportunity to diversify their investment portfolios themselves according to their own preferences (Royer, 1999). In the long term, this can lead to sub-optimal portfolios with an increased risk level, where the members will pressure the decision-makers to reduce the risk level despite the fact that this can lead to lower profits (Cook, 1995). Because of this, Nilsson (2001) claims that it may make sense to spread its assets in different businesses to reduce the risk level. Andersson (2014) notes that by managing a well-planned portfolio, it is possible to reduce the risks.

However, decisions regarding the proportion of investments in risky assets are independent of the level of welfare or risk preferences (Markowitz, 1952). Nevertheless, the principal will have to optimize the portfolio based on the agent's risk preferences, which can lead to lower profits and conflicts (Borgen, 2004; Nilsson, 2001; Cook, 1995).

3.1.7 Horizon Problem

The horizon problem emerges when an asset is estimated to be consumed before the end of its useful life, which means that potential investors are responsible for a limited planning horizon (Royer, 1999; Nilsson, 2001). This can be problematic as a rational investor intends to maximize his investments with respect to risk and rewards in each specific investment (Borgen, 2004). Since the return the farmer receives from the specific asset is lower than the general return that the asset generates, this can lead to that farmers under-invest in their business (Ortmann & King, 2007; Royer, 1999). In the long term, this may have greater consequences and lead to a reduction in the willingness to invest, which can lead to a reduction in growth opportunities for farmers, as the yield is assumed to be lower than previously expected (Cook, 1995; Royer, 1999).

3.2 Decision-Making

Behind every investment, there is a decision to make the investment. It can be explained by using decision-making theory. The theory is about understanding the basic processes and assumptions behind a decision (Jacobsen & Thorsvik, 2008; Öhlmér *et al.*, 1998). Information gathering, choice of alternatives, and the organisational context are factors that influence which decision is taken, together with production orientation and economic conditions. These variables have an influence on which decision will be made and the behaviour behind the chosen decision (Öhlmér *et al.*, 1998).

The general decision-making process is described as a dynamic process, but there is a disagreement about which parts the process consists of. Harrison & Pelletier (2000) describes the process based on six different steps. They believe that the beginning of the decision process is with the decision maker and the organization that defines the objective, what is the desired outcome of the decision. When the target image is set, the responsible decision maker seeks information for different action options. When the decision maker has identified a number of different options, for action based on the information search, the decision maker evaluates these. In connection with the decision maker evaluating the different options, he/she makes a choice of solution, and to implement the solution. Once implementing the decision, an evaluation is executed to examine how well the criteria meets the objective.

In the general decision-making process, different elements interact with each other and that there is an influence between different events (Harrison & Pelletier, 2000; Öhlmér *et al.* 1998). There is always a constant development during the course of the process to create the opportunity for more optimal solutions than the one or the ones first chosen. If it turns out that a new available alternative is more optimal than the previously chosen option, the process jumps back a step. A revising of the solution and chooses a new alternative to try out.

In the decision process described by Öhlmér *et al.* (1998), there are eight steps to make a decision. The decision-making process that Harrison & Pelletier (2000) describes looks different but still consists of similar moments. The description made by Öhlmér *et al.* (1998), however, may be considered more detailed. The general decision-making process consists of the decision maker, creating a target image and valuation to weigh the advantages and disadvantages of possible outcomes (Öhlmér *et al.*, 1998; Harrison & Pelletier, 2000). The decision-maker evaluates the current situation to determine if there is a need for change — the target image influenced by the prevailing situation, but also the personal preferences of the decision maker. When the decision maker has compared and evaluated the desired objective with the starting point the decision maker may discover problems and opportunities. It is important that a decision maker discovers the problem before any recognition of the problem can occur (Öhlmér *et al.*, 1998). If there is no discovery of the problem, there will be no possibility for change since the parties concerned will not be motivated. When identifying a problem, the decision maker evaluates possible solutions that are consistent with the target image. The decision-maker evaluates the situation based on experience and preferences to some extent, with the help of external parties.

By observing the information available, the decision maker can find problem-influencing factors, possible actions, and possible outcomes along with consequences (Öhlmér *et al.*, 1998). When observing the available information, the decision maker can discover aspects that have previously been unknown. When discovering new aspects, a new analysis of the problem is required and a remaking of the process. Then process the possible action alternatives in an analysis phase for the decision maker to evaluate these, based on their own preferences and their own target image. This part of the process that is the decision itself. When the decision maker chooses the alternative best assumed to fulfil the target image and preferences, it creates an intention to implement the decision. In the implementation phase of the decision, the resources required for implementation are collected. When all resources are available, a decision is made based on that information. After the execution of the document, the evaluation of the actual decision and its outcome takes place compared to the target image. The evaluation of the outcome influences the decision-maker in terms of future goals and actions in new decision situations. When the decision-making process is completed, it takes responsibility and acceptance for who is responsible for the decision taken.

3.2.1 Farmers Decision-Making Process

Öhlmér *et al.* (1998) analysed the farmer's decision-making process in a study. The study focused on the process that farmers go through during their decision-making. The conclusion of this was that the traditional decision-making process needed revising. The decision-making is relevant for both landowning and tenant farmers. Hence, decision-making concerns the business conducted at all farms.

Öhlmér *et al.* (1998) found that all steps from the traditional general decision-making process are a part of the farmer's process as well. However, the farmers' decision-making marks by seeking information and discovering problems rather than analysing and choosing (Öhlmér *et al.*, 1998). The decision model consists of four different phases and four different sub-

processes. The four different phases that the farmer's decision-making process consists of are *problem detection*, *problem definition*, *analysis & selection*, and *implementation*. *Problem detection* means actively searching for information, both internal and external nature. This is to create the opportunity to discover a problem or opportunity. *Problem definition* is the phase in which the problem is detected and defined. *Analysis & selection* creates options for solving the problem, and it is analysed for further development. *Implementation* is the final phase in which implementation takes place together with evaluation, which is important for analysing the result.

In collaboration with the four different phases, there are four different sub-processes. *Information search & attention* means processing the information previously collected to examine how it affects the problem and the underlying decision. *Planning* takes place by examining the consequences of the decision. *Evaluation, estimation & selection*, an evaluation takes place for what consequences the different decisions can give. *Responsibility* means the control for who is responsible for the final decision. These sub-processes co-operate with the various phases that Öhlmér *et al.* (1998) presents. How the sub-processes interact with the different phases is explained in *Table 1* presented below.

Sub-processes	Information search and attention	Planning	Evaluation, estimation and selection	Responsibility
Phases				
Problem detection	<i>Information search</i> <i>Attention</i>		<i>Estimation of consequences</i> <i>Evaluation of problems</i>	<i>Control of choice</i>
Problem definition	<i>Information search</i> <i>Find options</i>		<i>Estimation of consequences</i> <i>Evaluation of problems</i>	<i>Control of choice</i>
Analysis and selection	<i>Information search</i>	<i>Planning</i>	<i>Estimation of consequences</i> <i>Choice of options</i>	<i>Control of choice</i>
Implementation	<i>Information search</i> <i>Possible outcomes</i>		<i>Estimation of consequences</i> <i>Choice of corrective action</i>	<i>Responsibility for final outcome</i> <i>Forward information</i>

Table 1: Farmers Decision-Making Process. Source: (Öhlmér et al., 1998; Own modification)

The *problem detection* phase deals with the internal and external information that is available to determine whether there are any problems or opportunities. The evaluation of the information is to determine whether the farmer's situation deviates from the existing target image. There may be several goals for entrepreneurship for the farmer, and it seems to be created through intuition and feeling. The farmer's decision-making process is characterized by being intuitive because the target image is often intuitive (Öhlmér *et al.*, 1998; Öhlmér *et al.*, 2000).

Making intuitive decisions is something that is often common in smaller companies outside the agricultural sector (Ekanem, 2005). This is often because the target picture with a change in a smaller company does not have to be profit maximizing, but to find a solution that is satisfying to a current problem (*ibid*). Decisions within smaller companies usually are based on the decision maker's perceptions and previous experiences. It is less common for the decisions to be conventional and fully rational. The decision maker can experience the decision as rational because the decision is based on the perception, what is rational for the decision maker (*ibid*).

If the reality picture deviates from the decision-making farmer and the target image set, this means that a problem has been discovered (Öhlmér *et al.*, 1998). Upon the discovery of a

problem, it is required that the situation is nuanced and realistic. The perceived image of reality is ideal, and there will never be a problem discovery. To find motives for a change, the decision maker requires that he discovers a problem and creates an awareness that a change is required and why it needs to be implemented (Harrison & Pelletier, 2000).

Once the discovery of the problem has occurred, the phase in which the problem must be defined, and possible solutions will be identified (Öhlmer *et al.*, 1998). Experience with the farmer is the basis for the information that leads to possible solutions. If the farmer feels that the experience is not sufficient, external sources are used. When performing the information search, identification, and analysis of how different alternatives affect the detected problem. The decision-maker chooses to continue evaluating the alternatives believed to be best for the situation (*ibid*).

When making the choice of the identified action option, the decision-making farmer continues to analyse the selected options by searching for more information, continuing to assess any consequences, and evaluating their implementation (Öhlmer *et al.*, 1998). The farmer selects the best alternatives to meet the desired target for implementation. It is common for the farmer to discuss his decision with trusted sources in the environment to evaluate the chosen option (*ibid*).

When selecting which action to implement, the farmer performs the chosen option, whose consequences are best assumed to fulfil the desired target (Öhlmer *et al.*, 1998). It is important to evaluate the decision to see if the outcome corresponds to the expectations by the farmer. Evaluation of the outcome creates an opportunity to correct the decision and to improve knowledge for future decisions.

In each phase of the decision processes, a sub-process is ongoing (Öhlmer *et al.*, 1998). This is to describe, as the sub-processes, searching and paying attention, planning, evaluating, and selecting and taking responsibility for current decisions. With the help of the sub-processes, the decision maker's knowledge and understanding of the situation increases.

3.3 Bounded Rationality

Bounded rationality is the idea that an individuals' decision-making ability is limited by the traceability of the decision, the cognitive ability, and the time available to make the decision. The decision-makers in the bounded rationality find satisfaction in arriving at a solution instead of seeking the optimal solution (Gigerzner & Selten, 2002). When an individual is bounded rational, it does not have the opportunity to consider and calculate all situations and their results based on certain actions (Ostrom, 1998). When it comes to financial decision-making within organizations and companies, the classic theory of "economic man" or the rational decision-making model is often used. Complete information is required, as well as clear objectives and known consequences. The theory of the rational decision-making model often meets criticism because there is not always the opportunity to acquire complete information and to define a clear objective (Kahneman, 2003). The farmers of this study may be bounded by not getting the full information for the investments to be made.

Since it is not always possible to have complete information, an alternative theory has emerged instead of the rational decision-making model. As for the farmers of this study when deciding on investments. The theory of bounded rationality assumes that decisions are made with a certain degree of uncertainty and limited opportunity to be rational (Simon, 1955). Because the availability of information, knowledge, and the objective of the decision can vary between different situations, information that underlies a decision can be real but also consist of

assumptions made by the decision maker. In an environment full of unknown variables, decision-making takes place without access to full information or an unclear objective for the situation in the decision (*ibid*). According to Simon (1955), it is not possible for a decision maker to consider all variables and to have full information when to make a decision and to determine the objective for the decision. The process consists of facts, objectives, and preferences that are valued for the decision to be made. Bounded rationality is due to the limited availability of information and the ability to process it (*ibid*).

When confronting an individual with a situation limited by their rationality and unclear goals, it is usually more important to make a sufficiently good decision instead of striving to make the perfect decision. Since the decision maker does not have access to the objective and complete information, the individual does not know the perfect solution and how to achieve it. It is not possible for the decision maker to make the optimal decision for the company in such a situation (Simon, 1955). Therefore, it is important for the decision maker to find an alternative that leads to a decision that fulfils an arbitrary satisfaction.

Norms influence the individuals' ability to learn and act within the social context. Norms can vary within different social contexts and cultures, but also for the individuals and in different situations. This both promotes and complicates the social dilemma and the individual's ability to make decisions in different situations. When norms exist, it may affect different situations and expectations upon them. Hence, norms create reciprocity for the problem, and an understanding of keeping their promises may create short-term costs and long-term benefits. If individuals believe in them in their environment and that they will contribute, it also creates trust from other participants within the group. It facilitates decisions within the bounded rationality (Kahan, 2003).

3.4 Theoretical Synthesis

The theoretical synthesis of the study is based on principal-agent theory, decision-making theory, and bounded rationality. This is motivated by the fact that the relationship between the landowner (*principal*) and tenant (*agent*) is to be analysed. How the landowner relates to the tenant and the other way around is the basis. The analysis of this relationship will make it easier to understand how the relationship in a lease works and to understand the contextual understanding of the relationship, which leads to how a decision is made and how farmers work in decision-making processes and how they think about investments, what is important and which factors that are important in the decision.

The principal-agent theory is important for the study to examine the relationship. It highlights the problems that may occur in a tenancy relationship (Abdullah & Valentine, 2009). However, the decision-making process and bounded rationality are important aspects to consider are these phenomena. Since external factors can be depending on factors to why the farmer chooses to act in a specific way. A previous study states that profit maximisation is not always what is most important for the farmer (Hansson *et al.*, 2013). Therefore, these aspects are of importance to analyse.

These theories are intertwined together to create a deeper understanding of the phenomenon. The idea of the theories is that these should complement each other to create a complete picture of how it can work when investing in a farm lease. *Figure 6* shows a summary picture of how the theories are intertwined together and how all aspects are important of how the final decision is made.

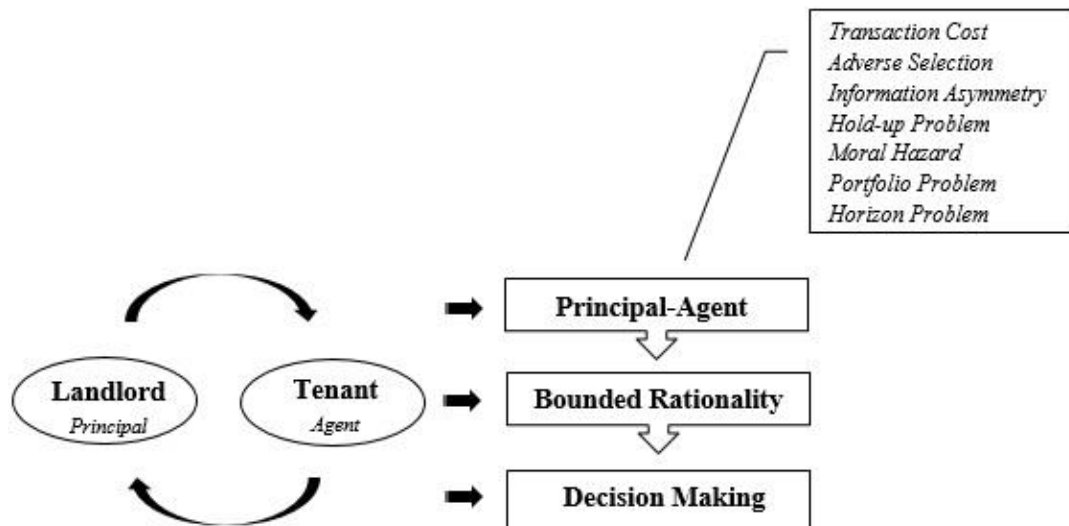


Figure 6: Theoretical Synthesis. Source: Own modification

4 Methodology

Chapter four describes and argues the chosen method that was chosen in each step of the study. First, through the literature review to position the study, and to select relevant theories. It is followed by the collection and presentation of the empirical data collected using in-depth interviews.

4.1 Qualitative Approach

This study uses a qualitative approach, and the data collection stems through semi-structured interviews. A study could also be quantitative, which means data-collection through surveys with numerical data or already predetermined answers via questionnaires with numerical values or default options (Christensen *et al.*, 2001). The qualitative method is useful when gathering a large amount of soft data, often by describing words or pictures, from a few sources. The qualitative method is superior if the aim of the study is to create a contextual understanding of the phenomena (Bryman & Bell, 2015).

The aim of this study is to create a better understanding and identify which factors affect the willingness or possibilities to invest in new buildings or soil-improving actions for tenant farmers. Hence, a qualitative study is perceived to be preferred since it is conducting an open approach (Bryman & Bell, 2015). The factors considered could be highly individual and vary between the respondents.

There are many aspects to consider when investing, especially for farmers who operate their business through farm lease. Experiencing these aspects can be subjective and individual depending on the farmers' situation. The choice of qualitative method is for the researchers to maintain an open view and avoid missing something of relevance. The qualitative method provides greater scope for interpreting opinions and perceptions within the current topic (Bryman & Bell, 2015). The purpose of the thesis is to convey the farmers' perception of the current situation for investments and not to investigate how common a specific phenomenon is within a larger population. Therefore, a qualitative approach is preferred.

4.2 Formulating the Theoretical Framework

In the academic world, there are two main theoretical approaches to research; these are deductive and inductive (Bryman & Bell, 2015). These differ where the deductive approach generates hypotheses based on already existing theories. These are tested empirically. The main goal in the deductive approach is to test existing theories based on the knowledge being processed.

The second approach is inductive, which is the opposite of the deductive. It is advantageous if the knowledge in an area is limited. The inductive approach consists of a collection of extensive empirical material that the researchers' attempt to generalise (Bryman & Bell, 2015). It starts with what can be observed in the world and from that, try to draw conclusions about these phenomena and create theories. Theories developed are compared with existing theories in the field. Since the chosen research area has a relatively limited theoretical base, an inductive approach is chosen for the study. It provides the opportunity to collect a large amount of data to interpret, which is advantageous in this case. With an inductive approach, the study aims to produce realistic and probable answers to the comprehensive questions being asked and to gain

a greater understanding of these phenomena. This is beneficial to the study instead of getting safer answers to more limited issues that the deductive approach generates.

Bryman & Bell (2015) relate to the importance of the researcher being aware of the starting position, how the researcher himself can influence the study and its results. This study's epistemological position is characterised by the perspective of interpretivism. This means that the researcher examines and observes social and cultural factors. Furthermore, Bryman & Bell (2015) believes that it is important to have an open mind and be aware that reality is discursive and in constant change. In addition, different researchers interpret situations differently.

The study bases itself on the assumption of a realistic ontological position, which means that the researchers see and are aware of reality but accept that it is changeable and can be observed with absolute certainty (Riege, 2003). With a realistic perspective, the researchers accept the differences that exist between the real world and the phenomena and problems examined in a study. The study, reflects on the relationship between the landowner and the tenant, by applying a realistic position, investigating relationships and experiences instead of formulating predetermined hypotheses and testing these against each other. This means that it is not as easy to make generalisations as in a quantitative approach to the same extent, which the researchers are aware of (Bryman & Bell, 2015). The reason is that a smaller sample size used in qualitative research does not generate a statistical foundation to the same extent as a quantitative method does. However, this does not prevent the researchers from making analytical and theoretical generalisations, using a case study (Robson, 2011). Awareness of the research and the researcher's influence is important, especially in qualitative research. The researcher influence increases with qualitative research, since the researcher analyses and draws conclusions of the observation (Bryman & Bell, 2015). This is something that the researchers have considered throughout the work process to minimize the risk of influencing the results.

4.2.1 Literature Review

The literature review is the first phase of this study, which carries out to create a greater understanding of the research area today, but also over time. This helps us identify gaps in the literature and to develop the conceptual, theoretical framework for the current study by bringing together established theories. In addition, the review provides a deeper understanding and breadth of the research area. The literature review presents a complete description of the existing situation regarding the knowledge that exists in the area, without the researchers having an influence on the report.

It is recommended to do a literature review for the study in order to get an idea of previous research in the area and to provide researchers with a greater understanding of the subject. This is to make the researcher, focus on the angles that previously have not been researched and thereby generate new knowledge for the research area (Starrin & Renck, 1996). In the literature review, the knowledge that previously exists in the area is considered to influence how this study is performed. During the literature review, it has been discovered that there has been no previous study that has been used as an attempt to investigate the willingness or the ability to invest by tenant farmers. Therefore, we found it interesting to investigate this area.

The main literature in the thesis is based on scientific articles, reports, theses, thesis work, and legal texts. To obtain these, mainly databases such as *Google Scholar*, *Primo*, and *Web of Science* are used. Searches are done in both English and Swedish to get a larger contextual understanding. Keywords as *tenancy*, *investments*, *farmers*, *farming through tenancy*, *investments in tenancy*, *decision-making*, *principal-agent*, *bounded rationality* is used in the searches to get an overview of the literature.

4.2.2 Choice of Theory

A study by Hansson *et al.* (2013) concludes that farmers are not always rational in decision-making processes. To a large extent, the decision-making process itself differs between the general decision-making process and the decision-making processes of farmers (Kahneman, 2003). Therefore, theories of bounded rationality and decision-making have been chosen, to gain a greater understanding of how landowners and tenant think about a decision to invest or not in a property.

This, together with the principal-agent theory that describes the relationship between the landowner (*principal*) and the tenant (*agent*), or the other way around, how their communication and trust in each other work. These theories have been chosen to gain a greater understanding of how a decision is formed and which influencing factors may be behind a decision being made about investing. The thesis is based on principal-agent theory to be able to analyse the relationship between the landowner and the tenant. The principal-agent theory is presented together with its basic elements to analyse the phenomenon deeper. All of these elements are fundamental to use in this study since they provide and explain how the different actors affect each other in the process of investment.

Alternative theories to this study might be the stakeholder theory. Which has its focus on the relationship between different stakeholders. To examine different roles and functions of these business relations in a deeper perspective (Donaldson & Preston, 1995). This theory is advantageous when examining how firms can satisfy their stakeholder.

4.3 Empirical Data

The following section presents how the interview objects are selected, how data is collected, and how the data is be presented. Then follows a description of how collected data will be analysed. Furthermore, the section describes why the study has chosen these respondents and what the advantages and disadvantages it entails.

4.3.1 Choice of Interview Objects

This multiple case study contains nine interviews consisting of different farmers and landowners who are facing an investment or have previously managed a process to make an investment. The number of interview objects is considered sufficient to create a nuanced picture of the empirical result in a qualitative study (Morse, 1994; Creswell, 1998). The purpose of the study is not to generalise the situation for all farmers. Instead, the purpose is to describe and create an understanding of the chosen field. To include additional objects in the study does not mean that they contribute more than those that can be captured in the selected interview objects.

The selection of respondents is limited to farmers that lease land from two different institutional landowners. This sample contains seven tenant farms and two institutional landowners. The reason behind choosing institutional landowners instead of private landowners is because this study attempts to analyse how investments can be made in a tenancy relationship. It is harder to analyse private landowners because the tenant may have several side leases from different landowners. Therefore, this study chooses to focus on tenant farmers that lease from institutional landowners where most of the land is leased from the institution. The distribution of respondents is motivated by the fact that the study examines the relationship between the actors and what factors affect investments. Therefore, two different institutions have been interviewed together with different tenant farmers from these institutions to make it possible to

analyse the relationship between these actors and what factors affect the willingness and the possibility to invest. To be able to get in contact with farms that match the objectives and purpose of the study. Farms are selected based on they are willing to invest and expand their farms. In addition, farms that have recently invest or plan to invest are also included. The researchers contacted the different institutional landowners to get in contact with farmers suitable to interview and that fit in with the criteria.

The selection of respondents has been made using a snowball selection together with the institutions. A snowball selection means that the selection of respondents takes place during a process together with the respondents (Biernacki & Waldorf, 1981). You start with a group of people in the selection, and these further recommend interesting respondents who match the study's purposes. By applying this method, you will continuously receive new respondents until the study's selection is saturated. A snowball selection is advantageous because it is quick to find new objects for the study since each person usually can recommend more respondents. This can lead to a higher participation rate because those who are recommended have a connection with each other and thus feel a sense of security in the situation. The method has been criticized because it opposes many of the assumptions underlying random selection and representativeness. It might be argued that larger companies with a more extensive social network can affect the selected sample. However, the benefits of getting a large variation in the sample are considered important in the study and the institutions have assisted us with finding respondents. This study gained access to a larger variety of the sample and the opportunity to find hidden populations that would otherwise have been difficult to get in touch with tends to broaden the study (Lewis-Beck *et al.*, 2004).

The authors of this study have not made any own selection of farmers that participate in the study. This can be a limiting factor for the study's generalisability since the researcher has not chosen the respondents themselves. Hence, we did get access to them via other respondents, in accordance with the delimitations described in *chapter 1.4*. In addition, landowners may deliberately have chosen tenants who have implemented investments, and consciously left out those who didn't get their investments' approved. In qualitative research, representativeness is not considered to be a major character, as the goal is to make in-depth analyses and draw conclusions about a specific phenomenon (Bryman & Bell, 2015). In a qualitative method, the focus is on examining a heterogeneous group to create a new reality about their views, and the different conditions of the selection should not erroneously affect the analysis and the result (Trost, 2010).

4.3.2 Collection of Data

The interviews took place between 2nd and 12th of April and started with a pilot interview was done with a farm that matched the studies delimitations. This was done to test the structure and see if it is necessary to reformulation some questions. This method is used to ensure the quality of the interviews (Robson, 2011).

The data on which this study is based is obtained by interviews that have been done with two landowners and seven tenancy farmers. Each interview took approximately about 60 minutes. The empirical data collected is conducted with semi-structured interviews that are made in person, to get a closer connection to the respondents. Semi-structured interviews are based on open questions in a specific order (Robson, 2011). Semi-structured interviews are applicable to this study because the same questions are asked to each respondent, where the respondents can respond freely with open answer opportunities instead of prepared response options that are applied in structured interviews (Bryman & Bell, 2015). This is motivated by the need to ensure

that the respondents' free opinions, thoughts, and thoughts come forward and to reduce the researchers' influence on the answers. A structure with open questions in a specific order is beneficial in a multiple-case study. It is easier to analyse and compare the empirical data collected, to obtain useful data from the interviews that fit the purpose of the study (Robson, 2011).

Since the literature in the field is not complete, in-depth semi-structured interviews are an appropriate choice of method. It gives the study complementary material that has not been available earlier since these issues have been difficult to investigate in advance (Bryman & Bell, 2015). Therefore, the method was chosen to let farmers point out the aspects that they think are important, which previously did not appear in the literature. This requires that the researchers are active during the interviews and ask follow-up questions to the respondents in order to receive deeper answers. The follow-up questions are asked in addition to the predetermined questions that are in the interview guide (Kvale & Brinkman, 2009), in *Appendix 1 and 2*. Using in-depth interviews help the researcher to understand more about the respondents and their situation, their view on the process, decision-making, beliefs, and norms, by asking *how* and *why* questions (Guest *et al.*, 2013).

However, although in-depth interviews have a potential to capture the situation from a larger perspective and give more dimensions to the study, there are challenges with the chosen method (Kvale & Brinkman, 2009). To avoid that the respondent feels uncomfortable and pressured to respond in a certain direction during the interview. Consideration has been given at the design of the interview. By allowing the respondent to choose the location for the interview, it may create comfort for the respondent.

In addition to the primary empirical data collected, secondary data from articles, literature, reports, and websites have also been collected. All interviews are recorded and transcribed. Written notes were taken during the interviews. In order to have the opportunity to return to the interviews and once again review the information, to analyse it further and to clarify any uncertainties. Using recording and transcribing reduces the risk of the researchers having their own opinions and interpretations emerging in the analysis of recording the data. Therefore, quality of the data processing is increasing (Bryman & Bell, 2015).

4.3.3 Presentation of Data

For all agricultural companies that participated in the study, a brief description of the company and their conditions are found to give the reader an idea of the size and capacity of the company. The large amount of data received through the interviews and the transcription have been coded thematically, which means that the information is sorted into different categories according to keywords that have been identified which correspond to the purpose of the study, to find different patterns to draw conclusions from (Rubin & Rubin, 2005; Trost, 2010). When coding the interviews, it facilitates the identification of the relevant results for the study (Rubin & Rubin, 2005). Within these categories with themed keywords, this is carefully coded with a focus on decision-making processes regarding investments, alternative obstacles, and the relationship between the principal and the agent.

The empirical findings are presented tables in *chapter 5, section 5.3 and 5.4*, with the aim of summarising and the material that emerged during the interviews that affect the opportunities for investment, this approach is an adequate method for research with qualitative methods according to Robson (2011). These tables are supplemented with descriptive text to highlight important aspects.

4.3.4 Analysis of Data

The unit of analysis in this study is the tenant farms and their willingness and ability to invest, and how the relationship works between the tenant and the landowner, which in this case, are the institutions — what factors that a decision will depend on and how the communication between the stakeholders works. The first aim of the analysis is, therefore, to describe the investment process at the farms in greater detail from subjective experience from individual farmers and the institutional landowners. The second aim is to identify differences' in the different cases in the study, to identify different circumstances that affect the decision concerning investment and how the communication works between the farmer and the landowner. This is done by applying the theoretical synthesis and utilizing the chosen theories to analyse how the farmers' investment process looks like and what factors a decision about investment depends on.

4.4 Quality Assurance

It is of importance to be aware of how the researcher himself can influence the study's results. It is important that the researcher evaluates himself carefully and clarifies how the study will maintain its quality (Bryman & Bell, 2015). This can be done in different ways. This study has chosen to use the research concepts trustworthiness and authenticity to describe the study's research quality. These concepts are used to explain how the study's purpose and conclusions are related to each other, and whether the probability is high to get similar outcomes in another study in the same field.

4.4.1 Trustworthiness

Trustworthiness is based on the four quality criteria, *credibility*, *transferability*, *dependability*, and *confirmability* in qualitative research, to present such a fair picture of reality as possible (Bryman & Bell, 2015).

Credibility is used to verify that the image of the reality stated by the researchers is correct (Bryman & Bell, 2015). This is done in the study following the stated rules and delimitations. Together with the respondents being given the opportunity to check the stated image of the reality that the researchers have experienced in shape of a respondent validation. Where the respondents have been given a summary of the interview. Hence, they have the opportunity to identify any misunderstandings and clarify these in order for the study to reflect a correct picture of reality.

Transferability depends on whether the results of the study are transferable to contexts other than those studied (Bryman & Bell, 2015). Since one of the goals of qualitative research is to create a more extensive and deeper understanding of the chosen subject, this is of great importance to determine whether the study's conclusion can be applied in another context. Therefore, a clear but not revealing description has been made of the case farms. Their statements have been analysed in a way that gives the reader an opportunity to determine whether the results are transferable to a different social reality than that of the study.

Dependability in the essay is obtained by providing an exhaustive description of all the steps and parts of the research process. An investigative approach has been applied (Bryman & Bell, 2015). To achieve this, a description of all the steps in the study has been made in the methodology chapter. In addition, the empirical data has been investigated and quality assured by both researchers of the study, to ensure its quality.

Being completely objective in the implementation of a study is not possible, according to Bryman & Bell (2015). Therefore, they advocate that it is important to make use of confirmability in their study. This is important to ensure that the researchers' own personal preferences and values have not been reflected in the study's analysis and results, which is otherwise one of the disadvantages of qualitative research (Bryman & Bell, 2015). This has been done in the study by examining the study's results to ensure its objectivity and quality.

4.4.2 Authenticity

Authenticity is included in the study giving a true and fair view and conveying the respondents' views in a correct and fair manner (Bryman & Bell, 2015). The study's authenticity is confirmed by applying respondent validation to minimize the risk of incorrect interpretation of the results in the study. Thanks to the respondent validation, any misconceptions in the interviews is remedied. In addition to having the respondent validation returned to the respondents, a description of their activities has been sent to ensure that information about their activities is correct.

Authenticity also means ensuring that the respondents convey a correct picture of their opinions and activities (Bryman & Bell, 2015). This type of authenticity is difficult to control because there is a risk that the farmer has reconstructed his opinion on how and why an investment was made at the given time. However, the experience was that farmers were honest and wanted to convey a correct and fair picture of their situation.

4.5 Ethical Considerations

The ethical considerations in this study have been taken into consideration throughout the entire process. This is an important part of the process, according to Bryman & Bell (2015). Since the data collected during qualitative research methodology originates from people's experiences, opinions, and attitudes, the ethical aspects such as volunteerism, anonymity, confidentiality, and integrity are fundamental aspects to consider. Hence, this is thoroughly enacted throughout the study and focus is on, among other things, consistent and clear communication to avoid misunderstandings regarding the conclusions and purpose. Therefore, the respondents have been informed about the study's structure and purpose and about the rights. As a volunteer, they have the right to cancel if they so wish, and whether they wish for anonymity and what it means if they would not choose to be. Furthermore, they have obtained insight into how the collected data will be used for the purpose of the study.

5 Empirics

This chapter is used to describe the different respondents, tenancy farmers, and agricultural managers at the land-owning institutions. The chapter also contains information from the interviews with the respondents and their relationship with investing in the farm lease. The empirical data is presented in the following order, first, the tenant farmers and then the institutions.

5.1 Empirical Background

The background to the empirical data for the study bases itself on the farmers' willingness and opportunities to invest in the leasing agreement. For it to be possible to carry out an investment, capital is required. It also requires approval from the landowner to build or conduct an investment. If there is not enough capital, there is the possibility that the landowner will make the investment given the consideration from the farmer who pays interest on the investment. The interest rate for an investment made by the landowner is based on the market conditions for capital costs and an estimated depreciation rate depending on the type of investment. The empirical data is presented with a connection in the principal-agent theory, which is the basis of the theoretical synthesis. The focus is on the relationship between the actors. Together with the decision-making process and how rationally the actors act based on their objectives.

5.2 Description of Case Companies

The respondents in our study consist of farmers with the farm lease of various institutional landowners, as well as with the agricultural managers of the various institutions. A summary of the case companies is display in *table 2* below. Section 5.1.1 presents a shorter description for each company containing how much land is cultivated, the production focus on the farm, organic or conventional, when they started their business when they got access to their last lease and what made investments during the years. Furthermore, in section 5.1.2, a description of the institutional landowners follows how they work and what they have in view of today's agriculture.

	<i>Farmer 1</i>	<i>Farmer 2</i>	<i>Farmer 3</i>	<i>Farmer 4</i>	<i>Farmer 5</i>	<i>Farmer 6</i>	<i>Farmer 7</i>
Location	Uppland	Uppland	Uppland	Uppland	Uppland	Västergötland	Västergötland
Main production	Milk	Grain	Milk	Grain	Beef cattle	Grain	Grain
Hectares	665	565	300	750	240	340	300
Active since	2010	2000	1998	1999	1996	2013	1994

Table 2: Description of Case Companies. Source: Own modification

5.2.1 Tenancy Farmers

Farmer 1

This is an ecological farm whose production focus is organic milk and a smaller portion of meat and cereals. 500 hectares of effective arable land and 100 hectares of pastures are cultivated on the farm. The crop distribution is 250 hectares of grain and 250 hectares of grassland. The farmer leases most of the land from an institutional landowner. The remaining land originates from private leases. A smaller portion of the land is owned. The farmer took over the farm in 2010 through succession and got access to the latest lease in 2018. Over the years, investments

have been made together with both the institutional landowner and investments financed by the farmer.

Farmer 2

This farm grows 565 hectares of land, where all land is leased land. The major crop is cereals with conventional cultivation. Farmer 2 took over the business in 2000 through succession and got access to their latest lease in 2018. The lease consists of a farm lease at the bottom together with some side lease from both institutional and private landowners. The farmer leases most of the land from an institutional landowner. There have been several different investments made over the years to expand and make the farm more efficient.

Farmer 3

The farm grows 300 hectares, and all land is leased. 150 hectares of tillable land is rented from the institutional landowner. The farm's main focus is milk production. Farmers 3 took over the business in 1998 through a succession. The farm consists essentially of a farm lease, but there are also some side leases. The farmer leases half of the land from the institutional landowner. Since the farmer took over the operation, some larger investments have been made in the form of a dairy barn.

Farmer 4

The farmer grows a total of 750 hectares and leases all land. The farmer leases a large part of the land from institutional landowners. However, the farmer leases a majority of the land from private landowners in the form of side leases. The farm's production focus is to grow conventional cereals. Farmers 4 took over the farm through an intergenerational transfer in 1999 and got access to their latest lease 2017 from a private landowner. Since the farmer took over the farm, there have been some investments conducted on the farm, primarily to make the farm more efficient.

Farmer 5

The farmer leases 238 hectares of land, some of which is pasture. The farmer leases a large share of the land through a farm lease from the institution. In addition, the farmer operates some side leases. The farmer took over the operation of the farm in 1996 through succession and got access to his last lease in 2004. The farm's main production focus is organic production of beef production and cereals. Since the farmer took over the operation, there have been several investments that are necessary for the future of the farm.

Farmer 6

The farmer currently leases 340 hectares, with the majority of the land from an institutional landowner. Most of the land is used for conventional grain production, which also is the farm's main enterprise. A small part is pasture. The farmer operates the farm together with two other farms through a machinery collaboration. The farmer got access to the farm in 2013 and lease all land.

Farmer 7

The farmer grows 300 hectares of arable land, of which he owns 30 hectares, and 15 hectares are side leases from private landowners. The farm's main occupation is conventional grain production. The farmer also runs an agricultural supply service agency. The farmer got access

to the farm lease in 1994, and the last addition of tillable land occurred in 2017. Through the years, there has been an investment in a large machinery building with repair workshop.

5.2.2 Institutional Landowners

Institutional landowner 1

This institutional landowner is managing and administration land in the form of agricultural land and forestry. The institution leases out the tillable land to tenant farmers. Currently, the department leases out 40 farms, unlike 1985, when they rented out 143 farms. The institution does not want to focus on side leases. They strive for long-term solutions that are based on a farm lease where they can work efficiently with the farms and create large sustainable units.

They want to continue the rationalisation of agriculture. Therefore, they define detailed requirements on their tenants before they can lease a farm. Careful analyses of operating plans, interviews, and home visits to the tenant take place. For a tenant to be up-to-date, they must share the institution's view and the desire for the future. This will benefit both in long-term earning capacity.

Institutional landowner 2

This institutional landowner generally works as a part of their business in arranging the agricultural leases, forestry, and leasing issues. Their view of agriculture is that in the future, rationalisation will continue. They have a desire to create long-term relationships with their tenants to develop larger and more efficient units. They have a belief that, as the agricultural sector develops, there will be a need for better-educated farmers in the future. The institution believes that the tenant farms will grow in the future and become a larger part of Swedish agriculture. At the same time, they view leases as a good way to enter the market for younger farmers. To then gradually work together enough capital to buy your own farm if there is interest.

At present, the institution leases out 48 farms, and 110 side leases distribute across 10 000 hectares. Most of these side leases are combined with the farm leases. To become a tenant for the institution, a notification interest is required together with an operating plan. Then follow interviews with the relevant farmer. They do not necessarily choose the one who provides the highest bid. They try to choose the farmer best suited for the farm, where they can build a sustainable long-term relationship. The institution wants farmers who have a desire to expand and develop and best matches the institution's criteria from a long-term perspective.

5.3 The Tenants Perspective

All the tenants contacted for the study have stated that a major reason for operating the farm of today is that previous generations in the family managed the farm. They had the opportunity to take it over through an intergenerational transfer. The farmers agree that this is a good way to enter the agricultural sector by leasing a farm because it is not as capital demanding as buying farmland. Therefore, it has never been an option for any of them to buy their own farm. However, they had been interested in owning the farm itself if capital had existed.

The farmers agree that if you do not originate from an owner-operated farm from the beginning or if you inherit a large amount of capital, there is no other way to enter the agricultural sector

than to rent a farm or land. Farmers present an advantage of leasing a farm. They can leave the lease at the end of a contract period if it does not meet their expectations.

5.3.1 Internal Impact

Need for investments

At present, the needs are different regarding the investment situation on each farm, but the majority of farmers have plans to carry out some types of investment in the future, mainly in buildings because they are old and outdated. Regarding investment in land improvement measures, the farmers are relatively cautious. However, they admit that it would have a positive effect on the yield, so it is not something that they put much emphasis on.

Farmer 4, on the other hand, perceives big benefits attributable to land improvement measures, and he thinks more people should do more. It is not sustainable in a long-term perspective to use the land without providing something back, which is often the case in leased farmland according to him. Therefore, he is positive that more farmers choose to invest in land-improvement measures, for example, drainage.

Capital to invest

As a tenant farmer, it can be difficult to obtain capital on your own for investments. You have no collateral in the form of a property or land. Therefore, many tenants need the landowner to step in and take over the bank's role in terms of major investments, according to Farmer 2. With the landowner as an investment partner, the investments may positively affect the economic outcome for the tenant. It is important for the tenant to analyse the investment carefully prior to implementation.

Farmer 7 states that there is capital to invest, but not enough to make investments on the preferences that he would satisfy his needs. Farmer 1 and 5 consider that they have a satisfactory level of capital to invest. A couple of the farmers in the study admit that they are positive to note that the landowner pays for the investment because the offered interest rate is in some cases, more favourable than the banks.

Reason to invest

All participating farmers in this study have made investments and improvements in their farms in recent years. Everyone agrees that the investments have been of importance for the future of the farm. Without the investment, it would have been difficult for them to continue their business in the foreseeable future. Considering the developments in the agricultural sector for a long time now, when everything goes towards larger, more sustainable units, the farmers agree that they need investments over time to remain competitive in the market.

Both Farmer 2 and 6 have invested in a grain dryer together with storage units as they claim it is of importance for their future businesses. This makes them more flexible in the market, and they can sell their products with greater flexibility and not be as dependent on the price level at harvest. Farmer 7 examines the options for investing in a new grain dryer for the same reasons as Farmer 2 and 6.

Reason to not invest

A reason why farmers do not want to invest is due to the fact that profitability is not perceived to be satisfactory in the short and long term. However, there are other factors that influence the decision. Farmer 1 argues that if the landowner's help is not enough, it may be difficult to find the capital needed to carry out the desired investments. Farmer 4 argues that various factors

affect whether an investment will not be made, for example, he is satisfied with the current situation or approaching retirement. This means that the willingness to invest becomes inhibitory in favour of putting away money for their retirement. When a tenant farmer leaves the tenancy, he has no property to lean back on and needs to find a new place to settle. Farmer 5 indicates that increased leasing prices and a high investment rate affect his willingness to invest. For Farmer 7, it also concerns how the situation is to gain more land. If it is difficult to gain access to more land, the incentives for investing in the business decreases.

The decision-making process for investments

The decision-making process looks different for each farmer. There is no clear or pronounced structure for how to proceed with an investment. However, a basic requirement is that the investment must be profitable to be implemented in the long-term.

Farmer 1 consult his brother, who is also part of the company when examining the possibilities for investments. An important criterion for them is that the investment is not too expensive. The reason is that they do not own the farm and do not share a possible value increase of the farm. This makes Farmer 1 feel that there is no need to build exclusive buildings, though the farmer sees the need for efficient and functional buildings that they could benefit from. Farmer 2 travelled around and looked for different options for carrying out the investment but found no alternative that was more economically advantageous than the landowner's proposal. Farmer 3 consults the family and colleagues in the industry and carefully evaluates how others have done and designed their investments before deciding themselves. The other farmers are similar in their processes for deciding on an investment.

Motivation to invest if the land was owned

The majority of farmers agree that if they had owned the land on which they operate, the motivation to invest would have been higher. In addition, they argue that in many cases, the investments would have been larger and more expensive if they had owned the farm. The reason is that they would be able to take advantage of the asset appreciation on the farm. This also means that the interior of, for example, buildings had been more sophisticated to make it more comfortable, not just think about efficiency and profitably. The fact that the farmer would share the increase in value is an important incentive for why the motivation to invest would be higher if you own the farm.

Farmer 6 and 7, on the other hand, perceive no change in the willingness to invest if they own the farm. They feel that they have support from the landowner to invest in the way they want and need. However, Farmer 7 claims that if the land had been his own, he had built a larger building directly instead of building in stages.

Table of farmers answers – Internal impact

	<i>Farmer 1</i>	<i>Farmer 2</i>	<i>Farmer 3</i>	<i>Farmer 4</i>	<i>Farmer 5</i>	<i>Farmer 6</i>	<i>Farmer 7</i>
<i>Need for investments</i>	New milking pit	No need right now, some smaller renovations	Milking robot	No need at the moment	Looking at options for a new barn.	No need at the moment	Looking at options for grain dryer
<i>Capital to invest</i>	It's always possible to solve finances	Depends on investment size	Have capital for some investments	Have capital for some investments	Yes, for the current investment plan.	Yes, for smaller. No for new farm buildings	Yes, but not to build exactly as he wants
<i>Reason to invest</i>	To make operations easier	To rationalize operations	To get a better return and to increase the yield	Profitability is the most important reason	A prerequisite for continuing operations	Necessary to farm the land and increase profitability	To increase profitability
<i>Reason to not invest</i>	Bad profit. Inhibitory	Bad profit, short & long term	Bad profit	Satisfied with current operations. Approaching retirement.	High investment rate, high rental price	Bad profitability	No access to more land.
<i>The Decision-making process</i>	Consults his brother. Needs profit	Discussion, looks at colleagues, calculates	Wife, colleagues, study visits	Brother, friends, colleagues, and family	Calculates price & profit	Wife, brother & father	No-one affects, good support from the institution
<i>Motivation to invest if the land was owned</i>	Probably would have been higher	Higher, raises the value of the land	Motivation would have been higher	Higher motivation to invest	No difference	No difference	No difference

Table 3: Presentation of the tenant farmers answers on the internal impact questions. Source: Own modification

5.3.2 External Impact

Relationship and communication with the landowner

All farmers agree that it is important to form a good relationship and good dialogue with their landowner. Since it sometimes can be difficult to obtain capital for investing as a tenant farmer. Cooperation with the landowner is of importance for making the investments that farmer wants on the farm, according to Farmer 4 and 6. Farmer 7 also states that his relationship with the landowner is necessary and that generates profits in a long-term perspective. Farmer 6 and 7 state that to agree on a certain decision, it is a game of give and take. Sometimes the farmers have to sacrifice a little. In the end, they both still feel that it pays off, they become successful in their demands for investments, e.g. when there is a need for drainage.

There is a great deal of variation on how often farmers communicate with their landowners. All try to form a continuous dialogue with them once a year to tune in and discuss different issues at the farm. The contact increases and becomes more frequent when there are processes that need extra attention. At the same time all farmers agree that if they have any problems regarding the farm, it is just to get in touch with the landowner to find a solution to the problem.

Landowners understanding of the investment

It can be difficult as a tenant farmer to raise capital to invest in the farm. This makes it important that both parties are convinced that the actual investment has a significant positive effect on the future of the farm. All farmers agree that they have the support from their landowners to carry out investments. Then the dialogue takes part in how the parties will proceed with the investment

Farmer 2 feel great support from their landowner to invest, but at the same time, the landowner wants to own the buildings. Farmer 4 states that the willingness of the landowner to invest is high, sometimes even too high. This means that he sometimes feels the need to slow down the landowner to emphasize the profitability of the farm. The investments must be adapted to the farm he operates and not just to the landowner's perspective of the future of the farm. Therefore, investments cannot be too large but must be of a reasonable magnitude to be profitable for the current farmer. Farmer 6 feels support as long as he presents relevant ideas that match the landowner's view of the future. Farmer 7 states that his landowner has a desire to invest, but not as much as himself. Farmers 7 wants to give priority to large investments in the business to streamline it further.

Who pays for the investment?

There is variation between the farms how they finance their investments. Each farm has different arrangements with their landowners in terms of how they finance the investments. The landowners often want to finance the investment themselves and charge an investment rate, according to Farmer 2. Nevertheless, it may look different depending on the situation, according to Farmer 1. Previous generations on the farm have financed the investments themselves, but in the case of larger investments, it may be good to have the support of the landowner. Farmer 3 prefers that the landowner finances the actual shell of the building, such as walls, ceilings, etc., while the farmer himself is responsible for assets in the building. Farmer 7 also perceives that it depends on the prevailing situation. He is presented a budget by the landowner. If he

wants to conduct additional investment that are not within this budget, he may finance it himself.

The influence of age

There are shared opinions if age affects the willingness and the ability to invest. Farmer 1 reports that the age is currently no factor, so he feels no influence on the issue, but at the same time, he points out that with increasing age and approaching retirement, his own interest in investing declines in order to save money for him and his family's future. Farmer 2, 3 and 4 argue that age has no impact from the landowner's point of view, but they look to the future of the unit and are therefore interested in investing regardless of age because the farm will continue to operate even after the farmer in question retires. Farmer 5, 6, and 7 are on the same track as Farmer 1 and argue that age affects an individual's willingness to invest. When you are younger, you are more motivated and driven to expand and streamline your business. However, the willingness decreases with age, and you start approaching retirement. The majority of farmers agree that, regardless of age, there is still an interest from the landowner to invest in the farm. They look at the farm in a long-term perspective and strive to continue developing it.

Future tenancy prices

Farmers agree that changes in tenancy prices are something that affects both their willingness and ability to make the investments on the farm. It concerns everything from land improvement measures to investing in buildings. On the other hand, there is a great deal of variation on how farmers view future lease prices and how these will develop in the coming period. Farmer 2 and 4 are of the opinion that they have reached a plateau level as of now and cannot rise much more, as the current level is not sustainable for farmers in the long-term. However, they believe that the current level of tenancy prices is high and will not increase that much in the future. Farmer 6 and 7 are of the opposite opinion and believe that prices will continue to increase. There is still a high demand for land, and this will contribute to that rental rates continue to rise, although the rise in rents has begun to diminish somewhat recently. At the same time, they feel that there is a limit to how much the rental rate can rise.

Relationship to the bank

The relationship with the bank for the farmers in this study is minimal. This is a consequence of the lack of collateral in the company when borrowing from the bank. They have support from their landowners, who are willing to invest. Therefore, there is no reason for farmers to build a relationship with their respective banks. However, some farmers argue that if there was an opportunity to get a loan from a financial institute and build on non-freehold property, it could be more advantageous than letting the landowner invest.

On the other hand, Farmer 3 and 4 feel that it might be beneficial to develop a better relationship with the bank. It is important to examine different alternatives to financing if the farmer makes the investment. The relationship with the bank is important, especially considering that tenant farmers do not have the opportunity to provide the same collateral as owners of land.

Important external actors

Farmer 1 and 2 mention that politicians are one of the most important external actors in the market. Farmer 5 are on the same track and supplement with the county administrative board and the local council. These are strong players in the market, and changes in their policies and regulations can have major consequences for farmers. Although they mention that nothing has happened radically yet, Farmer 2 claims that the consequences of a ban on glyphosate may have great consequences for them. Even if Sweden would go in a different direction from the EU,

this could have consequences for Swedish farmers. When the decisions are taken at EU level, it will be the same for everyone.

In addition, all farmers highlight their respective landowners as an important player that affects their future, but also their local trading partners such as Lantmännen, Swedish Agro, Svenska Foder, and KRAV.

Table of farmers answers – External impact

	<i>Farmer 1</i>	<i>Farmer 2</i>	<i>Farmer 3</i>	<i>Farmer 4</i>	<i>Farmer 5</i>	<i>Farmer 6</i>	<i>Farmer 7</i>
<i>Relationship & communication</i>	Good relation & communication is important	A good dialogue	Good relation & dialogue	Good relation. The landowner was a bit hesitant in the beginning	Good relation & dialogue	Feels good	Easy to work with, the landowner is always available
<i>Landowners understanding of the investment</i>	Fair consensus on the future	Feels the support from the landowner	Feels the support	A high willingness to invest	Feels the support for investments	As long as you got the right idea, the farmers feel the support	Feels the support but maybe not always as much as the farmer wants
<i>Who pays for the investment</i>	Depends on the situation	The landowner in exchange for investment rate	The landowner in exchange for investment rate	Shared payment in grain storage and dryer	Looking at both options. The last barn paid by the institution	The landowner paid for the last investment	Depends on the situation.
<i>The influence of age</i>	Age is not a factor today for the farmer	Age does not matter. The landowner looks at the unit	Do not feel that age affects	Thinks that age influence the willingness to invest for the farmer	The willingness to invest decreases with age for the farmer	Thinks that age affects the willingness to invest for the farmer	The age affects the willingness to invest for the farmer
<i>Future tenancy prices</i>	Hard to get it cheaper	Do not think they will change that much	The rental prices will continue to increase	Thinks they have reached the plateau level	Price developments affect	Thinks they will continue to increase	Everything gets more expensive, the increase has levelled off.
<i>Relationship to the bank</i>	Thinks it is possible to solve finances	Do not have or need that much connection with the bank	Feels the trust from the bank could be better	The importance of a good relationship depends on the situation	Thinks the relationship is good	Not that much contact with the bank	Not that much contact with the bank
<i>Important external actors</i>	Politicians	Politicians	The dairy plant	The large agricultural cooperatives	County administrative board & local council	The large agricultural cooperatives	Could not think of any

Table 4: Presentation of the tenant farmers answers on the external impact questions. Source: Own modification

5.4 The Institutional Landowners Perspective

Requirements for tenant farmers

Both Institution 1 and 2 stipulate requirements on their tenant farmers to become part of the business. Institution 1 states that they have a thorough process for developing long-term and prosperous collaborations with the tenant farmer who is currently at the farm. The process as of today is much more structured than it was 25 years ago, claims Institution 1. The process consists of a business plan presented by the farmer, interviews, review of background information, and home visits to the intended tenant. They also want the tenant farmer to perceive future opportunities for developing the farm. Institution 2 announces their lease in suitable media where interested tenants may place a bid on what they are willing to pay to get access to the unit. The tenants who submit bids must present a business plan. The application together with interviews and a background review is used to find the tenant who is considered best suited to carry on the business. Institution 1 has developed an elaborate model for pricing the leases, while institution 2 uses a bid for their leases. Institution 2 states that it does not have to be the highest bid that wins without making sure to find a tenant who is considered best suited to run the farm in a long-term perspective. It is important to find talented farmers who can be profitable in attractive areas. Institution 2 also believes that the requirement for higher education will increase in the future.

Expectations on the tenancies and trust

When choosing farmers for their tenancies, both institutions have expectations on the tenant farmers. Institution 1 strives to find farmers who want to develop the business and to create rational farming units in the future, together with far-reaching relationships. Institution 1 wants to develop larger sustainable farming units. Institution 2 wants farmers who, in the long term, can be profitable and give a return on the invested capital. Both institutions state that it is of great importance to have a high level of trust between the tenant and the institution to create sustainable long-term relationships. A high level of trust is something that all parties benefit from and is important for the business to work says institution 1. Institution 2 argues that trust is important for having a good climate between tenants and the institution. To develop a high level of trust, it is important with transparency, without creating envy between the farmers.

Action plan

None of the institutions have a developed action plan in case there are disagreements between the parties. Institution 1 says that this is because the cases of dissent are so individual that it is not possible to define a pre-planned action plan. Institution 2 states that they do not have a pre-prepared action plan but to try to solve problem as far as possible through communication. If it is not possible to solve the problem, legal assistance is available in the form of the rent tribunal and the tenancy tribunal.

5.4.1 Investment in Tenancy

The suggestions for the investment

The proposals for investment may originate from both parties. Institution 1 claim that it depends a little bit but that the idea of an investment usually stems from the leasing farmer. In some cases, it may come from the institution if they think they see a need on the farm. However,

Institution 1 points out that they cannot force an investment. Institution 2 states that both parties can come up with ideas about investments for the farm.

Who pays for the investment?

The procedure for paying the investment can be carried out in different ways either by the institution paying for the investment or by the farmer financing everything himself and building on non-freehold property. This often requires a redemption agreement with the institution for the bank to approve financing unless the farmer provides capital himself. The second approach is that the institution pays for the investment and charges a so-called investment rate that the farmer pays to the institution. Institution 1 states that it is most common that they pay for the investment. They have a standardised template that they use to determine how much the farmer must pay on the investment annually. Institution 1 believes that the investment rate is a good way to prevent unexpected surprises for the tenant farmer. Institution 2 states that they want to pay as many as possible of the investments on their farms. They demand a return on money that they have invested in the farms. Institution 2 monitors the investment together with the farmer to ensure that it is profitable for both parties. For larger investments, a far-reaching relationship is of great importance together with a budget for what the Institution is willing to invest in the selected object. If the farmer wants to exceed the budget, it is possible to share the investment between the farmer and the institution.

Hindrance in the investments

There may be barriers to investments that prohibit the institutions to invest according to farmers demands. Institution 1 says that the amount of capital is not a scarce commodity and that it can afford to finance most of the investments demanded. All investments are analysed individually. The institution determines whether the investment is relevant to the farm's future. Institution 1 also investigates possibilities for a new tenant to take over the business in the future in order to examine if the investment is generalizable. Institution 2 argue that obstacles to an investment may develop if the investment is adapted to the individual but does not fit into the farm's operations. Institution 1 reveals that it is unusual to decline an investment, but they can rework the original plan to better fit with the enterprise structure on the farm.

Possibilities for the tenants to invest themselves

In some cases, it may be that the farmer is exploring possibilities for carrying out an investment himself. The institutions want to avoid this since they want to own the buildings that are on their land. Institution 1 says that the possibilities for the tenant farmers to invest themselves are limited since the institution prefers to be involved in the development of the farms. Usually, the institution has the cheapest options for investment because they often have previous contacts with contractors who perform the construction, according to institution 1. If something is to be built on a non-freehold property, approval from the institution is required, and a redemption agreement is required. Building on a non-freehold property was more common in the past when one could make tax deductions (Institution 1). However, the institutions does not believe that any of the parties will benefit from it in the long term. Institution 2 prefer to invest themselves in their farms, though the possibility for the farmer to invest himself exists. It is possible to find compromises to make both parties satisfied.

Declining an investment

It may occur that the institutions as landowners decline an investment. This is unusual, according to Institution 1. It is more common to rework the investment plan before it is executed. If the investment is in line with the farm's production, it is likely to be implemented.

Institution 2 reveals that they want to be involved in investing and not hindering their tenants if they believe in the investment.

The importance of capital budgeting

According to Institution 1, it is important to develop good long-term solutions that benefit both tenants and the institution. Long-term thinking is important when calculating profitability. Institution 2 states that when making an investment, it is important to examine profitability. It is important for both institutions to have profitable investments.

The future with tenancies

The future with tenancy will be important for our food production. Institution 1 believes that it will be more common with farming units operated through a leasing arrangement. Since today's land prices make it difficult for young farmers to enter the market, without the amount of capital required. Tenancy creates opportunities for young farmers to enter the market unless someone inherits a larger amount of capital or land. Institution 1 also sees the importance of tenant farmers to keep competence. Otherwise, important skills will disappear from the sector.

6 Analysis

In this chapter, an analysis of the empirical data and the relationship to the chosen theories is presented. The analysis is based on principal-agent theory and how this relationship affects the various actors in the issue of investment, and how the decision-making process works.

6.1 The Principal-Agent Relationship

The relationship between the landowner and the tenant is similar to the relationship in the principal-agent theory. Therefore, this relationship can be related to this theory, where the various actors that have entered into an agreement influence each other and how their relationship and trust affect the outcome of the agreement (Abdullah & Valentine, 2009). Grossman (1992) notes that the outcome of the relationship between the two actors is strongly dependent upon experience. If there are previous experiences from both parties, this may facilitate the relationship between the parties. In this study, the farmers have extensive experience in working with their landowners. Several of the farmers' families have been active on these farms for generations. This has facilitated the communication between the landowner and the tenants. The majority of farmers in the study pointed out, that the long-term relationships with their landowners have facilitated understanding of how they want to conduct their business. This, in turn, facilitates carrying out investments together. Both parties emphasize that they want to invest in the business because in the long-term investment will benefit both parties. Therefore, it is important to have transparency and a good understanding of each other and not keep away any information from the other party.

It can be noted that the relationship between the tenant and the landowner is not only positive. One reason is the increasing rental rates in the market. This is the effect of the principal-agent relationship where the landowner has an advantage over the tenant (Royer, 1999), as it is the landowner who determines the price. This has consequences for the tenants' profitability, which in the long run, affects their willingness and ability to invest in the business. Furthermore, it is difficult for the tenants to anticipate this process, as they need the land to remain competitive in the market. Hence, they typically have to accept the landowner's conditions. If they do not accept the bid, they might be challenging legally. Therefore, the landowner has an advantage over the tenant in this relationship. The rents are an effect of supply and demand. The demand for agricultural land is high, which contributes to increasing prices.

6.1.1 Transaction Cost

According to Royer (1999), transaction costs may arise during a negotiation if one of the parties acts opportunistically. The landowners are aware of this, and to avoid this, they have designed their own models that they follow when writing new or extending existing contracts. Prior to contract writing, careful processes are carried out from the respective landowners. They evaluate each potential tenant thoroughly in the form of interviews with the tenant, the families, and close and analyses of the operating plan and home visits to create a complete picture of the situation. In order to be treated fairly and nobody should feel that they are less prioritized than anyone else is. The landowners exclusively work with written five-year contracts on their farm leases to eliminate the risks of conflict that may arise in the presence of oral contracts, since these not as well developed. The landowner's models are also used to treat each tenant in a cost-effective and fair manner, and that means that it is not the tenant who influences the rental rate. It is the soil, and the farm's general condition that he is to rent that becomes the sole basis for the decision. In this way, it becomes an objective assessment in each individual case. This

agrees with what Royer (1999) writes. It is important to be active in negotiation and contract writing and to make use of complete agreements to minimize the risks of opportunistic behaviour in connection with the design of the contract.

Transaction costs can also arise when negotiations on how an investment is to be implemented. It is common for transaction costs to increase when investing in assets with high site specificity (Williamson, 1987). During these circumstances, it can initially imply a great difference in the design of an investment, who should pay for it and how it should be designed practically. Since the tenant farmers generally have difficulties in obtaining collateral from the bank, letting the landowner invest is often the only option. The farmer needs the landowner's permission if they want to invest in a building on none-freehold property, given that they obtain capital themselves. Hence, it is not self-evident that the landowner will accept it. Therefore, landowners also work with standardized models that are specified for each individual case. Institutional landowner 1 makes it clear that they pay for the shell of the building and the tenant for the building equipment. The tenant pays an investment rate on the investment and depreciation. Occasionally, there is sometimes a dissatisfaction on the part of the tenants, since they believe that the investment rate is too high, while at the same time they have few other options. The model is designed to avoid transaction costs by treating all farmers equally, so that they obtain the same interest rates on similar investments. Hence, no one should feel that they are less prioritized than anyone else is. Everyone should face similar conditions from the institution's side in order to develop their operations.

6.1.2 Adverse Selection

In the relation between the principal and the agent, there may be information asymmetry between the two parties who enters the agreement before the contract is written (Groenewegen *et al.*, 2010). Either the contract could be the tenancy contract or the contract relating to an investment designed to develop the farm business. The information asymmetry emerges when information is missing or withheld between the parties before the contract is signed. Adverse selection emerges when the parties do not have the information needed, and therefore, the principal-agent problem arises (Groenewegen *et al.*, 2010; Royer, 1999). Before entering the tenancy contract, the institution does a thorough analysis of the farmer that is relevant for the tenancy contract. This is to gain the information needed to avoid adverse selection and to make sure that the preferences and values between the principal and the agent, institution, and farmer, match each other satisfactorily. If there is heterogeneity between the parties, they will act according to their own preferences. The same applies to the tenant farmer who needs to be aware of what the written contract stipulates. This applies to both the rental contract and the contract formulated for a specific investment.

As mentioned in the theory chapter, adverse selection stems from the insurance industry in order to distinguish different offers with respect to the level of risk (Groenewegen *et al.*, 2010). The relation between the tenant farmer and the institution is more extensive and more dependent on obtaining the right information. Most of the farmers reveal that they do not have sufficient capital to implement an investment on their own. They also reveal the importance of having good communication with the institutions. Communication is a way to avoid information asymmetry and to pursue the contract.

6.1.3 Information Asymmetry

Information asymmetry develops between the principal and the agent, which can influence the relationship between them. Based on the power that the agent has towards the principal, this

can be solved by force of one party. Which means that one of the parties adjust their preferences towards the other or how they influence each other (Saam, 2007; Royer, 1999). The importance of avoiding information asymmetry is evident for both institutions, given that asymmetry can create a lack of trust between the parties. If information asymmetry develops between the parties, it can create extra transaction costs due to information hidden between the parties (Wilson, 2008). According to the empirics of the study, both institutions try to avoid this by being transparent in different ways and on different degrees. The empirics' shows that Institution 1 attempts to be as transparent as possible by having created a template for determining the rental price. According to the institution, this template creates fair pricing towards the tenant farmers and creates transparency. Institution 2 does not have the same elaborate model for pricing their tenancies but tries to have a good dialogue with the tenants to avoid the information asymmetry.

The tenant farmers all believe in good communication with the institutions, which in the end reduces the risk for information asymmetry. The importance of communication is evident when it comes to being able to make investments in the business. The occurrence of the principal-agent problem and the risk of asymmetric information may arise in any situation (Groenewegen *et al.*, 2010). To avoid information asymmetry, the tenant farmers know the importance of good communication and dialogue with the institutional landowner. The tenant farmers all states that it varies how much they communicate with the institution but that the frequency of communication increases when there is a need for activities at the farm, for example an investment. This is a way to avoid asymmetric information and to increase the trust between the principal and the agent.

6.1.4 Hold-up Problem

The hold-up problem occurs between the principal and the agent when any of the parties take advantage of the other parts vulnerability and inflexibility. The situation creates a hold-up problem and is not sustainable for the future relationship. Hence, one of the parties uses the situation to renegotiate the contract to gain greater power (Groenewegen *et al.*, 2010; Royer, 1999). A good relationship builds on the trust between two parties. Institution 1 uses the transparency of their tenancy contract to maintain a high level of trust towards their tenants. Institution 2 is much aware of the importance of good communication with their tenants. These are two ways to communicate between the principal and the agent to avoid the hold-up problem. The hold-up relationship may cause unnecessary transaction costs and make it more difficult to proceed with negotiations on the contract (Royer, 1999) The farmers also perceive the importance of communicating with the institutions to develop good transparent contracts.

However, all farmers' state that they have rather sparse contacts with the bank, it is worth mentioning that it is more likely for the hold-up problem to occur there. The relationship to the bank could be an alternative partner for the communication of investments.

6.1.5 Moral Hazard

The moral hazard dilemma occurs in all types of businesses and refers to the case when one party changes its behaviour in contrast to the agreement after the contract has been written. It is difficult to control the moral hazard dilemma between the principal and the agent when one of the actors display a lack of information about the other (Groenewegen *et al.*, 2010; Royer, 1999; Saam, 2007). Both institutions stress that trust is important between the parties to create a long-term sustainable relationship. The relationship builds on communication and the exchange of information between the parties. Most farmers believe that communication with

the institution facilitates investment from the institution's side. Communication avoids the possibilities for one party to act opportunistically against the other. When one party acts opportunistically against the other it affects the effectiveness of the relationship as one party uses hidden information to exploit the contract differently than agreed (Groenewegen *et al.*, 2010; Saam, 2007).

A way to prevent the moral hazard dilemma is to maintain continuous contact between the parties. It is beneficial for the principal to visit and evaluate the agent at regular intervals (Groenewegen *et al.*, 2010; Holmström, 1982). The institutions and the tenant farmer have continuous contacts to evaluate the situation on the farm. The farmer states that they are in contact with the institution at least once per year, at some points even more. It depends on the situation on the farm. If an investment is planned communication increases. The institutions state that they have contact with their farmers at least once a year and every fifth year when the tenancy contract is renegotiated. Both institutions state that the amount of communication increases when there is something special, for example an investment at the farm.

6.1.6 Portfolio Problem

The portfolio problems can be viewed as an equity investment problem in the relationship between the principal and the agent (Cook, 1995). In a cooperative business, the perspective of the problems is often used as putting a higher level of risk than preferable. This makes it hard for the agent to diversify their level of risk and to their personal health (Royer, 1999). The tenant farmer faces the portfolio problem when dealing with the institutions. Especially those farmers who only lease arable land from the institutions. The risk stems from only dealing with one actor and not being able to distribute the risk among several different actors. According to Nilsson (2001) and Andersson (2014), it is valuable to maintain a spread of the assets into different operations of the portfolio. The need for a level of high trust becomes even clearer. Therefore, the tenant farmer needs to know that the institution gives him a fair rent and that the institution treats all farmers the same. The importance of communication with the institution is something all tenant farmers value since the institution commonly is the only or the largest actor in their portfolio. Farmer 4 and 6 especially state the fact that it is important to cooperate with the institutional landowner to be able to proceed with investments in the daily business. The tenant farmers may be considered as agents and the institutions as principals.

The principals, on the other hand, do not face the same kind of portfolio problem since they are working with several tenant farmers in their portfolio. Therefore, the institutions never really face the portfolio problem. They have a broad portfolio with several tenant farmers, which diversifies their risk. This facilitates investment decisions regarding risky assets where the relative share of these risky assets is independent of risk preferences and the level of wealth (Markowitz, 1952). The institutions own a lot of capital, and by diversifying their risk in investments at different farms, they will most likely obtain a sufficient return on their investments.

The farmers' possibility to distribute the risk is to either diversify the business, buy land, or lease land from several different landowners. Owning land gives the farmer a higher potential to obtain credit from banks or other lending institutions.

6.1.7 Horizon Problem

When an investor claims that his investment is written off before the investment's economic life has expired, a so-called horizon problem arises (Royer, 1999; Nilsson 2001). This is a

phenomenon that is currently a problem for tenant farmers. Some of the farmers perceive that the institutions' depreciation plan is often too short, which means that the investment is written off at a rapid rate. However, when it has been paid off, they have to continue paying for these assets in the form of the lease agreement on the farm. Even though the assets life span at some points is longer than the farmers' life span on the farm. Therefore, farmers believe that certain depreciation schedule should be on a more long-term time horizon.

In the long term, this can cause a decrease in the farmers' motivation to invest because they have the feeling that they pay for more capital services than they can utilize in the long run. This can lead to a slowdown in the growth rate of companies (Cook, 1995). Most farmers have pointed out the phenomena that the depreciation period is too short and that it is a current problem. Farmers strive to maximize profits of their investments. This is a consequence of the horizon problem that farmers face a reduced planning horizon and are starting to underestimate the potential that investments may have for their future operations. This leads to underinvestment in the farm business (Royer, 1999; Ortmann & King, 2007).

6.2 The Tenant Farmers Decision-Making Process

Making intuitive decisions is something that Ekanem (2005) notes is more frequent in smaller companies. According to Ekanem (2005), this may be because they do not have the main goal of being profit maximizing, but there are other values that play a role in the decision-making process and finding a satisfactory solution to the problem is more important. Furthermore, Ekanem (2005) states that it is normal for smaller companies to base their decisions on perceptions and previous experiences and that the solution that is currently considered best for the company is applied. However, it is not necessarily the solution that is most rational for the company in the long run (*ibid*).

Öhlmér *et al.* (1998) reaches a similar conclusion regarding the subject and defines the willingness of the farmers' decisions based on developing the farm forward for possible future generations. Farmers in the study's long-term goals are a bit unclear, but the desire to continue farming and developing the farm for the future is the most important. None of the farmers have any specified profitability goals for their operations, more than satisfactory profitability. This point to the fact that profitability is not the most important aspect, but there are other values that farmers perceive to be more important. This contrasts with what McConnell (1983) found, that tenant farmers are profit maximisers.

6.2.1 Problem Detection and Problem Definition

The decision-making process for farmers is based on the fact that a problem is discovered, it is discovered in connection with the fact that reality differs from the goals defined by the farmer (Harrison & Pelletier, 2000; Öhlmér *et al.*, 1998). Since the farmers do not have any specific targets with their business, they develop the business for the future in order to obtain satisfactory profitability. But this makes it difficult to detect problems since they base on the desired situation given a target image (Harrison & Pelletier, 2000).

However, since farmers have a desire to develop and expand their businesses, problem detection can be made based on their sub-goals. Based on this problem level of detection, the next step is problem identification, where various measures to solve the problem must be identified (Öhlmér *et al.*, 1998). Here, the farmer's previous experiences are important, and these can lead to potential solutions. If the farmer feels that he does not have enough information, he must turn to external actors for help (*ibid*). Hence, farmers rent land from institutional landowners can use different specialists in each area. Because the institutions want to participate and

develop the farms, they always offer farmers support if the farmers consider themselves in need of it. The most common way is that the farmer discovers a problem and then approaches the institution for advice on how to solve the problem. Furthermore, tenant farmers must always reconcile with their landowner at a problem discovery, how they should proceed, and whether it is a reasonable investment that matches both partners' preferences.

Investing in buildings or land improvement measures takes place due to problem detection and problem identification. These investments are not related to the farmers desire to increase the value of the farm. However, this a consequence of that they strive to develop their business.

6.2.2 Analysis and Selection

When the farmer has reached a decision to correct the identified problem, the analysis and choice of design of the investment are continued, by searching for more information and examining possible consequences of the outcome (Öhlmer *et al.*, 1998). A majority of the investments that have taken place on the farms have been a result of the farmer contacting the institution.

Among farmers who have participated in this study, their approach differs in terms of how they make decisions on investments. The influence of the family plays a certain role at some farms, while others look for other options to get inspiration. They contact colleagues and go on study visits to see how other farmers have designed their investments. In those cases where the family is involved and affects the decision, it is often the life situation around the family that affects the investment. The family impact in the decision is related to how active the rest of the family is in the company. At the same time, as the families' voices have not been completely decisive for the decisions but rather used as a basis for discussion.

It can be stated that the context has a certain effect on decision-making when investing in these companies, but it is not the farmers themselves if they can invest or not in the business finally. This is ultimately due to the landowner and if they have the same objectives in terms of the future of the lease. Although farmers have found that the institutions have a great desire to invest, the decision ultimately rests upon the landowner. However, it has been found that the institutions' willingness to invest sometimes tends to be too high because they look to the farm's future objectives and therefore tend to invest heavily. This can sometimes be in contrast with the tenants who want to invest at a slower rate in order to ensure profitability. Larger investments are often related to a higher annual cost.

The companies that participate in the study have a great willingness and motivation to invest. This is influenced by the fact that there is a greater commitment to developing in these areas and in the current landowners. This is consistent with Björklund & Nilsson (2014) and Nordström-Källström (2002), who found that if a company is located in a region where the willingness to invest is high, it is likely that this will affect the other companies in the area to invest. This may also lead to a higher degree of economic efficiency. This observation may be one reason why the willingness to invest is high among the farmers in the study. However, it cannot be fully concluded in this study that it depends on this phenomenon.

Gebremedhin & Swinton (2003) note in their study that the desire to invest increases with the degree of security. Since the protection of the property on the farm lease is strong, the researchers have not been able to see any impact of this in our study. In contrast, the farmers argue that the protection of the contract is not an important factor for determining whether an investment will take place or not. It is more strongly related to the relationship with the landowner and what level of trust the owner of the land possesses.

6.2.3 Implementation

The next step in the decision-making process, as Öhlmér *et al.* (1998) describe, is the implementation. The farmer implements the alternative that is expected to best correspond to his expectations. Here, it is important to evaluate the decision and learn lessons from for the future (*ibid*).

If the goal of the farmers is to develop and continue to drive the business forward, this is done by analysing how the chosen investment affects the company in the form of profitability. Farmers have been clear about the fact that an investment should be profitable in the long run. Otherwise, it is not an alternative. However, few have carried out an equally comprehensive analysis of the investment after it has been implemented. Farmers continue to invest over time, and this indicates that profitability is not the most important aspect. There may be other factors in the environment that play a role in the decision-making process, like Hansson & Ferguson (2011) pointed out in their study.

6.2.4 Bounded Rationality in the Decision-Making Process

Based on the analysis of the farmers' decision-making process concerning investments and which factors affect the decision, it can be stated that farmers are not completely rational in their decision-making processes. This is due to the fact that they do not have specified objectives to base problem discoveries on Öhlmér *et al.* (1998) model. It is difficult for farmers to identify the optimal solution, but they must settle for a solution that is considered satisfactory (Simon, 1955). Farmers make decisions based on available information and then discuss this with family, colleagues, and landowners to reach a decision that is satisfactory for all parties.

Farmers also reveal that, with age, the willingness to invest declines. This observation indicates that Hansson *et al.* (2013) conclusion is correct. Farmers are not completely rational in their decisions, and that profit maximization is not the most important thing. Having a good life for the family and themselves are factors that influence the decisions. Farmers admit that with increasing age, the development on the farm stagnates and the farmer focuses on his/her own future and does not invest in the farm anymore. The reason might be that it is a tenant farm that the farmer must leave when he retires. Hence, farmers need to save money for their future. This has consequences for the agricultural sector, because if the soil is not maintained sufficiently it may result in lower yields.

7 Discussion

Discussion of the analysis is conducted based on existing theory and the factors that the study has come up with affect the decisions about investment between the landowner and the tenant, together with a reflection and discussion of the applied method that has been used to reach the study's results.

The relation between the tenant farmer and the institution is important to be able to complete investments at the farm. A good relationship makes it easier to communicate. Each party will and strive for a sustainable business development of the farms. All respondents in this study agree that a good relationship between the parties is important. When using the principal-agent theory to analyse the empirics of the study, it becomes clear that this is the situation. The principal and the agent need to maintain a good relationship built on trust to be able to maintain a long sustainable relationship. If either the institution or the tenant farmer does not trust each other, it will hurt the relation between them. The empirical result has shown that protection of tenancy rights is of less relevance when deciding on an investment, but it is more important with a good relationship and trust in the landowner for an investment to be carried out. In the relationship of the principal and the agent, problems occur when one of the parties' act in self-interest and to gain an advantage against the other. Both the institutions and the tenant farmers want to generate profits. This is one of the reasons to invest in farms.

In today's agriculture, it is important that the landowner and the tenant together develop a sustainable structure for the business because the agricultural sector is capital intensive. Deininger & Binswagner (1999) reports on the problems of tenant farmers that there can be no incentive to make certain investments because the farmers don't always feel that they get a sufficient return on invested capital. In addition, the uncertainty that may exist in the long run that the farmer does not know when he will retire. For these reasons, landowners and farmers must find a balance in the structure so that both feel that they are generating a return on the investments. Therefore, landowners may have to review the depreciation period that exists today for the investments to further increase the motivation to make long-term investments that even subsequent generations will benefit from.

As the farmers' decision-making process takes place concerning an investment, the application of Öhlmér *et al.* (1998) becomes convenient. Öhlmér *et al.* (1998) further state that farmers are not fully rational in their decision-making though there is still a desire to develop the businesses. When conducting an investment, both institutions state that it is most common that the farmer presents a suggestion to develop the business via an investment. Institution 2 claims that occasionally they may suggest how the farmers can invest in their business. First, the farmer analyses the situation and what is needed. Then the farmer selects what investments he/she wants to implement and anchors it with the institutions. As the institutions reveal that it is rare that they decline an investment but more commonly that they revise the investment plan, it might be considered easy for the farmer to implement the investment. The farmers state that they consult family, friends, and colleagues when implementing the investment and to examine what is the best solution. Some farmers argue that they have been thinking about obtaining credit from a bank. This is, however, not common as the farmers have no land to use as collateral, and mostly, the best solution originates from the institution. Through the process of implementing investments, the farmer must detect and define problems that may occur. As the farmer evaluates the different options for investment, the implementation is the last step in the process. Regarding the decision-making process developed by Öhlmér *et al.* (1998), the empirics clarify that there are many parameters to consider when making an investment

decision. It is also clear that the farmers are influenced by getting support from friends, family, and colleagues in the business

Most of the farmers that have taken part in this study views age as a factor behind the decision-making of investments. They feel that as you get closer to retirement, the will and ability to invest decreases. The farmers who state that the will decreases says that they need to think about their retirement since they do not own any land. The institutions, on the other hand, do not really see the same problem with age as long as the investment is suited for the farm's future business. The age bounds the farmers because they feel hindrance to make investments when they get older. The institutions, on the other hand, are not bounded in the same way as they do not look at the farmer himself but instead looks at the farm's perspective and future. Öhlmér *et al.* (1998) argue that it can be hard for farmers to identify the best solution. This makes the farmers bounded, but they get help from the institutions since they are managing several tenant farms have the experience needed. This helps the farmers to reduce their bounded rationality.

Given the results of this study, it can be concluded that the rental rate and the changes in rents affect whether farmers are willing to invest in the business. This can be deduced from the fact that farmers do not own the farm themselves. In the long run, they cannot take advantage of the increase in value that the investment adds to the farm, which Pålsson (2014) also notes. This may affect the willingness to invest at increasing lease prices because farmers firstly need to think about their current finances before expanding their business. Therefore, renting farmers are more sensitive to external changes in the market.

Ultimately, everything depends on the institution's willingness to invest. Because no matter how extensive the tenant is willing to invest, the investment needs approval by the landowner. There are opportunities for the tenant to invest without the support of the landowner by investing in a none-freehold property. Landowners prefer not to do so. They want to be a part of the investment process as well as have an impact on the farm developing in the right direction. But even if this opportunity exists, there is still a need for approval from the landowner to enact on the investment. There are no indications from the study that these factors have affected the farmers' willingness to invest. Without the impact it has on farmers, the investments must be economically efficient. Hence, no resources should be added that do not affect production positively.

In qualitative empirical studies, the researchers must be aware of their own impact on the results (Bryman & Bell, 2015). Researchers must examine themselves and carefully evaluate the method, the result, and the possible influence that the researchers have on the outcome. Given the size of the selection, its geographical limitations and the extent of the actors, it is difficult to draw any generalising conclusions from this study. However, it gives an indication of how it works and what affects decision-making relating to capital investments in tenancy. This can result in the study's results being difficult to repeat outside of the studied context.

The approach chosen to select the respondents may influence the result. Since the study is based on a snowball selection, there is a possible risk that the sample may affect the study's results. That is, we may have gained access to respondents whose attitudes to investments may be similar. To avoid this, a randomized selection may be preferred during continued research in the field.

8 Conclusions

To draw conclusions from this study, the aim and research questions are presented again.

This study aims to create a better understanding of the ability for tenant farmers to succeed with investments in farm buildings or arable land improvements and to understand the decision-making factors behind them.

- How does the relationship between the tenant farmer and the landowner affect major investments in the business?
- Which factors affect the decision-making process for a tenant farmer that wants to invest in the business?

The conclusion with respect to the first research question is that it is important for both the institution and the farmer to have a good relationship at all time. It might be extra clear as an investment is to be made. The tenant farmer is dependent on the institution to be able to continue with their business since their portfolio is limited to only a few actors. The institutions, on the other hand, have a larger portfolio but are still dependent on having a good relationship with all their tenant farmers, since the portfolio is large but relatively homogenous. To maintain a good business relation, it is important to have good communication. It creates a sustainable long-term relationship where a high level of trust between the parties contributes towards a good future for the businesses.

The study concludes that the willingness to invest in the business among tenant farmers is high. The willingness to pay for the investments is also high among the institutions. Most of the larger investments require a lot of capital in a capital-intensive business. The farmers might not always have the capital needed and letting the institutional landowners making the investments can be beneficial for the business and for the relationship between the parties. It is most common that the institutions want to proceed with an investment because they see a possible profit in developing their farms. The extra communication needed to fulfil an investment is nothing that either the tenant farmers or the institutional landowner sees as a hindrance or unnecessary costs.

The results of the study reveal that there are several factors that affect the decisions behind an investment in a tenant farmers business. One of the most important factors is profit. If either the farmer or the landowner does not consider the investment profitable, there will most likely not be any investment. Family, friends, and colleagues are also factors that affect the farmers' decision on investments. One factor that most farmers say is not inhibitory is the fact that they do not own the land. Their willingness to invest is still high though some farmers claim that they probably would have invested in another way if they had owned the land. The business itself could be considered more important than owning the land.

The results of the study show that some farmers are bounded in their rationality in terms of investment behaviour, where age is an important factor. Some farmers reveal that their willingness to invest decreases when they get older since they do not have any land to rely on for their retirement. When the farmer is approaching retirement, the focus shifts to building up a satisfactory amount of capital for their retirement.

9 Future Research

Finally, this chapter presents proposals for further research in the area based on the results and conclusions that the study has contributed with.

Since this study is limited to the subject of only exploring the relationship between institutional landowners and tenant farmers and not the relationship between private landowners and tenant farmers. Therefore, this would be an interesting topic further investigate. Private landowners own the majority of the Swedish agricultural land that is leased out (Jordbruksverket 3, 2017). But also, for the reason that this relationship may be considered more complex. Based on these reasons, this would be an interesting topic for further research.

Another possibility is to examine how the willingness to invest differs internationally. It can be interesting to create a more comprehensive picture of the phenomenon by examining capital investments in tenancy relations through in a broader context to see what affects the farmers.

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Personal messages

The Farmers

Farmer 1
Personal meeting, 2019-04-02

Farmer 2
Personal meeting, 2019-04-03

Farmer 3
Personal meeting, 2019-04-04

Farmer 4
Personal meeting, 2019-04-04

Farmer 5
Personal meeting, 2019-04-05

Farmer 6
Personal meeting, 2019-04-12

Farmer 7
Personal meeting, 2019-04-12

Institutional Landowners

Institutional Landowner 1
Personal meeting, 2019-04-10

Institutional Landowner 2
Personal meeting, 2019-04-12

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Finally, thanks again and goodbye to our classmate and we would like to wish you all the best of luck in the future. See you soon!

Ultuna, 9 June 2019



Erik Andersson



Eric Larsson

Appendix

1 Interview Guide – Tenant Farmers

1. Background Questions

1. How old are you?
2. How did you develop your interest in agriculture?
3. For how long have you been working in the agricultural sector?
4. What do you have for previous experiences, education, and background?
5. What is the farm's main production focus?
6. Is agriculture your full-time employment, or do you have work alongside?
7. Are you driving the farm by yourself, or with someone?
 - If yes; how does the corporate structure looks like?
8. How much land do you grow?
 - Do you have any self-owned land?
 - Did you have your own land before you got access to the lease?
9. When did you get access to your first lease?
 - How many hectares was your first lease on?
10. When did you get access to your last lease?
11. What kind of lease do you have, farm or side-lease?
12. For how long does your lease extend and are you interested in extending it?
 - Does the contract length affect your choice of the lease agreement?
13. What attitude do you have to expand your lease if you had the opportunity to do so today?
14. What do you charge for the lease?
 - What is your highest fee?
 - What is your minimum fee?

2. Before the Tenancy

1. Why did you choose to run your business in agriculture through lease?
 - What factors were decisive?
 - Why did you choose a lease instead of buying land?
 - How did the process look before you started the lease?
2. How did the procedure look like, how was the first contact established?
3. How did the preparations look before the establishment of the lease agreement?
4. What expectations do you have on the lease?

3. Current Operation

1. Has the lease agreement matched your expectations?
 - Does it work the way you intended?
2. How do you think the profitability of your business has been affected since you took over?
 - What can you do to improve profitability?
3. How do today's land and lease prices affect your company?
4. How does the cooperation between you and the landowner work?
5. How does the relationship between you and the landowner work?
 - How has communication worked between you?

- Have you experienced and risk/obstacle to your lease?
- Do both parties follow the contract, regarding what has been agreed?
- 6. If the lease does not live up to your expectations, how do you act, then?
 - Do you have any action plan for how to act if the lease does not meet your expectations?
- 7. Do you and the landowner have a similar view of the future of the farm and the lease?
 - How does the landowner's interest look to develop the business?

4. Need for Investment in the Lease

1. Is there any need for investment on the farm at the moment, or has recently been made any investments? Such as drainage or renovation of buildings etc.
2. Are these investments of importance for the future of the farm?
3. Does the landowner understand the need for the investment?
4. Are the decisions made jointly, or is it the landowner who decides regarding investments?
5. Is an investment necessary to increase the profitability on the farm?
6. Do you know how the tenancy legislation works?
7. Do you feel confident with the protection of the lease if you were to make an investment?
8. How much impact does the protection of the lease have on performing investment or not?
9. Do you feel that you currently have the capital to make an investment by yourself?
10. How do you experience the relationship with your bank today?
11. How does it affect you that you do not own the land that you are investing in?
12. In what way did the motives for carrying out an investment increase if you own the land by yourself?
13. What factors affect whether a decision to invest in the tenancy is taken.
14. If you don't invest, what factors underlie the reason behind that an investment will not be made?
15. How does the price development of your lease affect your willingness/ability to invest?
16. Are you affected by your environment, such as families, friends, and colleague, when deciding wheatear invest or not?
17. Do you feel that you have the landowner's support to make an investment?
18. Do you feel that your age is a depending factor in the landowner's willingness to invest?
19. Can you imagine paying for the investment by yourself, even if there is a future uncertainty?
20. Can you imagine paying for the investment by yourself if there is a long contract?

5. Profit

1. Do you feel that your business has satisfactory profitability at the moment?
 - Exogenous circumstances
 - Endogenous circumstances
2. What do you think is needed to increase the profitability of the company?
3. In what way will the investment help you to improve your profit?

6. External Actors

1. Who or what is the most important external actor for your company?
2. How do laws and regulations affect your ability to invest today?
3. What confidence do you think external actors have towards tenant farmers?
4. Is there anyone in your environment that affects your decisions?
5. Do you use external actors for advice or similar when deciding on investment?

7. Future with Tenancy

1. What do you think of the future of your company and business?
 - Are you interested in developing the business more, for example, expanding the lease?
2. Are you willing to lease more land if the opportunity is given?
 - If yes; at what price?
 - If no; why?
3. If you had the opportunity to start leasing to today, would you have done anything different then?
4. What do you see for development potential in the lease for the future?
5. What do you think of the price development for future leases?
6. Is there anyone in your environment who influences your decision for the future?
7. How would changes in agricultural policy affect your business?
8. What do you think about the future competitiveness of your business?
9. Is there any redemption agreement established?
10. How is it designed in such a case?
11. What factors are crucial in designing a redemption agreement?

8. Transaction Costs

1. How much time do you spend on communication with the landowner?
2. Do you feel that the time is worth it in the end?
3. How does the relationship with the landowner affect your investment propensity?

9. Concluding Questions

1. Do you think the way into the agricultural sector through a lease is a good way?
 - How?
2. What are the advantages and disadvantages of being a tenant farmer?
3. Do you have any tips for other tenant farmers on how they can develop their business?

2 Interview Guide – Institutional Landowners

1. Background Questions

1. For how long have you been working here?
2. What are your main tasks?
3. How long have you been working within the agricultural sector?
4. Have you had any other job before you started here?
5. Do you have any academic background and, if so, what kind of education?
6. Can you describe the pros and cons of farming through lease?
7. What are the benefits of running a farm as a farm lease, according to you?

2. Institutional Landowners

1. What are your demands on your tenants for being able to start a lease agreement?
 - How have these changed until today?
2. What are your expectations for your leases?
3. How would you describe the confidence in tenants you work with?
4. How does the communication work between you and the tenant farmer?
5. How much contact do you have with the tenants?
6. How do you solve situations that appear where you and the tenant have different opinions on how things should be done?
7. How long lease agreement do you advocate?
 - What are the benefits of this?
 - Does this benefit the possibility of investing from your side?
8. Comes the initiative to invest from the tenants' side, or your side?
9. How do external circumstances affect your leases?
 - How do these affect the willingness to invest?
10. How are you affected by external actors?
11. How is your model of leases designed?

3. Investments in Tenancy

1. How is it determined who pays for what when investing?
2. Which do you think is the biggest obstacles for the tenant farmer to make an investment on his lease?
3. How does possession protection affect your attitude toward investments?
4. How have you designed the investment rate?
5. What is crucial to make decisions about an investment?
6. How do you determine which size of an investment that is best for the farm?
7. What do you have for general depreciation time on investments?
8. How do you view the possibilities of changing the length to shorter or longer depreciation periods?
9. What you're feeling about how the land is utilized? Sustainable or not?
10. Do you think that there are being made enough investment in land improvement measures?
11. Does the age have any impact on how you make investments for the leases?
12. How big freedoms do the tenant farmers have to invest in the farm lease?
13. What is your general attitude to tenants investing in their leases?
14. How much impact do laws and regulations have on how you view investments in the leases?
15. How is the contract designed for the investments?

16. How important is it to calculate with profit?

4. Tenancy Consultancy

1. Do you have any consulting for your tenants?
2. How does it look in such case?
3. Do you feel that there is a desired need from your tenants with more consulting?
4. How do you work with your tenants?
5. Do you think your tenants are rational in their decisions?

5. The Future with Tenancy

1. What do you think of the future when it comes to conducting business through tenancy?
2. How do you see the difference between you and other major landowners?