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A qualitative study of how they affect the local labour market

Janine Grosse

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Janine Grosse

Supervisor: Kostas Karantininis, Swedish University of Agricultural Sciences, Department of Economics

Examiner: Sebastian Hess, Swedish University of Agricultural Sciences, Department of Economics

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Dedicated to Marie Lange

Abstract

Foreign direct investment in agricultural land became more important in public discussions, whether in international dimensions or on the national level. This study focuses on the phenomenon of foreign agricultural investors being proactive in several regions in Germany, specifically in the former East Germany. These investors are often labelled with a less positive reputation in the public opinion and media. Different actors claim a political regulation of foreign investments in agricultural land to prevent negative effects and disadvantages on local farmers. This thesis investigates the employment effects of such foreign agricultural investors on the local labour market in different regions in Eastern Germany. To find results answering the research question two qualitative approaches are implemented. A survey about private foreign investors in agriculture and their attitudes towards farm employment has been conducted. Additionally, a case study was implemented that investigates listed agricultural firms, respectively farms that are identified as foreign investing agricultural firms in Eastern Germany. Effects of quantitative and qualitative changes in local employment were investigated. Assumptions about positive employment effects through activities of foreign agricultural investors could be confirmed. The firms that have been investigated showed an outstanding interest in employing local workers, offered seminars and training for their employees and were mainly active in social and public activities, and civic engagement.

Abbreviations

CAO	chief administrative officer
CBDO	chief business development officer
CEO	chief executive officer
CHRO	chief human resources officer
COO	chief operating officer
EU	European Union
FDI	foreign direct investment
GDP	gross domestic product
ha	hectare
k	thousand
kW	kilowatt
MW	megawatt
ukn.	unknown
€	Euro

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1 Introduction

The first chapter introduces the study subject and describes backgrounds as well as historical and current fasts about the topic of this thesis. It contains the problem situation, study objectives, delimitations and an outline.

1.1 Background of a debate

International investments in agricultural land became of a higher importance during the last years. The 2007-08 world food price crisis might be one of the reasons of the increasing demand for agricultural resources and hence an increasing demand for farm land and food products. In the public discussion phrases such as “land grabbing” emerged within this context. Land grabbing is mainly understood as an illegal acquisition of farm land through private investors, multinational agricultural enterprises or even governments. The phrase occurs often in the international debate and focuses on countries in Africa, Latin America or Asia.

Nowadays the phrase land grabbing can even be read and heard in debates about agricultural changes in industrialised countries like in the European Union. In Germany the outstanding increase of land prices, in both land sales and leases, is tried to be explained by the increasing number of foreign and supra-regional large-scale investors who invest in farm land. It is conspicuous that such investments are increasingly made in the Eastern states of Germany, the so called New States of Germany, and territory of the former German Democratic Republic. There are also international investments in agriculture in Western Germany but the majority of international investments are aiming acquisitions at the Eastern German land market. The average price of farm land in Brandenburg is about 8,500 Euros per hectare. Brandenburg is a county in the very east of Germany. In comparison a farmer in Bavaria pays about 40,000 € per ha land (www, RBB, 2015, 1). The land price in Eastern Germany seems greatly attractive for foreign investors and the development shows a still ongoing increase of farm land prices (Hüttel, et al.).

To understand the situation of agriculture in Eastern Germany, it is useful to know some historical facts about its transition. Before 1990, agricultural production in East Germany was suffering from general problems in the centrally planned economy, such as insufficient investments, a low level of productivity and vast environmental problems during production processes (www, BPB, 2010, 1). Agriculture used to be a much more important economic sector during that time and was organised in large, collectivised farms called the LPG[1] (Agricultural Production Cooperative). After the German reunification in 1990 the rural cooperative members decided to pursue the LPG system in a new type of enterprise, the *Agrargenossenschaft* (agricultural cooperative). Since then the Eastern German agriculture

[1] LPG stands for *Landwirtschaftliche Produktionsgenossenschaft* and existed only in the former East Germany.

developed quiet successfully and is currently characterized by large-scale farms with high productivity and only a few smallholder farms (ibid.). The current Eastern German agriculture also typifies a positive profit development and more often environmental friendly production processes. Agriculture is the only economic sector that is now performing better in Eastern Germany than in the western areas (www, BPB, 2010, 1).

Another very important part of the German agriculture is the structure of many farmer organisations and associations. The biggest is the German farmers' association (*DBV – Deutscher Bauernverband*) that represents the interests and needs of German farmers and foresters. The German farmers' association is constituted politically independent and has several sub-farmers' associations in each federal state. Their work covers plenty of topics such as agricultural, economic, environmental, legal, fiscal, educational and social issues, representing conventional as well as organic farming, etc. (www, DBV, 2015).

Today most farmers associations in Eastern Germany assume that a lot of smallholders in agriculture are doing a good business since the demand for agricultural products is on an upward trend. Soft commodities are highly demanded, globally as well as regionally, and that is why local farmers should work within a good perspective. Nevertheless, the rise of land prices is often commented critically in relation to non-local or international investors in agriculture. Many newspapers and press offices evoke a fight for farmland though (e.g. www, RBB, 2; www, lr-online, 2015; www, MOZ, 2013). As mentioned above the phrase land grabbing is often used in this debate. In a later part there will be a continuing discussion about an appropriate term.

The farmers' association in Brandenburg stated that non-local investors earn approximately 111,000 hectares in Brandenburg which is the size of a whole single district[2]. It is self-evident that there is much competition for farmland among the local farmers as well. Officially those farmers are more worried about foreign competitors with a greater capital stock. Reinhard Jung, the representative of Brandenburg's farmers' association, claims that the number of foreign and supra-regional land and farm acquisitions increases more and more and that it seems to be a threat for many local farmers in the rural regions (www, RBB, 3).

In this discussion another actor is under fire: The BVVG (*Bodenverwertungs- und Verwaltungs GmBH*). This company has the commission to privatise the former public-owned agricultural and forestry land in Eastern Germany. It is a kind of federal privatisation authority that conducts land sales in accordance to the EALG[3] law and the public privatisation policy (www, BVVG, 2008).

[2] A German district is an administrative subdivision. It is known as *Landkreis* ("rural district"). They are at an intermediate administration level between the German states (*Länder*) and the municipalities (*Gemeinden*).

[3] EALG stands for Entschädigungs-undAusgleichsgesetz and regulates issues of property law after the German reunification. Land and farmers that were expropriated in the former German Democratic Republic have the right for late compensation.

The BVVG came into criticism when farmer associations argued the company would prefer land sales in favour of foreign and supra-regional large-scale farmers. The BVVG objects this. In their point of view there are no disadvantages for local farmers since those still earn the largest stake of all land sales (www, RBB, 5). This controversial argumentation between BVVG and farmers brings much more confusion into the debate. A fact is that farms benefit in general from the current economic situation and that more and more large-scale investors are becoming more active in the sale and leasing of farm land in Eastern Germany. Local farmers fear a competition disadvantage and claim a policy that benefits the local farmers in pre-emption of farm land.

On the other side the incentives of foreign investors in agriculture may be various. They probably have high expectations on the productivity surplus of their investment. The fact that the demand for food and renewable resources is increasing globally may be a huge pull factor that attracts firms to invest in available land in the home country or on the international market. Food security in the home country might turn investors' attention to further markets and let them keep an eye on international land markets. Further incentives can be risk aversion and a diversification strategy of the firms. The requirements for foreign investments are mostly the availability and access to farm land, low land prices and in the majority of cases weak laws on the target markets (Forstner et al., 2011).

Reinhard Jung from the farmers' association in Brandenburg says that there is a macroeconomic development of foreign investors tending to be interested in new land. On the one side, he argues, there is a worldwide boom on the commodity markets. On the other hand, there is the financial crisis and the pressure to shove capital onto land and forest instead of risky capital investments (www, RBB, 3).

1.2 Problem

What does the future of rural land look like if only large-scale firms and non-regional investors dominate the rural areas? This kind of question can often be read in the German media lately (www, RBB, 4). However it will looks like, because of a permanent demographic problem many rural regions in Eastern Germany are facing, it is predicted that more and younger people will emigrate from there (Dienel, 2005). The population decrease has many reasons: low birth figures, death overflows, and many emigration sacrifices (ibid.). Specifically women are most willing to leave the region. The most mobile part of the population is the age group of the 25 years old and younger, and those who leave are most often the best qualified. They leave the rural region behind as well as their manpower, dynamics, innovation skills, and they also leave a lack of new-born children behind. This situation may conclude in a dangerous economic growth retard for rural regions. One reason seems to be feasible: there is high unemployment (Dienel, 2005).
The status of the Eastern Germany labour market in rural areas can hardly be noted as successful. The number of working population decreased from about 9.7 million in 1990 to 7

million in 1996 (www, BPB, 2). In the last years the official unemployment rate in Eastern Germany is more or less about 15 per cent. The real employment deficit is much higher because employment policies and earlier pensions led to a decrease in labour demand (ibid.). Still it is difficult for the New States of Germany to find connection to Western German labour standards and to establishing independently in relation to labour market balances.

This thesis will mainly concentrate on the federal states of Brandenburg and Saxony-Anhalt. Both are situated in Eastern Germany. The reason is that the study subjects of analysis are mainly situated in these states. The focus of research will therefore lie on Brandenburg and Saxony-Anhalt, they are going to be treated as representative states for Eastern Germany. The economic development is in both states affected by rural regions with municipalities of fewer than 2,000 habitants.

In Brandenburg 123,328 people were registered as unemployed in Brandenburg, which corresponds to an unemployment rate of 9.9 per cent (Statistisches Bundesamt, 2014). In Saxony-Anhalt 132,133 people were registered at the same time and the unemployment rate amounted 11.2 per cent in this federal state (ibid.). The national average unemployment rate was at 6.9 per cent in 2013 (ibid.). In the national ranking of unemployment rates of all federal states, Brandenburg and Saxon-Anhalt as well as other Eastern German states are situated at the bottom edge with the highest rates of unemployment.

Many rural regions in Eastern Germany are furthermore marked by an ongoing low employment, although the situation has improved during the last years on a low scale. The agricultural sector and its related economic sectors still have a relatively high importance for the labour market. Agricultural firms sometimes offer the only employment possibilities in the villages of the peripheral regions (Fock, et al., 2011).

Year	Employees	Wage workers
1995	161 k	127 k
1999	169 k	113 k
2003	167 k	105 k
2007	159 k	95 k
2010	148 k	98 k
1995-2010 change	-8.1 %	-22.8 %
2003-2010 change	-11.4 %	-6.7 %

Table 1: Development in agricultural labour force in Eastern Germany (Fock, et al. 2011)

The table above shows some employment data from the New Member States in Germany in a time period between 1995 and 2010. The data used is mainly coming from the Agriculture Report of the German Government in 2011 and the information is also used in the report by Fock, et al. (2011). It can be seen that the total number of both, employees and wage workers in agriculture decreased during this period.

Another point is the employment of seasonal workforce. It has a huge importance for most of the farms or firms being active in the agricultural sector. Firms need to cover their seasonal demand for workers flexibly since circumstances such as weather, market situation and other situations cannot be influenced by the farmer and need to be taken into consideration (ibid.).

In general the agricultural sector represents a stable economic sector in rural regions, specifically under consideration of employment in agribusiness. For a lot of peripheral and rural regions in Eastern Germany the importance of agriculture in relation to employment is very high. In many cases these rural regions are affected by demographic downsizes and economic problems. To save qualified professional young talents the existent structures of professional trainings are of very high importance. The current commitment of professional training in agricultural firms is not covering the employment security at the moment because of missing young talents (ibid.). The agricultural sector is going to face many challenges especially in Eastern Germany.

Resuming the question of how the future of rural land will look like if only large-scale firms dominate the rural areas, some assumptions can be brought to the table. Usually investments bring a much higher amount of capital into a specific sector or a region. Therefore, increasing amount of capital could improve the technical standards in many agricultural firms. If the discussion is about labour intensive agriculture, such as horticulture, animal farming, gardening etc. it can be assumed that investments are also affecting the employment. Logically an increase of capital in labour intensive farms can lead to a rise in labour force.

Why could such employment effects occur in relation to the existence of international investors? For now, one reason is that Foreign Direct Investment in most cases has employment effects in the target sectors. This issue is treated more carefully in the literature part of this thesis. This reason actually led to the choice of the overall topic of this thesis project.

1.3 Objective and delimitations

The aim of this study is to detect and characterise crucial employment effects foreign agricultural investors have on the local labour market in Eastern Germany. This objective combines the issues of decreasing labour trends in Eastern Germany with the existence of foreign investors in the Eastern German agriculture. It is assumed that foreign and non-local investors are having a positive impact on the local rural labour markets in Eastern Germany, because they are bringing a considerable amount of additional capital into the regions. The investigation includes practically based delimitations like the focus on special regions in the German federal state Brandenburg and Saxony-Anhalt. The case studies chosen and the farmers being interviewed are all active in those regions.
More specifically it is the objective to investigate what type of labour those foreign investors employ. Are the employees and wage workers coming from the surrounding regions or are

their origins far away, do they probably have another nationality? The question about the type of labour also includes the professional history of the employed farm workers, either if they are seasonal workers or permanently employed at the farm. The aim is rather to find any significant effects that occurred with a foreign investment in a specific region in Eastern Germany.

The effects that are going to be observed will be divided into qualitative and quantitative changes of local employment. Significant effects cannot only be determined in a change in the total number of employees or farm workers. Qualitative changes in workforce could be an additional job training supplied by the employer or an introduction of further high professional labour or the introduction of high technology that needs additional skills.

1.4 Outline

A brief introduction to the topic was given in the first chapter. It also discussed the most important facts about the economic and social situation in Eastern Germany and introduced the main arguments of the debate about foreign investors in agriculture. Literature and journal papers related to the topic are going to be listed in the following chapter. The third chapter focuses on the research method used and gives broad information and explanation about the use of case study analysis as well as a justification of a qualitative research approach. Chapter four will describe the implemented survey of foreign agricultural investors interviewed. Results and analysis are going to be presented. Chapter five discusses and analyses the finding of the two chosen case study firms. A profound discussion is provided in the sixth chapter in which results of the survey and case studies are going to be compared and discussed with previous literature. Chapter seven concludes.

2 Theoretical perspectives and literature review

The second chapter provides a literature review of the problem stated and introduces several theoretical approaches.

2.1 Definitions

According to the controversial discussion about foreign investments in agricultural land, it is most important to narrow and clarify different definitions that have been used. In the following part it is tried to reach a limitation of terms and a common definition that is going to be used in the following study.
In the international perspective a clear definition for the object of investigation is not simple to ascertain. In the literature phrases are often used as "land grabbing" as well as "foreign direct investment" in the agricultural sector. That is mainly the reason why the three terms land grabbing, global farmer and foreign agricultural investor will be examined in the following sections.

2.1.1 Land Grabbing

As already mentioned in the introduction, land grabbing in national and international use is continuously raising concerns. The FAO (Food and Agriculture Organisation of the United Nations) defined land grabbing as "large-scale international investments in developing country agriculture, especially of agricultural land" (FAO, 2012, xiii). The term might be seen controversial since the discussion about it is controversial, too. 'Land grabbing' or 'global land grab' is not necessarily only happening in developing countries. The terms are actually used as a signal word to describe the developments and trends in large scale (trans-) national commercial land transactions (Hall, 2011).

Obviously there is a tendency in using land grabbing as a term, most often by activists, to criticize the different roles of multinational firms, governments and the food industries. Many complex economic, political, institutional, legal and ethical issues are raised in relation to current problems such as food security, poverty reduction, rural development, technology and access to land and water resources (FAO, 2012).

The background of increasing activities of land grabbing is that farm land is seen as a source of financial capital. Farm land is assessed as safe investment not just since the latest financial and economic crisis in 2008. Other investment opportunities do rarely have such yield prospects, also because the international prices for farm land and agricultural resources are increasing. Multinational enterprises or countries are the primary potential buyers, many only

lease farm land, others cultivate it, and others only speculate on the increasing development of farm land prices.

There are many more factors that lead to the international demand for agricultural resources and farm land, and therefore to a scarcity in farm land. An important factor is climate change. One example is Qatar that invests in farm land in Kenya because of water shortages in the home country (www, EUI, 2012). A further reason is the change in consumption behaviour. Countries are looking for investment possibilities in international farm land for cattle because the own population wants to consume more meat or milk products. China, for example, bought land in the republic of Congo to attain palm oil (www, China in Africa, 2010). Another concern is the EU-policy of renewable energy production. Land for maize production is bought to produce biogas or biofuels instead for food production (van Foreest, 2012).

2.1.2 Global Farmer

It exists an increasing number of farmers who are professionally active in more than one country. Karantininis and Zylbersztajn (2007) found an overall definition of that type of international active farmer, the so called *global farmer*. They are defined as "farmers or farming enterprises, carrying activities in more than one country or at very distant sites within the same country or region" (Karantininis and Zylbersztajn, 2007, p.2). The phenomenon of the global farmer can be found around the globe, and it has been divided in four different categories: the migrant, partnership, corporate, and multinational. In the following the four types are going to be described briefly.

The first one is the migrant farmer, also called "pioneer", or "settler". It defines an individual who changes his location and settles down in another area, while keeping the original nationality. The world history in agriculture is full of this type of farmer and he is more of a traditional type. If the new location does not have a commercial agriculture, the migrant farmer can be called a pioneer. The second type of global farmer is the partnership. One important difference to the previous type of farmer is that this one forms a partnership with a local national farmer or with someone from his or her home country. A partnership also includes various characteristics a migrant farmer does not have, issues like transaction costs, property rights, and agency problems. A further type is the corporate. When global farmers move and work in another country, they need to get involved with a new legal system. A corporate is built when farmers form a legal partnership that is based on finances from their home country, and also involves the typical separation between ownership and control (Karantininis & Zylbersztajn, 2007). The last type of global farmer is the multinational. If we assume that an already existing multinational corporation is acting like a global farmer and extends its business into foreign countries then it is most probably fitting into this type. The relation of the corporate and its subsidiaries is mostly of a more formal type.

Foreign investors in farm land are most probably fitting into the scheme of a global farmer and can be assumed to belong to one of the before explained types. In the later part the picked

case study farms will be discussed in terms of fitting with the characteristics of the global farmer. It is assumed that they are mostly belonging to the group of multinational farmers.

2.1.3 Foreign agricultural investor

The term *foreign agricultural investor* is an own creation. It combines many attributes and characteristics of existing definitions around the phenomenon of international investors in the agricultural sector. The global farmer, which was defined before, does also include some characteristics the foreign agricultural investor has. The term is used in order to find a description of the special type of investor that is often used in the public discussion. In Germany a correlated used term is '*überregional aktive Investoren*' (Forstner, et al., 2011). Literally it can be translated as 'nationwide active investor'. It describes investors that are active - not only - in one settlement or region, but invest in more places in a country or internationally besides their home country. Resuming the characteristics of the global farmer, the last two types (corporate and multinational) could be matched with the non-local active investor. In the following the phrase *foreign* will mainly be used instead of non-local or nationwide, because most often investors are not only active within a nation. Also, the investors are mostly non-local in terms of a foreign kind of origin. It is also possible that foreign investors are coming from areas in Germany others than the eastern parts.

In the debate there is also often heard about investors with a non-farming background. Here, it is focused on larger companies that have originally not been active in farming before, but found investing in agricultural land a lucrative business. However, this study is not about those kinds of investors.

A first attempt in finding a definition came from Forstner et al. (2011). In their report about activities of non-agricultural and non-local investors, they differentiated between the use of non-agricultural investors and farmers. In the public opinion non-agricultural investors are noted as people buying or leasing farm land and did not work in the agricultural sector before. In reality the distinction of the term is far more complicated.
There are two main problems in assessing this parameter. Firstly, the affiliation to agriculture is regulated differently in the legal order. Defining agricultural farmers is different in tax law than in the agrarian statistics. Secondly, many may be subjectively influenced in their assessment by the strangeness of the investors (Forstner et al. 2011).

Additionally there are investors that acquire or found an agricultural firm or farm, but did not have agricultural experience before. Those are mainly buying or leasing further land in the perspective of future profits. They could be farmers that earned the investment capital from a non-agricultural source, or farmers who have the original farm in another location, for instance in the Netherlands, Denmark or in other regions of Germany. This second type of investor has the key characteristics of the foreign agricultural investor.

To sum it up, foreign agricultural investors can be private persons, institutions or companies that are active in agriculture. They buy or lease farm land or acquire established farms in different regions in Eastern Germany, in the home country or abroad. The most significant property is that they have settled in rural regions in Eastern Germany.

2.2 Measuring Employment Effects

In the following a theory of the measurement of employment effects is going to be introduced. The study is a final report of the Centre for Strategy and Evaluation Services that was published in 2006. It actually revolves around a best practice framework for measuring employment effects of the Structural Fund (CSES, 2006). Therefore, the aim of this paper is more policy focused. Nonetheless it gives a good groundwork in defining and characterising employment effects, which will be used as the theoretical framework in this thesis.

The paper suggests a Bottom-up-Approach to measure any employment effects. This approach includes the use of monitoring data in a certain time frame, backed up by case studies and surveys, among others, to estimate direct effects and labour changes (CSES, 2006). The top-down approach is an alternative which involves the use of statistical and econometric research approaches to estimate any impacts on the labour market and employment structure. This thesis is using the so-called “bottom-up” approach. It is very important to define indicators that show the existence of employment effects.

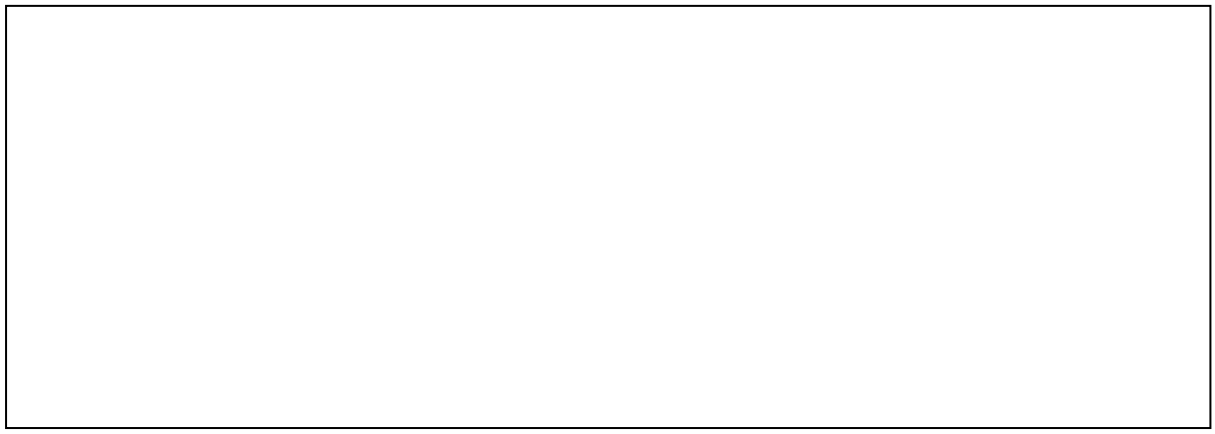

Figure 1: Indicators of employment effects (CSES, 2006, p. 23)

In order to finally measure employment effects the indicators above will be tried to identify within the case study analysis and the survey analysis. Using the button-up approach the collected data is used to define any measurable differences in employment structure both quantitative and qualitative.

2.3 Foreign direct investment and employment

In the discussion about foreign investors in agriculture a specific phrase is most often used: foreign direct investments in agriculture. This term is mainly used in academic papers dealing with economic issues in developing countries, but also rarely in the debate about foreign farming company acquisitions in Eastern Germany. FDI (foreign direct investment) means an acquisition or financial control of a firm that is situated in one country and has its headquarters in another country; for instance there is a Danish firm which buys foreign agricultural enterprises in Eastern Germany but still keeps its firm basis in Denmark. Foreign agricultural investors may not use foreign direct investments by nature. It is a possible strategy that several companies use, especially large transnational companies with a huge stock of capital.

Agricultural enterprises can use many possible strategies to get at further farm land. One of those strategies is a geographical expansion. If they enter foreign territory and consequently there is an internationalisation in expansion, then it is called a foreign direct investment (Stange, 2010). Liu et al. (2014) add that FDI is most often represented by a form of investment where capital is exported from one country into another by a firm or a person, whereby actors from the private sector include 'funds, pension funds, hedge funds, agricultural and agro-industrial companies and in some cases, energy companies'. Liu et al. (2014) see the aims and driver of such kind of investments in establishing new business premises, acquiring foreign companies or to acquire an interest in shares to have influence on business management.

To fetch the situation of agriculture Liu et al. (2014) admit that FDIs in agriculture are most often defined as large-scale land acquisitions. Those are very often discussed controversially in the literature as well as in the media and therefore a first theoretical item to explain the phenomenon of foreign farmers investing in agriculture. There is also a huge discussion about if FDIs in terms of foreign land acquisitions bring more benefits than disadvantages for the host country. Some of the benefits are going to be pointed out in the following.

Liu et al. (2014) list some effects that they found out in studies about foreign direct investments in developing countries. The effects of FDI on host countries are not an issue of developing countries all the time, but mostly. Liu et al. (2014) found that positive effects were an increase in productivity, growth accelerations via additional investments, contributions to a diversification of the production, transfers of technology and access to capital and markets. In the case of positive impacts on agriculture effects are a higher productivity, an increased food availability and poverty reduction. The most important effect correlated with the research question of this thesis is that FDI increases employment and creates jobs in the host country. However, it must be clear that all those positive effects on the local economy do not arise automatically and depend on a wide range of other factors such as the investment contract, the

type of business model, the linkages with smallholders, the institutional framework in the host country etc. (Liu, et al. 2014).
There are also many disadvantages FDI brings into host countries. Liu et al. (2014) mentioned some. Most critical is the fact of welfare losses that arise when foreign investors are preferred by public benefits such as subsidies or free use of infrastructure services. On the other hand FDI can cause displacements of local producers. This is a problem that affects the local employment mainly negatively and harms the economic situation of local farmers.

Liu et al. (2014) suggest that investment projects which give local farmers an active role and leave them in control of their land tend to have positive effects on local economic and social development. In many cases FDI is not meant as an expropriation of farm land, whereas some examples of land acquisitions in developing countries came under fire. It all depends on too many factors before it is really obvious to determine any social effects of FDI. Successful FDI projects should have many characteristics to cause any positive effects on the host country. Liu et al. (2014) say that these projects combine the strengths the investors have (like capital, technology, and expertise in management and marketing) with strengths that local farmers have (labour, land, tradition, know-how and knowledge of the local conditions).

Ayumu (2012) investigated FDI effects on domestic employment in several Japanese industry sectors in his article. He found out that, in all cases, FDI initiating firms benefit from higher employment effects in comparison to firms that remained completely domestic. There are various academic articles that come to similar conclusions in terms of FDI effects on employment. Only a few treat the agricultural sector. Gries and Jungblut (2005) developed a model to investigate the effects FDI has on skilled and unskilled labour, separately. They claimed that skilled labour will benefit most from opened capital mobility because firms will look for more skilled employees after FDI has taken place. The employment effects of FDI on unskilled labour are rather negative and according to Gries and Jungblut (2005) economic policy should regulate that problem. They give some reasons how to implement such programmes.
In order to show some more specific theories that relate to agricultural employment in particular, the next section will discuss some of them.

2.4 Agriculture and employment

The general impression of labour in the agricultural sector is that there is only a small part of employment working in that sector compared to others such as manufacturing, services and other industries. If we assume the three-sector theory by Fisher, et al. (1935) where economies are composed of a primary sector (work with raw materials), a secondary sector (industry and manufacturing) and a tertiary sector (services), then we could assume that nowadays only few employees work in the primary sector that contains agriculture. On the other side it seems that more and more people are going to be employed in the service sector.

Alvarez-Cuadrado and Poschke (2011) see the current declining in the agricultural employment as a key feature of the economic development. Also Van den Ban (2011) stated that with the ongoing economic growth the proportion of workers in the agricultural sector decreases. The authors argued that it might be possible that the labour productivity in agriculture is increasing much since technologies and new machineries have taken place in agricultural production. Hence the productivity of labour in agriculture increases much more in proportion to the overall food consumption per capita (Van den Ban, 2011). When production overcomes consumption then the labour input is going to be reduced. And hence, there is less employment in agriculture. This process is also called a structural change. Alvarez-Cuadrado and Poschke (2011) mentioned two observations that go with this structural change: the aforementioned decrease of labour share in agriculture and the smaller share of agricultural output in national product. This change has its causes in improvements in agricultural efficiency and technology and, on the other hand, improvements in industrial and service technologies which leads to labour migration from agriculture to other sectors. Alvarez-Cuadrado and Poschke (2011) are calling those drivers "labour push" (technology in agriculture) and "labour pull" (other sector's technology attracts employees out of agriculture). Van den Ban (2011) argues that the phenomenon of economic growth creates job opportunities that are outside the agricultural sector. Hence, economic growth is a labour pull-driver that causes less labour in agriculture.

More detailed research was published by Van den Ban (2011), where he found out that educated adults (skilled labour) are more likely to leave the agricultural sector and migrate to find jobs somewhere else. Better income opportunities can be found in urban areas, big cities or abroad. Many young, good educated workers leave the rural areas, where agriculture sometimes is the largest employer. This migration leaves a lack of well-educated workers in rural areas and affects agriculture negatively. Only a few young people start working in agriculture. Farm jobs are still presumed to be hard and income expectations are rather low. Babikir and Babiker (2007) resulted that demand and supply for agricultural labour depend on characteristics of households and economic and non-economic conditions. Household characteristics can be interpreted diversely. Most applicable are the relative change of income per household and the absolute change of income in the economy. A decrease in income pushes labour away, whereas an increase of income attracts labour. Wages pay a most significant role in household decisions, and also in the fact of labour demand in agriculture. Prabakar, et al. (2011) investigated how a low supply of labour affects agriculture. Labour scarcity seems to be a major problem in today's agricultural production, although the high productivity in that sector does need less labour input. The study of Prabakar, et al. (2011) revealed that acute labour scarcity in agriculture affects the productivity levels of outputs and even changes production patterns in farming. Concerning higher costs of adopting labour-saving technologies many farmers refuse adopting them and face problems with a lack of skilled workers (Prabakar, et al., 2011). Further reasons they mentioned for labour scarcity in agriculture are higher wages in other job opportunities, the high importance of seasonal work and the "presumption of an agricultural job to be of low esteem" (Prabakar, et al., 2011, pp.). In their report they suggest improvements in agricultural extension in a way that educates farmers in adopting labour-saving technologies. But can a problem like labour scarcity be

solved in only adopting and improving labour-saving technology? Making agricultural work remunerative for workers, especially young skilled people could be an appropriate way. This could happen when wages increase at least insofar that they are comparable with other available job opportunities in the location (Prabakar, et al., 2011).

Darpeix, et al. (2014) concentrated on the phenomenon of seasonal work in agriculture in their studies. Seasonal employment is a huge matter for many agricultural enterprises and farms every year. Farmers must cover their labour requirements in the seasons, no matter how weather, environment or economic situation look like and how the supply of seasonal workers is given. Farmers have the choice between hiring permanent or seasonal work force or wage workers. Darpeix, et al. (2014) found that this choice is not only determined by the seasonality of farm activities. Characteristics of the local labour market also affect the decision of farmers to hire permanent and/or seasonal workers. If we assume that the local labour market for agricultural workers is rather unfavourable or tight, there could be a greater chance for a substitution between permanent and seasonal work (Darpeix, et al. 2014). Less labour supply leads to an increased employment of seasonal work. This could have positive effects for both the farmer and employees. First, there is an increasing flexibility of agricultural labour and less strict commitments. Secondly, it could be cost reducing for the employer (Darpeix, et al., 2014). An important role therefore has family labour. It is seen as another substitute for farm employees, more specifically for seasonal work if there is a shortage of farm workers on the local labour market. Insofar it is very important to investigate the role of seasonal work and family labour when doing research on labour in agriculture and investigating the local rural labour markets.

The development of labour in agriculture does not look really bright in terms of sufficient labour supply. It is not right to say that young rural people leaving the area are making the wrong choice. And it is either wrong or right to judge when young folks stay in the rural areas and starting a career in agriculture. Agriculture is a sector that will always exist, since the global population does not stop to consume food. Van den Ban (2011) and other authors claim that agricultural producers shall be supported insofar they remain needed, and good agricultural entrepreneurs will be able to earn a decent income if they are doing a good job.

2.5 German agriculture and employment

In Germany as in many other industrialised countries there is a permanent decline in labour figures in the agricultural sector. Specifically small and medium family farms in Western Germany face an impressive decline of work force. Fasterding and Rixen (2005) analysed the labour structure in the German agriculture in their report. In the German agricultural sector it is distinct that the share of farm labour in total employment is below 3 percent like it is in many other regions in the European Union. This share is increasing along with the distance to economical core regions. This means that in more industrialised regions the share of work force in agriculture is lower than in “less developed” regions. Within Germany the labour

shares in agriculture are mostly higher in the northern and eastern regions compared to western and southern regions (Fasterding and Rixen, 2005). Also, in the northern and eastern regions there are rural structures and these regions are also marked by a significant structural change towards urbanisation. Significant is also the structure and size of farms and agricultural enterprises throughout Germany. In Eastern Germany there is a higher proportion of enterprises and farms with more than 100 ha and, on the other side, less than 5 ha (ibid.). That shows that larger farms are situated in the eastern parts of Germany, but also the share of very small farms is high there.

The amount of labour in agriculture has halved in Western Germany between 1973 and 2001 (Fasterding and Rixen, 2005). In Eastern Germany increased the number of agricultural employees by about 10 percent between 1993 and 2001, the work effort increased by 28 percent (ibid.). This has its reasons in the quick technological adoption as well as the considerable occupational downsizing after the reunification in 1990, but also it has reasons in the ongoing structural change of many rural areas (see the introduction part).

As in several countries the labour supply in agriculture is on a downward trend in Germany. Fasterding and Rixen (2005) figured that the unemployment rate shows no shortage of agricultural employment, meaning that official unemployment in the agricultural sector is rather low and leaves no sign of a lack in labour supply. In Western Germany the number of unemployed farmers was smaller than the number of open vacancies (ibid.). This leads to an insight of a shortage of labour supply in agriculture. Fasterding and Rixen (2005) argued that problems caused by a lack of young professionals and junior skilled labour. This lack seems bigger in Western Germany than in the eastern states. The problem of insufficient skilled work force in agriculture is in general more significant than in other sectors in the economy. More specifically, Fasterding and Rixen (2005) found out that more firms have trouble with shortages of skilled labour than with shortages of junior workers. It must be said that the labour requirements in agriculture cannot be covered in all areas. According to Fasterding and Rixen (2005) are labour requirements in agriculture decreasing most in the northern and in the eastern parts of Germany.

Besides the decreasing labour supply, it is necessary to have a closer look at the demand side of agricultural labour in Germany. Here, Fasterding and Rixen (2005) explain formally that output quantities determine the prices of labour (wages) which influence the value of production outputs. Hence, wages are influenced by agricultural production outcomes. Changes in agricultural prices influence the relative excellence of alternative technologies and the structure of factor inputs (ibid.). More or less this means that labour prices (wages) are being influenced by the productivity of labour.
Policy has some influence on different functional chains of labour input in agriculture (ibid.). By way of example it could be possible to adopt labour saving technological progress to release employees with the help of affirmative action (policy) inducing the adoption of technological progress and changes the relative excellence of labour input.

It was stated before that the unemployment rate shows no shortage of agricultural employment and that in some areas in Western Germany the number of unemployed workers was smaller than the open vacancies in the agricultural sector. Fasterding and Rixen (2005) argued that the actual demand for farm jobs must be higher than assumed because the published vacancies might be less than the number of open vacancies. It is assumed that not all open vacancies are going to be published. Jobs in agriculture are mainly going to established farmers before foreign professionals are going to be advertised.
Andermann and Schmitt (1996) described the labour demand in agriculture as followed: Since the number of agricultural enterprises decreases, also the number of employees in that sector decreases. Hence, the number of workers per firm decreases, too. A major problem is that to replace senior workers when they become too old, or to replace people leaving the enterprise for any other reasons, there is not enough demand of next generation workers (Andermann and Schmitt, 1996).

Further research was done by Fasterding and Rixen (2005) regarding latest developments in German agriculture and farm employment. The share of firms with employees having additional off-farm occupation is smaller in Eastern Germany than in Western Germany, at least in firms with the legal form of sole proprietorships[4] (ibid.). The same share of off-farm workers was significantly higher on farms with more than 20 ha farm land. It is controversial in matter that most large-scale farms are situated in Eastern Germany, so it could be assumed that the share of employees having additional off-farm occupation is higher in those areas where farms are most likely bigger than 20 ha. Despite the fact that there are more problems on the overall labour market in Eastern Germany, the combinations of on-farm and off-farm work has greater importance in Western Germany (Fasterding and Rixen, 2005).

As a consequence of different business structures and legal forms in Eastern Germany, and the dominance of legal forms like partnerships and juristic persons, the share of farm wageworkers is higher in Eastern Germany (ibid.). This is motivated by the definition of partnerships and juristic persons, since they employ wageworkers per definition. On the contrary there are many family farmers and smallholders in Western Germany that have mostly the legal form of sole proprietorships. Those firms rather hire full-employees than wageworkers.
Another group of agricultural employees are the seasonal workers. According to Fasterding and Rixen's (2005) report, the share of seasonal workers lay at about 11 percent and there exist no significant differences in various regions in Germany. They also found out that in agricultural sectors, such as horticulture (rather sole proprietorships), work more seasonal workers than in other sectors. A big part of the seasonal work force is coming from other European countries, specifically Poland (ibid.). Seasonal work is an important part of agricultural production and specifically important in times of harvest. Many countries are facing a shortage of willing workers; that is why many employers are trying to improve their offer (www, Economist, 2012).

[4] German *Einzelunternehmen*

Fasterding and Rixen (2005) reported also that the share of family workers is very different to the share of wageworkers: In Western Germany 71 percent of the workforce is done by family labour and 9 percent of the work by wageworkers. In the New Member states of Germany 24 percent of farm work is done by family labour and 55 percent by wageworkers (still in sole proprietorships).

There seems to be a growing importance of seasonal work in the German agriculture as discussed in the previous section. Also the amount of part-time farming is of increasing importance. The share of family workers decreases in relation to growing sizes of agricultural enterprises (Fasterding and Rixen, 2005). Wages in agriculture are decreasing in whole Germany, but most significantly in Eastern Germany. That leads to an augmented migration of labour leaving the agricultural sector. As Andermann and Schmitt (1996) argued, agricultural workers react sensitively on changes in labour conditions. This refers rather to wageworkers than family workers, and rather to young than to old workers. Young wageworkers are the most flexible group of agricultural work force. Unfortunately, young people seem eager to leave rural areas and do not prefer to work in agriculture due to unfavourable conditions. Another problem arises out of the group of family workers: the increasing number of old farm holders and the decreasing demand of company handovers. Policy regulations and public benefits can be an appropriate way to attract young people for working in the agricultural sector. Andermann and Schmitt (1996) declared that policy might have a delayed effect on the process of mobility in agriculture. That means that the current decrease in number of farmers can rather be regulated in the long term.

3 Research method

This chapter offers an overview of the methods used as well as statements providing the choice of methods. It contains the purpose and choice of the study, a brief theoretical background of qualitative research methods, a description of data and discusses the validity and ethics of the chosen research method.

3.1 Purpose and choice of approach

The purpose of this study is to detect effects that foreign agricultural investors have on the local labour market in Eastern German rural regions. A usual approach for determining any effects on labour is the use of quantitative data. This could be, for instance, official employment statistics as well as changes in unemployment rates or figures about labour migration. This kind of data can be found for different regions and different sectors. Hence, such data sets are available for the agricultural sector, too. There is one important problem: At least in Germany there are no official statistics that capture the nationality or origin of entrepreneurs or farmers. Under such circumstances it is impossible to rely on macroeconomic data because any employment effects cannot be linked with the investors' background. A conclusion could not be made with the help of secondary data, such as official statistics and macroeconomic data. Hence, using quantitative methods the research question could not be answered in a proper way.

This circumstance led to the choice of using a qualitative research method approach. It is quite unusual to use a qualitative approach within the field of economics, even in labour economics. However, in this specific case it felt most appropriate to choose the qualitative research method. It seems that in agricultural economics the use of qualitative research strategies is less developed compared with neighbour disciplines such as rural sociology or business communication. Case studies, open-ended interviews or participant observations are rather a part of the standard repertoire of other disciplines (Bitsch, 2000). It is not the case that there are no qualitative approaches in economic studies at all. But sometimes quantitative methods make a research topic or a project more difficult, as it does in this case. It is also most important to justify the choice of research method, not only when it is about an exploratory qualitative approach. Bitsch (2000) argued that the general discussion of research strategies and methods is most often omitted and the reason for that could be that there is a lack of knowledge in the field of study methods.

In this thesis there are two tools of qualitative study used. There is a survey and case studies. The survey covers the summary and analysis of a questionnaire that has been answered by local foreign agricultural investors. The questions are based on a prepared questionnaire. The most difficult part was the task of identifying and finding farmers as foreign agricultural investors and persuading them to answer the questionnaire. The survey was made on a high qualitative structure but also contains quantitative questions. More details about the structure

can be found in part 3.3 of this chapter. The subjects were farmers that are active in any agricultural activities in Eastern German federal states and whose enterprises are not that big and spread and are not part of the German stock market. The farmers asked to define one kind of foreign agricultural investor. The interviewees were asked anonymously.

On the other hand, the study contains an analysis of two case studies. The two 'cases' are two chosen companies that are stock market listed agricultural companies. Both of them fit in the definition of foreign agricultural investors but fell in another category than the farmers that were interviewed in the survey part. Both of the case study companies are also often represented in the media. They are large-scale farming companies that also have district offices in other countries, specifically in Eastern Europe. Because of their size and impact, they do belong to another category of foreign agricultural investor and are treated separately in the case studies part. The reason why the case study analysis was chosen is that the companies either refused interviews or did not cooperate and respond at all, so that there was no chance for any primary sources and statements. The case study part was executed as follows: Since both companies are listed at the stock market, there is much available material about the financial situation and business developments of the firms. Trends of investments in Eastern Germany can be assessed that way and also a trend of increased activity in employment or downsizing can be analysed. The business report facts are compared with secondary data, such as official employment statistics of regions the company invests actively. These companies are big enough to draw an impact on local employment in agriculture. That is a reason why they were chosen. Tertiary sources are used as well to investigate the case study firms more closely and open the variety of different perspectives on the issue.

Before should it be demonstrated and justified in depth why the chosen method of using interviews and case studies is an appropriate choice for this study. First of all it is the best way to find proper answers to the research question. Using interviews as a research technique in economics is, for instance, a good way to draw out interesting facts that could be meaningful and interesting, and could never rise up when using only statistical data. The difficult part in analysing is defined in the ability to read and interpret the interviews. There are many stories that need to be told, because all these stories sit behind the huge data sets, behind the statistics that were run with any commonly used statistic software. The story is the observation (Piore, 2006). It is typical to analyse the statistical data, and not the stories behind it. However, stories need to be interpreted to coming closer to completely understand the data observations that are collected. It is also important to create theories. Theory is used to stimulate the interpretation of interviews (Piore, 2006). It is less common to use interviews in economic research. Piore (2006) told two facts why it is specifically required in economic studies. Firstly, according to Piore, economics is highly structured and secondly, has the discipline has a strong normative disposition. Economic studies are based on theories with very strict assumptions and sometimes with conclusions very out of touch with reality. In addition to that empirical techniques are grounded on similar tight theories. On the other side, Piore (2006) claimed that economics is of a very normative kind and aims to evaluate economic rules and suggests improvements. The major problem is that economics is

addressing real-life problems with a set of methodical tight research tools. Nonetheless there is no perfect set of assumptions that could be chosen alternatively instead of existing assumptions. Therefore, the qualitative approach is useful to use the material for building-up on existing assumptions and coming closer to reality. Even if conventional economic theory is not working for real-life problems, qualitative research can build a bridge, because it is problem-oriented. Theories always need to be judged, specifically if it is the goal to implement policies with them. At last there should be given a quote by Michael J. Piore (2006, p.22): "In interpreting interviews, I do not think sufficient attention is ever given to the possibility that the world is really chaotic; it doesn't fit anybody's models, not those of the social scientist and not those available to the actors."

The purpose of this thesis has therefore an explanatory and investigative nature. The phenomenon of foreign agricultural investors is aiming to be explained and the current situation shall be drawn in relation of public concerns that gave the idea to this study.
The analysis of the survey consists of a display of collected information and the discussion which compares similarities and differences between the answers given. The analysis of the case studies is done similarly. It focuses more on analysing data that is not primarily available.
The data that is contained in the survey is quantifiable. However, there is no sense to use any specific statistic software to analyse it quantitatively since only three farmers were willing to answer the survey. Quantitative answers would not be statistically significant.

There are many kinds of international investors in agriculture. To capture as much material as possible for this study I want to investigate foreign agricultural investors that invested in German agriculture, either there are of a large-scale size or smallholders. Both types are included into the definition of a foreign agricultural investor.

"*Economics is commonly associated with the use of quantitative methods, and because of this, supposedly, the discipline is more ''rigorous'' than other social sciences, which are in turn associated with the application of qualitative methods, presumed to be less rigorous.*"
(H. White, 2002, p.511).

3.2 Theory of Qualitative Research Design

"We have to face the fact that numbers and words are both needed if we are to understand the world." (Miles, et al. 2014, p.55)

This section covers the most important ideas about qualitative research, and specifically the case study analysis approach by Yin (2009). Appropriate reasons of why the qualitative approach was chosen could be found in the last section. Using case study research is a way of qualitative research that finds application in this thesis. In the following, main characteristics of qualitative research are going to be presented.

Yin (2009) suggests the case study approach when "how" or "why" research questions are being posed. Formally it is also useful to use case studies the researcher does not have control over behaviour events and when the focus is on contemporary phenomenon within some real-life context (Yin, 2009). The table below gives an overview of the different qualitative research strategies in relation to their characteristics of when they are appropriate research tools.

Strategy	Forms of research question	Requires control over behaviour events?	Focuses on contemporary events
Experiments	How, Why	Yes	Yes
Survey	Who, What, Where, How many, How much	No	Yes
Archival analysis	Who, What, Where, How many, How much	No	Yes/No
History	How, Why	No	No
Case study	How, Why	No	Yes

Table 2: Strategies of Qualitative Research and their properties (www, Slideshare, after Yin, 1981)

First of all it is necessary to become conscious of the research question. It is the basis from where an appropriate research strategy can be chosen. Characteristics are the form of research question, the potential control of behaviour events and the focus on contemporary events (see table 2). The essence of a case study is the attempt to investigate a decision or a certain development, why it happened and how it was happened. Also, it is important to know of what were the results, although it is not always possible to know any results at the moment of research. Case studies are empirical in-depth projects that investigate contemporary phenomena within their real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2009).
From the table it can also be seen that surveys are following almost the same characteristics as case studies, although the forms of research question are more distinct.

Case studies can be found in many academic fields, even in economics. They are used to, for instance, investigate the structure of an industry or urban economy or any other region's economy (Yin, 2009). The reason for choosing the case study approach is most often the desire to understand certain phenomena that are far more complex than they could ever be investigated with any other, e.g. quantitative approach. In the area of social science the use of case studies seems therefore rather adjustable. Events in real-life are full of different characteristics that want to be understood and analysed. Those events can be individual life

cycles, organisational and managerial processes, neighbourhood changes, international relations, and the maturation of industries (Yin, 2009).

One of many concerns about case study research is that it contributes little to a greater scientific generalisation (Yin, 2009). It is clearly difficult to generalise results from a case (or some more), specifically when the rest of the population of interest is not taken into consideration. Yin (2009) argues that case studies are generalizable to theoretical propositions but not to populations and universes. If we do not see case studies as sample representations but rather as supported evidence to question existing theories, this concern is weakened.

Yin (2009) defines five different applications for the case study approach:

- Explaining the presumed causal links in real-life interventions that are too complex or the survey or experimental strategies
- Describing an intervention and the real-life context in which it occurs
- Illustrating certain topics within an evaluation
- Exploring situations in which interventions being evaluated
- Meta-evaluation

The matter of evidence collection is another topic that should be brought up to fulfil sufficient theoretical background about case study analysis. Yin (2009) speaks about six sources of evidence: documents, archival records, interviews, direct observation, participant-observation, and physical artefacts. These sources are going to be presented briefly.

The documentation can include sources like letters, memoranda and other communiques and private written texts. It also includes agendas, announcements and minutes of meetings, and other internal written reports of events (Yin, 2009). Additionally listed are documents such as administrative documents (proposals, progress reports, and other internal records), formal studies or evaluations, newspaper clippings and other articles appearing in the mass media or in community newsletters (Yin, 2009). The most important use of documents is confirming and strengthening the evidence one has resulted from other sources (Yin, 2009).
This thesis is making use of the documentation source. In the case study part it avails of documents such as administrative reports, formal studies and evaluations, newspaper articles and other media publication about the case firms. Private documentation will not be used in this study.

A second kind of sources is archival records. This contains service records, such as those showing the number of clients served over a given period of time, organisational records (organisational charts and budgets over a period of time), maps and charts of the geographical characteristics or layouts of a place, lists of names and other relevant items, survey data (census records, previously collected data and personal records, such as diaries, calendars and telephone listings) (Yin, 2009). Handling with archival records it is necessary to be careful with the source and condition of records.

This study includes archival record sources as well. Most of the collected material was found during investigative research about the case firms as online material. Personal collected data was not possible to get.

A next kind of sources is interviews, as in Yin (2009). Having interviews was the main task of the survey section. Primarily interview material is not available for the case studies. Direct observations and participant-observations are further sources. This strategy is containing the possibility of being a resident in a neighbourhood as a subject of the case study, for instance (Yin, 2009). It can also include being a staff member in an organisation, enterprise or farm. These kinds of observations were not possible during the research process and any reports cannot be analysed.
A last kind of source is physical artefacts (Yin, 2009). In the matter of this thesis, there was no need to collect any physical artefacts from the cases.

Yin (2009) defines three major principles that may lead to a well-written case study. These principles are (a) the use of multiple sources, (b) a case study database, and (c) the chain of evidence.
Principle number one, the use of multiple sources of evidence, shall be explained with the help of the following graphic.

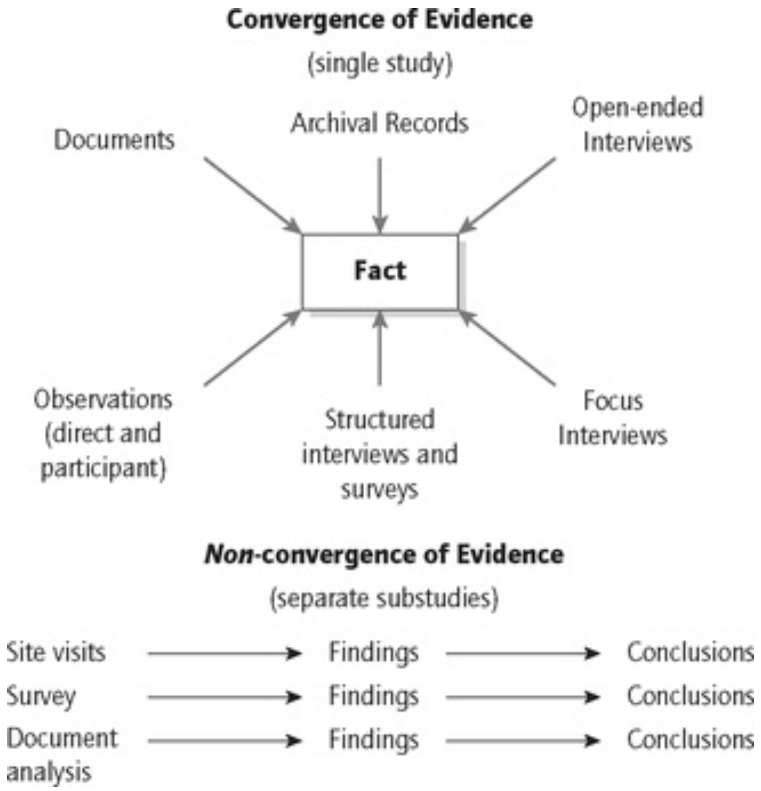

Figure 2: Convergence and Non-convergence of Multiple Sources of Evidence (Yin, 2009, p. 116)

When conducting a case study it is always more credible and sustainable to use more than only one source of evidence. Several of them were described before. Figure 2 shows that they all give information that is useful to build up on the investigated fact. The fact needs to be proven by all of the collected data. Using more than one source of evidence increases the possibility that the investigated "fact" is more strengthened. It could also happen that different sources interfere. The non-convergence of evidence shows that single sources of evidence lead to different findings and hence to different conclusions. The focus must be on the research subject, the outcome or answer to research question.

The second principle states that there is a need to create a case study database, which is important to implement any further research. Future researcher must have an access to the findings and data that was collected during the case study research.
The third principle is the maintaining of a chain of evidence. This allows the external observer to follow the derivation of any evidence (Yin, 2009).

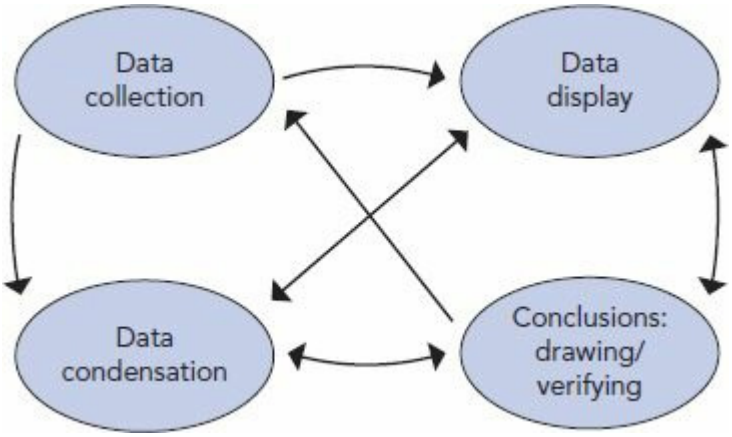

Figure 3: Components of Data Analysis - Interactive Model (Miles & Hubermann, 1994, p. 16)

3.3 Sample selection and description

3.3.1 Survey

The subject of the survey part has been farmers that fit into the definition of the foreign agricultural investor. That means farmers who moved to Germany and invested in agriculture at some point in time and are active in agriculture. They also had to be active in agriculture before they came to (invested in) Germany. Hence, they should have been occupied in agriculture before and after migration. They are coming from abroad or from regions in western or southern Germany and now these farmers have settled in Eastern Germany with

their company or re-established a firm. About 23 farmers were identified as agricultural investors in Eastern Germany and all of them were asked for study participation (answering questionnaire). Only three farmers responded; all of them are from the Netherlands. This circumstance was not intended. It proved that is very difficult to ask about certain topics with those farmers.

The survey contains three parts. One part covers general questions about the farm(s) and structure of enterprise. The second part covered specific questions about the farm employment and is in terms of the research question the most important part. In the third part the interviewees were asked to answer open questions about their experiences and opinions. Some of the questions in the questionnaire had prepared answers, interviewees only needed to choose from. Other questions were open and gave much freedom to answer.

3.3.2 Case Studies

The case study part contains two larger firms: KTG Agrar and Tonkens AG. There are three agricultural firms listed at the German stock market. One of them (Agrarius AG) is active in trading farm land in Eastern Europe and therefore it is out of the scope of the study. The other two companies are analysed in the case study part.

Several sources were gathered to find information about the economic situation and the business development of both firms as well as crucial employment information. Unfortunately both firms did not reply on interview proposals, either they refused to talk about that topic or there was no response at all. The data that could be found ulterior is analysed, giving the existing market information. The results of the analysis are not fully able to show real effects on employment since there are no real statistics available. Assumptions can be made about how they possible influence the labour market in the rural regions in Eastern Germany.

3.4 Advantages and concerns

One of the major advantages of using the case study research approach is that it investigates a specific topic very deeply. It is not taking tight assumptions into account and does not support superficial analysis. Piore (2006) argued that case study analysis is most often viewed as essentially offering empirical results. The findings should not be viewed as empirical evidence but as inputs to the construction of new theories (Piore, 2006).

An already mentioned concern of the use of case study research is that it has little contribution to scientific generalisation. A generalisation is not possible in that matter that there are not enough observed samples (cases) that could underline a significant hypothesis. Every case study leaves out another that is not taken into consideration. Case study results are not one

hundred percent transferrable to real data. The lack of information of primary and secondary data leads rather to assumptions about employment effects than real-life evidence.

Nevertheless is it important to show validity of data. Validity can be divided into external and internal (Yin, 2009). Frankfort-Nachmias and Nachmias (1996) stated that the external validity of qualitative research is characterised by the generalisability of study results beyond the specific research context. The internal validity, on the other hand, is when the researcher makes sure that the results that have been collected and used is equal to what they really aim to observe. The external validity is very strong in cross-sectional and survey design (Bryman, 2008). The reason is that samples that are collected randomly. The internal validity is towards to external validity weaker in survey designs (ibid.).
In this study it is well taken care of the validity, externally and internally, of the results. For the survey as well as for the case studies the subjects were chosen (once been identified) with due regard to their origin, current location and activity. The group of identified agricultural investors is too small to implement any randomisation but the interview answers were held anonymously. Hence, the validity increases.
The internal validity can be strengthened by a so-called triangulation. Triangulation is the use of different data collection methods within the same study. (Merriam, 1995; Whittemore et al., 2001; Agegnehu, 2012). The information of the survey part of this thesis is coming only from interviews, whereas supportive data for the case studies is coming from various sources.

Another important issue that goes along with concerns in research application is ethical consideration. Robson (2011) suggests that researchers must inform their participants fully about the purpose of research as well as the respectful treatment of personal data. Before the interviewed farmers were asked, the questionnaire as well as the oral instructions taught about the purpose of research and treatment with given information as well as anonymity. Robson (2011) stated that anonymity is essential when applying ethical considerations. He also mentioned that the anonymity leads to more openness of interviewees when they know that their answers are treated anonymously (Robson, 2011).

The theoretical framework of implementing a survey questionnaire and case study approach was done in regard to capture the phenomenon of agricultural foreign investors as a complex one that has both economic and social implications.

4 Survey Data

This section will describe and analyse the main findings out of the interviews and answered questionnaires. Main findings with respect to the theory are going to be discussed in the last part.

4.1 Survey Settings

As defined before in section 2.1, foreign agricultural investors can be characterised as be private persons, institutions or companies that are active in agriculture. To describe the employment effects of private investors that come from abroad, a survey was intended to conduct.

For implementing a survey the interview technique seems most practically and appropriate to investigate a very complex issue. Prepared questionnaires were distributed to 25 identified foreign farmers in different regions in Eastern Germany. Also some farmers where asked directly for personal or phone interviews. In general it was difficult to win farmers or agricultural firms for having interviews or a simply answering of the questionnaire. Unfortunately only three farmers gave a respond, whereas two of them filled in the prepared questionnaire and one was interviewed via phone. The questions from the questionnaire were identical to the ones that had been asked in the phone interview. The interviewees, as mentioned before, were farmers who moved to Germany and were active in agriculture before migration. They are mostly family farmers or private farmers. The questionnaire was divided into three parts. The first part included general questions about the farms, their structure and organisation. That helps to classify the foreign agricultural investor in a more general setting and gives information about the history and current situation of their farms. The second part consisted of questions regarding the topic of this thesis – the employment. The last part ended up with open questions that should draw the farmers' opinions, their experiences and their concerns about employment developments and their own situation as a foreign farmer in Eastern Germany. All three parts together aim to understand individual stories and try to explain certain employment or investment decisions that has been made by the farmers.

In the following part the interview questions are going to be presented as well as the results (answers given by the interviewees). The discussion introduces the most considerable commons and differences, and serves an analysis that investigates the role of foreign farmers in rural regions in Eastern Germany in relation to the theories.

4.2 Results

4.2.1 General Part

The first interviewee is a farmer that came to Saxony-Anhalt in 1992. He was coming from the Netherlands and was also active in agriculture before. By now he took out the German citizenship. In Eastern Germany the farmer does not have any further business premises than the farm in Saxony-Anhalt that he owned as an acquisition. Employees that had been working on the farm before were not taken over. The farmer is mostly active in stockbreeding, animal fattening, crop cultivation and fodder cultivation. On the farm there he has 950 cows living on about 1300 ha in total. 27 percent of the farm land is own property and 73 percent of it is leased land. The agricultural products are not self-processed and merchandised. The farmer does not participate in generating bioenergy. The farmer himself does not know if the products were sold in the region or even internationally because he is selling yields and cow products to larger intermediaries. When I asked him what his main reasons to invest in a farm in Eastern Germany were, he mentioned his agricultural background in the Netherlands and the lack of money his family had to face and fight poverty every day. In Germany he was searching for financial security in the agricultural sector. The choice of going to Eastern Germany was accidentally, it was the first possibility for him to invest and he did it. The farmer also said that his expectations were totally fulfilled, even more. Crucial constraints of the development of his farm did he see in the new environment when he moved to Germany. He claimed that the soil was different and he did not had the knowledge about it then and also the fact that he had less cows available to run a farm. Nowadays the biggest constraints in the development he sees in the rather negative public image of foreign farmers or private farmers in general. The greatest expectations for the future for him and his farm is the improvement of the public picture of farmers in the society and in politics and also a general acceptance of farmers and their way of farming without premature political restrictions in agriculture.

The second interviewee is a farmer with Dutch origin who came to Germany in 2002. His farm is located in the federal state of Brandenburg and he owns no further business premises. He owned the farm through an acquisition and stated that he took over the employed staff after acquisition. This Dutch farmer is active in stockbreeding and animal fattening, crop cultivation and fodder cultivation, in production of renewable energy (biogas) and in other services. In total he owns about 3,000 cows and cultivates land of about 1,000 ha; whereas 35 percent is own property and 65 percent is leased land. This farmer also states that the farm's products are self-processed and merchandised. The legal form of his firm is a limited partnership[5]. The farm's products as well as the produced biogas were distributed on the local market and also some are sent to other countries. The main reason for investing in land in Eastern Germany he said was the chance to build up a bigger farm with higher productivity other than in the Netherlands. He is very satisfied with the location and in general his expectations were fulfilled with the investment. He pointed crucial constraints of business development in the growing amount of bureaucracy and the hard restrictions of the

[5] equivalent to German *Kommanditgesellschaft*

municipalities towards farmers in Germany. In addition to that the farmer complained about the missing qualified personnel. The most important expectation for the future he sees in the good development of milk prices.

The third farmer that was interviewed came to Germany in 1994 and his farm is situated in Saxony-Anhalt. He is also coming from the Netherlands and owns further business premises in Eastern Germany. This farmer re-established his farms when he settled in Saxony-Anhalt. The business areas of his farm are stockbreeding and animal fattening, crop cultivation and the generation of renewable energies (biogas). He owns about 1 700 cows and cultivates land of about 1 100 ha. Of that land the farmers own 30 percent and leases 70 percent. The agricultural products were not self-processed and merchandised. The legal form is a limited partnership. Some of products, such as the produced biogas, are merchandised on the local market. A few products were also sent on international markets. The farmer sees the intentions of investing in land in Eastern Germany in the possibility of becoming a fully self-employed farmer. He stated that his expectation of the new environment have fulfilled completely. The question of crucial restrictions of business development answered the farmer with problems in local building law and the increasing land prices. The biggest expectation for the future for him is health.

4.2.2 Employment Part

The first interviewed farmer stated that 20 employees work on his farm in Saxony-Anhalt. Therefore different kind of employment can be found on his farm: fulltime-employed, part-time employed, farm workers and family workers. The farmer also stated that he employees mostly local people. 17 out of 20 employees come from surrounding towns or villages. The regional employees work in management, business and production. When it was asked if the farmer hire local workers advantaged, he said yes. In addition to the local employees, the farmer employs three foreign workers. They work in management and in production. He mentioned that he does not prefer to hire workers from abroad, but it is hard to find qualified staff in the location. The farmer could not guess the average age of his workers he said that the age range is very large. He assesses the work of his employees with a very good grade[6]. The supply of qualified employees in his neighbourhood he evaluates sufficient. The farmer offers adult education as well as off-the-job trainings for his staff whenever it is possible to do so.

The second interviewed farmer has 35 employees working on his farm. Among them there are 30 full employed and 5 part-time employed. The farmer employs 15 regional workers on his farm. They mostly work in business. He stated that he prefers to hire local people but regarding to the less qualified supply he finds it difficult to find local workers. The rest of his employees, the other 20, come from abroad. They also work in business. The farmer

[6] The interviewees were asked to evaluate with the help of school marks. The German scale reaches from 1 (very good) to 6 (insufficient). The results in detail can be found in appendix.

confessed that he prefers to hire workers from abroad. The average age of his staff is 40 years. The interviewee evaluates the work of his employees as satisfactory. The local supply of qualified employees he values with insufficient. The farmer does not offer adult education for the workers on the farm.

The last farmer that was asked to fill in the questionnaire has 21 employees working on his farm, whereas 20 are full employed and only one is part-time employed. He notes that 18 work as farm workers and two belong to family workers. The third farmer employs 18 local professionals. Those work in farm management, administration and in farm business. The farmer stated also that he prefers to employ local people as agricultural labour. Three out of 20 are international workers[7]. They work in the farm business. The farmer is likely to preferring foreign employees to hire. 41 years old is the average employee on this farmer's farm. In general the interviewee is satisfied with the work of the employees. The supply of local professionals he claims to be insufficient on the other side. The third foreign farmer does not offer adult education for his staff.

4.2.3 Open Questions

In the third and last part of the questionnaire the interviewees were asked general questions about their experiences and civic engagement in the rural areas in Eastern Germany.

The first interviewee stated that he got a warm welcome when he moved to Germany with his family. He experienced a speed-up integration which caused of his own interest in the region and his full commitment in several social groups. Though he did not faced large problems. In the next question he was asked about the relationship to neighbour farmers. He said that first there was envy, but nowadays there is a good relationship with all the local farmers and there is help and support to each other. His main contribution to the rural development was his steadily civic engagement from 1995 to 2009. This included not only political commitment. The farmer is/was active in regional associations and clubs, in councils and local parliaments, in professional associations and in many other activities and institutions such as churches and schools. In the following the farmer was asked of his opinion about the environmental laws regarding bureaucracy and legal controls in agriculture. He mentioned that it does not differ from the regulations in the Netherlands or elsewhere. He said it is positive to see a new confidence for nature and food products. NGOs and the Green Party in Germany may have done a good job in the past, but he also criticises the current agenda for more regulation in agriculture. For the future he hopes that farmers will get a better public reputation, since they should all know best what good farming is and what it is not. At the end he was asked about an evaluation of his own reputation as a foreign investor in Eastern Germany. He said that his experiences were positive and also from what he had heard from foreign colleagues. But he

[7] The text represents only the information given by the interviewee. Any counting mistakes may arise through the answers of interviewees.

also confessed that investors in pig farming have the worst reputation in the media and in politics. Single examples such as the Dutch pig farmer Adriano Straathof[8] should show this.

The second farmer also stated that in the beginning it was hard for him to start the new business in the new location. After some years the situation has changed positively. The farmers said that after ten years of cooperation the relationship to the neighbour farmers become good. Here he also mentions the improving development over time. Unfortunately he did not answer his own civic engagement in the rural regions in comparison to other local farmers. On the contrary, the farmer states in the following that he is active in regional associations and clubs as well as in professional associations. “Too much bureaucracy” was his statement when the farmer was asked about the environmental standards in Germany and legal controls in agriculture. At last he was asked about his own reputation as a foreign investor in the Eastern German agriculture. He said it is positively because of his own commitment in the society and himself as an “active farmer”.

The third farmer said he had a relatively positive start as a foreign investor in the beginning. His opinion about the relationship to other local farmers does he describe as relatively good. When the farmer thinks of civic engagement, he sees concurrence within the relationship of local farmers. In councils and local parliament the farmer is taking action himself. The interviewee mentioned the problems that arise with the status of German environmental laws, bureaucracy and restrictions. He said that small mistakes in animal husbandry could immediately lead to huge punishments for the business. In general, this investor is thinking straight positively about his role as a foreign farmer and his and other foreign farmers’ reputation within the German public.

4.3 Analysis

Before analysing the three interviews it must be noted that these examples does represent only a little part of foreign farmers in Eastern Germany. As it was explained before a generalisation is difficult to make, especially under the circumstance that only a few farmers responded or agreed to give interviews. The following discussion only captures the findings that could be found from the given material. And in that way the sample only represents a small circle of foreign agricultural investors.

4.3.1 General part

The general part is giving information about the characteristics of the interviewed farmers. It helps to organise and order the farmers to define them as a specific group of foreign agricultural investors.

[8] Adriano Straathof is one of the best known pig farmers in Europe. He was claimed to act against the German animal protection law and some of his pig farms were closed.

Most remarkable in the general section is that all interviewed farmers have their origin in the Netherlands and they all do work in large-scale farming. Therefore they can be characterised as a group of Dutch cattle farmers in the Eastern States of Germany. Following up on the theory of the 'global farmer' by Konstantinis and Zylbersztajn (2007) these famers of farmers belong to the group of 'migrant farmers'. All three farmers changed their location of farming and settled down in a new area; most of them kept the originally nationality, some did not. In comparison with the defined foreign agricultural investor some of the farmers do not have several premises within or outside of Germany. They only work on one single farm site. One interviewed farmer does have more than one farm in Eastern Germany. But since all of them can be called non-local, since their origin is one of a non-German, they are all three belonging to the group of foreign agricultural investors and therefore are a crucial part in this thesis.

All three interviewed farmers seem to have a lot in common. They are all active in cattle farming and producing crops on their land, too. The media articles about foreign Dutch investors in agriculture differ in terms of this characteristic. In the media the criticised farmers are mostly active in pig farming (www, Spiegel 1, TAZ, 3sat, etc.). Of course it is surprising that most of the farmers that have been identified as foreign agricultural investors are coming from the Netherlands. That might lead to clichés and prejudices beneath German farmers and the rural population, but it also shows how difficult it must be for new settled Dutch investors to fully integrate in the society.

A significant common of all the interviewed farmers is that they cultivate a similar size of land which is between 1 000 and 1 300 hectares. The average farmer in Germany owned land of about 59 hectares in 2013 (www, Statistisches Bundesamt, 1). In the federal state of Brandenburg[9] the average size of land that is cultivated by an agricultural firm is about 243 ha (Amt für Statistik Berlin-Brandenburg, 2014). The interviewed farmers do obviously own and lease land that is much bigger than the average. It is therefore contested to call them small-scale farmers, when they are active on such a huge area of land. In the official statistics by the public statistical office of Berlin-Brandenburg numbers of the average amount of cows per agricultural form are being published. Figures state that on average 221 cows are kept on a farm that breeds cattle (Amt für Statistik Berlin-Brandenburg, 2014). The interviewed farmers keep between 950 and 3 000 cows on their farm. Here it can also be seen the huge dimension. The Dutch farmers also stated a similar relation of owned and leased land. All of them own about one third of the used land and lease two third. In Eastern Germany the share of owned land in the total amount of owned land in whole Germany is rather small. It is more common that Eastern German farmers lease their land despite increasing prices for leased land (www, Bodenmarkt, 2015).

Another common is that the agricultural products from the farm are sold to be commercialised at another agricultural trading company. Most farmers do not know where their products will

[9] Statistical sources come from the federal states of Brandenburg and Saxony-Anhalt. The reason is that the interviewed farmers are active in these states and the data is analyses in comparison to each other.

be processed, packed and sold in the end. In the media it is often read of huge corporations that process and sell their own products directly. This arguments hold only for bigger farming companies such as the KTG Agrar AG.

All farmers chose the legal form of a KG (*Kommanditgesellschaft*) which is comparable with the English version of Limited Partnership. The KG is used as a legal form mainly for trading companies. There is only one head or manager in the company but it also has a higher amount of seed capital. There are two bodies: the general partner who is the actual firm owner and the partnerships. The partners participate only financially and are not liable for losses. Figures of whole Germany show that limited partnerships do only have a share of six per cent of all legal forms of agricultural enterprises. The reason why the interviewed farmers chose this kind of legal form could be that they are pretty large farms and are more dependent on further capital, so that it is not an appropriate way to choose being a sole proprietorship which is the most often chosen legal form of German farmers (www, Statistisches Bundesamt).

One crucial difference in the answers of farmers is the reason why they chose investing in farm land in Eastern Germany. It was said that the official agricultural restrictions in the Netherlands, such as the milk quote (www, topagrar, 2015), were an important reason to invest in Germany. For many family farmers it was hard to get enough out of agricultural production. Many saw a chance in the German land market with less public restrictions and laws. Some farmers were motivated to expand their production and farm size. This also made them changing location. The German market for land seemed to be more attractive and open than in the Netherlands. Another reason that was given was the chance of becoming an independent farmer. In general it seems that the reason for investing in Eastern German land was that it is simply more attractive for foreign, especially Dutch, farmers and that it seemed to open more chances for a good development of agricultural work.

Problems with the settlement were also discussed in many different ways. Farmers differentiated between difficult circumstances in the past and today. In the beginning when the Dutch farmers came to Eastern Germany noticed problems with the environment. Some say it was the soil that was too dry compared to the soil in the Netherlands and different farming methods needed to be introduced in a short time. It was also said that the start was aggravated because of a minimal number of cows, and it was not easy to increase the population at the first place. Other farmers mentioned the sceptical behaviour of local farmers when the Dutchmen invested in the neighbouring farm land. Other problems arose after some years of settlement in that area, underneath them the increased bureaucracy and the environmental restrictions passed by local governments. The actual development of environmental restrictions and bureaucracy effort in the Eastern States in Germany can be comprehended. The German farmers association claims that agricultural policy needs less bureaucracy, simplifications in the cooperation with the European Union, practice-oriented rules for a minimum wage in agriculture and so on (www, DBV, 2015).

More complains that could be caught by the interviews are problems with the building law and the increasing prices for farm land. The issue of building law complications can be linked

to the paragraph before, where the bureaucracy was discussed. The increasing prices of land are a fact that can be observed with the help of official statistics and is proven from many sides (www, Amt für Statistik Berlin-Brandenburg, DIW, agrar heute). And obviously it is a problem for many private farmers in Germany, not only those who are called foreign agricultural investors.

Another important fact that came with during the interviews is the public image of farmers. This image is not only linked to foreign investors. It is a matter of all farmers and has its reasons in the growing confidence of food products, the demand of sustainable products and the criticism towards conventional farming practices. Many private farmers are facing the political desire of increased farming requirements and restrictions. The farmers' freedom of choosing the optimal farming strategy is limited more and more every year. Additional to that is that the public image of farmers is getting worse in its importance for the society. An interviewee said that it is still the farmer who knows best what an appropriate way to do farming is and how to feed animals. The general trust in local farmers seems to be on a downward trend and that is what many farmers are concerned about (www, Spiegel, 2).

Another difference in the characteristics of the farmers is included in their responses for future outlooks. Most farmers want to improve the image of farmers and a proper acceptance in the society. Some want better process for milk and some other hope for a better private future. Here it can be seen the dimensions of farmers' concerns. Some address politicians, the media, restriction plans and some other care more about themselves. It cannot be judged about any of the answers. It can only be seen that foreign farmers are part of the political system, the society and local farmer circles. Their desire may not differ from them German farmers would have answered in respond to the same question. The answers only open an insight in the problems farmers in rural areas are most afraid of and they are important findings that should find the entrance in the overall discussion about farming in Germany.

To conclude the first block of questions it can be said that the interviewed farmers are belonging to the first group of global farmers as in Karantininis & Zylbersztajn (2007), the so called migrant farmers. There seem to be a huge number of Dutch migrant farmers in Eastern Germany, most of them are active in private or family farming. In terms of production outputs they play a fairly small role in the overall agricultural production sector in Eastern Germany. Nevertheless, they are an important part of rural life and development. To find answers on how those agricultural actors are influencing the employment development in their location, it is unalterable to look at the following part of the interview, where specific questions of employment were answered.

4.3.2 Employment part

This is part is crucial relating to the research if there are any effects foreign agricultural investors have on the local employment in Eastern Germany.

Firstly it should be noticed that on the farms represented here work 20 to 35 employees each, which means that the general employment effects of those farms are rather low or insignificant in the large statistics that are provided by public institutions. Nevertheless play those farms an important role in rural development as stated in the section before. Therefore it is important to see the qualitative trends of large-scale farmers in terms of their employment structure. In this section it is the objective to observe foreign farmers' opinion and experience with different kinds of employment. This is a crucial way to analyse the situation of agricultural workforce from a micro-perspective and leads to further insides macro-data cannot provide.

In the beginning it should be stated what type of employment is hired at the farms that were surveyed. On all three farms the biggest part of employment are fulltime employees. Only a small part of the farm work is done by family farmers. According to a report of the German Statistical Office (www, DeStatis), do 505.600 family workers work on German farms. The highest share of family workers is definitely situated in the old federal states of Germany where there are many private farms and sole proprietorships. The issue of family farming is in Eastern Germany therefore of a less importance than it is in the Western part of Germany.
It could be surprising that there are not that many part-time employees on the farms since it is difficult for many people to earn all money from agricultural work (Fayer, 2014). It is stated that more and more people in agriculture having a second job in the non-agricultural sector.

It is significant that all interviewed farmers employ both regional and foreign workers. Intuitionally raises a higher share of local workers the local employment. In contradiction, a higher share of foreign workers decreases local employment if we assume that foreign employees were substituted for a local worker and this one is not employed or he/she has disadvantages because of the foreign worker's employment. This simplification is both, banal and superficial (as so many assumptions in economic theory) but it helps to characterise any employment effects that could emerge through foreign investors' decisions.
From the answers giving by the farmers it can be seen that most of the staff is compounded of people living in the region. The regional employees work mostly in farm business, e.g. in crop cultivation, animal breeding, production, etc. It is also remarkable that all of the interviewed farmers prefer hiring local workers. This fact stands in concurrence with statements that can be heard from time to time by some rural inhabitants who fear that foreign farmers tend to prefer hiring foreign workers and so "steal jobs" that can be made by local people. This argument does not find any evidence either in this or in other studies about rural employment. All in all, there are prerequisites for a positive employment development of local people giving by foreign agricultural investors in large-scale farming.

On the other side, all farmers being asked do also employ foreign workers on their farms. Also, the foreign staffs work mostly in farm business and production. But it can also be noted that the relative amount of foreign workers varied on each farm. The interviewed farmers gave different answers when they were asked if they prefer foreign people working on their farm instead of locals. Some relations can be drawn. A farmer, who is not very satisfied with the local workers, prefers to employ foreigners. Another one who prefers to employ fewer

foreigners is overall very satisfied with the work of the locals on his farm. This makes sense in the individual point of view, but it also makes it harder to analyse an overall trend of farmers' willingness to hire more local or foreign workers. It all depends on their experience with the employees that have ever been working on that farm. Different farmer have different experiences.
In that manner it can be seen, when comparing the interview answers, that the farmers' evaluation of their satisfaction with their farm workers is relatively good. A very important issue give the answers for the question how farmers evaluate the regional supply of qualified workers. All farmers assessed this factor as a very bad mark. That leads to the perception that a positive employment effect of local farm work is hampered by a poor supply of good qualified and skilled workforce in the region where these farmers have settled.

The last question of this section dealt about farmers supply for adult education or on-the-job trainings. Only one farmer offers that kind of advanced training, only of it is 'feasible'. The average age of the farm staff was estimated to be around 40 years.

To conclude this section, many similarities in the opinion and experiences of foreign farmers in Eastern Germany appeared when it comes to the employment of farm workers. Most farmers are satisfied with the work of their employees and do hire both people from the neighbourhood as well as foreign workers. It is actually not clear why farmers do employ foreign workers. One reason can be that there are few good experiences with the local workforce in agriculture, such that farmers hire more professionals from farer places. One may say that international workers do their job for way less money than the locals so that the farmers save spending on labour. In the interviews it was not explicitly asked why farmers generally hire foreign workers. So it stays a matter of interpretation. What, however, can be clearly seen from the interviews is the fact that, in terms of qualification of workforce, farmers do prefer to hire local workers but are less satisfied with their work. That leads to the conclusion that there could be a positive employment effect for the region of there would be enough qualified workforce to be appointed at agricultural companies or farms.

Again it must be said that any employment effects are very low for the regions, since farmers as those that were interviewed only employ a little amount of workers on their farm. They do own a rather small share of farm land and do have a rather small number of cows on their farms. It is therefore more important to see what farmers' attitudes are towards employment and it can therefore a tendency of future employment behaviour be reflected.
Any more concerns and attitudes that could play a role in farmers' decision to employ are discussed in the following part.

4.3.3 Discussion part

This part will help to understand the farmers' perspectives on their role as foreign investors and farmers in rural Eastern Germany. It shall bring light on background issues investors are

concerned of and it opens the public discussion in terms of other important issues that have not been discussed about before.

In general the open questions part was answered quite positively by the farmers, experiences in the regions and with politics and society were interpreted rather satisfactorily. Also remarkable is the common active commitment all farmers seem to have in their regions.

Most farmers that were asked moved to Germany in the early 1990s or early 2000s. They all mentioned that in the beginning it was difficult for them to settle down and do farming in a new country, new environment and with new customs and neighbours, who were mainly sceptical then. For all the Dutch farmers the experiences changes positively over time. Now they tell they work in good relationship to other farmers. It must be mentioned that many Dutch famers in Eastern Germany are also connected to each other, either they work in the same region or not. Over the years they build up a network of Dutch farmers. The *Netzwerk Niederlande-Mitteldeutschland*[10] is a society that offers a platform for companies, institutes investors and municipalities to make contact with firms and decision makers in the Netherlands (www, Niederlande-Mitteldeutschland, 2015). They are closely intertwined and also support Dutch farmers in Saxony-Anhalt, Thuringia and Saxony. It is not clearly how their political influence in the several regions is. It shows the fact that especially Dutch investors are attracted to invest in Eastern Germany. That is a phenomenon that can be investigated in any further research.

The interviewed farmers think differently about their contribution to the neighbourhood. As said, most of them are social engaged in different ways in their regions. Some are active in regional councils or parliaments. This again raises the question of how big is the political influence of Dutch farmers in these regions. Since this is not a specific question of this thesis it not going to be deepened here. It is still remarkable that there seems to be a huge commitment of Dutch farmers in the societies and that might also be one reason why their local reputation is estimated as a rather good one.

One farmer mentioned a possible reason why there could be a negative reputation of Dutch farmers in the media. He differentiates between the cattle farmers and the pig farmers. Pig farmers might have a rather negative image in the society because of several problems with the animal protection law. They are mostly working on large-scale farming and their actions lead to a generalisation about Dutch farmers. That is why new investors sometimes struggle for acceptance, so the farmer.

Different opinions were given of the environmental laws and governmental restrictions. Some said that there is no difference compared to the Netherlands. Others claimed that bureaucracy in general is too strict and sometimes prevent effective farming.

[10] In English: Network Netherlands-Central Germany

This section may be less related to the research question. Nevertheless it brings up important qualitative data that reflect farmers' experiences in the society. It is a crucial task to understand the situation of farmers before understanding any economic decisions that are made by them. Dutch farmers seem to gain a bigger share in the Eastern Germany agriculture and therefore it is important to know what they are dealing with. Any conclusions of employment effects can hardly be predicted when an important player is not analysed sufficiently.

These interviews represented the foreign farmers in Eastern Germany. For them, acceptance and commitment seem to be most important. But they only play a small role in the question if foreign agricultural investors do have any effects on the local labour markets in Eastern Germany. For a better analysis it is crucial that also large-scale investors are going to be investigated. The next chapter will discuss this type of investor and their possibly effects on the labour market for agriculture.

5 Case Studies

In this section research is conducted on international active farming companies that have a significant impact on local agricultural production in Eastern Germany. The two cases that are going to be investigated are KTG Agrar Ag and Tonkens Agrar AG. Both were assumed to have a significant impact on the local labour market in the agricultural sector. The following chapters give an introduction to both firms and state their role in local agricultural production as well as their reputation in the media. Both firms are listed on the German stock market. Information about the financial and economic situation is analysed as well as different points of view on the labour situation of employees compared with regional labour data. Most information used was extracted from business and financial documentation the firms have published on their websites.

5.1 Case Study Descriptions

This section will briefly introduce the two firms. It reflects the current economic situation of the KTG Agrar AG and the Tonkens Agrar AG, their history and development. This information is necessary to implement further analysis about any possible employment effects that are tried to figure out by means of rare data that is freely available.

5.1.1 KTG Agrar AG

KTG Agrar introduces its own business concept as followed. The steadily growing global population, expanding globalisation, climate change and changing food consumption habits are crucial trends that are affecting the agricultural market, and they lead to an increasing demand for food products and renewable energies in both quantitative and qualitative (www, KTG Agrar, 1). KTG is one of Europe's largest large-scale suppliers of agricultural products and a steadily growing company. More than 42 600 ha acreage is cultivated by them (www, KTG Agrar, 1). The specialisation is on large-scale production of ecologically and conventionally grown fruits such as crop, potatoes, rape and soy. They conduct high investments in new agricultural technology, efficient methods of field cultivation and better repository since 20 years. KTG produces crops for about 1.5 million people annually (www, KTG Agrar, 1). Since 2006 KTG is also active in the production of electricity, biogas and heat out of renewable and sustainable resources (www, KTG Agrar, 1). KTG claims that they generate energy for about 350 000 people. In addition to energy and agricultural production KTG offers services like management skills in farming and energy sectors and teaches know-how (www, KTG Agrar). The business model of the KTG Group contains several segments: Farming, Energy, Food and Logistic Services (www, KTG Agrar, 1).

The executive board of KTG Agrar consists of the following managers (in 2014): Ulf Hammerich (CAO), Michael Schirrmacher (CHRO), Benedikt Förtig (CBDO) and Siegfried Hofreiter (CEO). Bert Wigger (COO) is also mentioned (www, KTG Agrar, 2).

The KTG Agrar AG is a listed company and its current share value is at 15.25 (2015-08-17).

5.1.1.1 KTG's business development

The KTG Group made revenue of about 234,119 k Euro. The revenue divided into the business segments is of 59,938 k € in farming, 70,855 k € in energy and 103,326 k € in the food segment (KTG Agrar, 2014). It can be seen that the food segment is the most important business sector at KTG.
The listed share of the company went relatively steady in 2014 (ibid.). The general development of the firm's share is satisfactorily (Warburg Research, 2015a). KTG itself see an improvement of business development in all their business segments. The equity could be increased in 2014 compared to the year 2013. The revenue increased by 42 percent in 2014 compared to the year before (KTG Agrar, 2014). In addition to the financial situation the size of acreage was increased too in 2014. It increased by 1,750 ha, so that in 2014 the total size was 44,350 ha (ibid.). The official business report of KTG also opens that the share of owned farm land decreases from 10,239 ha to 5,850 ha. One reason might be that about 4,400 ha farm land was sold in Lithuania, whereof the firm earned about 18.5 million Euros. The biogas production increased of 53 MW in 2014 (ibid.). The latest development was a new ecological *Biozentrum*.

The KTG Group also published an own business outlook. They predict that the ecological and conventional agricultural production in crucial regions such as Eastern Germany, Lithuania and Romania are going to increase (ibid.). Furthermore they are planning to cultivate more farm land in Eastern Europe areas and predicting further more revenue of about 70 million € by 2016/2017 due to the agricultural expansion. KTG Agrar sees another great potential of growth in the cultivation of soy (ibid.).

Despite the fact of massive decreasing of resource prices in the area of primary agricultural production, KTG sees a profit increase in the business segment of farming. The ongoing development of increasing prices of farm land is useful to the large-scale farmer KTG, whereas many smallholders claim that increasing prices for land endangers their existence as farmers.

Many independent research agencies advise to buy or keep KTG Group shares (Warburg Research, 2015; DZ Bank, 2015; and Independent Research, 2014). The current rate of share is at 15.97 (2015-08-12).

5.1.1.2 KTG as employer

More than 1 100 employees work at the KTG Group (www, KTG Agrar, 3).

On KTGs firm homepage the company is advertised as a modern, diverse employer that offers individual development possibilities for every potential employee (www, KTG Agar, 3). The company states that employees are structural incorporated with the help of a patented career system from the beginning. KTG generally advertises itself as great employer mentioning that employees are supported individually starting from the phase of incorporation to the individual development in cooperation with the firm own academy. The KTG Academy was founded in 2013 and offers seminars that are specifically created for the employees from all business divisions. At the academy young trainees are trained and also senior professionals get advanced trainings there. There is a diverse offer of trainings and seminars, for example instructions for new employees, trainings for executives, seminars for tractor drivers or MS-office trainings for the administrative staff (www, KTG Agrar, 4). Around 775 staff members are being educated at the academy.

Furthermore, KTG offers a flexible model of working hour management, a modern IT infrastructure and wages that are dependent on professional performances. KTG claims that they are constantly looking for qualified employees and executives. KTG claims also that their employees are playing a key role for the success of the company (www, KTG Agrar, 3).

Working at KTG includes mainly tasks that revolve around the processing of soil. Therefore the company makes use of applications such as most modern agricultural machinery, harvest technologies, occupations with drying processes, storage and marketing tasks. For their staff they express their selves as employers with “optimal working conditions” (www, KTG Agrar, 3). These conditions include mainly the provision of modern technologies. KTG Agrar is looking for tractor drivers, farmers as well as business leaders. For the future they are looking for employees Europe-wide who are willing to work in efficiently and sustainable agriculture (www, KTG Agrar, 3).

The Energy division of the KTG Group is giving much effort in advanced trainings for their employees to deploy them at the newly built biogas plants. Therefore the firm wants to connect their staff directly with the firm’s profit. KTG recruits new employees with offers like secure workplaces, flat hierarchies and fast decision making processes. Furthermore KTG employees can benefit from performance-dependent salary, a benefit scheme, a company vehicle, mobile phone for employees and participation at the KTG Academy (www, agrajo, 2015).

The average number of employees at the KTG Agrar was 1,008 in 2014, whereas 76 were employed in Lithuania (in 2013: 775 employees, whereas 96 in Lithuania) (KTG Agrar, 2014). The number of trainees was 15 in 2014. In the previous year 6 trainees were employed. (ibid.).

Year	Total number of employees	employees	workers	trainees	In Lithuania
2006	101	61	40	-	-
2007	103	51	44	-	-
2008	167	69	88	-	50
2009	214	98	98	11	-
2010	256	112	124	10	-
2011	484	-	-	13	-
2012	591	-	-	6	104
2013	775	-	-	6	96
2014	1 008	-	-	15	76

Table 3: Number of Employees at KTG Agrar 2006-2014 (KTG Agrar, annual business reports from 2006 to 2014)

5.1.2 Tonkens Agrar

The next listed company that plays a role in this case study analysis is the Tonkens Agar AG that was founded in 2010. Firm's executive is the chairman Gerrit Tonkens – a Dutch investor who came to Germany in 1998 (www, MZ, 2012). The firm is located in Saxony-Anhalt only. The supervisory committee consists of Johannes Waitz, Horst Mantay and Bea Tonkens.

The Tonkens Agrar AG and its subsidiaries (Tonkens Group) are active in different divisions of agricultural production. Business activities include cultivation of land, dairy production as well as storage, refinement and marketing of agricultural products (Tonkens Agrar, 2014/2015). A further business segment was opened after the building of a biogas plant in 2011, which includes the operation of photovoltaic installations. The next business segment is called "renewable energies" (ibid.). A second biogas plant was built in 2014 and both plants together have a nominal capacity of 1,200 kW (ibid.).

Tonkens Agar business strategy is focused on the development of the business segments: dairy production, land cultivation, storage, refinement and marketing, and renewable energies. Currently the segment of renewable energies is not growing at the moment because of "inconvenient political framework conditions" (ibid., p.9). The goal is a continuous growth with the help of five different factors: buying and leasing of further farm land, expansion of diary production by means of increasing number of cattle, optimisation of financial structure, expansion of services and a regional expansion, including land acquisitions abroad (ibid.).

5.1.2.1 Business development

The Tonkens Group benefits concerning a considerable farm size and therefore earns profits out of synergy effects that cannot be used by smaller competitors. The synergy effects arise through the close distance to subsidiaries and a well-functioning logistic system. Another advantage is the good quality of soil in Saxony-Anhalt which leads to an outstanding yield quality (Tonkens Agrar, 2014/2015).
Tonkens Agrar is a leading supplier of onions and potatoes in Germany. A problem arises concerning the omission of milk quota in Germany in 2015. This might lead to a deceleration of expansion in cattle.

Warburg Research (2015b) evaluates the company's business development positively. Concerning its large size the company benefits from positive economies of scale compared to regional agricultural competitors. A further positive driver for a good firm economy is the three pillar strategy of production (field crops, dairy production and renewable energy) that enables a reduction of volatility in yield development (Warburg Research, 2015b). Tonkens Agrar is financially well structured and the balance allows significant investments in business growth such as further processing of yield crops or the generation of renewable energy. Concerning the advantageous geographical location and the outstanding quality of soil in that area the firm may benefit from over proportional natural productivities in the future (ibid.).

Warburg Research (2015b) also analysed weakness of Tonkens business development. The cyclic price development of field fruits can only be compensated by a low amount of diversification. This means that the crop diversification is at a too low level. Another concern is the strong consolidation of customers of field harvests (ibid.). A huge problem is the dependency of future direct payment from the European Union agricultural funds. Large-scale agricultural companies are mostly criticised by competitors for their large earning of public subsidies due to their farm and land size. Another weakness is listed by Warburg Research's (2015b) analysis that claims the yet not occurring generation of ecological products, as it is proclaimed by the company.

Possibly risks for the business development of the Tonkens Group could be a higher volatility of yield developments because of the already mentioned expiring of the milk quota in 2015 as well as the expiring of the sugar quota planned in 2017 (www, DBV, 3; www, BMEL, 2015). It includes minimum prices for milk product and sugar beets. Another risk in business is the increasing price of farm land and leasing many farmers have to face. Decreasing public direct payments and an increasing complexity of environmental restrictions could prevent the firm of further profit making (Warburg Research, 2015b). Furthermore, risks occurring because of weather and climate, not alone because of climate change, are interfering Tonkens' Agrar business development.

Nonetheless Warburg Research suggests keeping Tonkens shares at the market. The current rate of shares is at 9.1 (2015-08-12).

5.1.2.2 Tonkens Agrar AG as employer

100 employees worked at the Tonkens Agrar on December 31st 2014 (Tonkens Agrar, 2014/2015). Beneath them worked 89 full-time employees and 2 part-time employees, further 7 people were marginally employed and two were trainees.
The development of numbers of employees can be read in the annual reports of Tonkens Agrar. The following table will summarize and represents the figures.

Date	Full time employees	Part-time employees
30th June 2009	83	ukn.
30th June 2010	85	ukn.
30th June 2011	88	17
30th June 2012	86	14
30th June 2013	94	13
30th June 2014	91	13
31st December 2014	89	2

Table 4: Number of employees at Tonkens Agrar 2009-2014 (sources: annual business reports by Tonkens Agrar from 2009 to 2014)

It can be seen that the number of full time employees increased until 2013, and then Tonkens Agrar must have downsized their full time staff. On the contrary, the total numbers of part-time employees decreased with every year. A significant downsizing of full-time staff happened between June and December 2014. It is not the purpose to analyse the figures at this point, but it shall be noted that there may be seasonal reasons of the downsizing and the figures of employment in June 2015 have not been published yet.

The Tonkens Agrar AG states that there are regular trainings and seminars for the employees to prepare them optimally for the technological requirements (Tonkens Agrar, 2014). Gerrit Tonkens is the only executive and operator at the management level. The firm fears the less of Gerrit Tonkens, which may lead to an outage of the operating power with many long-term business contacts and firm knowledge (ibid.). A further management level is installed below Gerrit Tonkens that is responsible for the operative business and administration tasks. Gerrit Tonkens prepares his sons for a future business management (ibid.).

Another fact is that the Tonkens Group is specialised on the production of potatoes and onions which is very labour intensive work. Hence, harvest revenue is strongly dependent on the general development of wage levels. The company states that increasing wage level will automatically lead to decreasing productiveness as well as to economic losses (ibid.).

5.2 Analysis

The following analysis responses on the theory of the paper of CSES (2006) about measuring employment effects as well as own research. To repeat the core indicators that shall be investigated to figure out any employment effects, they are called as followed. Firstly, it shall be observed an empiric change in the number of jobs created. Secondly, it needs to be investigated if any jobs are maintained by the influence of the foreign agricultural investors. Then, it is important to detect the number of employees receiving professional training. And at last, it will be meaningful to identify the number of jobless who are receiving training. This last group includes unemployed people who benefit from training that either improves the employability or leads to actual employment (CSES, 2006). It is assumed that the last point will not play any role in the analysis of the employment effect activated by investments of foreign agricultural investors in Eastern Germany, because it is unusual that farmers offer training for unemployed locals. And, even if they do, the impact will not be significant enough. To investigate all those changes some more information should be taken into account. Once already it is too difficult to capture true effects. Reasons are a lack of statistical data as well as the chosen research approach.

First it is the purpose to capture an impression of the two case study firms by analysing the given information about labour inputs in production and employment figures that have been published in the annual reports.
KTG Agrar AG is making an overall good impression according to their published facts about the firm's employment. They offer many training opportunities and additional qualification seminars for their employees. This can be shown by the creation of a firm-own academy. The impression is that the company wants to keep its employees and want them to be well-qualified in times of fast increasing technological progress, especially in agricultural production. The KTG Group is a fast growing company with a simultaneously increasing number of employees and workers. The first impression leads to the assumption of positive quantitative and qualitative effects on the local labour market.

The Tonkens Agrar AG stated also to offer professional training for their employees. Unfortunately it is not well documented to what extend this statement is realised. According to the number of employees, any quantitative effects on the labour market must be smaller than those of KTG Agrar. In addition to that the figures show that the number of employees at Tonkens Agrar decreased since 2013. On the other hand it can be seen that the company's revenue is increasing every year and that they are active in mainly labour intensive sectors. Figures also show that there is a small staff downsizing within the company. For now Tonkens Agrar could be assumed to have slightly negative employment effects.

A further try of verifying possible employment effects on the local labour market is the comparison to official statistical data on local employment and unemployment.

In general it is significant that the number of workers and employees decreased in the agricultural sectors in Eastern Germany in the time between 2001 and 2013. The following table targets to illustrate the development.

Year	Number of employees in thousand
2001	161.7
2003	166.8
2005	165.1
2007	159.4
2010	147.6
2013	145.3

Table 5: Number of employees in the agricultural sector in Eastern Germany (Source: BMEL Statistik)

The statistics show that there is a significant decline of labour in agriculture. For that reason any factor that provides any further unemployment can be assumed to be a positive employment effect, e.g. the number of employees that maintain jobs as well as the number of further created jobs (CSES, 2006). The next table illustrates the number of unemployed people in Eastern Germany between 2001 and 2005, and in addition to that the unoccupied vacancies in the same period of time.

Year	Total unemployed	Unoccupied vacancies
2001	79,010	11,802
2002	78,800	11,560
2003	87,795	9,778
2004	87,653	9,006
2005	91,194	12,149

Table 6: Unemployed in agriculture and open vacancies 2001-2005 (Source: BMEL Statistik, March every year)

These figures apply only for the agricultural sector, but they are valid for whole Germany and are not separated for Eastern German regions. They show that the total number of unemployed people increased during 2001 and 2005. The number of unoccupied vacancies decreased from 2001 to 2004. That leads to the conclusion that the demand for agricultural jobs had declined. Only in 2005 the number of unoccupied vacancies increased by about 3,000. It is hypothetical that there appealed any positive employment effects that raised the number of job opportunities in the agricultural sector. It is difficult to conclude any microeconomic effects out of the macro-data given by the statistical offices. If the number of unemployed increased along with the number of open vacancies, there must be barriers for farm workers to find the way into employment. These barriers cannot be determined by means of the given macro data.

In the following there shall be shown some regional examples that compare regional employment statistics with the employment development of both firms, KTG Agrar and Tonkens Agrar.

Starting with KTG Agrar it can be seen that they invested a lot in certain regions in Eastern Germany (appendix 2). A specific example is the district *Oberhavel* in Brandenburg. It is situated north of Berlin and economically it benefits a lot from the close distance to the capitol. In Oberhavel KTG Agrar has three branches in Oranienburg, Schönfließ and Vehlefanz (ibid.). 66 employees and 14 trainees are working at the location in Oranienburg (www, Oranienburg, 2012). KTG Agrar states that at the location in Oranienburg work 38 employee in agricultural production (KTG Agrar, 2014).

To analyse the regional changes at the labour market it is important to check the unemployment statistics for the district Oberhavel. According to data from *Regionalstatistik Deutschland* were 17,388 people without work in this district in 2005. In 2010 10,961 people were unemployed. The number decreased again and in 2014 only 9,294 people were registered without a job (www, Regionalstatistik, 2015). The total number of unemployed people decreased. It is more beneficial for analysis to use the employment statistics for the agriculture sector in the district of Oberhavel. The following table shows the employment rates for the district Oberhavel in the time period from 2000 and 2009.

Year	Total number of employees	Employees in agriculture	share of employees in agriculture
2000	59.9 k	2.2 k	3.673 %
2001	58.2 k	2.0 k	3.436 %
2002	56.9 k	1.7 k	2.988 %
2003	56.4 k	1.6 k	2.837 %
2004	56.6 k	1.6 k	2.827 %
2005	55.3 k	1.5 k	2.712 %
2006	56.2 k	1.5 k	2.669 %
2007	58.6 k	1.6 k	2.730 %
2008	58.6 k	1.6 k	2.730 %
2009	59.2 k	1.7 k	2.872 %

Table 7: Employment in agriculture in the district Oberhavel (Regionalstatistik, 2015)

The total number of occupied people in the district of Oberhavel developed relatively constant over time. After 2005 the decreasing trend of employment changed and increased up to 59,200 employees in 2009. The total number of people occupied in agriculture increased as well until 2005; then it increased again slightly. The same development can be shown observing the share of employees in agriculture. Compared to 2000 the share of people working in agriculture in Oberhavel went down. KTG Agrar invested much in the location Oranienburg in 2012/2013 and later also in other locations in Oberhavel (www, KTG Agrar,

5). These investments could have had positive impacts on the local labour market in that district which can be figured out of the increasing number of employees in the agricultural sector since 2005. This is still an assumption and does not take other factors into consideration, such as the business development of other farmers in the district. KTG might be the largest investor there, but a clear hypothesis can hardly be made about positive impacts by means of official labour statistics.

Another example shall be shown for Tonkens Agar. The firm operates in Saxony-Anhalt mainly. Therefore the district *Börde* is picked to illustrate changes in labour. The "Börde-Vita GmbH Wanzleben", "Bördelagerhaus GmbH Kroppenstedt", the "Milch- und Zuchtbetrieb Hendiks GmbH" in Stemmern and the "Agrar- und Milchhof Stemmern GmbH" are situated in the district of Börde and all of them belong to the Tonkens Group (www, Tonkens, 4).

The development of employment figures of the district Börde in Saxony-Anhalt is illustrated in the table below.

Year	Total number of employees	Employees in agriculture	share of employees in agriculture
2000	66.4 k	3.1 k	4.669 %
2001	65.6 k	3.0 k	4.573 %
2002	65.2 k	3.0 k	4.601 %
2003	64.0 k	2.9 k	4.531 %
2004	63.2 k	2.8 k	4.430 %
2005	61.9 k	2.7 k	4.362 %
2006	61.9 k	2.6 k	4.200 %
2007	63.0 k	2.6 k	4.127 %
2008	63.5 k	2.6 k	4.094 %
2009	63.0 k	2.6 k	4.127 %

Table 8: Employment in agriulture in the district Börde (Regionalstatistik, 2015)

The total number of employees is decreasing in the district of Börde in Saxony-Anhalt. More importantly, the number of employees in agriculture is decreasing, too but slightly constant in the time between 2006 and 2009. This may have reasons in the migration of rural population to towns or a trend in general decreasing in employment. The share of employees in the agricultural sector in the district of Börde in Saxony-Anhalt is slightly decreasing between 2000 and 2009. That shows people are leaving the agricultural labour market. In this downward trend of employment in agriculture it would be a positive employment effect if a firm can manage to create or at least maintain jobs. The major problem is that later statistics about employment in agriculture in certain districts are not available. Figures of employment at Tonkens Agrar are available since 2009. If it is assumed that the development of decreasing labour in agriculture in Börde went on up to today, then there cannot be shown any positive

quantitative effects emerging by Tonkens Agrar's investments. That cannot be proven by means of statistics yet.

Another medium of investigating possible employment effects on the local labour markets in Eastern Germany are newspaper articles and posts on websites discussing the issues of KTG Agrar and Tonkens Agrar investing in Eastern Germany. One example is an article of the local media portal *RBB*[11]. The broadcaster published a report about KTG Agrar investing in a farm in *Altdöbern* (Brandenburg). The acquisition of the agricultural company happened in 2009. In the report the old farm owners are glad about the acquisition by KTG Agrar, because of financial problems in the past (www, RBB, 6). The more interesting information for this study is the fact that 40 employees were taken over by KTG Agrar and all of them are coming from the region (ibid.). The farm management was taken over as well; till the accountings and buying are organised centrally (ibid.) In addition to that are all employees participated in the profit of 8 million Euros that the listed company gained in 2013 (www, RBB, 6). This single example shows positive employment effects KTG Agrar has on the local labour market. Although this example may remain a single one, it underlines clearly an action that was taken by a foreign agricultural investor to maintain jobs in agriculture in Eastern Germany.

Another strategy of identifying employment effects, especially qualitative, is the look at employees' evaluations about their employer. On the internet some websites can be found on which employer evaluations are possible and free for everyone. It is noted that such instruments cannot generally reflect the real situation, but they help to have a look into a company as employer. In Germany there are two major platforms that provide such services, Kununu and Xing. Employees can rate anonymously. In the case of KTG Agrar, several evaluations of current and formers employees can be found. The investigation of such comments shall lead to qualitative insights of employment satisfaction within such companies. Employment satisfaction can be a small part of positive qualitative employment effects.

The first website is Kununu where 10 employees of KTG Agrar evaluated their company as employer (www, Kununu, 2015). The system consists of a rating scale between 0 and 5 points, whereas 0 points stands for very bad conditions and 5 for very good conditions. Several different employment factors can be rated, such as working atmosphere, work-life balance, communication, salary and equal treatment.
For the KTG Group the employees' satisfactory varies strongly. On average the given points were 2.58 which represent the exact middle of evaluation, neither good nor bad (www, Kununu, 2015). Assuming that a good evaluation is defined as 4 given points and more, and a bad evaluation as 2 points and less, then the following criteria are assessed as good and bad. Good evaluations were given for interesting tasks and team spirit within the KTG Group. On the other hand, bad evaluations were given for communication, work-life balance, firm's public image and firm's social and ecological awareness (ibid.). Overall these are more negative aspects than positives.

[11] RBB stands for Rundfunk Berlin Brandenburg and is a public broadcasting institute for the countries Berlin and Brandenburg in Eastern Germany.

To investigate this further some individual comments of employees that were made can be analysed. Here are some random facts given that were mentioned by employees.

- superiors are choleric and treat employees bad
- team of colleagues is great but the turnover of staff is enormous
- monitoring morale of the company
- communication impersonal and only little helpfulness
- permanent accessibility of employees and no payments for extra hours
- no gender equality
- no environmental awareness – profit thinking only
- survives because of subsidies
- great team and colleagues
- versatile tasks and many business insights
- high career opportunities for committed employees

The evaluation at Xing is similar. The system of evaluation works the same way as at Kununu. The average points at Xing for the KTG Agrar group as employer were 2.60 out of 5 points (www, Xing, 2015). The comments that were made are similar to those at Kununu. It is assumed that the same staff made comments on both websites.

In terms of identifying qualitative employment effects out of such open evaluation systems, some points can be interpreted. Some employers mentioned the good collegial climate and the possibilities of making good career at KTG Agar. It also seems that KTG Agrar is a very profit- and growth-oriented company that invests first of all in talents and high working efforts. Leaving the morale behind, those facts underline a positive development towards additional quantitative and qualitative staff effort. Thus, positive employment effects can be interpreted out of the evaluations, although some may seem very negative. Business ethics such as gender equality, social and ecological awareness are very important factors for a company to be a good employer. Nevertheless, such factors do play no role in identifying employment effects, except they scare away potential professionals.

To find a conclusion of quantitative and qualitative employment effects of KTG Agrar and Tonkens Agrar on the local labour markets in Eastern Germany the aspects mentioned shall be compared and summarised. First of all it is necessary to classify both companies as representatives of the phenomenon of the foreign agricultural investor. The firms are listed and have a specific reputation in regions of business activities (Tonkens Agrar AG) and international (KTG Agrar). Both firms are active in large-scale farming and are in comparatively large funds. The founder and executive of Tonkens Agrar, Gerrit Tonkens, is originally coming from the Netherlands. He definitely belongs to foreign agricultural investors in Eastern Germany. KTG Agrar as the other case study has its coming from western Germany. They operate mainly in Eastern Germany and in other countries in Eastern Europe in the field of agricultural production. That is why also KTG Agrar belongs to the classification of foreign agricultural investors. Furthermore both companies have in common

that they are one of the most successful (in terms of sale figures) agricultural producers in Germany.

Based on their self-images KTG Agrar and Tonkens Agrar are making a good impression concerning employment. KTG Agrar gains advantage in that matter because the company invests much more resources in the development of their employees through offering seminars and trainings in a firm-own academy. Tonkens Agrar also claims to invest in the employee's development but there is no profound evidence. Moreover Tonkens Agrar hires far less employees than KTG Agrar. Tonkens Agrar employs about 100 people, whereas KTG Agrar employs about 1,000 at the same time. This leads to the conclusion that any employment effects of Tonkens Agrar are expected to be of a smaller extend than employment effects occurring from KTG Agrar.

Sources about labour policy and employment structure are rather available for KTG Agrar. There are far more media articles about KTG Agrar as well as firm descriptions and evaluations. It is therefore more difficult to compare both firms' effects concerning employment. KTG Agrar is also rather known by many people than Tonkens Agrar that is only active in single locations in Saxony-Anhalt, whereas KTG Agrar is one of Europe's largest farming company. But KTG Agrar probably also have a worse reputation within the public discussion about foreign agricultural investors due to their prominence.

Due to a lack of appropriate statistical data it cannot clearly be shown any significant quantitative employment effect through the case study firms. The comparison with local employment and unemployment data in the agricultural sector is therefore less profitable in answering the research question, but it shows the difficulty of approaching this problem using statistical information only. Only weak assumptions can be made about labour impacts of KTG Agrar and Tonkens Agrar in the chosen districts.

There is no data available that illustrates employees' evaluation of their work at Tonkens Agrar AG. Therefore no qualitative comparison can be made. Some evaluations of KTG Agrar employees can be found. In order to find out more about that it would be necessary to interview a sufficient number of employees in both firms. Since both firms refused giving interviews or did not answer to interview proposals it could be a matter of further research to investigate that part of study.

A factor of measuring employment effects can be a change in the number of jobs (CSES, 2006). This can be evaluated with the help of annual business reports the companies have to publish due to their legal form of listed company. The figures for KTG Agrar show an increasing trend from 2006 (101 employees) to 2014 (over 1,000 employees). It needs to be noted that some of the employees are in Lithuania or other regions in Europe and Germany, but many of them are located in Eastern Germany (appendix 2). If the increasing number of employees is meant to be an employment effect, then KTG Agrar definitely has a positive employment. The Tonkens Agrar AG on the other side has a slightly decreasing trend in numbers of employees since 2013. In addition to that the number of employees working part-

time at Tonkens Agrar is strictly decreasing. Till 2013 Tonkens Agrar seems to have positive employment effects, but currently they would be rather negative and if so then effects were rather low and would have less impact on total local employment.

Concerning the point of changing number of jobs maintained there cannot be make any explicably conclusion by reference to the existing material. The situation is different with the number of employees receiving training, which is also a factor of measuring employment effects (CSES, 2006). The number of employees receiving training is definitely positive and probably increasing too, at the KTG Agrar AG. The academy founded for training staff and the increasing number of people working at KTG Agrar lead to that conclusion. KTG Agrar claims itself to be an efficient-driven agricultural producer and to develop skills of their staff to be good with the latest technology in agriculture and energy production. Therefore the employment effect is again assumed to be positive. The specific number of trained employees is not known but it might be bigger than the number of employees trained at Tonkens Agar. There is no concrete fact giving concerning employees' professional training. Hence, it can be assumed that there is a positive effect with unknown extend.
The last factor of employment effects – the number of jobless receiving training – is not taken into consideration at all, because any result would be insignificant due to its small impact on the local labour market. Also, there is no documentation that supports the fact that KTG Agrar and Tonkens Agrar offering any training to unemployed locals who could possibly benefit from it.

Overall it seems that there is a positive employment effect occurring from the investments made by the large companies KTG Agrar and Tonkens Agrar, whereas KTG Agrar has the far bigger share of positive employment effects.
The problem remains in the lack of specific documentation and firm details that could not investigated within the scope of the study. Details remaining unknown are, for instance, the origin of employees at the firms, the real use of seasonal work, the differences in business levels and sectors and in which business tasks is invested the most, etc. Then there are the problems of acquisition information and the unknown number of workers dismissed.

6 Discussion

This chapter is going to present a comparison of the findings of analyses with previous research reports and other relevant literature. It will be a discussion about how the results in this study will differ or support from similar studies about the topic. It all shall lead to a strong argumentation based on answering the question on how foreign agricultural investors are affecting the local labour markets in Eastern Germany.

The first issue is the definition of the phenomenon of foreign agricultural investors. There is a social debate about foreign farmers investing in farm land in Eastern Germany. Many local farmers claim that the investors are too large, having a huge amount of capital and being the reason for fast increasing prices for farm land (Forstner et al, 2011). Multinational corporations are under suspicion to buy the land and lease it without being active in agriculture. Lowder, Carisma and Skoet (2012) investigated that actually farmers are by far the largest investors in agriculture, not non-agricultural corporations. To summarize the phenomenon of many foreign investors in Eastern German agriculture a new formulation was built and therefore also an own created definition to limit this phenomenon as subject for this study. There are several other forms being used. Forstner et al. (2011), for instance, discuss in their report about the phenomenon of non-agricultural and non-local investors. Non-agricultural investors are, as already mentioned, not active in agricultural production or cultivation of land; mostly they never worked in agriculture before. Following the results of Lowder, Carisma and Skoet (2012) it is disagreed to use the subject of non-agricultural investors in this study, since they seem to be of a smaller number. For this thesis it is not limited of the investors are private persons, farming smallholders or large-scale companies. The conditions are that they are active in agricultural activities and are coming from other regions to invest in Eastern Germany. Forstner, et al. (2011) stated that foreign farmers in Eastern Germany are coming specifically from countries like the Netherlands and Denmark. It was not the aim to prove that statement within this thesis, but the impression during the phase of research lead to an agreement. Most importantly in the limitation of the term is the condition that foreign agricultural investors do not need to be from other countries, but other regions than those in Eastern Germany (that includes regions in western Germany, too).

Within the survey three farmers were interviewed. All of them were coming from the Netherlands, even if some of them got the German citizenship by now, and all of them are active in the agricultural sector in Eastern Germany. All three of them are active in cattle farming. All of them are private investors and therefore fitting into the definition of foreign agricultural investors.
For the analysis of the case studies another types of investors were investigated. One is the KTG Agrar AG that has its origin in western Germany. Since the company in mainly investing in farm land in Eastern Germany and has a non-regional character it is also a foreign agriculture investor. KTG Agrar also invests in Eastern Europe countries such as Lithuania and Romania, but most of their acquisitions and subsidiaries are located in Eastern Germany. The second case study firm is Tonkens Agrar AG whose founder is coming from the

Netherlands. They only are active in agricultural production and energy generation in Eastern Germany (more specifically Saxony-Anhalt). Also Tonkens Agrar belongs to the phenomenon of foreign agricultural investor, such as all research subjects within this study.

Another definition of this kind of investors was established by Karantininis and Zylbersztajn (2007). They investigated the phenomenon of the global farmer. The term of global farmer can be sorted in four groups: the migrant farmer, the partnership, the corporate and the multinational (Karantininis and Zylbersztajn (2007). The global farmer and the foreign agricultural investor have much in common, but there arise also difficulties in classifying the foreign agricultural investor into the four theoretical groups of global farmer. The farmers that have been interviewed in the survey section could belong to the group of migrant farmers or partnerships. Not all of them have their financial background in the state of origin. And not all of them really form partnerships with local farmers or farmers in the home country. According to Karantininis and Zylbersztajns (2007) theory of global farmer KTG Agrar must fit in the group of multinational farmer, because they are steadily expanding their business into foreign countries. KTG Agrar actually does not expand only in foreign countries, mostly in farm land in Eastern Germany. Tonkens Agrar is difficult to classify within global farmer theory. It is definitely not a multinational investor yet. It is also not fitting in the group of corporates because it is not financially settled in the Netherlands. It seems that somehow some foreign agricultural investors do not go along with the theory of global farmer even though the basis drive for both theoretical terms is the same: the observation of a real-life phenomenon.

A further theoretical framework is the impact of foreign direct investment. The foreign agricultural investor can be assumed to be a form of FDI. Stange (2010) found in her study that international agricultural investors are very heterogeneous in terms of the sector background, structure of investors, extend of investments and reasons for investment in other regions than the home country. Concerning the survey, the foreign farmers that were interviewed are less heterogeneous in terms of the called characteristics. The investors interviewed had similar backgrounds and reasons for investing in foreign land. The companies of the case study are rather heterogeneous in terms of their background drivers and structure. Stange (2010) also found in her study that the majority of international investors have an agricultural background. This is also true for the subjects in this study. All farmers interviewed and all firms in the case study had agricultural backgrounds before investing in agriculture. There are several drivers that make investors moving to new areas, but for the group of international agricultural companies the main drivers are bad growth possibilities in their home countries and/or good economic and environmental condition in the target country (Stange, 2010). The farmers in the survey part decided to invest in Eastern Germany mainly because of these reasons. KTG Agrar's and Tonkens Agar's drivers of internationalisation are formally unknown, but could be assumed to be equal to the drivers of other farmers. Stange (2010) also mentions further non-economic reasons of internationalisation and implementing foreign direct investment in any form. Non-economic reasons cannot be located in the answers of farmers interviewed. Also in the case study analysis there is no hint of non-economic drivers that lead to international investments of the companies.

Liu et al. (2014) found that foreign direct investment can have a positive impact on the regions if local farmers play an active role in the implementation of direct investments. They wrote that even from the investor's perspective, land acquisitions is not the most profitable business model because of the high potential for conflict and damage of reputation (Liu et al., 2014). In the case of the foreign farmers interviewed it became clear that the reasons for investing in farm land in Eastern Germany were solely of an economic nature. The same applies for the case study companies. According to Liu et al. (2014) they did not choose the most profitable way of investment, if they considered their future reputation. Following the decisions of foreign agricultural investors it can be seen that the choice of investing in foreign farm land is favoured by almost all of them even taking into consideration a possible loss of good reputation. The answers of some interviewed farmers showed that some are very concerned about their reputation and are really willing to fight for a better understanding of farmers' way of decision making. But the report of Liu, et al. (2014) also reveals that cooperation between foreign investors and local farmers have by means the most positive and sustainable effects on local economies (ibid.). The interviewed farmers cultivate close contacts to their neighbour farmers, and some of them are also committed in the rural society. This underlines the statement that good cooperation can lead to positive social and economic effects in rural regions. On the other side do big companies such as KTG Agrar and Tonkens Agrar have much more problems with a bad reputation in the neighbourhood than investors of a smaller scale. Large-scale farming companies stand in stronger concurrence with the local farmers because locals see them as a far too powerful competitor for farm land. It cannot be alleged that large-scale farming corporations are looking for friction with local farmers per se. It seems to be an automatic process that let many "smaller" farmers call out for policy security to correct the competition environment. It may seem that benefits and losses of foreign investment cannot be separated well. Liu, et al. (2014) state that economic and social impacts depend on a range of factors, such as contracts, business models, the just mentioned linkages to smallholders and institutional frameworks in host countries. Concerning the results and experiences of this study it also need to be mentioned that foreign investor's attitudes toward integration in the host country is a further very important factor for social and economic impacts on the local markets for agriculture.

Another very important issue is the declining development of employment in agriculture. Not too few theories arose out of this development. Alvarez-Cuadrado and Poschke (2011) commented that a characterization of economic growth is an increasing rural-urban migration, and therefore a trend of people leaving the rurality and finding jobs in other sectors than in agriculture. They offered two hypotheses that describe this kind of development: labour-push and labour-pull. Labour-push effects occur when progresses in agricultural technology lead to such a decrease in labour demand that people are "pushed out" of agricultural work. Labour-pull, on the other side, occurs by improvements made in technology in industry and service sectors that attract labour out of agricultural production (Alvarez-Cuadrado and Poschke, 2011). These authors also suggest that labour-pull effects dominate. The problem of shortage of qualified agricultural workers is experienced by all of the research subjects in this study. This can be seen on the basis of answers the interviewed farmers have given as well as the reactions of the companies on skill shortage (by giving opportunities of training and

education). This noticeable structural change is happening in many areas but most significantly in Eastern Germany, where migration of particularly young people rips holes in the supply for agricultural labour in rural areas. Prabakar, et al. (2011) identified the reasons for labour migration in higher wages in jobs that are available in other areas as well as the presumption of farm work to be of low esteem. These reasons were also mentioned by one of the interviewed farmers. What is more, Prabakar et al. (2011) suggest that jobs in agriculture should be made more lucrative for citizens by raising wages, thus they are more or less equal paid with other non-agricultural jobs in the region. That seems to be a problem for many farmers in general, including foreign agricultural investors who are also active in the regions. Tonkens Agrar, for instance, claimed that increasing wages generates risks for firm's overall economic success (Tonkens Agrar, 2014). The company is active in very labour-intensive fruit cultivation and fears losses due to further increases of wage levels. It is insecure how far these concerns are eligible. But it must also be mentioned that the only increasing of wages cannot only lead to higher employment in agriculture. Several more factors are playing a role in hiring strategies of agricultural firms. They will be discussed later in this section.

Liu, et al. (2014) stated that the creation of employment is by far the main type of benefits occurring from foreign investments. Concerns are announced due to the sustainability of the creation of new jobs, since studies have shown that the number of jobs created decreased over time (Liu, et al., 2014). This development can be illustrated based on employment data of Tonkens Agrar. Since 2005 the total number of employees decreased slightly. This phenomenon cannot be explained with the data of KTG Agrar's employment data. It is in the eye of the beholder how job creations developed. Another reasonable concern might be the issue of quality of jobs created and who is benefiting from it (Liu, et al., 2014). Much critique is going to the assumption of job creating in managerial positions that is occupied by non-local employees and even in the low-skilled job divisions the work is mainly be made by people who are not coming from the region (ibid.). From the survey data is can be concluded that most foreign agricultural investors are willing to employ rather local people than foreigner or non-locals. Also the case study companies do not make the impressions of neglecting the local labour markets. Unfortunately there is not enough evidence to show farm managers' tendencies of recruiting.

Another comment shall be made about the concern of Tonkens Agrar AG about labour productivity and the fear of increasing wages hinder the economic growth of the firm. Economists say that labour productivity accretion is affecting the growth of wage levels. Vergeer and Kleinknecht (2007) argue that there is causal link in the direction that wage growth determines the growth of labour productivity. That means if wages are increased, the probability is high that labour productivity increased, too. If labour productivity increases, the firm's economic performance is increasing too and thus there is higher productivity in production and better revenues. Avoiding wage growth may favour job creation but prevents also labour productivity (Vergeer and Kleinknecht, 2007). This argument is against many agricultural firms' wage policy. Since raising wages does not conclude in creating new jobs it does neither have positive employment effects in rural regions.

Attracting young people for finding employment in agriculture and educate workers is another issues that shall be discussed. Wiener (2004) is warning that the problem of shrinking supply of labour in agriculture may not disappear as far as major problems are not faced in a structured and sustainable approach. Furthermore purposeful statements shall be made that are more substantial than regular labour market statistics in agriculture (Wiener, 2004). Van den Ban (2011) offers options of how farmers can react and profit from the overall economic growth. They could increase the yields of their crops and animals, switch to the production of high value products where there is also an increasing demand, increase the labour productivity on their farms, and find non-farm sources of income for their family members (ibid.). The problem that labour force turns back off agricultural work can be handled with the help of an increasing labour productivity and non-farm employment of family members of farmers (ibid.). Further tasks to attract people for farm work may be the introduction and usage of latest technological machineries, agreeable working conditions for employees, the participation of employees at firm's successes and, as far as possible, a lucrative wage level, training and education for employees, etc. According to the issues of increasing labour productivity it was an obvious conclusion while doing research that all subjects, interviewees and case study companies, are aiming to increase their labour productivity, although they may have different financial preconditions. The issue of finding non-farm jobs for family members only applies for the foreign farmers that were interviewed, since some of them make use of family workforce. Concerning the use of latest technologies, KTG Agrar is a frontrunner in investing in good machineries. It is obviously more difficult for agricultural smallholders to adopt expensive technologies on their farms. In this study no interviews with employees have been made, thus it cannot be stated much about the working conditions within the agricultural enterprises. According to the employees evaluation of KTG Agrar on business websites there can be caught some impressions about that matter. The evaluation results showed no significant negative or positive assessments of KTG Agrar as employer on average. Since KTG Agrar and Tonkens Agrar are listed companies the shareholders are participating of the success of both companies. As from different articles about KTG Agrar it can be noted that also their employees are participated in profit distribution (www, RBB, 6). KTG Agrar as well as Tonkens Agrar and some of the farmers being interviewed are offering training programmes for their staff. It is constantly important for agricultural producers, either foreign or local, to try to attract school-leavers and graduates for trainee programmes on farms and support with future perspectives and the strategies that have been mentioned above, because also Babikir and Babiker (2007) stated that labour demand and supply are mostly depending on economic conditions.

Kimhi (2000) argues that the migration of labour out of agriculture affects the tendency of becoming engaged in a full-time off-farm job positively. This leads to the question of what role does seasonal work actually has in agriculture. Darpeix, et al. (2014) is claiming a recently increased use of seasonal wage labour in agriculture. The case of Tonkens Agrar shows that there is a significant decrease in the use of seasonal workers. For the case of KTG Agrar there is no distinction in kind of labour been made in the data. The survey reveals that no one of the interviewed farmers does employ seasonal workers on their farms. That stands in large contrast to the statement of Darpeix, et al. (2014). In their study they found that the

choice between hiring permanent or seasonal wage labour is not only determined by the seasonality of farming activities but rather by characteristics of the local labour market which is affecting a trade-off between seasonal and permanent labour (ibid.). If the regional labour market is tight, then it emerges substitutability between permanent and seasonal work (Darpeix, et al., 2014). There will be an increasing flexibility when the amount of seasonal work is higher than permanent employees (ibid.). This phenomenon cannot be supported by means of the data resulting from the case studies and the survey. Actually it is more interesting for this study to identify effects on the local labour market and not the other way around.

A potential substitute for seasonal wage labour in agriculture is the use of family labour (Dawson, 1984). The issue of family labour in agriculture is another one that should be mentioned in the analysis. Two out of three interviewees employ family workers on their farms. KTG Agrar is very large and cannot be called a family enterprise, thus family labour does not play a significant role in this company. Unlike KTG Agrar, Tonkens Agrar is employing family members in the business. The executive Gerrit Tonkens is planning to take over his sons as future firm executives. Besides this, a family member is in the supervisory board of the firm. This kind of work has nothing to do with any substitution for seasonal wage labour. Substitution of family workers is rather occurring in smallholder enterprises, e.g. when there is a shortage in labour supply. Dawson (1984) thinks that the composition of family is an important determinant of labour supply. Since there is a significant structural change in Eastern Germany there is often a shortage of labour supply, which actually leads to an extended use of family workers. It also must be noted that family labour supply is not much important in large-scale farms, except in management levels (see Tonkens Agrar).

A further significant question is the how the employment of foreign farm workers is affecting rural regions economically and socially. This is a crucial topic because all of the foreign farmers that have been interviewed employ foreign workers. The share of foreign workers at KTG Agrar and Tonkens Agrar is unknown on the contrary. It is an often heard broad statement of some locals that farmers are hiring preferred workforce from Eastern Europe, because of cost saving reasons. Some local unemployed people see a threat of increased competition for farm jobs in the supposedly large share of foreigners in agricultural employment. The results of the survey show that farmers generally prefer local workers on their farms, but they also hire foreign workers because of the low agricultural labour supply in many regions. Bauder, et al. (2003) found that the local economy can benefit from the presence of foreign workers through added consumer power, etc. That implies that foreign workers are contributing to the rural development. The lack of information or personal interaction with foreign workers leads sometimes to distorted images of behaviour and attitudes of foreign workers (Bauder, et al., 2003). Negative employment effects through the use of foreign workers cannot be determined in this study. The actual effect on the local labour market is marginal. The use of foreign labour brings additional labour supply but only small competition with local workers.

Official statistics have shown that there is a decreasing trend of total agricultural employment in Eastern Germany. The reasons behind that may be various: the growth in labour productivity and therefore less labour demand, new agricultural technologies and improved machineries, the structural change, the shortage of young professionals and farm successors, labour-pull indicators, the process of urbanisation, wage differences of the sectors, only few possibilities for lifestyles in rural areas, etc. This study finds unfortunately no indicators for a counteracting trend in theses labour statistics.

One thing that can be done against this melancholic appearing trend is the implications of policies. It is mainly in the interest of local farmers to implement restrictions that oppose foreign agricultural investors. The question is if those investors really harm the local economy or the local labour markets. One of the most applied forms of regulation in agriculture is the restriction of farmland ownership (Ferguson, et al., 2006). This regulative kind of policy is also demanded by many local farmers in Eastern Germany, especially by farmers' organisations. Many countries have passed restriction laws for the control of farmland ownership, for instance Canada (FSA – The Saskatchewan Farm Security Act in 1974) and the USA (AFIDA – Agriculture Foreign Investment Disclosure Act in 1978). Ferguson, et al. (2006) stated that a stricter regulation leads to a lower value of land. That implies on the other side that free competition is leading to increasing prices for farm land, which is actually the case in Eastern Germany. Restriction policies on farm land do not have direct effects on local labour markets; they only determine who is able to own a specific size of land. Employment effects occur because of business decisions of agricultural enterprises and farmers, as well as on the economic development of their business. Petrick and Zier (2012) found out that there were only a few desirable effects on job maintenance in agriculture due to a restrictive policy. They also state that investment subsidies keep the labour on the farms and a reduction of wages reduces the labour use in agriculture (Petrick and Zier, 20012). It follows that political motivated restrictions in farm land ownership do not affect local employment increases.

In their report about labour in agriculture in Saxony[12], Albrecht, et al. (2013) analysed that there will be a decrease in labour supply and demand in agriculture in the nearer future, and there will not be changes in the shares of wage labour, seasonal work and full-time employment. This includes no obvious existence of any quantitative labour deficits in Saxony's agriculture in the short-run (Albrecht, et al., 2013). Long-term future problems of skill shortage and rural emigrations will remain nonetheless. In the report the authors suggest farmers shall take good care of their employees to counteract these trends (ibid.). This includes also the adoption of new technologies in agricultural production processes as well as training opportunities for employees. This is what companies such like KTG Agrar and many others are already practicing. Albrecht, et al. (2013) claim also that the public image of many farmers must become positive. Foreign farmers that have been interviewed for this study considered the same problem. Civic engagement of farmers or agricultural companies in local society is helpful to get a more positive reputation and impression of their work. It also can

[12] Saxony is situated south of Brandenburg and east of Saxony-Anhalt and Thuringia, and therefore it belongs to the federal states that are located in Eastern Germany.

help to get in touch with local people and may simplify recruiting processes. This issue applies to all research subjects in this thesis, foreign farmers from the Netherlands as well as large-scale listed agricultural companies. A major key to success is the improvement of the reputation and civic engagement, the search for dialogues with local citizens and better marketing strategies. The future perspectives of the interviewed farmers were all positive as well as various, but most importantly they were positive.

7 Conclusion

The aim of the study was to identify any effects of labour market changes in Eastern Germany through activities of foreign agricultural investors. The phenomenon of foreign agricultural investors in Eastern Germany has been discussed in a rather confusing medial debate. In this study it was made a clear limitation of the term *foreign agricultural investor*. This term was designed to capture the most important characteristics of international investors in Eastern German Agriculture.

The study results brought to mind that the activities of foreign agricultural investors counteract the very powerful appearance of structural change, which includes the emigration of young and talented people and the increasing unemployment in many rural regions in Eastern Germany. Foreign agricultural investors invest in these rural areas and therefore create new opportunities for the rural communities. The fast increasing of large-scale agricultural companies such as KTG Agrar lead to an accumulation of capital that can prove advantageous for local communities. Firms' expansions also create a higher demand for labour. The demand for agricultural labour became so important that farms and agricultural enterprises are investing much to keep employees and offer benefits to attract more people finding jobs in agricultural production. More and more farmers, specifically foreign farmers are investing in the generation of renewable energy. Additionally investment also leads to positive employment effects. Knowledge and know how are much demanded factors. Many farmers invest in training of their employees. Foreign agricultural investors were assessed to be very much likely to invest in training opportunities for their employees. In general there are no recorded negative employment effects arising by the activities of foreign agricultural investors. This is by far the most important contribution this study can provide.

Another huge problem has been identified. Most negative developments on the labour markets in Eastern Germany do not arise because of farm land sales and international investments. The main impact is coming from structural change. Its consequences lead to increasing unemployment rates, specifically in the agricultural sector. Any maintenance in the number of jobs can therefore be evaluated as a positive effect on the local labour market.

Other results that appeared are that there is a decrease in the number of seasonal workers by all the research subjects. This outcome contradicts the opinions that were represented in many theoretical research articles. Furthermore, positive drivers for good employment environment are the introduction of modern technologies and machineries in agriculture, increasing wages, civic engagement of agricultural firms in their regions and an improving reputation for farmers as employer, also implying better marketing strategies for foreign investors. The general impression of all interviewed farmers is that all of them have positive prospects for the future.

The use of labour statistics does not help to figure out any plausible employment effects in this case. There are no statistic offices that capture and provide labour data that include

investors' heritages. A statistical approach would have missed the intention of this study. The samples collected are far too small to have a statistical significance. Also comparisons with the development data of firms can hardly be made with local labour statistics. A solution would be the gathering of appropriate background facts of investors and farmers in statistical offices. An example would be the publication of data about country of origin of investors and active farmers. It is onerous and difficult to identify farmers as foreign agricultural investors, and mostly not possible to manage without hints by other farmers or researchers.

There was little readiness of agricultural enterprises and farmers to answer interview proposals. This may have one reason in the toughness and complexity of this issue. It is suggested - for further research or other interest – to provide a bigger platform for investors and farmers in the public debate, thus they are able to express their concerns and standpoints.
Other future approaches could be an extension in doing interviews, specifically with employees to gather further qualitative data, and also trying to get access to further detailed material about farms and enterprises.

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Appendix 1: Survey Questions

Dear Sir or Madam,
My name is Janine Große and I'm a Master student at the Swedish University of Agricultural Sciences in Uppsala. My Master thesis is about the impacts of foreign agricultural investors on the local labour market in Eastern Germany.
I need your help for the accomplishment of a sufficiently profound analysis of the rural regions in Eastern Germany. Below you will find questions, which you can answer with a short statement or by marking. Please try to fill in all the fields. The response of the questionnaire will only take some minutes of your time.
Your information will be used anonymously. There is no need to declare your name or the name of your company.
I am thankful for your help.
Janine Große

I. General questions about the farm/enterprise

1. Since when are you active in Eastern German agriculture?

2. Where in Eastern Germany is your farm/enterprise located?

3. From which region or country are you from?

4. Do you own further enterprises or subsidiaries?

5. If yes, where are they located?

In Eastern Germany
In other (western) regions of Germany
In another country

6. Is your company a new foundation or a takeover of a former farm?

7. In case of a company takeover, did you take over labour force from the former farm?

8. In which agricultural sector are you mainly active?

Animal breeding & animal fattening	specialised crop cultivation
Crop cultivation & forage production	Aquaculture
Forestry	Service
Renewable energy production	Horticulture

9. If you are active in the area of animal breeding/ animal husbandry, which kind of animals do you have?

   Pigs
   Cows
   Poultry
   Others, which are …

10. How large is the particular stock of animals?

11. How much hectare land is cultivated? (If there are more branches in Eastern Germany, please note the total area.)

12. How is the share of the leased area and how big is the area of owned property?

13. Do you process and sell the agricultural products on your own?

14. Name the legal form of your company.

15. Are you involved on the production of biogas?

16. Are your products marked regionally?

17. Do you have customers in foreign countries?

18. What where the main motivations for you to invest in an agricultural company in Eastern Germany?

19. Have your expectations been fulfilled so far?

20. Where do you see the essential constraints for the positive development of your farm/enterprise?

21. What are the most important expectations for the future of your farm/enterprise?

II. Questions about employment

1. How many employees are working in your company today? (If you have more companies note the total number of employees)

2. What kind of employment do you have in your company and how is the number of employees?

Full-time employees
Part-time employees
Farm wage workers
Seasonal workers
Family workers

3. Do you employ regional workers?

4. How many employees are from your region?

5. In which sector do the regional employees work?
management
administration
farm work
transportation
production
seasonal work

6. Do you prefer employing regional people?

7. Do you employ workers from foreign countries?

8. How many workers are from a foreign country?

9. In which sector do the foreign employees work?
management
administration
farm work
transportation
production
seasonal work

10. Do you prefer employing workers from foreign countries?

11. What is the average age of your employees?

12. How do you evaluate in general the work with your employees? (school grading system)

Excellent	Very Good
Good	Satisfactory
Sufficient	Not Sufficient

13. How do you evaluate the supply of qualified employees in the region?

Excellent	Very Good
Good	Satisfactory
Sufficient	Not Sufficient

14. Do you offer training and further education for your employees?

III. Open questions

1. How have you been admitted as a foreign agricultural investor in your region?

2. How would you describe the relationship to other agricultural companies in the neighbourhood?

3. What do you think is your contribution for the rural development in your region, also compared with other companies nearby?

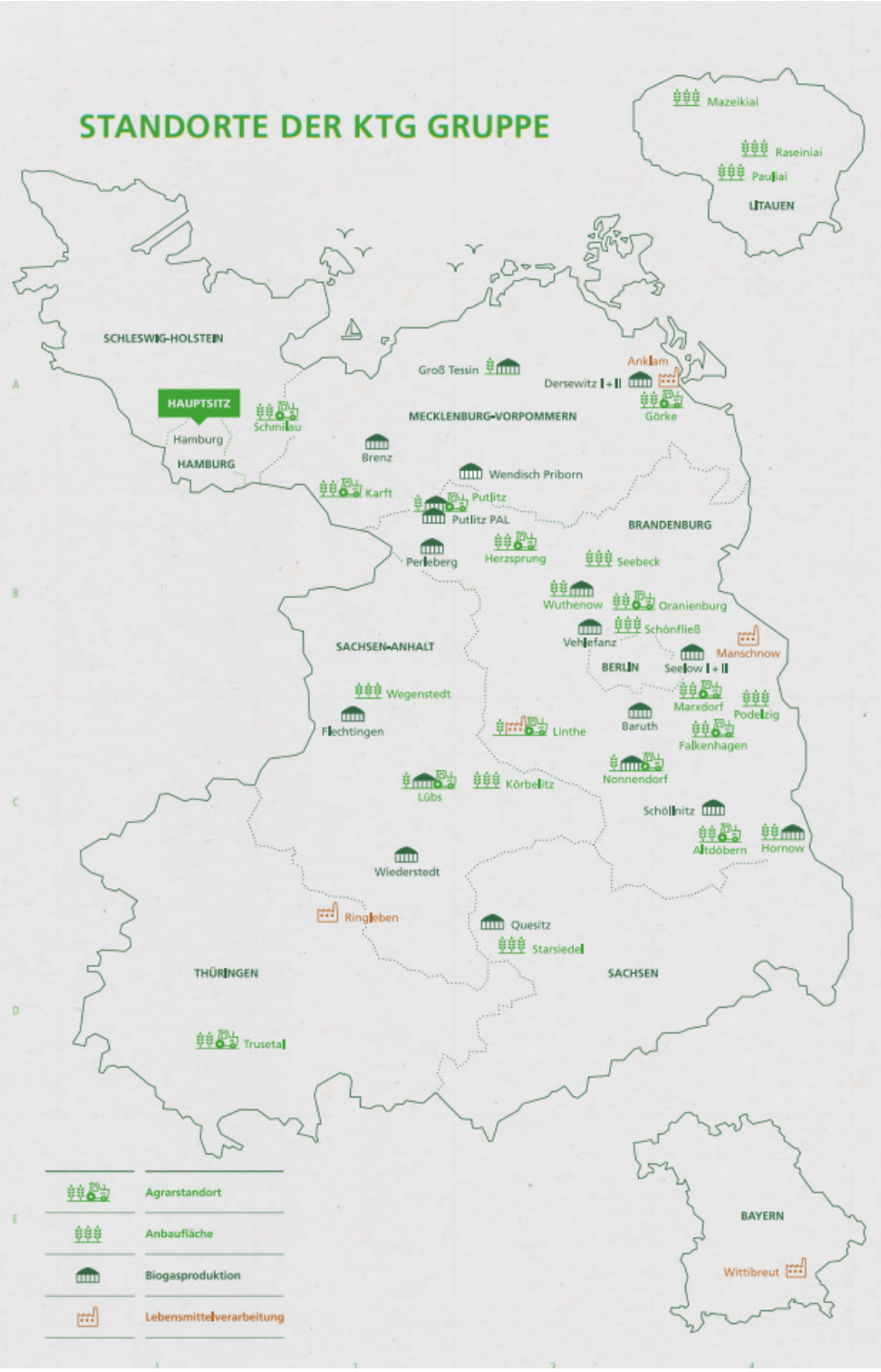
4. Are you socially committed in your region?

regional clubs and organisations
boards and community parliaments
occupational unions
other unions, for example …

5. Another topic: How do you evaluate the present environmental laws according to bureaucracy efforts and legal controls in your region?

6. Finally: How do you evaluate your reputation as foreign agricultural investor in Eastern Germany?

Appendix 2: KTG Agrar AG locations



Source: KTG Agrar annual report 2014