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What are the Implications of Regulation of Acquisition of Agricultural and Forestry Land – Insights from an Analysis of Mental Models of Expert Stakeholders in Sweden using Thematic Analysis

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Abstract

Agricultural and forestry land markets are regulated in several European countries. However, assessing the economic consequences of land market regulation for agricultural and forestry firms is methodologically challenging for various reasons. The aim of this study is to highlight the usefulness of exploring expert stakeholders' mental models in order to gain insights into the economic impacts of agricultural and forestry land market regulation. We use thematic analysis based on in-depth interview data to explore Swedish expert stakeholders' mental models about the regulation of the Swedish agricultural and forestry land market. Findings point to that the current regulation does not have any major impacts on the economic situation of agricultural and forestry firms in Sweden.

Keywords: expert stakeholders, economic consequences, land market regulation, mental models, Sweden

Introduction

In agricultural and forestry firms, land is a key production factor and securing access to sufficient amounts of agricultural and forestry land is one of the most important strategic focuses for those firms. This is especially important for the large group of agricultural and forestry firms which focus on low-cost strategies, engaging in highly specialized production of anonymous products which are sold at the world market price. Among these firms, expansion is one of the most obvious strategies to develop their activities. At the same time, land value per hectare is high in many EU member states (DG Agriculture and Rural Development, 2018), leading to high land prices which may limit further expansions of farms. As reviewed by Lehn and Bahrs (2018) several factors such as urban sprawl (Livanis, Moss, Breneman, & Nehring, 2006), governmental payments to farmers (Latruffe & Le Mouël, 2009) and environmental amenities (Wasson, McLeod, Bastian, Rashford, & 2013) have been found to contribute to increased land prices. At the same time, inherent properties of land, such as immobility implies that new land only becomes available if one farmer decides to exit, assuming all land is used (Hüttel, Wildermann, & Croonenbroeck, 2016). This is likely to further contribute to competition for land and thereby increased prices. From the perspective of individual farmers and forestry owners, land thus constitute one of the most important and valuable assets in their businesses. For new farmers and forestry owners entering the industry and for expanding farmers and forestry owners, high land prices can cause significant barriers due to the corresponding need of cash outlay at the point of purchase.

Agricultural and forestry land markets are regulated in several European countries for various reasons. Ongoing discussions among stakeholders centre

on the possible need for further regulation of land markets to reduce the increasing land prices (Lehn & Bahrs, 2018) which are considered problematic from the perspective of farmers and forestry owners. Any changes to land regulation requires profound understanding about the consequences of the regulation and the possible effects that will follow from changing the regulation. In this study, we focus on the possible consequences of the Swedish land market regulation in relation to the development of agricultural and forestry firms and the effects that can follow from a less strict regulation. From a practical perspective, the study is motivated from concerns with high land prices and the current land market regulation as voiced in a recent Swedish governmental inquisition (SOU 2015:15)

Swedish legislation has since long regulated acquisition of agricultural and forestry land through the Land Acquisition Act (LAA). The main restriction of LAA implies that legal persons, such as limited companies and foundations, can only buy additional agricultural and forestry land if they at the same time sell land which can be considered equivalent in terms of size, type and productivity. One of the purposes of the LAA is to avoid concentrated ownership of agricultural and forestry land and to maintain a balanced structure with land being owned by both individuals and legal persons. The LAA also stipulates that owners of agricultural or forestry properties in less densely populated areas must live on the property (the residence requirement). By the LAA society would like to achieve more vivid rural areas, which is desirable from a societal perspective. In practice, the legislation around acquisition of agricultural and forestry land implies that most activities at the Swedish land market for agricultural and forestry holdings take place between private persons. This in turn means that farmers or forestry owners who would like to use land assets for business purposes are restricted to organize the land assets in sole proprietorship. Sometimes farmers organize part of their businesses as a limited company that rents land from the farmer in his/her role as a private person. This facilitates collaboration between farmers, but causes potential problems related to having to organize the business in two or more separate legal forms. Lately, the Swedish legislation around acquisition of agricultural and forestry land has been questioned. The legislation is claimed to hamper business development among agricultural and forestry firms by restricting their legal form. This is assumed to constrain inflow of financial capital via bank loans and co-ownership. It is also assumed to hamper smooth succession of agricultural firms. These are all aspects which are significant for farm business development. By its assumed negative impacts the LAA considered to hamper the competitiveness of the Swedish agricultural sector.

From a methodological perspective it is challenging to assess the impact of a specific regulation such as the Swedish LAA on business development. All firms in the country are exposed to the same legislation, leaving no variation in the degree of exposure. Furthermore, the legislation has been in effect for a very

long period of time, making it impossible to evaluate and compare with the situation that existed before agricultural and forestry land acquisition became regulated. Land use and development of agricultural and forestry firms is also likely much dependent on the institutional and cultural context it otherwise exists in, making comparisons with less regulated countries and markets problematic. In this paper we posit that exploring mental models of expert stakeholders is a useful way of gaining insights into how regulation of agricultural and forestry land acquisition affects business development. Mental models describe individual's cognitive structure about a situation(Beach & Connolly, 2005) and represent the lenses through which individuals see the world (Johnson-Laird, 2005). They contain values, experiences, beliefs, learning and biases about the functioning of the world (Greenfield, 2005; Sax & Clack, 2015). By uncovering expert stakeholders' mental models about the effects of regulation of agricultural and forestry land acquisition on business development, we expect to gain informative insights into the economic consequences in agriculture and forestry of regulation of land acquisition. This is gained through the highlighting of effects on possibilities of agricultural and forestry firms to develop from a business perspective and how possible hampering effects of regulation land acquisition may be handled in practice within the firms. Accordingly, the aim of this study is to highlight the usefulness of exploring expert stakeholders' mental models in order to gain insights into impacts of land regulation on economic consequences in agriculture. We use thematic analysis based on in-depth interview data to explore expert stakeholders' mental models.

Previous literature has shown interest in the effects of land regulation and related questions. For instance, focusing on price drivers, Lehn and Bahrs (2018) found urban sprawl and livestock production to be the most important factors driving price of agricultural land in Germany and suggested a focus on regulation that underline these factors instead of new land price related regulations if society would like a reduction in land prices. Juknelienė, Valčiukienė, and Atkocevičienė (2017) assessed the regulation of legal aspects in relation to territorial planning in Lithuania. Nixon and Newman (2016) evaluated the efficacy of land use regulation in British Columbia, and found the regulation to be successful in protecting farm land.

This study contributes to the understanding about the effects of regulation of land acquisition of the Swedish type on possibilities for business development among agricultural and forestry firms and highlights the usefulness of thematic analysis of in-depth interview data with expert stakeholders to uncover their mental models with respect to regulation of land markets. This has not been done by previous literature, but enables a rich understanding about expert stakeholders' views and understandings of the Swedish market for agricultural and forestry land, the implications of current regulation of land acquisition and the economic consequences of those in terms of business development.

Material and methods

Our study is based on a set of 21 in-depth interviews conducted by the first author with 23 respondents who are to be considered experts in the Swedish agricultural industry, and complementary written material provided from four additional experts. The respondents included representatives of the banks, realtors, consultants, analysts, lawyers and authorities related to the agricultural and forestry sector in Sweden. An initial list of respondents was identified by a reference group engaged in the study. This was complemented with additional respondents generated from contacts with the first set of respondents, in a snow-ball manner. Furthermore, a few respondents contacted us after hearing about the study and volunteered to provide their views. If they were considered suitable for the study, they were interviewed. After 21 completed interviews, saturation was achieved, meaning that the same information repeatedly came back. The in-depth interviews were mainly conducted during the period November – December 2017. Three additional interviews were conducted during 2018. For practical reasons the majority of the interviews were conducted by phone. Complementary written material was requested from expert stakeholders in the bank sector after an initial analysis of the interview material in August – September 2018.

The interviews were conducted using a semi-structured interview guide. Respondents were asked to reflect on how agricultural and forestry firms act to handle the current LAA and how the act affects the firms' abilities to develop their businesses. This was done by probing respondents general views on the legislation, and following that on the effects of the legislation in relation to impact on organizational form, possibilities to obtain financial capital, possibilities to maintain and develop collaboration with other firms, possibilities for farm succession, possibilities to handle economic risk and the effects on the agricultural and forestry land market.

The interviews were recorded, transcribed and coded with NVivo Plus (QSR International Pty Ltd, 2011) using thematic analysis (Liamputtong, 2009). Thematic coding is flexible and compatible with different theoretical and epistemological stand points (Braun & Clarke, 2006). Thematic analysis allows for eliciting patterns within the data, focusing on the total amount of data rather than on individual respondents. According to practices of thematic analysis (Braun & Clarke, 2006), the transcribed data were categorised into theme nodes across the dataset. Theme nodes were identified according to the semi-structured interview guide, which centred on aspects which can be considered of significance for farm business development. Quotations from the individual interviews were collected under each theme node and used to produce a summary of the content of the interviews across respondents under

each theme node. The theoretical saturation was evaluated and achieved in this step, as adding additional interviews only added minor details to the summarizing descriptions of the content of the node themes. The summarized material, across the dataset, was taken to represent a view of the expert stakeholders' mental models with respect to how regulation of acquisition of agricultural and forestry land affect opportunities for business development.

Results

Findings are reported according to the node themes.

Respondents general views on the legislation around agricultural and forestry land acquisition

Respondents generally believe that the LAA is still a necessary regulation on the Swedish agricultural and forestry land market. At the same time, several respondents emphasise challenges in the agricultural and forestry sectors, which need to be handled. Some respondents believe that this should be done by revising the LAA, for instance by implementing criteria which can improve the competitiveness of the sector. Those respondents think the LAA is outdated and that the market should be allowed to more freely determine future development. They also emphasise that constraints by the LAA is not always implemented and especially not in a consistent way. Other respondents emphasise that those challenges can be met within the framework of the current legislation. One part of LAA is requirements on the landowner to live on the property acquired in rural areas with low population density (residence requirement). Respondents express that the residence requirement does not guarantee positive expected effects on local employment. Abandoning the residence requirement is instead believed to improve flexibility of individuals to purchase agricultural and forestry land. The residence requirement is also emphasised as problematic from the perspectives of the banks, because it can cause unequal processing of loan requests and that less suitable individuals are accepted as buyers instead of individuals with higher potential as farmers or forestry owners.

Limitations on organizational form of agricultural firms and forestry holdings and consequences of those limitations

Current regulation in LAA implies limitations for farmers and forestry owners to freely select organizational form for their businesses, which in practice means that most agricultural and forestry owners organize their businesses as sole proprietorship. Another possibility is to organize the business operation in a limited company which rents land from the sole proprietorship. This means that farmers and forestry owners need to run their businesses in two separate

legal forms. When probing respondents about the consequences of this implication of LAA, majority of them maintain that in practice this procedure does not impede on business development in the agricultural and forestry sectors. However, for farm businesses specialized in animal production, considerable investments in barns are necessary. The procedure with double organizational forms as described above, implies that the investment in barns is funded by equity and bank loans in the limited company running the farm operation, while the agricultural land on which the barns are constructed are owned by sole proprietorships. Legally, the buildings are considered movable property which are build on immovable property. From the perspective of banks, this is problematic as the buildings cannot easily be sold if the business goes bankrupt. Apart from this, respondents maintain that by running agricultural and forestry firms in double organizational forms, where sole proprietorship is combined with limited company is functioning well for most agricultural and forestry firms and covers the current needs by most firms. They also emphasise that many farmers prefer to own land in their role as private persons and view this as an investment to be realized by retirement. Respondents emphasise that agricultural and forestry owners consider this opportunity an important long-term strategy to handle the riskiness of investments in agricultural and forestry firms.

Impacts of LAA on possibilities to obtain financial capital

As mentioned, LAA implies limitations of agricultural firms and forestry owners to freely choose organizational form. When probing about implications on possibilities to obtain financial capital, respondents emphasised that credit requests are evaluated in the same way by banks irrespective of organizational form of the business, as they believe that risk cannot be limited from the owner of agricultural and forestry firms depending of organizational form. However, respondents maintain that problems of obtaining financial capital do exist for new agricultural firms and for large farms specialized in animal production, because these lack sufficient equity or guarantee for their loans.

Impacts of LAA on possibilities to maintain and develop collaboration with other firms

When probing about the effects of LAA on possibilities to maintain and develop collaboration with other firms, respondents highlighted LAA a basic condition to maintain and develop collaboration between firms in the agricultural and forestry sectors. This is because LAA is designed to maintain a balance in land ownership between individuals and limited companies. Respondents consider this to establish and maintain local anchoring of agricultural and forestry firms, which they in turn consider a prerequisite for business relations and collaboration among firms. Respondents also claim that large-scale

organization of agricultural and forestry firms may lead to decreased activity in local areas which they in turn believe can negatively impact local employment.

Impacts on succession

Succession and uptake of agriculture of a new generation of farmers is a key challenge for agriculture across Europe. We probed about respondents views on the impact of LAA in the slow succession of agricultural and forestry firms. Respondents maintained that a key problem is not the LAA in itself, but the market value of agricultural and forestry land in relation to possible return on investments. Several respondents expressed concerns that removing or revising the LAA would lead to further increasing the market price of agricultural and forestry land, by opening the market more to limited companies which may be interested in buying land for reasons to gain from the appreciation of land value), which they believed would further accentuate challenges in farm succession.

Impacts on possibilities of agricultural and forestry firms to handle financial risk

During the interviews, we probed respondents' views on how LAA impacts on the possibilities for agricultural and forestry firms to handle financial risk in their businesses. Respondents consider the economic risk in practice to remain with the individual irrespective of organizational form because the individuals may be requested to guarantee instalments of bank loans if the limited company cannot pay. This means that individuals in practice will have personal liability to bank loans. Some respondents emphasize in relation to issues of financial risk that many landowners consider agricultural and forestry land holdings a relatively safe investment for their retirement and that this is an important driving force to acquire land, even if it implies a personal liability for the bank loans used to fund the acquisition.

Effects of LAA on agricultural and forestry land markets

Respondents believe that LAA functions to keep land prices down and that this is to the advantage of those active in agricultural and forestry based businesses. Respondents claim that land market prices are primarily determined from expected appreciation of land valued instead of the value motivated by return on production. Respondents view this as problematic, and maintain that over the long-term this may lead to problems in agriculture and forestry if the land holdings are not bought by those most suitable to obtain maximal production from the land, but by investors who invest in agricultural and forestry land for speculative reasons.

Discussion and conclusion

This study aimed at highlighting the usefulness of investigating expert stakeholders' mental models on impacts of regulation of agricultural and forestry land markets, using thematic analysis based on in-depth interview data in order to gain insights into the impact of land regulation on economic consequences in agriculture. We focused on the impact caused by the Swedish LAA which regulates agricultural and forestry land market in Sweden and explored the possible economic impact of this act by probing a number of possible effects of the LAA in domains which are important for the economic development of the agricultural and forestry sectors. The Swedish LAA has been in effect for a very long period of time, with a central aim of maintaining a balance in ownership of agricultural and forestry land between private persons and limited companies. In practice, this means that limited companies are highly restricted when it comes to acquisition of agricultural and forestry land. From a societal perspective it is important to understand the possible downsides of a regulation of this type on desirable outcomes, such as economic viability of the agricultural and forestry sector and that the sector can maintain its functions in providing food and fibre. Assessing the effects of an act of the LAA type which has been in effect for a very long period of time is challenging, as i) it is not possible to compare with the situation that existed before the act was introduced and ii) the act applies equally to everyone which means that there is no variation in exposure to the act. Thus, in this type of situation a causal analysis based on statistical methods encounter significant constraints. With this paper, we suggests how thematic analysis can be used to explore the effects of land regulation of the Swedish type on the economic development of the agricultural and forestry firms.

The approach taken in this study means that we explore the effects of land regulation based on expert stakeholders' mental models which are uncovered by thematic analysis of in-depth stakeholder interviews. The representation of the mental models as reported by the summary of the thematic nodes in this paper contain expert stakeholders' values, experiences, beliefs, learning and biases about the functioning of the world (Greenfield, 2005; Sax & Clack, 2015). It should therefore be noted that possible biases in understandings about causes and effects and stakeholders' own values and beliefs are captured by the thematic nodes, and implies a risk that the nodes are affected by erroneous perceptions held by stakeholders. However, as this study is based on interviews with expert stakeholders who are expected to possess key insights in how land regulation may affect the economic development of agricultural and forestry firms they are expected to provide balanced views. Furthermore, constructing the thematic codes based on interview data collected across a large set of in-depth interviews with expert stakeholders is

expected to enable a balanced representation of stakeholders' mental models, with only limited impact of erroneous perceptions.

Findings show that a rich understanding about the effects of land regulation on economic consequences in terms of business development could be achieved by the use of thematic analysis of in-depth interview data with expert stakeholders in the Swedish agricultural industry. According to the results, respondents generally do not think there are reasons to believe that the LAA affects business development among Swedish agricultural and forestry firms. For instance, from the analysis of the in-depth interviews, there are no reasons to believe that the inflow of external capital is constrained by the constraints of organizational form of agricultural and forestry firms imposed by the LAA. One notable exception to this is however respondents' views on the possibilities of large specialist animal farms to obtain bank loans to fund investments in animal barns. Constraints on organizational form imposed by LAA implies that barns sometimes are built on land which is owned by another organizational entity. This is problematic form the perspective of banks if the organizational entity which owns the barn goes bankrupt. Respondents did not attribute possible problems with succession of agricultural and forestry firms to the LAA. Collaboration with other firms was considered facilitated through a situation with many smaller firms, which is considered an effect of the LAA. Finally, respondents considered the impact of the LAA on the possibilities to handle economic risk minor, and that the LAA possible had a negative effect on land prices by constraining purchases by legal persons.

Findings have implications for policy in that they question the assumed negative effects of the Swedish land acquisition act as suggested by Swedish public inquiry (SOU 2015:15). Instead, findings points to that reasons for problems with competitiveness of the Swedish agricultural sector must be searched for elsewhere.

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