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FACULTY OF LANDSCAPE ARCHITECTURE, HORTICULTURE
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Quantifying internal and external influences on Swedish farmers' strategic choices and performance outcomes

JOZEFINE NYBOM



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Jozefine Nybom

Faculty of Landscape Architecture, Horticulture and Crop
Production Sciences (LTV)

Department of People and Society

Alnarp



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© 2023 Jozefine Nybom, <https://orcid.org/0000-0002-9403-2403>

Swedish University of Agricultural Sciences, Department of Human and Society, Alnarp, Sweden

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“In sum, the world is not
the totality of facts but that
of things. And all the
things are changeable,
and every thing is related
to some other things.”

(Bunge, 2015; p. 21¹)

¹ Bunge, M. (2015). *Chasing reality: Strife over realism*. University of Toronto Press.

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Abstract

The Swedish agricultural sector is undergoing a period of rationalization and structural change where farms have become fewer and larger. This has created a number of challenges for the remaining farms in terms of how to survive and prosper in the changing competitive landscape. This compilation thesis investigates how the external environment (competitive intensity), social environment (advisors and family) and internal environment (identity) influences farmers' strategic choices related to strategic orientation and entrepreneurship as well as outcomes related to performance.

Based on a sample of 388 randomly selected farmers, paper I revealed that as perceptions of competitive intensity increase, farmers tend to become more market and Lean production oriented, but not entrepreneurial oriented. Fittingly, those farms that adopted a more market or Lean production orientation experienced better overall performance than those who increased their entrepreneurial orientation.

In paper II, a three-group between subject experimental design was conducted on 122 Swedish farm management students in order to investigate the influence of "cultural intolerance" on the advice given to a farmer considering different strategic options to develop their farm. As the subject's cultural intolerance (as measured through their level of "Jante") increased, their recommendations towards adopting entrepreneurship decreased.

Paper III in this thesis used a survey of 269 Swedish farmers to measure social identity and the level of involvement of family members on the farm in order to predict strategic choices related to financial, social and environmental sustainability goals. Findings reveal that family influences sustainability goals, however this influence is limited to social sustainability goals, but not economic or environmental sustainability goals. The findings can be useful to understand farmer's social justification to be in business.

Finally, the kappa in this thesis employs a post-literature scoping review in order to reflect on the choices made in conceptualizing, operationalizing, and positioning the work in order to develop recommendations for future research.

Keywords: Entrepreneurial orientation, Market orientation, Lean Production orientation, Competitive intensity, Subjective performance, Entrepreneurship, The law of Jante, Motivation, Founder social identity, Family influence, Agriculture.

Kvantifiering av intern och extern påverkan på svenska lantbrukares strategiska val och företagets resultat

Svensk sammanfattning

Den svenska lantbrukssektorn genomgår en period av rationalisering och strukturomvandling där gårdar har blivit färre och större. Detta har skapat en rad utmaningar för de kvarvarande gårdarna avseende hur de ska överleva och utvecklas i takt med den ökande konkurrensen. Denna doktorsavhandling undersöker hur den yttre miljön (konkurrensintensitet), den sociala miljön (rådgivare och familj) och den interna miljön (identitet) påverkar lantbrukarens strategiska val i relation till det strategiska arbetet, lantbrukarens entreprenörskap och företagets prestation.

Baserat på ett urval av 388 slumpmässigt utvalda lantbrukare, visade artikel I att när lantbrukarens uppfattning att konkurrensintensiteten ökar, tenderar lantbrukaren att bli mer marknads- och Leanproduktionsorienterad, men inte entreprenörorienterad. De lantbrukare som anammade en mer marknads- eller Leanproduktionsorienterad upplevde generellt en bättre företagsprestation, än de som ökade sin entreprenöriella inriktning.

I den artikel II genomfördes en tregrupp mellan ämnesexperimentell design på 122 svenska gårdsförvaltningsstudenter för att undersöka inverkan av så kallad kulturell intolerans, på de råd som ges till en bonde som överväger olika strategiska alternativ för att utveckla sin gård. När kulturell intolerans (mätt genom deras nivå av Jante) ökade, minskade deras rekommendationer för att anta entreprenörskap.

Till artikel III skickades en enkät ut som besvarades av 269 svenska lantbrukare för att mäta social identitet och graden av involvering av

familjemedlemmar på gården för att förutsäga strategiska val relaterade till ekonomiska, sociala och miljömässiga hållbarhetsmål. Resultaten visar att familjen påverkar hållbarhetsmålen, men detta inflytande är begränsat till sociala hållbarhetsmål, men inte ekonomiska eller miljömässiga hållbarhetsmål. Resultaten kan vara användbara för att förstå bönders sociala berättigande att vara i affärer.

Slutligen, denna avhandling använder en postlitteraturstudie för att reflektera över de val som gjorts i konceptualisering, operationalisering och positionering av arbetet för att ta fram rekommendationer för framtida forskning inom lantbruksföretagande.

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List of publications

This thesis is based on the work contained in the following papers, referred to by Roman numerals in the text:

- I. **Nybom, J.**, Hunter, E., Micheels, E., and Melin, M. (2021). Farmers' strategic responses to competitive intensity and the impact on perceived performance. *SN Business & Economics*, 1(6), p. 1-22.
- II. Hunter, E., **Nybom, J.**, Micheels, E., and Klyver, K. (2022). Farmers that engage in entrepreneurship for the "wrong" reason and the moderating role of cultural intolerance. *The International Journal of Entrepreneurship and Innovation*, p. 1-11, DOI: 10.1177/14657503221077939.
- III. **Nybom, J.** (202X). Social identity and the moderating role of family influence in sustainable decision making (In final stage of submission).

Papers I-II are reproduced with the permission of the publishers (Open Access).

List of publications

The contribution of Jozefine Nybom to the papers included in this thesis was as follows:

- I. Conceptualized and constructed survey with co-authors. Was responsible for data collection and primary analysis. The second step of analysis was in collaboration with co-authors. As a main author I had the overall responsibility to write the paper.
- II. The study design and conceptualization was made in collaboration with co-authors. Performed data collection and analysis in collaboration with co-authors.
- III. Conceptualized and planned, collected data and performed analysis. As a single author I have the main responsibility writing the paper.

Other publications

Articles

- I. Hunter, E., Johansson, C., **Nybom, J.**, Gallardo Cobos, R., Sánchez Zamora, P., Caño Vergara, B., ... and Frewer, L. (2020). The effectiveness of policies promoting sustainable permanent grasslands across five European countries (representing five biogeographic regions): mapping, understanding, and key stakeholder perceptions. Report Super-G H2020, EU project number: 774124-2.

Conference paper

- I. **Nybom, J.** and Hunter, E. (2020) Strategic farmer responses to market turbulence and the moderating role of the Tall Poppy Syndrome/Jante. IFAMA 2020 Conference, Rotterdam.

Conference posters

- I. **Nybom, J.**, Hunter, E., and Melin M. (2017). *Benchmark for Successful Farming in Sweden* at the International Farm Management Congress (IFMA 21), Edinburgh (Scotland).
- II. **Nybom J.**, Hunter E., Micheels, E., and Melin, M. (2019). Dynamic Capabilities and Performance in Swedish Agriculture. 2019 AAEA Annual Meeting in Atlanta, GA, USA.

Factsheet

- I. **Nybom, J.**, Hunter, E., and Melin, M. (2018). Business management in animal production. SLU Factsheet 2018:17

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Abbreviations

AAEA	Agricultural and Applied Economics Association
AMI	Agricultural Management Index
CAP	Common Agricultural Policy
CFA	Confirmatory Factor Analysis
COM	Communitarian
CI	Competitive Intensity
DAR	Darwinian
EC	European Commission
EO	Entrepreneurial Orientation
ESBRI	Entrepreneurship and Small Business Research Institute
EU	European Union
F-PEC	The Family Influence on Power, Experience, and Culture scale
FSI	Founder Social Identity
IFAMA	International Food And Agribusiness Management Association
IFMA	International Farm Management Conference
LPO	Lean Production Orientation
MARKOR	Market orientation measure
MIS	Missionary
MO	Market Orientation
SBA	Swedish Board of Agriculture
SEM	Structural Equation Modelling
SLF	Swedish Foundation for Agricultural Research
SP	Subjective Performance
TPS	Tall Poppy Syndrome
USDA	U.S. Department of Agriculture

1. Rationalization and structural change in Swedish agriculture

Rationalization and structural change have led to a noticeable decrease in the number of farmers, with farms disappearing at a rate of 2% per year worldwide (Hendrickson, James and Heffernan, 2014). In the EU-28, structural change is reflected in the closure of 4.2 million farms between 2005 to 2016 (Eurostat, 2021). In Sweden, the number of farms has declined by 53%, from 117,882 farms in 1980 to 62,937 in 2016 (Statistics Sweden, 2019). The shift towards fewer, larger farms since the 1980s (SBA, 2022) has led to increased competition and the need for family farms to adapt to the intensity of the changing landscape (EU, 2022).

Competition has been characterized by increased productivity and per unit costs, resulting in lower overall market prices (Benton and Bailey, 2019; Wang, Schimmelpfennig and Fuglie, 2012). In turn, lower market prices have led to the redistribution of production factors (e.g. labor and capital) within the farm unit (Karlsson, 2016). Lower market prices motivate some farmers to attempt direct marketing and diversification strategies, which some studies have shown to increase gross farm income (Uematsu and Mishra, 2011).

Although the trend towards larger farm units has been accompanied by increased land prices that act as an entry barrier (EU, 2022), this has forced farmers to rationalize production in order to realize economies of scale. It has been suggested that this type of competition leads to a proverbial “race-to-the-bottom” (Taylor and Ömer, 2019) – a pernicious cycle that reinforces rationalization and structural change, where productivity improvements lead to lower costs and market prices, but not improved margins. The farms that are able to keep up with capital-intensive investments in productivity grow

in size, while others, mostly smaller farms that lack financial, social and/or human and capital resources, increasingly become non-competitive and either exit the market, or find other ways to compete (McMullen, 2022).

In the “race to the bottom”, rationalization and structural change is recognized by various special interest groups, and local, national, and multi-national governments as an existential threats to traditional farming, small family farms, rural communities and even national competitiveness (Regeringen, 2015; Regeringen, 2017; EU, 2022). This has precipitated governments around the world either helping their farmers develop managerial competences or fostering strategies that avoid competition based on low-cost production. For example, the United States Department of Agriculture has initiated the Value-Added Producer Grant program to help producers “enter value-added activities to generate new products, create and expand marketing opportunities and increase producer income” (USDA, 2023). Similarly, the EUs innovation policy, including Horizon Europe, represents around one tenth of the total EU budget and steers funding towards, among other things, more market-oriented innovations (European Commission (2021). In the same vein, the EUs Common Agricultural Policy (CAP) increasingly promotes innovation and entrepreneurship by “fostering knowledge transfer and innovation and enhancing farm viability and competitiveness” (EC, 2013; p. 9).

When considering how best to navigate (or approach) these increasingly competitive agricultural markets, farmers are surrounded by stakeholders who influence whether they participate in entrepreneurial activity. There is a variation in what qualities an entrepreneur is expected to possess. This thesis takes the Schumpeterian perspective – i.e. the entrepreneur is associated with risk-taking and realization of new ideas (Littunen, 2000), evaluation and exploitation of opportunities (Shane and Venkataraman, 2000), which in turn leads to firm profit, economic growth, and an increase in the number of jobs (Carree and Thurik, 2010; Wong et al, 2005). The entrepreneur does not only have specific characteristics, the characteristics can be compiled into a model. The entrepreneurial process was compiled in a model by Cunningham and Lischeron (1991) consisting of four parts – recognizing opportunities; acting and managing; reassembling need for change; and evaluating self.

Further, stakeholder engagement can enhance entrepreneurial development (Leonidou, et al., 2020), and farmers are surrounded by stakeholders who can influence whether they participate in entrepreneurial activity. These stakeholders include family, friends, and other individuals in the community, as well as those involved in the farm business on a regular basis such as farm advisors. It is important to understand the influence these stakeholders exert on the farm manager, as research has shown that individuals surrounding themselves with support and encouragement for entrepreneurial conduct are more likely to engage in entrepreneurial activities (Elfring et al., 2021). The advisor is a part of the farm entrepreneurs' social networking, and Klyver and Foley (2012) stated that "... cultural norms and practices moderate the way entrepreneurs utilize social networking" (p. 584). The farm advisor is an actor in the farmer's social network who may also give advice influenced by cultural norms in agriculture, and thereby re-enforce or influence entrepreneurial activity.

Finally, how the farmer responds to and navigates the competitive landscape and social influences (e.g. family, friends and farm advisors) also depends on how the farmer sees themselves. This has been referred to as "identity" in the literature – i.e. in the context of identity as "a label attributed to the attempt to differentiate and integrate a sense of self along different social and personal dimensions" (Bamberg, 2011), and it is an important determiner for entrepreneurial behavior. Being a "real farmer" is one type of identity that appears to be particularly strong among Norwegian farmers (Brandth and Haugen, 2011). Being a "real farmer" does not preclude entrepreneurial activity per se, however, it does appear to ferment negative reactions towards the concept of becoming an entrepreneur. For example, previous research suggests that a "real farmer" is focused on production improvements (e.g. crop rotation, smart water management or heat tolerant crop varieties) rather than entrepreneurial activities (e.g. risk-taking and evaluation of new opportunities). This "real farmer" self-concept, based on a production identity, seems to be common across studies and farm communities (Burton and Wilson, 2006; Vesala and Vesala, 2010; Seuneke, Lans and Wiskerke, 2013). Even when the majority of farmers are production oriented, many identify as entrepreneurs (McElwee, 2008). More importantly, recent research by Fitz-Koch (2020) has revealed a plethora of farmer identities related to entrepreneurship, suggesting that identity is an

important factor to understand because it provides meaning and guidance for companies and may explain variation in the types of opportunities pursued. Consequently, farmer identity is a useful concept for understanding motives to stay in or develop their business (Sieger, et al., 2016), as well as which opportunities they discover, evaluate and exploit (Shane and Venkataraman, 2000).

1.1 Conceptualizing papers

In the previous section, some of the challenges facing the agricultural sector, such as rationalization, structural change, and the competitive landscape, were discussed. Given these challenges, entrepreneurship may be an important pathway for some farmers to remain in operation and increase profitability. However, its adoption and outcome is influenced by personal and social factors that do not always align with traditional farmer behaviors (see e.g. Beedell and Rehman, 2000; Edwards-Jones, 2006). Consequently, the three papers that are included in this thesis are connected by a need to better understand the influences on entrepreneurial activity and its outcomes. A background to these three papers and the gaps they target is provided below.

1.1.1 Conceptualizing paper I

In line with the rationalization and structural changes that have taken place, there are increasing demands placed on farmers in terms of the competencies needed to manage innovation processes and engage in entrepreneurial activities. Previous research has addressed some of these competencies and, in the scholarly domains of entrepreneurship, strategy, and marketing, a key focus has been on understanding how the manifestation of variations in organizational culture, such as market orientation (Narver and Slater 1990; Kohli and Jaworski, 1990) or entrepreneurial orientation (Lumpkin and Dess, 2001), influence profitability (Soininen et al., 2012), firm survival (Lechner and Gudmundsson, 2014), decision making and other firm outcomes (Wales, 2016). Thirty years of research in this area has revealed that differences in organizational culture and how it translates into practice has meaningful consequences for innovation and entrepreneurial activity, profitability, and firm survival (Crick, 2021; Basco et al., 2020).

A limitation of previous research into ‘manifestations of variations in organization culture’, or more precisely those studies looking into entrepreneurial and market orientation, is that they tend to examine organizational cultures as mutually exclusive, instead of allowing for the possibility for concomitant organizational cultures, such as a market *and* entrepreneurial orientation, to exist (Montiel-Campos, 2018). This raises several interesting strategic questions with clear practical relevance for (agricultural) firms with limited resources. Developing a culture characterized by entrepreneurial or market orientation consumes valuable resources (Presutti and Odorici, 2019). Given this, the question is whether farms (and other organizations) should focus on developing market orientation over entrepreneurial orientation if they don’t have the resources to do both. Are there synergies to being both market and entrepreneurial oriented and, if so, what are they? Answers to these questions are complicated, but likely depend on the myriad strategic goals companies have and the importance they place on specific outcomes (e.g. increased profitability, growth, diversification and firm survival).

The entrepreneur is often portrayed as someone who has the ability to identify and exploit new economic opportunities (Carree and Thurik, 2010), and is a force in both local growth (Cappiello, 2015), and economic growth (Baumol and Strom, 2007; Wennekers and Thurik, 1999). Moreover, Filion (2021) suggested that the entrepreneur should be defined in the context in which he or she operates. Therefore, the entrepreneur is here defined as: An actor who recognizes entrepreneurial opportunities, makes moderately risky decisions and takes action by combining resources to generate profits (Filion, 2021). Given these perceptions, it follows that policy makers often turn to entrepreneurship as a solution to the competitive challenges facing farmers. These competitive challenges can be exemplified using the Treadmill theory which states that cost-reducing technology and the continuously need for investments leave room for innovators keep pushing down average per unit costs (Levins and Cochrane, 1996). Thus, farmers that fail to innovate tend to experience lower profitability (Läpple and Thorne, 2019), which can lead to a downward spiral of cost cutting (Horn et al. 2012). In Swedish agriculture, advisors are often the link between policy makers and farmers and have an influence on farmer’s decision-making process. For example,

Höckert and Ljung (2013) suggested that policy makers push farmers to become more business school minded and entrepreneurial as part of their political rhetoric and top-down approach to farming and farm businesses. Taken together, it is these decisions that will play an important role in the farmer's ability to compete and survive.

Consequently, the study described in paper I of this thesis (Nybom et al., 2021) suggested that there is a need to examine “manifestations of variations in organizational culture” in parallel in order to find answers to questions like those posed in the preceding paragraphs. The results in paper I show how different strategies contribute to various perceived returns to farm performance.

1.1.2 Conceptualizing paper II

Turning away from paper I, there is an important social component to consider as farmers transition towards new ways of competing in the era of rationalization and structural change. Not only do farmers need to make money to survive, they need to survive socially by maintaining good community relations. Surviving socially might require ensuring you are seen as a good farmer who pursues conventional agriculture using production methods that everyone else uses so as not to stand out (Norton and Alwang, 2020). Fitting in with the community might mean pursuing production methods and approaches that are more sustainable and help with biodiversity, better animal welfare or cultural services like farm hotels. The unwritten rules that exist in Scandinavian communities can act as cultural millstones which may, according to Cappelen and Dahlberg (2018), be expected to impact decision making, variations in organizational culture, and firm level outcomes, such as profitability, growth and survival. The unwritten rules which are part of the community may be enforced by neighbors, close friends and family; this may also be done by farm advisors, who are strategically involved in the process of leading the farmers to make strategic decision (Dockès et al., 2019).

One point of departure in paper II is the way it views agricultural advisors as being influenced by similar “cultural millstones” to those of their clients, with this playing an important role in the advisory process (specifically in

the context of entrepreneurship and innovation). Previous research has also examined cultural influences and the role of advisors in the entrepreneurship/innovation advisory process, (Läpple et al., 2016). More specific to the Swedish context, there are forms of cultural intolerance that have been identified, referred to as the “Law of Jante”, that relate to personal norms and values in society which influence behavior, including dissuading entrepreneurial activity (McElwee, 2008; Klyver and Arenius, 2020). While the “Jante” culture may not be as prevalent today in the larger cities and in most industries, there is considerable anecdotal evidence to suggest it is still important in rural farming communities. For example, cultural intolerance can be expressed through the advisors own “... mental image of the farmer as being either a producer, or an entrepreneur” (Höckert and Ljung, 2013; p. 304), or through the importance of visualizing a common image being overlooked when formulating farm strategies and what they may lead to (Krafft et al. 2021). Given the relatively greater importance of community and cultural artifacts that relate to “Jante” and conservatism in the agricultural sector (Constance and Tuinstra, 2005) and the emphasis placed on promoting entrepreneurship and innovation by the governments (EC, 2013), it is an important topic to explore.

Consequently, paper II investigates the influence that social, culture, as operationalized by the “Law of Jante” (Sandemose, 1934), has on the farm advisors in their role of advising farmers on different investment decisions (Hunter et al., 2022). The results show a clear bias in the types of advice given by advisors who possess higher levels of “Janteness” (i.e. a higher level of cultural intolerance), making them less likely to recommend entrepreneurship as a suitable course of action.

1.1.3 Conceptualizing paper III

From paper I, it is suggested that rationalization and structural change increases the variant importance of strategic orientations on the farm, and in paper II, the advisory process and its effect on entrepreneurial advice is explored. Paper III turns its attention toward farmers’ personal preferences, personality and motives, revealing how they pursue opportunities and achieve personal goals (Fauchart and Gruber, 2011; Sieger et al., 2016). The founder social identity framework (Sieger et al., 2016), adopted in paper III,

measures the core entrepreneurial motivations which help explain strategic choices.

Thus, paper III builds on the idea of three groups of social identity (Darwinian, Communitarian, and Missionary) and how these relate to personal goals and farm outcomes. This is important as it can reveal the motives behind farm entrepreneur practices and how they identify opportunities. Researchers have tried to characterize individuals' identity in meaningful ways that support an understanding of their strategic choice (Sieger et al., 2016), including discussions of who becomes an entrepreneur and why. As in any other social context, farmers tend to identify with groups that share certain values, beliefs and motivations. The differences in their motivations have strong implications for decision making in their businesses, including the decision to innovate and become more entrepreneurial. Agricultural researchers' have observed that a small percentage of farmers hold a strong sense of entrepreneurial identity (Vesala et al., 2007). Further, McElwee (2008) suggests that farmers to fall into one of two groups: 'price takers' and 'price makers', where price takers tend to be those farmers who possess a producer-identity and struggle to think of the farm as a business. Moreover, the price makers are those who tend to possess an entrepreneurial identity and are oriented towards activities that benefit their business (Stenholm and Hytti, 2014). This either/or approach has limitations as it simplifies the farm entrepreneur motives to stay in business.

Founder identity is based on social identity theory as a self-evaluative process (Hogg, 2001). Further, Fauchart and Gruber (2011) made the assumption that firm founders' social identity would reveal their motivation for entrepreneurship, reflected by different actions, and in the selection of competitive strategies in a similar market situation. Moreover, Sieger et al. (2016) stated that firm founders can choose when, and how, to exploit an opportunity, or how to reach set goals in order to succeed with the firm outcome. The entrepreneurial identities developed by Fauchart and Gruber (2011) are categorized into three main types: *Darwinians* – who have a high self-interest when engaging in business and act with a traditional business school approach and view competition as a preference in business; *Communitarians* – who have a supportive approach to business and view their social community as a reference in business; and *Missionaries* – who

like to follow a code of conduct and view society-at-large as a reference in business.

Consequently, paper III of this thesis investigates farmer’s motivation for being in business using a part of the F-PEC scale by Astrachan, Klein and Smyrnios (2002). The findings in paper III show a clear connection between the different identity types and the farmers motives (economic, social, and environmental) to engage in entrepreneurial activity. Further, the results provide insights into the farmer’s entrepreneurial rationale and strategic choices and the survival of the farm (see figure 1).

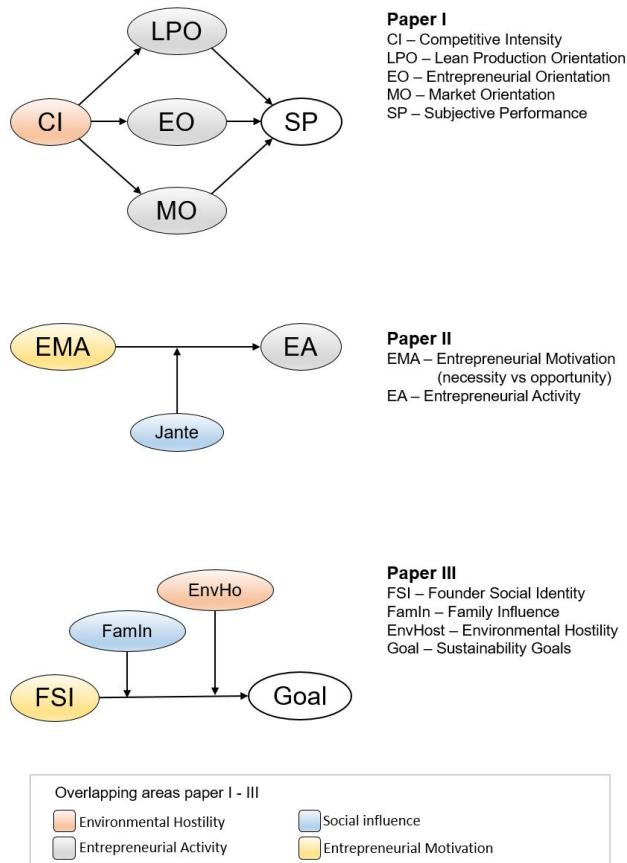


Figure 1. Visualizing all conceptual models of Swedish farm entrepreneur’s strategic choices (models in paper I-III).

1.2 Overview of thesis papers and main contributions

The purpose of the papers was to examine farmers' strategic choices under different types of influence (see figure 1). Strategic choice is here defined as the organization's position through evaluating environmental uncertainties, value and norms, action by competitors, and trends (Child, 1972).

These influences are represented by external forces (competition), social forces (cultural intolerance and family), and internal forces (entrepreneurial identity). The different papers have some points in common, such as entrepreneurial activity, environmental hostility, entrepreneurial motivation, and social influence.

1.2.1 Empirical contribution

The insights and main methodological contributions of this work can be seen in the combination of concepts. In paper I, entrepreneurial orientation (EO), market orientation (MO), and lean production orientation (LPO) was examined to contextualize farmers multiple strategic choices when faced with competitive intensity (CI). Paper II showed that it is possible to meaningfully operationalize cultural intolerance (i.e. Jante) and demonstrate how it influences entrepreneurial advice. Paper III demonstrated how the founder social identity (FSI) framework can be adapted to a farm context and used to better understand the motives of farmers, leading to strategic choices (in terms of economic, social and environmental sustainability). However, the power to understand these motives is markedly improved with the inclusion of family influence.

In paper I, the empirical contribution was to simultaneously operationalize different strategic orientations using structural equation modeling (SEM). It can be useful for the practitioner (farmer) and advisors to identify which strategic choices potentially provide the best trade-off for the individual farm business. From paper II, cultural intolerance (through the Jante Index) was operationalized through a survey in an experiment. To the best of my knowledge, this was the first time it was operationalized and shown to be a useful construct in explaining entrepreneurial behavior (i.e. indirectly through advice giving). The findings can be supportive in various situations where, for example, the farm advisor and the farmers' cultural

intolerance can be a basis for discussion on how to prioritize farm strategy, and to ‘match make’ when the entrepreneur wants to make investments or diversify the business. In paper III, the findings show the farmers entrepreneurial diversity, and demonstrates various motives for a farm entrepreneur to stay in business.

In addition, another methodological contribution is the way in which the different concepts/models have been operationalized in the papers. The concepts originated from different research fields but have been shown to contribute valuable insights to the farming context.

Table 1. Overview of thesis papers and main contribution.

Paper	Contributions	Fields of contribution
I Farmers’ strategic responses to competitive intensity and the impact on perceived performance.	<ol style="list-style-type: none"> 1. Operationalizing competitive strategies using structural equation modelling (SEM). 2. Examine farmer’s strategic portfolio (LPO, EO, and MO) under the influence of competitive intensity. 	<ol style="list-style-type: none"> 1. Entrepreneurship 2. Strategic choice 3. Farm performance
II Farmers that engage in entrepreneurship for the “wrong” reason and the moderating role of cultural intolerance.	<ol style="list-style-type: none"> 1. Experiment on the effects of cultural intolerance and the entrepreneurial advice given. 2. Conceptualizing Jante 	<ol style="list-style-type: none"> 1. Cultural intolerance (The Law of Jante) 2. Farm advisor influence 3. Strategic choice
III Social identity and the moderating role of family influence on sustainable decision making.	<ol style="list-style-type: none"> 1. Founder identity scale – founder identity influence on entrepreneurial motivation. 2. Family influence and environmental hostility and its influence on entrepreneurial motivation. 	<ol style="list-style-type: none"> 1. Founder identity and strategic choice 2. Family influence on farm business 3. Entrepreneurship

LPO = Lean Production Orientation; EO = Entrepreneurial Orientation; MO = Market Orientation

1.2.2 Theoretical contribution

Theory and empirical findings contribute to the understanding of different influences on the farmer's entrepreneurial choice. The findings from the different papers also add to knowledge of how farmers respond to the influence of competitive intensity, how farmers may be unknowingly exposed to cultural intolerance and the influence family has on different entrepreneurial identity types.

The theoretical contribution emerges from the various parts. For example, it is sometimes difficult to exemplify what a farmer's strategic orientation looks like, however, from using SEM, a working model was operationalized that mimics the strategic response on the farm. The same applies to Jante, by operationalizing Sandesmoses' (1934) formative construct, it was shown to have an important influence on the advice given to potential entrepreneurs. Finally, the FSI framework provides important information about the farmer's way of seeing themselves as an entrepreneur.

1.3 Research journey and purpose of the thesis

A major challenge in writing this thesis was connecting and justifying the choices made in the three papers described above. They originated in different projects and at different points in my research training and, while they all make attempts to understand influences on farmer decision-making, they differ considerably conceptually, methodologically, and in how they are positioned (Trafford and Leshem, 2009).

In retrospect, there was a myriad of ways these studies could have been carried out and not all of them were articulated or appreciated at the time of writing. Thus, in this section, I reflect on these choices. I do this in order to share with the reader some of the things that I have learned during the process of writing this dissertation and to set the stage for the point of departure I take in writing the remainder of this thesis.

In a more traditional approach, the research may have started with a systematic literature review to identify research gaps, identify areas of interest and, thereafter, formulate research questions. This could have been followed by a theoretical framework that served as support for a step-by-step investigation of influences on farmer decision-making. Osanloo and Grant (2016) stated that a theoretical framework is "... one of the most important

aspects in the research process” (p. 12) and thus, the theoretical framework is the “blueprint” on which the entire dissertation rests. Other researchers have suggested differently and maintain that there is virtue to be found in the freedom to follow a lead, to explore and conduct applied research. This is in line with Wellington (2013) who emphasizes how the doctoral journey is largely about the process. Further, Trafford and Leshem (2009) believe that a conceptual framework emerges from theoretical perspectives, personal experience, and the acquisition of new knowledge represents the doctorateness craftsmanship.

Hyland (2004) suggested that theory guides the quantitative researcher, with the theory developed during the course of the academic training acting as building blocks rather than a rigid template. Three building blocks of theory development have been proposed; the *what*, the *how* and the *why*. These building blocks represent separate factors that, according to Whetten (1989), should explain the following – the subject (*what*), operationalization and conceptualization of patterns (*how*), and rationalization of theory assumptions (*why*). Thus, *what* and *how* describe, whereas *why* explains. This rational underlines the importance of the empirical material, and how the data should inspire the researcher to participate in a critical dialogue between theoretical and empirical work (Alvesson and Kärreman, 2007). In turn, this approach gives the PhD. student time to reflect on personal beliefs (Osanloo and Grant, 2016) and push boundaries in theory development (Whetten, 1989).

During my journey, I have made mistakes. Some mistakes relate to conceptualization – in paper I, some choices that were made in creating the survey affected the results and findings. For example, the way in which Covin and Slevin (1989) was adopted in paper I meant that EO as a construct reflected a conservative posture, and the data collected on farmers captured risk-averse behaviors. In hindsight, I believe it was a mistake to not also include statements on risk-taking. By not including these questions, I could not, for example, analyze whether the sample group were risk takers or were risk adverse. Ultimately, this may have limited the reliability, and hence the validity, of the findings.

Other mistakes relate to methodology. In paper II, the research field on Jante lacked a model or designed scale to measure for cultural intolerance. Instead of designing an experiment, I could have conducted interviews,

avoiding the issue of relying on anecdotal evidence (from the articles). The results from the interviews could have provided primary evidence the existence of Jante in the farming community. Interviews have their advantages when “There is insufficient known about the subject to be able to draft a questionnaire” (Rowley, 2012; p 262). They could be used to form an understanding of how these values and beliefs affect decision making in the organization (Symon and Cassell, 2012), and from this information created a more reliable questionnaire to send out to farmers.

Methodology also relates to conducting a scoping review. At the time of the scoping review, I based my protocol on highly cited authors. However, in the process of finalizing this thesis, I realized that I understood the articles from a different perspective and would likely do my next scoping review differently. An example of this can be seen in how I previously viewed the concept of a scoping review as less formal than a systematic literature review. Although for some this may be accurate, I now feel that the scoping review could have been better executed, creating more valid results.

Ultimately, these mistakes affect the results and the positioning of the research. As such, there is a need for reflection on this journey in order to demonstrate that learning has taken place. A more detailed self-reflection can be found as part of chapters 3-5. The subsections in each chapter provides space for a critical dialogue about operationalization and problematization, and demonstrate the learning I have done during my journey as a doctoral student.

Consequently, the purpose of this thesis is to do three things:

1. To reflect on the choices made in developing papers I-III (chapter 3-5),
2. To reflect on the positioning and contribution of paper I-III (chapter 3-5),
3. Given the new insights from each paper in this research journey, to provide suggestions to build on paper I-III (chapter 6).

1.4 Disposition of thesis

This thesis will provide insights into farmers' actions in response to different levels of influence, from the market, advisors and families. Furthermore, this work will provide a "post-literature review" where every section will be reviewed from the perspective of current research and reflect upon conceptualization, operationalization and the positioning of the papers.

Thus, the approach of this thesis will follow the *sandwich model*, which mimics the traditional monograph (Nygaard and Solli, 2020). The papers will, however, be included and have individual chapters including a post-literature scoping review and problematization through methodology (figure 2).

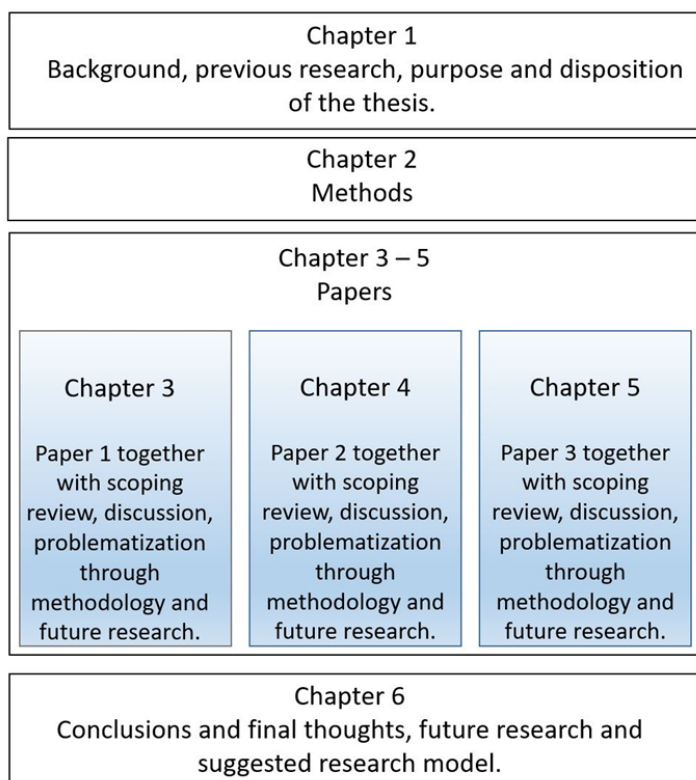


Figure 2. Visualization of the structure based on the sandwich model by Nygaard and Solli (2020).

The papers included in this compilation thesis were motivated by different projects over time and, therefore, make use of different theoretical frameworks and methods. This leads to a possibly rather unorthodox solution for a kappa. It is not straightforward, it was not planned from the beginning and consists of building blocks. Moreover, as the papers are driven by separate theories, an introductory literature review is ill-advised. Therefore, a post-literature review will be conducted for each paper (chapter) to position the contribution in recent research. Each paper will also be partly analyzed from reflection on assumptions, with inspiration from Alvesson and Sandberg (2011) and Davis (1971), followed by self-reflection in chapter 3-5. This analysis will become a lens from which this Kappa will address further research, providing criticisms and contributions. At its core, the center of attention for this work is to understand the farm entrepreneur strategic choices.

References

- Alvesson, M. & Kärreman, D. (2007). Constructing mystery: Empirical matters in theory development. *Academy of management review*, 32(4), pp. 1265-1281.
- Alvesson, M. & Sandberg, J. (2011). Generating research questions through problematization. *Academy of management review*, 36(2), pp. 247-271.
- Astrachan, J. H., Klein, S. B., & Smyrnios, K. X. (2002). The F-PEC scale of family influence: A proposal for solving the family business definition problem1. *Family business review*, 15(1), 45-58.
- Bamberg, M. (2011). Who am I? Narration and its contribution to self and identity. *Theory & psychology*, 21(1), 3-24.
- Basco, R., Hernández-Perlines, F., & Rodríguez-García, M. (2020). The effect of entrepreneurial orientation on firm performance: A multigroup analysis comparing China, Mexico, and Spain. *Journal of Business Research*, 113, 409-421.
- Baumol, W.J. & Strom, R.J. (2007). Entrepreneurship and economic growth. *Strategic Entrepreneurship Journal*, 1(3-4), pp. 233-237.
- Beedell, J., & Rehman, T. (2000). Using social-psychology models to understand farmers' conservation behaviour. *Journal of rural studies*, 16(1), 117-127.
- Benton, T. G., & Bailey, R. (2019). The paradox of productivity: agricultural productivity promotes food system inefficiency. *Global Sustainability*, 2.
- Burton, R. J., & Wilson, G. A. (2006). Injecting social psychology theory into conceptualisations of agricultural agency: towards a post-productivist farmer self-identity? *Journal of rural studies*, 22(1), 95-115.
- Brandth, B., & Haugen, M. S. (2011). Farm diversification into tourism—implications for social identity? *Journal of rural studies*, 27(1), 35-44.
- Cappelen, C., & Dahlberg, S. (2018). The Law of Jante and generalized trust. *Acta Sociologica*, 61(4), 419-440.
- Cappiello, G. (2015). Entrepreneurship, Local Growth and Global Markets. *Symphonya. Emerging Issues in Management*, 8-18.

- Carree, M.A. & Thurik, A.R. (2010). The impact of entrepreneurship on economic growth. In: *Handbook of entrepreneurship research* Springer, pp. 557-594.
- Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice. *Sociology*, 6(1), 1-22.
- Constance, D. H., & Tuinstra, R. (2005). Corporate chickens and community conflict in east Texas: Growers' and neighbors' views on the impacts of industrial broiler production.
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic management journal*, 10(1), 75-87.
- Crick, J. M. (2021). The dimensionality of the market orientation construct. *Journal of Strategic Marketing*, 29(4), 281-300.
- Cunningham, J. B., & Lischeron, J. (1991). Defining entrepreneurship. *Journal of small business management*, 29(1), 45-61.
- Davis, M.S. (1971). That's interesting! Towards a phenomenology of sociology and a sociology of phenomenology. *Philosophy of the social sciences*, 1(2), pp. 309-344.
- Dockès, A. C., Chauvat, S., Correa, P., Turlot, A., & Nettle, R. (2019). Advice and advisory roles about work on farms. A review. *Agronomy for Sustainable Development*, 39, 1-14.
- Edwards-Jones, G. (2006). Modelling farmer decision-making: concepts, progress and challenges. *Animal science*, 82(6), 783-790.
- Elfring, T., Klyver, K., & van Burg, E. (2021). *Entrepreneurship as networking: Mechanisms, dynamics, practices, and strategies*. Oxford University Press.
- EC (2013). Overview of CAP Reform 2014-2020. ex.europa.eu: European Commission, pp. 1-10.
- European Commission (2021) Directorate-General for Research and Innovation, Horizon Europe, budget: Horizon Europe - the most ambitious EU research & innovation programme ever, Publications Office of the European Union, 2021, <https://data.europa.eu/doi/10.2777/202859>
- EU (2022). Small farms' role in the EU food system. European Union: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733630/EPRS_BRI\(2022\)733630_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733630/EPRS_BRI(2022)733630_EN.pdf) (Accessed 2023-04-15)

- Eurostat (2021). *Agricultural income per annual work unit*.
<https://ec.europa.eu/>
- Fauchart, E. & Gruber, M. (2011). Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of management journal*, 54(5), pp. 935-957.
- Filion, L.J. (2021). Defining the entrepreneur. In: *World Encyclopedia of Entrepreneurship* Edward Elgar Publishing.
- Fitz-Koch, S. (2020). Who am I, and if so, how many? Identity dynamics in agricultural entrepreneurship. Doctoral dissertation, Swedish University of Agricultural Sciences.
<https://res.slu.se/id/publ/104565>
- Hendrickson, M., James Jr, H., & Heffernan, W. (2014). Vertical Integration and Concentration in US Agriculture. *Encyclopedia of Food and Agricultural Ethics*, 1799-1806.
- Hogg, M.A. (2001). A social identity theory of leadership. *Personality and social psychology review*, 5(3), pp. 184-200.
- Horn, M., Knaus, W., Kirner, L. & Steinwider, A. (2012). Economic evaluation of longevity in organic dairy farming. In: *Proceedings of Tackling the Future Challenges of Organic Animal Husbandry, 2nd Organic Animal Husbandry Conference 2012*, pp. 265-268.
- Hunter, E., Nybom, J., Micheels, E., & Klyver, K. (2022). Farmers that engage in entrepreneurship for the “wrong” reason and the moderating role of cultural intolerance. *The International Journal of Entrepreneurship and Innovation*, 14657503221077939.
- Hyland, K. (2004). Graduates' gratitude: The generic structure of dissertation acknowledgements. *English for Specific purposes*, 23(3), pp. 303-324.
- Höckert, J. & Ljung, M. (2013). Advisory encounters towards a sustainable farm development—interaction between systems and shared lifeworlds. *The journal of agricultural education and extension*, 19(3), pp. 291-309.
- Karlsson, J. (2016). *Konkurrenskraften i svenska gårdar - En jämförelse av lönsamhet och produktivitet bland svenska jordbruksföretag 2005–2013* (2016), Jordbruksverket.
- Klyver, K., & Foley, D. (2012). Networking and culture in entrepreneurship. *Entrepreneurship & Regional Development*, 24(7-8), 561-588.

- Klyver, K., & Arenius, P. (2022). Networking, social skills and launching a new business: A 3-year study of nascent entrepreneurs. *Entrepreneurship Theory and Practice*, 46(5), 1256-1283.
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of marketing*, 54(2), 1-18.
- Krafft, J., Höckert, J., Ljung, M., Lundberg, S. & Kolstrup, C.L. (2021). Delivering too much, too little or off target—possible consequences of differences in perceptions on agricultural advisory services. *Agriculture and human values*, pp. 1-15.
- Lechner, C., & Gudmundsson, S. V. (2014). Entrepreneurial orientation, firm strategy and small firm performance. *International Small Business Journal*, 32(1), 36-60.
- Levins, R. A., & Cochrane, W. W. (1996). The treadmill revisited. *Land Economics*, 72(4), 550-553.
- Littunen, H. (2000). Entrepreneurship and the characteristics of the entrepreneurial personality. *International journal of entrepreneurial behavior & research*, 6(6), 295-310.
- Leonidou, E., Christofi, M., Vrontis, D., & Thrassou, A. (2020). An integrative framework of stakeholder engagement for innovation management and entrepreneurship development. *Journal of Business Research*, 119, 245-258.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of business venturing*, 16(5), 429-451.
- Läpple, D., Renwick, A., Cullinan, J., & Thorne, F. (2016). What drives innovation in the agricultural sector? A spatial analysis of knowledge spillovers. *Land use policy*, 56, 238-250.
- Läpple, D., & Thorne, F. (2019). The role of innovation in farm economic sustainability: Generalised propensity score evidence from Irish dairy farms. *Journal of agricultural economics*, 70(1), 178-197.
- McElwee, G. (2008). A taxonomy of entrepreneurial farmers. *International Journal of Entrepreneurship and Small Business*, 6(3), pp. 465-478.

- McMullen, S. (2022). Competition, Regulation, and the Race to the Bottom in Animal Agriculture. In *Animals and Business Ethics* (pp. 113-130). Cham: Springer International Publishing.
- Montiel-Campos, H. (2018). Entrepreneurial orientation and market orientation: Systematic literature review and future research. *Journal of Research in Marketing and Entrepreneurship*.
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of marketing*, 54(4), 20-35.
- Norton, G. W., & Alwang, J. (2020). Changes in agricultural extension and implications for farmer adoption of new practices. *Applied Economic Perspectives and Policy*, 42(1), 8-20.
- Nybom, J., Hunter, E., Micheels, E., & Melin, M. (2021). Farmers' strategic responses to competitive intensity and the impact on perceived performance. *SN Business & Economics*, 1(6), 74.
- Nygaard, L.P. & Solli, K. (2020). *Strategies for writing a thesis by publication in the social sciences and humanities*: Routledge.
- Osanloo, A. & Grant, C. (2016). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house". *Administrative issues journal: connecting education, practice, and research*, 4(2), p. 12-26.
- Presutti, M., & Odorici, V. (2019). Linking entrepreneurial and market orientation to the SME's performance growth: the moderating role of entrepreneurial experience and networks. *International Entrepreneurship and Management Journal*, 15, 697-720.
- Regeringen (2015). Attraktiv, innovativ och hållbar – strategi för en konkurrenskraftig jordbruks- och trädgårdsnäring 2015): SOU.
- Regeringen (2017). *En livsmedelsstrategi för Sverige – fler jobb och hållbar tillväxt i hela landet*2016/17). Swedish Government.
- Rowley, J. (2012). Conducting research interviews. *Management research review*, 35(3/4), 260-271.
- Sandemose, A. (1934). En flykting korsar sitt spår: berättelsen om en mördares barndom: Tiden.

- SBA (2022). Swedish Board of Agriculture. <https://jordbruksverket.se/om-jordbruksverket/jordbruksverkets-officiella-statistik/jordbruksverkets-statistikrapporter/statistik/2022-07-05-jordbruksstatistik---sammanstallning-2022> (Accessed 2023-04-05)
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *The Academy of Management Review*, 25(1), 217-227.
- Seuneke, P., Lans, T., & Wiskerke, J. S. (2013). Moving beyond entrepreneurial skills: Key factors driving entrepreneurial learning in multifunctional agriculture. *Journal of Rural Studies*, 32, 208-219.
- Sieger, P., Gruber, M., Fauchart, E. & Zellweger, T. (2016). Measuring the social identity of entrepreneurs: Scale development and international validation. *Journal of business venturing*, 31(5), pp. 542-572.
- Soininen, J., Martikainen, M., Puumalainen, K., & Kyläheiko, K. (2012). Entrepreneurial orientation: Growth and profitability of Finnish small-and medium-sized enterprises. *International Journal of Production Economics*, 140(2), 614-621.
- Statistics Sweden (2019). *Agricultural statistics 2019* www.scb.se.
- Stenholm, P. & Hytti, U. (2014). In search of legitimacy under institutional pressures: A case study of producer and entrepreneur farmer identities. *Journal of Rural Studies*, 35, pp. 133-142.
- Symon, G., & Cassell, C. (2012). *Qualitative organizational research: core methods and current challenges*. Sage Publications, ISBN: 978-0-85702-411-4 (pbk).
- Taylor, L., & Ömer, Ö. (2019). Race to the bottom: Low productivity, market power, and lagging wages. *International Journal of Political Economy*, 48(1), 1-20.
- Trafford, V., & Leshem, S. (2009). Doctorateness as a threshold concept. *Innovations in education and teaching international*, 46(3), 305-316.
- Uematsu, H., & Mishra, A. K. (2011). Use of direct marketing strategies by farmers and their impact on farm business income. *Agricultural and Resource Economics Review*, 40(1), 1-19.

- USDA (2023). Value-Added Producer Grants, Program application period 2023. Available at: <https://www.rd.usda.gov/programs-services/business-programs/value-added-producer-grants#:~:text=The%20Value%2DAdded%20Producer%20Grant,Socially%2Ddisadvantaged%20farmer%20or%20rancher> (Accessed 2023-04-20).
- Vesala, K.M., Peura, J. & McElwee, G. (2007). The split entrepreneurial identity of the farmer. *Journal of Small Business and Enterprise Development*.
- Vesala, H.T. & Vesala, K.M. (2010). Entrepreneurs and producers: Identities of Finnish farmers in 2001 and 2006. . *Journal of Rural Studies*, 26(1), pp. 21-30.
- Wales, W. J. (2016). Entrepreneurial orientation: A review and synthesis of promising research directions. *International Small Business Journal*, 34(1), 3-15.
- Wang, S. L., Schimmelpfennig, D., & Fuglie, K. O. (2012). Is agricultural productivity growth slowing in Western Europe? In *Productivity growth in agriculture: an international perspective* (pp. 109-125). Wallingford UK: CABI.
- Wellington, J. (2013). Searching for ‘doctorateness’. *Studies in Higher Education*, 38(10), 1490-1503.
- Wennekers, S. & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13(1), pp. 27-56.
- Whetten, D.A. (1989). What constitutes a theoretical contribution? *Academy of management review*, 14(4), pp. 490-495.
- Wong, P.K., Ho, Y.P. & Autio, E. (2005). Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small Business Economics*, 24(3), pp. 335-350.

2. Method

This chapter will describe the tool (i.e., the scoping review) used to support this thesis in the process of reflection, conceptualization, operationalization and positioning of papers I-III. To do this, I conducted a scoping review to position the papers within their respective research fields.

2.1 Literature review

A literature review is a method of compiling literature from a certain field, and from the results of the review, finding less explored areas where more research is needed (Snyder, 2019). It is important in order to further develop a base of knowledge (Tranfield, Denyer, Smart, 2003). There are different ways to conduct a literature review. For example, in a systematic literature review the researcher attempts to "... summarize existing evidence, identify gaps in current research, and provide a framework for positioning research endeavors" (Okoli, 2015; p. 43), whereas in a scoping review the goal of the research is "... to provide a snapshot of the field and a complete overview of what has been done" (Xiao and Watson, 2019; p. 99).

However, as the papers that form the cornerstones of this thesis do not originate from one singular doctoral project, and therefore lack a common framework, an introductory systematic literature review is ill-advised due to the breadth of topics. Moreover, the research field of management is heterogeneous, with disparate research streams existing due to the lack of consensus (Tranfield et al., 2003). Therefore, conducting a scoping review was the most appropriate decision (Munn et al., 2018).

2.1.1 Scoping review

The objective with this scoping review is to assess the literature relevant to papers I-III of this thesis. A scoping review allows the researcher to explore the present literature, clarify key concepts, and identify topics for future research (Tricco et al., 2016). The scoping review will support papers I-III and explore how others have operationalized, operationalized and positioned their research.

The premise of a scoping review can vary depending on the researchers' purpose. It can be "... exploratory and descriptive" (Peters et al. 2020; p. 2122) and is useful when bringing different literatures together and through mapping, allowing the researcher to clarify and compile concepts in the field of interest (Peters et al., 2015). The mapping process can also be helpful in establishing patterns within the literature as it reflects the knowledge and, in turn, determines the validity of findings (Bradbury-Jones et al., 2021). Further, Levac, Colquhoun, and O'Brien (2010) found large variations within the method, as well as the absence of a prevailing consensus. Due to a lack of unity in conducting a scoping review (Cacchione, 2016), Arksey and O'Malley (2005) presented a methodological guide and framework to improve consistency, from which a development of protocols was advanced (Peters et al., 2015; Peters et al., 2020). At an early stage, it was considered that scoping reviews could be carried out relatively quickly (Arksey and O'Malley, 2005), but this has been questioned more recently, and today more rigorous scoping reviews can last up to two years (Peterson et al., 2017).

A scoping review should also include a detailed protocol in which inclusion criteria are clearly stated (Peters et al., 2020). The scoping reviews presented in this thesis are restricted to published journal articles and exclude other publications, such as book chapters and conference papers. The argument for this is that peer-reviewed articles have gone through "... a review process that acts as a screen for quality" (David and Hahn, 2004; p. 42). The results of a scoping review can be presented in different ways, e.g., through a map of extracted data, using diagrams/tables, and/or through descriptive approaches that align with the objectives of the scoping review (Peters et al., 2020). There should always be an awareness when conducting a scoping review that there is a potential gap between goal and method. For example, Martin et al. (2020) pointed out methodological challenges, such as the way in which, although many seek to synthesize evidence within a

topic, the lack of a common methodology (and protocol) of a scoping review may constrict the validity and reliability of these findings. Ongoing developments call for attention, while emphasizing the issues the method still has. For example, in the ongoing development Peters et al. (2021), urge researchers and other stakeholders using the scoping review method to be *transparent* in how they perform a scoping review. The argument for transparency is that, if there is a "... lack of clarity or transparency relating to methodology, it is difficult to distinguish poor reporting from poor design" (Pham et al 2014; p. 380).

2.1.2 Limitations of scoping review

Although the methods and protocols of conducting a scoping review have been developed and refined over the past 20 years, there is still a need to create a uniform protocol for how a scoping review should be conducted (Khalil et al., 2021). The lack of examples for every step creates limitations, such as issues of how to present and clarify results (Khalil et al., 2020). These shortcomings can create uncertainties about how to summarize and present findings, which also means that both the validity and reliability of the findings may come into question.

2.1.3 The screening process

The searching (screening) process was conducted in Scopus and Web of Science using the search items listed in appendix 1. The first 100 hits (Carr et al. 2011; Kennedy, Kenny and O'Meara, 2015) returned by each search on Scopus/Web of Science were scanned for relevance. The decision to only include the first 100 articles in the search is based on Stevinson and Lawlor (2004), who investigated whether broad searches yielded better results (i.e., more topic-relevant articles). However, the expanded search did not yield better hits and, thus, the search can be narrowed. The limitation of 100 articles has been practiced by e.g. Coe et al. (2014); Kennedy et al. (2015); Pham et al. (2014); and Yeung et al. (2019).

The entire evaluation process contained 6 steps, ranging from key words to final reading. The conceptual framework used in paper II (covering Jante) belongs to a limited field of research with a low number of published articles, therefore only containing 5 steps (see all steps in appendix 1). The final articles were read through and summarized, and the final papers from the

scoping review are discussed for each chapter, respectively (see individual scoping reviews in chapter 3-5).

Moreover, as there is no rigid protocol in regard to conducting a scoping review at the time of the review process, the steps outlined by Arksey and O'Malley (2005); and Peters et al. (2020) were followed. These steps were extracted from the text and made into a protocol to create an equivalent review protocol for all three papers (see table 2).

Table 2. Overview of the protocol framework used to guide the screening. Inspired by Arksey and O'Malley (2005); and Peters et al. (2020).

Paper	Description
1. Key words	Identify key word to use in search
2. Identifying relevant studies	Develop a plan for which terms to use, language, time span, etc.
3. Study selection	Involves a post-hoc inclusion of criteria.
4. Screening data	Extract data from each study to exclude papers that are non-relevant.
5. Reading	Reading through the papers from the final screening.
6. Summarizing and reporting results	Provide a broad overview of the final literature (see chapter 3-5).

Munn et al. (2018) suggested six main focus areas for conducting a scoping review: (1) identify the types of available evidence in a given field; (2) clarify key concepts/ definitions in the literature; (3) examine how research is conducted on a certain topic or field; (4) identify key characteristics or factors related to a concept; (5) a precursor to a systematic review; and (6) identify and analyze knowledge gaps (p. 2). These six focus areas fit well with the purpose of the thesis of reflecting the study journey and demonstrating learning. Points 2 and 6 relate to the issue of conceptualization, 3 and 4 relate to operationalization, and 1 and 6 are connected to positioning.

The scoping review covers all three areas of conceptualization, operationalization, and positioning, but do so in a different context for each paper. In paper I, it is in the context of EO/MO (delimited to agriculture); in paper II, it is in the context of Jante/Tall Poppy Syndrome; and in paper III, in the context of the FSI framework/identity. Paper I is delimited to

agriculture due to the size of the research field; paper II and III are not delimited as both research fields are considerably smaller.

Findings from the scoping review show that the farmer's decision-making is a trade-off that is affected by various factors. EO and MO have various effects on the farm business, e.g., MO benefits farmers who act on consumer demand, and EO can benefit farmers who act on new innovation.

However, one should be careful of making generalizations as conceptualization varies, making results difficult to compare. In paper II, the limited supply of articles created a challenge when attempting to provide a true conceptualization based on the scoping review. The existing literature is lacking a validated model to measure Jante or the like, requiring operationalization to be an exploratory phase, with the discussion focusing on defining the differences between various cultural expressions (i.e., Jante, Tall Poppy Syndrome, and Crab in Bucket syndrome). One finding showed that entrepreneurs could learn to handle cultural intolerance when supported by other entrepreneurs who had learnt to manage similar issues. In paper III, the scoping review shows how the FSI framework scale can capture entrepreneurial identities and works in different cultures. However, the scoping review revealed an issue with items cross-loading/loading in another dimension, which can give rise to uncertainties regarding the outcome when using the scale.

The results from the scoping review, problematization through methodology and self-reflection enable positioning and suggestions for future research following papers I-III.

References

- Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, 8(1), 19-32.
- Bradbury-Jones, C., Aveyard, H., Herber, O. R., Isham, L., Taylor, J., & O'Malley, L. (2021). Scoping reviews: the PAGER framework for improving the quality of reporting. *International journal of social research methodology*, 1-14.
- Cacchione, P. Z. (2016). The evolving methodology of scoping reviews. *Clinical Nursing Research*, 25(2), 115-119.
- Carr, S. M., Lhussier, M., Forster, N., Geddes, L., Deane, K., Pennington, M., & Hildreth, A. (2011). An evidence synthesis of qualitative and quantitative research on component intervention techniques, effectiveness, cost-effectiveness, equity and acceptability of different versions of health-related lifestyle advisor role in improving health. *Health Technology Assessment (Winchester, England)*, 15(9), iii-iv.
- Coe, J. B., Young, I., Lambert, K., Dysart, L., Nogueira Borden, L., & Rajić, A. (2014). A scoping review of published research on the relinquishment of companion animals. *Journal of Applied Animal Welfare Science*, 17(3), 253-273.
- David, R. J., & Han, S. K. (2004). A systematic assessment of the empirical support for transaction cost economics. *Strategic management journal*, 25(1), 39-58.
- Kennedy, S., Kenny, A., & O'Meara, P. (2015). Student paramedic experience of transition into the workforce: a scoping review. *Nurse Education Today*, 35(10), 1037-1043.
- Khalil, H., Bennett, M., Godfrey, C., McInerney, P., Munn, Z., & Peters, M. (2020). Evaluation of the JBI scoping reviews methodology by current users. *JBI Evidence Implementation*, 18(1), 95-100.
- Khalil, H., Peters, M. D., Tricco, A. C., Pollock, D., Alexander, L., McInerney, P., & Munn, Z. (2021). Conducting high quality scoping reviews-challenges and solutions. *Journal of clinical epidemiology*, 130, 156-160.
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: advancing the methodology. *Implementation science*, 5, 1-9.

- Martin, G. P., Jenkins, D. A., Bull, L., Sisk, R., Lin, L., Hulme, W., & Group, P. H. A. (2020). Toward a framework for the design, implementation, and reporting of methodology scoping reviews. *Journal of Clinical Epidemiology*, 127, 191-197.
- Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC medical research methodology*, 18, 1-7.
- Okoli, C. (2015). A guide to conducting a standalone systematic literature review. *Communications of the Association for Information Systems*, 37.
- Peters, M. D., Godfrey, C. M., Khalil, H., McInerney, P., Parker, D., & Soares, C. B. (2015). Guidance for conducting systematic scoping reviews. *JBI Evidence Implementation*, 13(3), 141-146.
- Peters, M. D., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews.
- Peters, M. D., Marnie, C., Colquhoun, H., Garritty, C. M., Hempel, S., Horsley, T., & Tricco, A. C. (2021). Scoping reviews: reinforcing and advancing the methodology and application. *Systematic reviews*, 10(1), 1-6.
- Peterson, J., Pearce, P. F., Ferguson, L. A., & Langford, C. A. (2017). Understanding scoping reviews: Definition, purpose, and process. *Journal of the American Association of Nurse Practitioners*, 29(1), 12-16.
- Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Research synthesis methods*, 5(4), 371-385.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of business research*, 104, 333-339.
- Stevinson, C., & Lawlor, D. A. (2004). Searching multiple databases for systematic reviews: added value or diminishing returns? *Complementary therapies in medicine*, 12(4), 228-232

- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, 14(3), 207-222.
- Tricco, A. C., Lillie, E., Zarin, W., O'brien, K., Colquhoun, H., Kastner, M., & Straus, S. E. (2016). A scoping review on the conduct and reporting of scoping reviews. *BMC medical research methodology*, 16, 1-10.
- Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. *Journal of planning education and research*, 39(1), 93-112.
- Yeung, W. K., Dawes, P., Pye, A., Charalambous, A. P., Neil, M., Aslam, T., & Leroi, I. (2019). eHealth tools for the self-testing of visual acuity: a scoping review. *NPJ digital medicine*, 2(1), 82.

2.2 Appendix 1- Protocol scoping review

Protocol Scoping review – paper I

1. Key words – search and results SCOPUS	KEY WORD: entrepreneurial AND orientation*: 4,296 documents
	KEY WORD: entrepreneurial*, AND farm*: 1,040 hits
	KEY WORD: entrepreneurial*, AND farm*, AND agriculture*: 26 hits
	KEY WORD: entrepreneurial AND orientation* AND farm*: 83 hits
	KEY WORD: entrepreneurial AND orientation* AND farm* AND agribusiness: 8 hits
	KEY WORD: entrepreneurial AND orientation* AND farm* AND agriculture: 25 hits
1. Key words – search and results Web of Science	KEY WORDS: entrepreneurial orientation* OR market orientation* OR farm performance* OR lean*: 96,135 hits
2. Identifying relevant studies	Saving the first 100 hits from both searches, and cross-checking results for doubles. Exclusion criteria: all journal papers published earlier than 2012. Inclusion: All countries/regions Language: English
3. Study selection	Exclusion: abstracts failing to contain one or more of the primary key words: EO, MO, Lean, and farm performance.
4. Screening the data.	Reading articles: primary method and results. Exclusion: papers of weak relevance to the subject.
5. Readings	Reading the final articles more carefully and summarizing.
6. Summarizing and reporting results	Extracting the summary, providing a broad overview of the final literature (see chapter 3).



Protocol Scoping review – paper II

1. Key words – search and results SCOPUS	KEY WORD: Jante: 35 documents
	KEY WORD: Law AND of AND Jante*: 8 documents
	KEY WORD: Law AND of AND Jante* AND agriculture: 1 document
	KEY WORD: Law AND of AND Jante* AND farming: 0 documents
1. Key words – search and results Web of Science	KEY WORD: Law of Jante* OR Jante*: 22 documents
	KEY WORD: Law of Jante* OR Jante* AND Farming* AND Agriculture: 10 documents
2. Identifying relevant studies	Saving the 8 hits from Scopus and the 10 hits from Web of Science (<i>18 articles in total</i>), cross-checking results for doubles. Exclusion criteria: all journal papers published earlier than 2012. Inclusion: All countries/regions Language: English
3. Study selection	Exclusion: abstracts failing to contain one or more primary key words: Law of Jante, Jante (or Janteloven).
4. Screening the data.	At this point, only four articles from the study selection were retrieved, and this step was skipped.
5. Readings	Reading the final articles more carefully and summarizing.
6. Summarizing and reporting results	Extracting the summary, providing a broad overview of the final literature (see chapter 4).



Protocol Scoping review – paper III

1. Key words – search and results SCOPUS	KEY WORD: darwinian* AND communitarian* AND missionary*: 9 documents
	KEY WORD: darwinian* AND communitarian* AND missionary* AND founder* AND social* AND identity*: 6 documents
1. Key words – search and results Web of Science	KEY WORD: darwinian* OR communitarian* OR missionary*: 14 545 documents
	KEY WORD: darwinian* OR communitarian* OR missionary* AND founder* AND social* AND identity*: 7160 documents
Adding filter “Research areas”	Business economics OR Philosophy OR Behavioral Sciences OR Psychology OR Sociology OR Agriculture: 2 051 documents
Adding filter “Research domains”	Social Sciences: 1268 documents Note: The added filters did not narrow down the search as expected and were removed.
2. Identifying relevant studies	Saving the first 100 hits from Web of Science, adding the 9 from Scopus, and cross-checking results for doubles. Exclusion criteria: all journal papers published earlier than 2012. Inclusion: All countries/regions Language: English
3. Study selection	Exclusion: abstracts failing to contain one or more primary key words: Darwinian, Communitarian, and/or Missionary.
4. Screening the data.	At this point, only four articles from the study selection were retrieved, and this step was skipped.
5. Readings	Reading the final articles more carefully and summarizing.
6. Summarizing and reporting results	Extracting the summary, providing a broad overview of the final literature (see chapter 5).



3. Utilize farm entrepreneurship

Chapter 3 starts with a brief background describing the origins of paper I. This is followed by paper I and the sandwich model described in the first chapter. The sandwich model was adopted to make it easier for the reader to move between the current paper, discussion and self-reflection and is aided by the following sub-sections: results from the scoping review, positioning of paper I, and an extended part on self-reflection. It reflects my thoughts on operationalization and problematization, and the learning process that took place. The chapter ends with suggestions on avenues for future research.

3.1 Paper I. Farmers' strategic responses to competitive intensity and the impact on perceived performance

This first paper is based on a project grant from the Foundation for Agricultural Research (SLF), with the purpose of this project being to develop an Agricultural Management Index (AMI). Paper I was limited to investigate what advantage Swedish farmers saw from strategic choice when faced with competitive intensity. The data was collected using a survey sent to a sample of Swedish farmers between August and September in 2017.

Partial results from this research were presented at the International Farm Management (IFMA21) conference in Scotland in 2017, at the Alnarp conference in 2018 (Consumer trends and entrepreneurship) and at the AAFA Annual Meeting in Atlanta, GA in 2019. The results generated interest in different agricultural forums such as from the "Entrepreneurship in Swedish Agriculture" Podcast with Länsförsäkringar Bank (2018), an article in *Tidningen Lantmästaren Research on the future systems of farming* (2018), and *Farmers 'good luck' is a myth in leadership in farming*" (*Tidningen Chef*, 2018).

While the response from popular media was encouraging, the feedback received from academic conferences highlighted the need to narrow the scope. Consequently, paper I was delimited to examining how perceptions of competitive intensity influenced farmers' strategic orientations, and, in turn, how different strategic orientations affected farm performance.



Farmers' strategic responses to competitive intensity and the impact on perceived performance

Jozefine Nybom¹  · Erik Hunter¹  · Eric Micheels²  · Martin Melin¹ 

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Abstract

A large percentage of small- and medium-sized farms have ceased operations in the last 2 decades in part due to their inability to respond to increased competitive intensity. Consequently, the strategic responses farmers adopt to competitive intensity are important to understand as they may influence performance and ultimately their survival. Based on a sample of 388 randomly selected farmers in Sweden and using structural equation modelling, we find that as perceptions of competitive intensity increase, so does their market orientation (MO) and lean production orientation (LPO), but not entrepreneurial orientation (EO). Moreover, we find that farmers who indicate greater (in order of importance) MO and LPO report better overall performance, while increased EO surprisingly contributes negatively to performance. Our findings contribute to the limited body of research on strategic responses to competitive intensity in the agricultural sector and subsequent payoff on farm performance.

Keywords Entrepreneurial orientation · Market orientation · Lean production orientation · Competitive intensity · Subjective performance · Agriculture · Farming

✉ Jozefine Nybom
jozefine.nybom@slu.se

Erik Hunter
erik.hunter@slu.se

Eric Micheels
eric.micheels@usask.ca

Martin Melin
martin.melin@slu.se

¹ Department of People and Society, Swedish University of Agricultural Sciences, PO Box 190, 234 22 Lomma, Sweden

² Department of Agricultural and Resource Economics, University of Saskatchewan, Room 3D14, Agriculture Building 51 Campus Drive, Saskatoon, SK S7N 5A8, Canada

Introduction

Similar to what has been occurring in other developed economies, there has been a significant decline in the number of farms in Sweden since the 1960s (SBA 2009). While the total number of farms has declined by 83%, the number of large farms, defined as farms over 50 hectares has increased by 137% as of 2007. At the same time, the price of land has increased by 87% from 2008 to 2018, while out-price indices have been variable (SBA 2019a). For example, the output price index increased 21% from 2015 to 2018 but declined by 11% from 2018 to 2019 (SBA 2019b). In such highly competitive environments, producers may search for increased returns in a variety of areas. Two broad strategies are to become more efficient or to move closer to the customer. The question before managers and policy-makers is what strategies are adopted and what are their payoffs to performance?

Porter (2008, 1991, 1985) described two main methods of improving performance. When faced with increased competition, Porter suggested that firms could either become more efficient or they could endeavor to differentiate their production to potentially earn higher prices for their production. These two broad strategic choices have been extensively studied in areas outside of agriculture (Takata 2016; Stonehouse and Pemberton 2002; Yamin et al. 1999). It has only been relatively recently, however, that researchers have examined the factors that might influence these choices within agriculture. For example, Mirzaei et al. (2016) found that market-oriented firms had better marketing outcomes among Ontario farms that differentiated by marketing channel. Other work has also shown that differentiation strategies can pay off for farms investing in this strategy (Levi et al. 2019; Meraner and Finger 2019; Bauman et al. 2018). Similarly, previous research has found farms having an entrepreneurial orientation tend to benefit financially in the long run with their entrepreneurial efforts (Grande et al. 2011). However, the pay-off of a strategic orientation depends on contextual factors such as competitive intensity and managerial ability (see, e.g. Jaworski and Kohli 1993).

It is clear that efficiency or differentiation strategies play an important role in financial performance. However, the strategy (farm) organizations adopt is not relegated to one or the other; rather, they can be expected to pursue multiple strategies in parallel (see, e.g. Mavondo et al. 2005) related to improving efficiency or diversification and for different contextual reasons such as perceptions of competitive intensity. Consequently, responses to competitive pressures and financial performance outcomes can be better understood when different strategic orientations (e.g. efficiency and differentiation) are modelled together (see, e.g. Al-Henzab et al. 2018; Baker and Sinkula 2009).

Surprisingly, the literature on differentiation strategies such as market orientation and entrepreneurial orientation, are rarely studied together with efficiency strategies such as just in time, lean, and total quality management (see, e.g. Liu and Fu 2011; Grinstein 2008; Zelbst et al. 2010). Moreover, studies focused on the relationship between strategic orientation(s) and performance tend to omit

antecedents (such as competitive intensity) driving the strategic orientation(s) (Köhr et al. 2019; Kirca et al. 2005). This limits the understanding of producers' actual responses to competitive pressure as they would likely have a portfolio approach to competitiveness: some resources are directed toward becoming more efficient, while others are directed to better understanding the needs of the market and acting upon opportunities.

Consequently, the purpose of this paper is to examine how perceptions of competitive intensity influence different strategic orientations and how they in turn affect firm performance. We use survey data gathered from a random sample of 388 Swedish farm producers and measure the competitive intensity they experience and their strategic orientation (i.e. market orientation—a propensity for understanding and catering towards customer needs; entrepreneurial orientation—the firm's proactiveness and risk tolerance towards (innovative) opportunities and lean production orientation—behaviors in the firm that foster efficiency). We then build a structural equation model to test the relationships between perceived competitive intensity and strategic orientation to understand differences in perceived performance.

A confirmatory factor analysis revealed that market, entrepreneurial and lean production orientations represented unique dimensions—however, there was considerable overlap between market orientation and entrepreneurial orientation. To resolve this, entrepreneurial orientation items relating to conservative posture were retained in the final structural equation path model. Our results show that as perceptions of competitive intensity increase, farm producers tend to display greater market and lean production orientations, but not entrepreneurial orientation. The returns to all three strategic choices were significant, however, not in the way predicted. Returns to better understanding the needs of the customer (market orientation) and efficiency (lean production orientation) were positive while being more entrepreneurially oriented had a negative effect on performance.

Frame of reference and hypotheses

Swedish farmers' (much like farmers in the rest of the Western world) operate in highly competitive markets. Since joining the European Union and the opening of markets in the 1990s, Sweden has faced increasing competition from imports and individual companies are surrounded by larger and more efficient competitors. Given the strong competition from European and global competitors, farms must either adapt to the new competitive environment or risk failure. Recent statistics show that the rate of exit continues to be around 6% and is attributed to competitive intensity (Statistics Sweden 2019). Even with significant support through the Common Agricultural Policy, increased competitiveness would suggest that to survive and thrive, farmers in Sweden need to find sustainable ways to improve performance.

Recent work has suggested that increased competitive pressure can trigger changes in the strategic direction of firms, as well as moderate the effectiveness of the actions undertaken by firms. For example, O' Cass and Weerawardena (2010) find that increased competitive intensity increases market-focused learning among a sample of manufacturing and service firms. Given new trade agreements combined

with changes within the EU agricultural sector, Swedish farms are facing an increasingly dynamic market (Konkurrensverket 2011). At the same time, consumer demands continue to evolve, necessitating the need to be continually aware of how a farm's production fits within the broader agricultural value chain. These changes can therefore stimulate strategic changes within agricultural firms to explore new opportunities or to exploit current capabilities in meeting the needs of the market (Abebe and Angriawan 2014).

Competitive intensity (CI) as an antecedent of strategic orientations

Actors in markets embodying high levels of competitive intensity tend to experience fierce competition from a large number of competitors as products are usually interchangeable, offerings easily matched by other actors, and competition is driven by price and cost (see, e.g. Auh and Menguc 2005; Zahra and Covin 1995). Competitive intensity has been modeled by Porter (1985) and others (see, e.g. O'Casey and Weerawardena 2010) as relating to buyer power, supplier power, threat of entry, threat of substitution, and rivalry. More competitive industries would have greater pressures from one or more of these forces. Others have focused mainly on the issue of rivalry when studying competitive intensity (Feng et al. 2019). In our context, we view competitive intensity as a combination of price intensity, competitor strength and ease with which products can be replaced.

The entrepreneurship and marketing literature has tended to focus on competitive intensity as a moderator between a market orientation (MO) and profitability. In highly competitive industries, for example, the benefits of having a high MO outweighs its costs. However, in other situations, such as where a company has a monopoly or where competition is not intense, having a high MO may not be strongly related to profitability (Kohli and Jaworski 1990). When the focus of research is on comparing industries or sectors that have large variation between competitive intensity, treating competitive intensity (CI) as a moderator can reveal under which conditions firms benefit from different strategies such as MO, entrepreneurial orientation (EO), or lean production orientation (LPO). However, and arguably, treating CI as a moderator within industries where competitive intensity is more uniform, such as farming, is less interesting.

Nevertheless, within a specific industry variation in how a firm chooses to respond can be expected to be based on perceived competitive intensity. When based on perceptions, competitive intensity can also be viewed as an antecedent variable. That is, CI may influence the development of different strategies to counter hostile operating environments. In fact, Lusch and Laczniak (1987) demonstrated that increased perceptions of competitive intensity (by Fortune 500 executives) led to more market-oriented behaviors. Similarly, increased perceptions of CI have been shown to increase export entrepreneurship (Navarro-García et al. 2015) and have been tested (but not confirmed) for its positive effect on EO in the pharmaceutical industry (Jambulingam and Doucette 1999). The common denominator between MO and EO studies that have CI as an antecedent is the suggestion that competition forces companies to be more aware of their customer needs and competitors (MO)

and to take risks by exploiting opportunities (EO). Agricultural producers, however, tend to view the path to improved performance through improved efficiency (Hansson 2007; Van Passel et al. 2006). In this manner, farms may seek to become more efficient through standardization processes which seek to identify best practices and to ensure they are practiced by all family members and employees on the farm.

Though we are unaware of previous research that has explored the relationship between perceived CI and increases in MO or EO in the agricultural sector, we hypothesize that the logic should be similar. That is, increased perceptions of CI by farmers should spur increasing levels of EO and MO as a result. Moreover, countering CI through increased entrepreneurship and marketing orientation is a topic heavily promoted by the government and NGOs in Sweden (see, e.g. Regeringen 2017). Finally, rationalization and structural changes witnessed across the world in agriculture are direct results of efforts to increase production efficiency in the face of increased competition (Hendrickson et al. 2014; Weis and Weis 2007). It follows, therefore, that as farmers perceive higher levels of CI, they will be more likely to be engaged in activities that improve their efficiency (later described and operationalized as LPO). Taken together, we hypothesize that increased perceptions of CI will lead to increases in market, entrepreneurial and lean orientations as follows:

H₁: An increase in perceived competitive intensity is associated with an increase in the level of lean production orientation.

H₂: An increase in perceived competitive intensity is associated with an increase in the level of entrepreneurial orientation.

H₃: An increase in perceived competitive intensity is associated with an increase in the level of market orientation.

Lean production orientation (LPO) and subjective performance

In commodity markets where prices are set in global markets, increases in net income are largely driven by efficiency gains that lower per unit costs of production. Agricultural firms have often focused on the adoption of new technologies that have been developed outside the farm gate to achieve this goal, but these gains are often short-lived, and the developer of the technology often takes a considerable share of any projected gains in efficiency. Internal innovation practices are another means to increase efficiency. This follows the work by Karlsson and Åhlström (1996) who define lean production systems along a variety of practices aimed at improving production efficiency. Moreover, research has shown that involving employees and others in decision-making processes and worker autonomy can lead to improved production outcomes (Kalleberg et al. 2009).

Given the nature of agricultural markets, farmers are continually searching for the means to increase efficiency. Work by Hansson (2007) showed that there is significant room for efficiency gains among farms in Sweden. While Hansson (2007) suggested that the CAP may reduce the necessity to seek improved efficiency in firms who do not meet their performance goals, they can choose to invest valuable resources in becoming more efficient thereby lowering their break-even price and allowing them to cover costs of production as greater levels of competition and

innovation pushes equilibrium prices lower. Recent studies have shown that investing in lean production systems, even incrementally, may lead to improved financial performance in markets where competitive dynamics have changed (Barth and Melin 2018; Shah and Ganji 2017).

Lean production systems balance worker autonomy with process standardization. The ability to stop the assembly line is based on worker autonomy, but the idea of assembly line itself is based on task standardization (Míkva et al. 2016). For firms with employees, standardizing practices ensure that tasks are repeatable and that outcomes fall within acceptable tolerance levels. A core tenet of lean philosophy is to reduce waste and embrace a “just-in-time” production system, including continuous improvements that will add value in every step (Ohno 1988). The promise of lean production is improved productivity (Lewis 2000), enhanced quality, shortened lead times, reduced costs (Karlsson and Åhlström 1996), reduced waste and improved operational effectiveness (Roriz et al. 2017) which contributes to desired improvements in the quality process. In this paper, we define a lean production orientation as one that standardizes production processes to reduce waste and improve efficiency.

Increases in efficiency gained through the standardization of practices should theoretically lead to better financial performance. However, the positive association between lean practices and increased performance has not always received empirical support. This may be due to differences in measurement or intervening variables such as non-financial measures (Fullerton and Wempe 2009). Nevertheless, even if lean business practices increase the risk of, e.g. ill-health (Landsbergis et al. 1999), especially in dangerous occupations such as farming (see, e.g. Alwall et al. 2019; Hall 2007), the literature and widespread adoption seem to support the aggregate cost–benefit to performance. Consequently, we propose that farms that adopt a LPO will have better performance measures than those that do not. Moreover, we expect to find this effect to be independent of and in addition to the differentiation strategies we discuss in the next section.

H₄: An increase in lean production orientation is associated with an increase in firm performance.

Entrepreneurial orientation (EO) and subjective performance

Entrepreneurial orientation refers to an organizational mindset that promotes ongoing autonomy (Anderson and Eshima 2013), innovativeness, risk-taking, proactiveness (Wiklund 1999), and competitive aggressiveness (Anderson and Eshima 2013; Lumpkin and Dess 2001, 1996). It is this mindset that forms the basis for entrepreneurship in organizations—that is the new entry of goods and services into new and existing markets (Lumpkin and Dess 1996). Despite conflicting evidence in individual studies, the body of research suggests that an EO has positive implications for performance. For example, Naldi et al. (2007) could not find support for a significant relationship between entrepreneurial orientation and performance in small family businesses. However, Grande et al. (2011) found EO paid off financially in farm-based ventures over time. Building on the knowledge available, Rauch et al. (2009)

concluded from a meta-analytical study of 53 samples that EO has positive—and moderately large—performance implications for businesses across cultures, operationalization of the construct, and time.

Within agricultural markets, entrepreneurial actions may be evident in both input and output markets. For example, in commodity markets, much of the competition among producers is for inputs (e.g. highly productive land; quality employees). On the other hand, firms that seek to differentiate their production may develop new products or seek to operate in new markets or channels (Mirzaei et al. 2016). Regardless, being proactive in the search and acquisition of valuable inputs or the development of innovative methods to market agricultural production should ultimately lead to improved performance through greater efficiency or increased revenues. Given this, we propose that:

H₃: An increase in entrepreneurial orientation is associated with an increase in firm performance.

Market orientation (MO) and subjective performance

A market orientation has been defined by Slater and Narver (1994) as an organizational culture focused on the discovery of customer needs. Through a greater understanding of the customer and the strengths and weaknesses of other firms in the market, market-oriented firms may develop strategies that can lead to improved performance. Even in agricultural markets where production from one farm is indistinguishable from another, research has shown that firms who better understand the needs of their buyer have improved performance (Micheels and Gow 2015; Verhees and Meulenbergh 2004).

Production agriculture has long been a near textbook case of a perfectly competitive market. In typical agricultural commodity markets, farm businesses compete with firms with similar resource endowments and similar constraints to sell agricultural commodities (which are undifferentiated by definition) to processors and retailers. Through a combination of exit and mergers and organic growth, many agricultural landscapes are now populated by fewer and larger firms. At the same time, the needs of value chain participants have evolved to reflect the changing needs of consumers. Increasingly, agricultural value chains are attempting to compete with competitors based on measures of environmental sustainability, increased animal welfare, degree of localness, as well as price. For agricultural producers operating within these value chain systems, greater competition at the production level may lead to greater pressures on firm performance. As suggested by Levinthal and March (1993), search is a function of aspirations, and the ability of the firm to meet performance goals. Alternatively, agricultural firms facing increased competition could focus on developing a differentiated value offering based on their unique ability to help the value chain meet customer needs. As downstream firms face greater competition due to mergers and acquisitions, greater competition from international firms, and changing consumer demands, firms who can better understand their buyer (and their buyer's customer) may find that performance can also be improved in this manner. Recent studies have shown that market-oriented firms in agricultural markets

can improve performance through greater learning about customer needs (Micheels and Gow 2015; Gellynck et al. 2012) even though other studies have shown that issues surrounding legitimacy may inhibit the development of a market orientation (Press et al. 2014). Based on this, we hypothesize that:

The hypotheses introduced in this section are modelled in Fig. 1. The structural model suggests that increased competitive intensity leads to increases in three different strategic orientations—LPO, EO, and MO—that in turn, and in parallel are expected to increase perceptions of firm performance.

Methods

Sample and procedure

A list of all active farmers in Sweden was retrieved from the Statistics Bureau in Sweden (SCB). This list contained a total of 62,095 farmers and included contact information and basic demographic information about e.g. sector focus, size of the farm in terms of area, and age. Farm units with less than 10 hectares and farms categorized as “Smallholders” by SCB were removed from sample consideration. This was done to avoid collecting data on “hobby farmers” who are over-represented among small-landholders who do not consider farming as their main occupation and often produce for their own needs rather than for profit. Of the remaining 29,295 farmers, 1,952 were randomly selected and sent a pen-and-paper questionnaire via the postal service with a return envelope and pre-paid postage. After four weeks, a single reminder, also by post, was sent to those who did not respond to the initial survey.

Participants were told that the questionnaire was used to gather benchmark data of managerial activities in agriculture and answers they provided would be treated

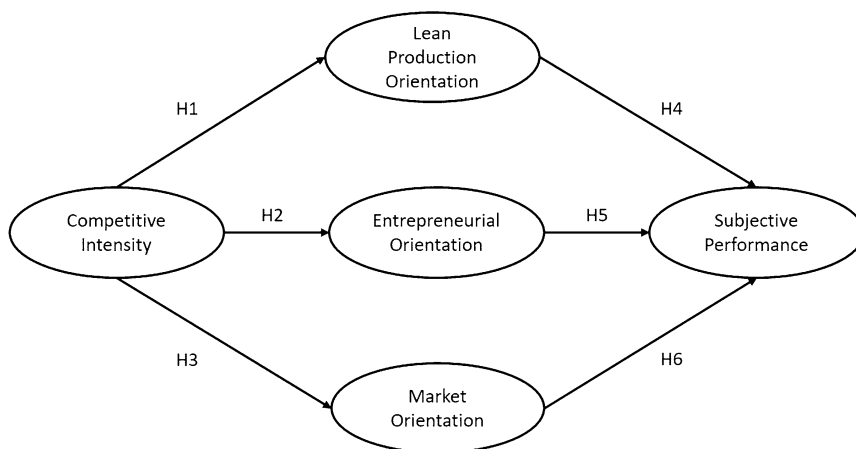


Fig. 1 Structural model

anonymously and reported in aggregate to make identification impossible. Instructions in the survey asked that it be filled in by the person most responsible for making strategic decisions on e.g. investments and production. Finally, all participants were informed in writing that responding to the survey was completely voluntary. A pre-test of the questionnaire was conducted by a small group of students with farming experience ($N=10$) to improve reliability (e.g. by flagging confusing language or unclear instructions; ensuring concepts were understood; structure was easy to follow, etc.). In total, 388 completed surveys were returned for a response rate of around 20%. Due to an extensive area, Sweden is divided into regions where livestock is the most dominant in the central districts of the country, and crop production dominated the south (plain district), and the forest district is represented by a majority of smaller farm holdings (Statistics Sweden 2019). On average farmers in Sweden are 57 years old with males representing 88% of farmers (Statistics Sweden 2019). In comparing the known population of Farmers in Sweden with our sample data, we find that in terms of gender and age, size (ha), production district, and education, there are no significant differences (see Table 1).

Measurements

For a complete list of the questions used to measure competitive intensity, LPO, EO, MO, and subjective performance the reader is directed to ESM Appendix. All items were translated from English to Swedish and measured on 7-point Likert scales with end points strongly disagree = 1 and strongly agree = 7. Below, the choice of operationalization is motivated.

Subjective performance (SP)

While performance is often captured using objective financial measures such as ROA (Dess and Robinson Jr. 1984), growth in sales (Pearce et al. 1987; Dess and Robinson Jr. 1984), profit (Wall et al. 2004) they are more difficult to attain, evaluate and potentially less accurate than subjective measures (Rowe and Morrow Jr. 1999). Previous research has shown remarkable correlation between objective and subjective measures of performance (Pearce et al. 1987; Dess and Robinson Jr. 1984)

Table 1 Socio-demographic characteristics of respondents

Gender (%)	Male	88.4	Education (%)	Primary school	20.6
	Female	10.8		Secondary school	43.0
Age	Average	56.7		Higher education	36.4
Size (ha)	Average	132.8	Production (%)	Conventional	77.6
Production district (%)	Plain district	22.7		Organic	20.6
	Central districts	40.5			
	Forest districts	35.6			

and therefore some researchers advocate the use of subjective measures (Slater and Narver 1994).

For the aforementioned reasons, performance was measured subjectively and operationalized using seven items developed by Micheels (2010) and one item from Pearce et al. (1987). These items captured responses to questions related to whether return on assets, investments, and marketing met expectations; more global questions related to performance in the previous year based on expectations or when compared to major competitors; questions about cash flow and sales growth were also measured. Together, these questions on subjective performance were intended to capture multiple aspects of financial and market performance. See ESM Appendix for a full list of items used to measure subjective performance.

Competitive intensity, EO, MO, and LPO

Measures for LPO, MO, EO and CI were taken from previously published scales and adjusted slightly to fit an agricultural context. LPO was captured using 11 measurement items and took inspiration from Karlsson and Åhlström (1996). The key elements of LPO are activities related to reducing costs and improving profit margins (Zhou 2016). However, much of the literature and operationalization of lean were developed in the field of operations management and in the context of large manufacturing organizations. As a result, efforts were made to keep the items for LPO as similar as possible to the ones borrowed from Karlsson and Åhlström (1996). In total, 16 items were used to capture MO. These were inspired by the seminal Narver and Slater (1990) article but based on Micheels (2010) adaptations made for the agricultural sector. The items correspond to three dimensions of MO, i.e., customer orientation, competitor orientation and inter-functional coordination. Eight items intended to measure EO were taken from Covin and Slevin (1989) and deal with strategic posturing or activities the firm typically engages in such as innovation, proactiveness, and risk-taking. Even though competing models of EO have been presented in the literature, Covin and Slevin (1989) were used because it was developed for studying small (rather than large) firms and has been validated repeatedly over the last few decades. The items retained in the model measuring EO include five items and capture at least one item related to innovativeness, proactiveness, and risk-taking (and subsequently recoded so that agreement on the items reflected increasing EO). CI was developed using one item from (Gatignon and Xuereb 1997) relating to a rapidly declining market and seven items from Jaworski and Kohli (1993) corresponding to demand uncertainty and the perceived intensity of external competitors and market prices.

Reliability and validity

The reliability and validity of the measurement scales were tested using SPSS 24 and AMOS 24. Table 2 shows factors loadings for the retained items used in the model. Factor loadings at 0.5 are accepted, but values over 0.7 are preferred (Hair et al. 2014). To measure for internal consistency, Cronbach alpha was used

Table 2 Factor loadings of the items including Cronbach's α and Corrected item-to-total correlations (for all items in the questionnaire, see ESM Appendix)

Constructs	Items	Factor loading		Cr. alpha	Corrected item total correlations	AVE	Square root of AVE
		1	2				
Competitive intensity (CI)	CI1	0.841		0.767	0.623	0.684	0.827
	CI2	0.820			0.592		
	CI3	0.820			0.593		
Lean production orientation (LPO)	LPO1	0.873		0.844	0.645	0.627	0.792
	LPO2	0.839			0.698		
	LPO3	0.774			0.657		
	LPO4	0.680			0.611		
	LPO5		0.837		0.587		
	LPO6		0.835		0.637		
	LPO7		0.683		0.391		
Entrepreneurial orientation (EO)	EO1	0.782		0.738	0.588	0.495	0.704
	EO2	0.730			0.535		
	EO3	0.683			0.486		
	EO4	0.671			0.462		
	EO5	0.644			0.449		
Market orientation (MO)	MO1	0.803		0.876	0.671	0.604	0.777
	MO2	0.771			0.612		
	MO3	0.733			0.582		
	MO4	0.726			0.699		
	MO5	0.654			0.622		
	MO6		0.874		0.677		
	MO7		0.874		0.686		
	MO8		0.755		0.563		
Subjective performance (SP)	SP1	0.879		0.850	0.705	0.942	0.835
	SP2	0.842			0.606		
	SP3	0.824			0.737		
	SP4	0.739			0.534		
	SP5		0.914		0.539		
	SP6		0.855		0.622		
	SP7		0.784		0.538		

as measurement. Acceptable values for internal consistency range from 0.70 (Hair et al. 2014) to 0.95 (Tavakol and Dennick 2011). Low values could indicate poor correlation or poor inter-relatedness between items and should be discarded, while if Cronbach alpha is too high this could be an indication of items testing the same thing and therefore a maximum Cronbach alpha of 0.90 has been recommended (Tavakol and Dennick 2011). The results meet the threshold for internal consistency with Cronbach alpha values that range from 0.738 to 0.876. Item-total correlations

less than 0.3 were removed in accordance with Rodriguez-Blazquez et al. (2011); Cristobal et al. (2007) since they are likely to measure different construct from other items in the scale.

To assess convergent validity, i.e. the amount of variance captured by each construct, average variance extracted (AVE) values were calculated. The AVE value should exceed 0.50 (Fornell and Larcker 1981), and an AVE < 0.50 indicates on average more errors remain than variance explained (Hair et al. 2014, 2011). To test for common method bias (CMB), Harman's single factor test was conducted in SPSS. One factor stood for 22% of explained variance. This indicates that CMB exists; however, it does not exceed the commonly accepted threshold value of 50% (Eichhorn 2014) and, therefore, no further actions are necessary (Podsakoff 2003). Table 3 shows descriptive statistics of constructs being significantly correlated to each with the Pearson Correlation Coefficients ranging between -0.050 to 0.590. Previous researchers have pointed out considerable conceptual (Jones and Rowley 2011) and empirical (Kwak et al. 2013; Sciascia et al. 2006) overlap between EO and MO. In retaining EO items mostly related to conservativeness or risk-taking, such as "my firm typically embrace(s) low risk projects...and typically avoids high-risk projects" (see ESM Appendix), we avoid conceptual overlap with MO items that were mostly related to customer orientation and interfunctional coordination. Importantly, we found no indication of multicollinearity in the retained items used to capture the constructs as the correlations were less than 0.90 (Hair et al. 2014).

Results

The structural model was analyzed using SPSS 24 and AMOS version 24. Structural equation modelling (SEM) was used to test the structural model (Fig. 1) and the relationship between latent constructs (Ullman and Bentler 2003). SEM is a multivariate technique that provides a simultaneous estimate that a single multiple regression or a single factor analysis does not (Weston and Gore Jr. 2006). Thus, SEM will involve both the structural and measurement model combined and therefore provides a better way of empirically examining the theoretical model (Hair et al. 2014; Weston and Gore Jr. 2006). Further, the strength in using SEM is that the technique allows for measurement errors to be eliminated (Cohen et al. 1990). In

Table 3 Descriptive statistics (mean and standard deviation) and correlation matrix of the constructs

Construct	Mean	SD	1	2	3	4	5
1. Competitive intensity	4.22	1.35	1				
2. Lean production orientation	3.52	1.34	0.216**	1			
3. Entrepreneurial orientation	4.03	1.20	-0.016	-0.184**	1		
4. Market orientation	3.46	1.21	0.219**	0.517**	-0.190**	1	
5. Subjective performance	4.06	1.09	-0.049	0.271**	-0.199**	0.423**	1

**Correlation is significant at the 0.01 level * Correlation is significant at the 0.05 level

addition, SEM allows for flexibility in the interplay between theory and data and the outcome represents a more complex theoretical model (Chin 1998).

Model fit

Figure 2 shows the structural model of the effects from competitive intensity on Swedish farmers’ strategic response and the return on their estimated performance. To determine model fit we used common indices. Chi-square (X^2) is a method to assess model fit and in a good fitting model, the chi-square value should be non-significant (Hooper et al. 2008). Because chi-square value can be sensitive to sample size (Hooper et al. 2008) additional indices assessing model fit have been used. Some common indices used include the Tucker–Lewis Index (TLI), Comparative Fit Index (CFI) and root mean square error of approximation (RMSEA) and Standardized Root Mean Square (SRMR) (Hair et al. 2014). General threshold values for a good model fit for interpreted indices are $TLI > 0.95$, $CFI > 0.95$, $RMSEA > 0.08$, and $SRMR \leq 0.08$. SRMR values range from 0 to 1.0, where 0.05 is considered a well-fitted model, whereas 0.08 is acceptable (Schreiber et al. 2006).

Our results show an acceptable model fit. The X^2 measure is 1171.41 and is non-significant with 374 degrees of freedom. From the test for discrepancy between the hypothesized model and the data, CFI turned out to be 0.852, indicating an acceptable fit. The relative fit indices, TLI, is 0.827 which is an acceptable fit. The parsimony-adjusted index, RMSEA, that corrects for model complexity is 0.06 which represents a moderate fit. The calculated SRMR value of 0.1232 turns out to exceed the threshold value for even a mediocre fit. This could indicate that the hypothesized model may be too parsimonious. Table 4 shows the results from the path diagram and indicates that the data in general supports the hypothesized structural model.

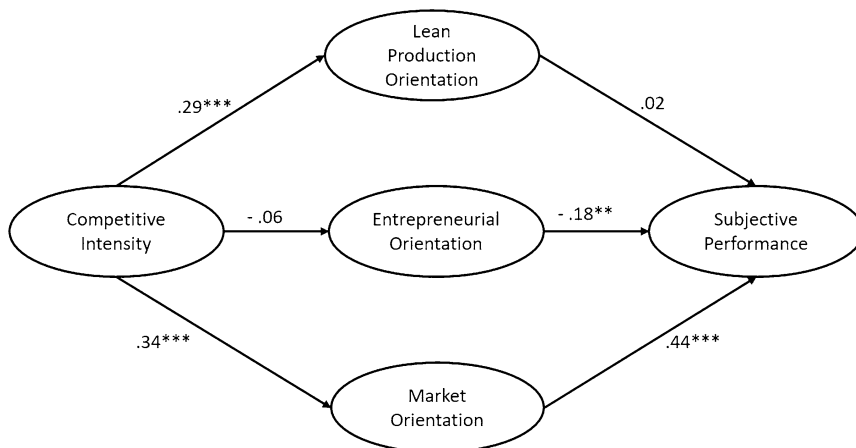


Fig. 2 Structural model of the effects from competitive intensity on Swedish farmer’s strategic response and return on subjective performance. Overall model fit: Chi-square = 1171.41 $df = 374$ CFI = 0.852 TLI 0.888 RMSEA = 0.0740 SRMR = 0.1232

Table 4 Results from path diagram

Latent construct	Influence	Hypothesis	Hypothesis supported	Estimates	Std. errors	Multiple sq. correlations
LPO	← CI	H1	Yes	0.223	0.056	0.083
EO	← CI	H2	No	− 0.034	0.043	0.003
MO	← CI	H3	Yes	0.298	0.066	0.118
SP	← LPO	H4	Yes	0.088	0.053	0.1
SP	← EO	H5	No	− 0.224	0.087	0.1
SP	← MO	H6	Yes	0.384	0.061	0.1

The SEM results in Fig. 2 and Table 4 indicate that CI has a positive effect on MO (H3 supported) having the highest standardized coefficient value (0.35) followed by LPO (0.32) (H1 supported). However, CI does not appear to influence EO (H2 rejected) as the standardized coefficient is non-significant at -0.03 . Looking at the different strategic orientations, MO appears to have a positive, medium effect, on SP (0.27) followed by LPO at 0.12. Surprisingly, EO was significantly, but negatively related to SP (-0.18). Based on this, we find support for H4 and H6, but not H5. Although the results for H5 are significant, the finding is inconclusive since we operationalized, in line with extant literature, EO as having a positive relationship with performance. Taken together, the results suggest that when farmers perceive increased CI, they tend to increase their LPO and MO, but not EO. At the same time, the results also suggest that each of the strategic orientations influences perceived performance with MO having the largest effect followed by LPO and a surprising negative effect for EO.

Discussion and conclusions

The purpose of this paper was to examine how perceptions of competitive intensity influence different strategic orientations and how they in turn affect firm performance. In doing this, we confirmed that two of the strategic orientations measured, MO and LPO were related to increased perceptions of performance; unexpectedly, EO was negatively related to performance. Our structural model also revealed that the strategic paths farmers chose when CI increased tended to include MO and LPO, but fittingly perhaps, not EO.

This research contributes to an understanding of how farmers strategically respond to competitive intensity and in turn how this influences their performance. Previous research in this area has tended to focus on linear relationships between, e.g. MO and firm performance, rather than on how different strategic orientations work in parallel (Hernández-Linares et al. 2018). We suggest that the structural model used in this study comes closer than previous studies in mimicking farmers' strategic, "portfolio" response to competitive intensity and the performance "pay-off" that flows from their choices. In addition to confirming the independent nature of the MO, EO, and LPO factor structures, we also showed the relative importance

(i.e. effect size) of each strategy orientation on performance under conditions of competitive intensity.

Porter (1991) suggests that firms could either become more efficient or attempt to differentiate production facing increased competition. In line with this, our results show that Swedish farmers turn to both as perceived CI increases. Although an increase in LPO was shown to contribute to improved performance, the effect size was smaller than turning to increased MO. One reason for this result may be related to the law of diminishing returns—e.g. farmers have focused on improving efficiency for decades (Hendrickson et al. 2014; Welter 2011; Qualman and Tait 2004) therefore marginal gains may be easier to achieve through orientations directed at better understanding the buyer and downstream customer needs (Assuncao and Ghatak 2003). Nevertheless, the importance of LPO on performance, in particular as we have measured through standardized routines and following up those routines with employees should not be understated and may become more important over time. Currently, the average Swedish farm has the equivalent of 1.3 employees, not including family members or temporary and seasonal workers (Sweden Statistics 2019). Due to structural change and rationalization, the average farm size (in Sweden and Worldwide) has increased, as has the movement of migrant laborers which currently is estimated to be 15,000 working in Swedish agriculture. Efficiency can be expressed in different ways. However, having temporary and external employees during peak season highlight the need for developed routines to minimize mistakes since mistakes can have a great impact on margins. Therefore, well-developed routines (i.e. lean production routines) should minimize the risk of mistakes by employees and thereby improve efficiency.

MO promotes, e.g. new revenue opportunities in less competitive arenas that allow the farmer to sell at a higher price, or to produce products for alternative markets (e.g. barley for the beer or whisky industry). LPO and the cost benefits that accrue from such a strategy may instead promote expansion and larger production units. However, bigger units come with a cost such as different expectations on leadership and management (Assuncao and Ghatak 2003). To keep up cash flow in bigger units the farmer must be able to coordinate different events in the market, and market intelligence becomes important. Interestingly, our findings show that returns to EO, even when accounting for the variance captured by MO and LPO, are significant and display a larger effect size than LPO. This indicates that producers do not necessarily need to take significant risk when attempting to improve performance outcomes. On the contrary, the effect we found for EO suggests that taking large risks, being competitively aggressive, and ignoring caution is negatively related to performance. This unexpected finding seems to contradict previous EO research on farm businesses that show a positive effect on firm performance (see, e.g. Gellynck et al. 2015; Veidal and Flaten 2014; Grande et al. 2011). This difference may be explained by the Swedish farm context used to gather data or the combination of strategic orientations captured in this study; nevertheless, this has important implications for policy-makers, farm organizations, and advisors who regularly advocate entrepreneurship as a pathway towards increased competitiveness and survival (see, e.g. Regeringen 2017; Regeringen 2015; EU 2013; EU 2011).

Policy makers often assume that increased production, efficiency, market orientation, and entrepreneurship is the solution to agricultural competitiveness (Regeringen 2015). However, to our knowledge, no research has so far sought to understand how farmers act when competition increases from the perspective of multiple strategic choices. The EU continues to push for an increased MO-responsiveness from farmers. In the overview of CAP-reform 2014–2020, the Commission stated that "... to enhance market orientation of EU agriculture is continued by adapting the policy instruments to further encourage farmers to base their production decision on market signals" (EU 2013; p. 5). This statement is likely true, but it needs more context to achieve the intended results. First, farmers already respond and make decisions on market signals. We see this each spring when farmers make allocation decisions regarding which crops to seed for the upcoming season. Moreover, increasing market orientation does not mean that new product innovation means moving closer to the consumer. This is discussed by, e.g. Grunert et al. (2010) who suggested that producing a high-quality and homogeneous raw product (such as milk, grain, meat, etc.) is an example of an MO-response. In this manner, the market or channel is signaling their needs in terms of quality, quantity, and other characteristics (time of delivery, residue limits, etc.). Thus, market-orientated farmers are well positioned to identify such needs, which are in line with our findings. MO captures activities such as visiting customers to learn more about their needs, gathering intelligence on competitors, and sharing information in the company to produce products that target the right markets or are better tailored to match customer needs. While all of these activities are entrepreneurial in nature, they are less risky than the behaviors captured by an EO which includes, e.g. making major changes to product offerings or even launching completely new ones. A strategic orientation combining EO and MO brings Sarasvathy's (2001) theory of effectuation to mind. Effectuation describes an approach to making entrepreneurial decisions that includes using only those resources available (bird-in hand) and investing only as much as you are willing to lose (affordable loss). In other words, the relationship we found between a strategic orientation, showing negative EO effects, combined with pro-MO leading to greater performance may be due to farmers risking only what they could afford with the means they had available.

The results for EO do not imply that farmers avoid entrepreneurial behavior or entrepreneurial orientations; however, we can say that EO does not appear to be triggered by differences in competitive intensity perceptions. This result runs counter to strategic recommendations by, e.g. researchers Engelen et al. (2015) and Porter (2008) and, e.g. E.U. governments (EU 2011). It may be the case that (Swedish) farmers tend to avoid risky entrepreneurial behavior under all perceived levels of competitive intensity or simply when competitive intensity is high. An argument could be made that focusing solely on improving production orientation or market intelligence under intense competitive situations will not be enough to survive in the long run. Should future research establish such a connection, the challenge becomes how to educate and convince farmers on the need to take larger risks in the face of increased competitiveness when a general, low-risk effectuation type strategy, at least in Sweden, appears to have a higher pay-off.

Limitations

Our model proposes that CI is an antecedent to managerial orientations, and LPO, EO and MO as antecedents to SP. However, the results in our model are, to an unknown extent, based on the measurements we retained and omitted. The items kept capture a fragment of the dynamic environment (CI) and reflect how farm managers in Sweden react to external factors. While we argue that we captured EO, the results may be difficult to compare with other studies that made use of all Covin and Slevin (1989) items or those that used semantic differential items to capture EO instead of Likert items. Our operationalization of LPO is focused on assembly-line systems and did not capture practices related to improving biological efficiency through e.g. input usage or technology. Arguably, this may have led to our results underrepresenting the relative importance of lean production as a response to competitive intensity and impact on performance. While production agriculture is not exactly representative of an assembly line, decisions made at different points in the growing season can be sources of cumulative errors. As found by Defflorin and Scherrer-Rathje (2012) a mass producer benefits from a semi-standardized LPO protocol since this opens up for employees to solve problems as they arise in the operational process of work. For example, in agriculture, loading a sprayer with the incorrect chemical can kill the crop rather than the weeds. In this instance, having lean systems in place where managers and employees check that it is the right chemical at the right rate in the right field at the right time might ensure that small mistakes do not become large mistakes.

Main contribution

Arguably, EO, MO and LPO all have an influence on competitiveness and may be approached independently or in combination by businesses trying to increase their competitiveness. Structural changes have created a necessity for farmers to take on trade-off decisions for their business. The main choice is to grow in size and, therefore, benefit from cost-efficiency, or to differentiate and as a result gain a deeper understanding of market mechanisms, what customers want and deliver greater value than competitors. In addition, structural change contributes to an increase in competitive intensity where fewer farm holdings compete with bigger units of produce, which makes it challenging for small farms to compete. Increased competition in a farming context can be understood as a race of cost-efficiency where all farms produce the same quality, meaning there is always a risk for someone else, with different circumstances producing the same at a lower cost. To avoid this race to the bottom, farmers' may consider alternative strategies such as MO that allow them to grow with the market rather than become a victim of structural change and rationalization or avoiding risky entrepreneurial endeavors altogether that may expedite this process.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s43546-021-00078-1>.

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Data availability All data analysed are contained in the paper.

Declaration

Conflict of interest Jozefine Nybom declares that she has no conflict of interest. Erik Hunter declares that he has no conflict of interest. Eric Micheels declares that he has no conflict of interest. Martin Melin declares that he has no conflict of interest.

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References

- Abebe MA, Angriawan A (2014) Organizational and competitive influences of exploration and exploitation activities in small firms. *J Bus Res* 67(3):339–345
- Al-Henzab J, Tarhini A, Obeidat BY (2018) The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance. *Benchmark Int J* 25(8):3117–3142
- Alwall CS, Hunter E, Palsdottir AM (2019) Work safety interventions and threat complexity—a formative investigation into why farmers do not act safely. *Ann Agric Environ Med* 26(2):280–289
- Anderson BS, Eshima Y (2013) The influence on firm age and intangible resources on the relationship between entrepreneurial orientation and firm growth among Japanese SMEs. *J Bus Ventur* 28:413–429
- Assuncao JJ, Ghatak M (2003) Can unobserved heterogeneity in farmer ability explain the inverse relationship between farm size and productivity. *Econ Lett* 80(2):189–194
- Auh S, Menguc B (2005) Balancing exploration and exploitation: the moderating role of competitive intensity. *J Bus Res* 58(12):1652–1661
- Baker WE, Sinkula JM (2009) The complementary effects of market orientation and entrepreneurial orientation on profitability in small businesses. *J Small Bus Manag* 47(4):443–464
- Barth H, Melin M (2018) A Green Lean approach to global competition and climate change in the agricultural sector—a Swedish case study. *J Clean Prod* 204:183–192
- Bauman A, McFadden DT, Jablonski BB (2018) The financial performance implications of differential marketing strategies: exploring farms that pursue local markets as a core competitive advantage. *Agric Resour Econ Rev* 47(3):477–504
- Chin WW (1998) Commentary: issues and opinion on structural equation modeling. JSTOR
- Cohen P, Cohen J, Teresi J, Marchi M, Velez CN (1990) Problems in the measurement of latent variables in structural equations causal models. *Appl Psychol Meas* 14(2):183–196
- Covin JG, Slevin DP (1989) Strategic management of small firms in hostile and benign environments. *Strateg Manag J* 10(1):75–87

- Cristobal E, Flavian C, Guinaliu M (2007) Perceived e-service quality (PeSQ). *Manag Serv Qual Int J* 17(3):317–340
- Deflorin P, Scherrer-Rathje M (2012) Challenges in the transformation to lean production from different manufacturing-process choices: a path-dependent perspective. *Int J Prod Res* 50(14):3956–3973
- Dess GG, Robinson RB Jr (1984) Measuring organizational performance in the absence of objective measures: the case of the privately-held firm and conglomerate business unit. *Strateg Manag J* 5(3):265–273
- Eichhorn BR (2014) Common method variance techniques. Cleveland State University, Department of Operations & Supply Chain Management. Cleveland, OH: SAS Institute Inc, pp 1–11
- Engelen A, Schmidt S, Bushsteiner M (2015) The simultaneous influence of national culture and market turbulence on entrepreneurial orientation: a nine-country study. *J Int Manag* 21:18–30
- EU (2011) The CAP in perspective: from market intervention to policy innovation. Agriculture and Rural Development: European Commission
- EU (2013) Overview of CAP Reform 2014–2020(2018). European Commission. <https://ec.europa.eu>. Accessed 18 Dec 2019
- Feng T, Wang D, Lawton A, Luo BN (2019) Customer orientation and firm performance: the joint moderating effects of ethical leadership and competitive intensity. *J Bus Res* 100:111–121
- Fornell C, Larcker DF (1981) Evaluating structural equation models with unobservable variables and measurement error. *J Mark Res* 18(1):39–50
- Fullerton RR, Wempe WF (2009) Lean manufacturing, non-financial performance measures, and financial performance. *Int J Oper Prod Manag* 29(3):214–240
- Gatignon H, Xuereb J-M (1997) Strategic orientation of the firm and new product performance. *J Mark Res* 34(1):77–90
- Gellynck X, Banterle A, Kühne B, Carraresi L, Stranieri S (2012) Market orientation and marketing management of traditional food producers in the EU. *Br Food J* 114(4):481–499
- Gellynck X, Cárdenas J, Pieniak Z, Verbeke W (2015) Association between innovative entrepreneurial orientation, absorptive capacity, and farm business performance. *Agribusiness* 31(1):91–106
- Grande J, Madsen EL, Borch OJ (2011) The relationship between resources, entrepreneurial orientation and performance in farm-based ventures. *Entrep Reg Dev* 23(3–4):89–111
- Grinstein A (2008) The relationships between market orientation and alternative strategic orientations. *Eur J Mark* 42(1/2):115–134
- Grunert KG, Trondsen T, Campos EG, Young JA (2010) Market orientation in the mental models of decision makers: two cross-border value chains. *Int Mark Rev* 27(1):7–27
- Hair JF, Ringle CM, Sarstedt M (2011) PLS-SEM: Indeed a silver bullet. *J Mark Theory Pract* 19(2):139–152
- Hair JF, Black WC, Babin BJ, Anderson RE, Tatham RL (2014) *Multivariate data analysis*, 7th ed. New International Edition. Pearson Education Limited
- Hall A (2007) Restructuring, environmentalism and the problem of farm safety. *Sociol Rural* 47(4):343–368
- Hansson H (2007) Strategy factors as drivers and restraints on dairy farm performance: evidence from Sweden. *Agric Syst* 94(3):726–737
- Hendrickson M, James HS Jr, Heffernan WD (2014) Vertical integration and concentration in US agriculture. *Encyclopedia of food and agricultural ethics*, pp 1799–1806
- Hernández-Linares R, Kellermanns FW, López-Fernández MC (2018) A note on the relationships between learning, market, and entrepreneurial orientations in family and nonfamily firms. *J Fam Bus Strateg* 9(3):192–204
- Hooper D, Coughlan J, Mullen M (2008) Structural equation modelling: guidelines for determining model fit. *Electron J Bus Res Methods* 6(1):53–60
- Jambulingam T, Doucette WR (1999) Pharmacy entrepreneurial orientation: antecedents and its effect on the provision of innovative pharmacy services. *J Soc Admin Pharm* 16(1):26–37
- Jaworski BJ, Kohli AK (1993) Market orientation: antecedents and consequences. *J Mark* 57(3):53–70
- Jones R, Rowley J (2011) Entrepreneurial marketing in small businesses: a conceptual exploration. *Int Small Bus J* 29(1):25–36
- Kalleberg AL, Nesheim T, Olsen KM (2009) Is participation good or bad for workers? Effects of autonomy, consultation and teamwork on stress among workers in Norway. *Acta Sociologica* 52(2):99–116
- Karlsson C, Åhlström P (1996) Assessing changes towards lean production. *Int J Oper Prod Manag* 16(2):24–41

- Kirca AH, Jayachandran S, Bearden WO (2005) Market orientation: a meta-analytic review and assessment of its antecedents and impact on performance. *J Mark* 69(2):24–41
- Kohli AK, Jaworski BJ (1990) Market orientation: the construct, research propositions, and managerial implications. *J Mark* 54(2):1–18
- Köhr CK, Corsi AM, Capitello R, Szolnoki G (2019) Family culture and organisational systems as antecedents of market orientation and performance among family wineries. *Int J Wine Bus Res* 31(2):180–202
- Konkurrensverket (2011) *Mat och Marknad—från bonde till bord. Rapport 2011:3*. Swedish Competition Authority
- Kwak H, Jaju A, Puzakova M, Rocereto JF (2013) The connubial relationship between market orientation and entrepreneurial orientation. *J Mark Theory Pract* 21(2):141–162
- Landsbergis PA, Cahill J, Schnall P (1999) The impact of lean production and related new systems of work organization on worker health. *J Occup Health Psychol* 4(2):108
- Levi R, Singhvi S, Zheng Y (2019) Economically motivated adulteration in farming supply chains. *Manag Sci* 66(1):209–226
- Levinthal DA, March JG (1993) The myopia of learning. *Strateg Manag J* 14(S2):95–112
- Lewis MA (2000) Lean production and sustainable competitive advantage. *Int J Oper Prod Manag* 20(8):959–978
- Liu B, Fu Z (2011) Relationship between strategic orientation and organizational performance in born global: a critical review. *Int J Bus Manag* 6(3):109
- Lumpkin GT, Dess GG (1996) Clarifying the entrepreneurial orientation construct and linking it to performance. *Acad Manag Rev* 21(1):135–172
- Lumpkin GT, Dess GG (2001) Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle. *J Bus Ventur* 16(5):429–451
- Lusch RF, Laczniak GR (1987) The evolving marketing concept, competitive intensity and organizational performance. *J Acad Mark Sci* 15(3):1–11
- Mavondo FT, Chimhanzi J, Stewart J (2005) Learning orientation and market orientation. *Eur J Mark* 39(11/12):1235–1263
- Meraner M, Finger R (2019) Risk perceptions, preferences and management strategies: evidence from a case study using German livestock farmers. *J Risk Res* 22(1):110–135
- Micheels ET (2010) *Market orientation in production agriculture: measurement, relationships, and implications*. Diss.: University of Illinois at Urbana-Champaign
- Micheels ET, Gow HR (2015) The effect of market orientation on learning, innovativeness, and performance in primary agriculture. *Can J Agric Econ* 63(2):209–233
- Mirzaei O, Micheels ET, Boecker A (2016). Product and marketing innovation in farm-based businesses: the role of entrepreneurial orientation and market orientation. *Int Food Agribus Manag Rev* 19(1030-2016-83118):99–130
- Mílkva M, Prajová V, Yakimovich B, Korshunov A, Tyurin I (2016) Standardization—one of the tools of continuous improvement. *Procedia Eng* 149:329–332
- Naldi L, Nordqvist M, Sjöberg K, Wiklund J (2007) Entrepreneurial orientation, risk taking, and performance in family firms. *Fam Bus Rev* 20(1):33–47
- Narver JC, Slater SF (1990) The effect of a market orientation on business profitability. *J Mark* 54(4):20–35
- Navarro-García A, Schmidt AC-M, Rey-Moreno M (2015) Antecedents and consequences of export entrepreneurship. *J Bus Res* 68(7):1532–1538
- O’Cass A, Weerawardena J (2010) The effects of perceived industry competitive intensity and marketing-related capabilities: drivers of superior brand performance. *Ind Mark Manag* 39(4):571–581
- Ohno T (1988) *Toyota production system: beyond large-scale production*. CRC Press
- Pearce JA, Robbins DK, Robinson RB Jr (1987) The impact of grand strategy and planning formality on financial performance. *Strateg Manag J* 8(2):125–134
- Podsakoff, N. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *J Appl Psychol* 885(879):10.1037
- Porter ME (1985) *Competitive advantage: creating and sustaining superior performance*. University of California Free Press
- Porter ME (1991) Towards a dynamic theory of strategy. *Strateg Manag J* 12(S2):95–117
- Porter ME (2008) The five competitive forces that shape strategy. *Harv Bus Rev* 86(1):25–40
- Press M, Arnould EJ, Murray JB, Strand K (2014) Ideological challenges to changing strategic orientation in commodity agriculture. *J Mark* 78(6):103–119

- Qualman D, Tait F (2004) The farm crisis, bigger farms and the myths of "Competition" and "Efficiency": Canadian Centre Policy Alternatives
- Rauch A, Wiklund J, Lumpkin GT, Frese M (2009) Entrepreneurial orientation and business performance: an assessment of past research and suggestions for the future. *Entrep Theory Pract* 33(3):761–787
- Regeringen (2015) *Attraktiv, innovativ och hållbar—strategi för en konkurrenskraftig jordbruks- och trädgårdsnäring 2015*: SOU
- Regeringen (2017) *En livsmedelsstrategi för Sverige—fler jobb och hållbar tillväxt i hela landet 2016/17*. Swedish Government
- Rodriguez-Blazquez C, Frades-Payo B, Forjaz M, Ayala A, Martinez-Martin P, Fernandez-Mayoralas G, Rojo-Perez F (2011) Psychometric properties of the International Wellbeing Index in community-dwelling older adults. *Int Psychogeriatr* 23(1):161–169
- Roriz C, Nunes E, Sousa S (2017) Application of lean production principles and tools for quality improvement of production processes in a carton company. *Procedia Manuf* 11:1069–1076
- Rowe WG, Morrow JL Jr (1999) A note on the dimensionality of the firm financial performance construct using accounting, market, and subjective measures. *Can J Admin Sci* 16(1):58–71
- Sarasvathy SD (2001) Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Acad Manag Rev* 26(2):243–263
- SBA (2009) Facts about Swedish Agriculture(2019). Swedish Board of Agriculture. <http://www.jordbruksverket.se>. Accessed 18 Dec 2019
- SBA (2019a) Price indices and prices in the food sector—annual and monthly statistics—2019:08 2019). Swedish Board of Agriculture. <http://www.jordbruksverket.se>. Accessed 18 Dec 2019
- SBA (2019b) Agricultural land prices 2018(2019). Swedish Board of Agriculture. <http://www.jordbruksverket.se>. Accessed 18 Dec 2019
- Schreiber JB, Nora A, Stage FK, Barlow EA, King J (2006) Reporting structural equation modeling and confirmatory factor analysis results: a review. *J Educ Res* 99(6):323–338
- Sciascia S, Naldi L, Hunter E (2006) Market orientation as determinant of entrepreneurship: An empirical investigation on SMEs. *Int Entrep Manag J* 2(1):21–38
- Shah SR, Ganji EN (2017) Lean production and supply chain innovation in baked foods supplier to improve performance. *Br Food J* 119(11):2421–2447
- Slater SF, Narver JC (1994) Does competitive environment moderate the market orientation-performance relationship? *J Mark* 58(1):46–55
- Statistics Sweden (2019) Agricultural statistics 2019. <http://www.scb.se>. Accessed 9 Dec 2020
- Stonehouse G, Pemberton J (2002) Strategic planning in SMEs—some empirical findings. *Manag Decis* 40(9):853–861
- Takata H (2016) Effects of industry forces, market orientation, and marketing capabilities on business performance: An empirical analysis of Japanese manufacturers from 2009 to 2011. *J Bus Res* 69(12):5611–5619
- Tavakol M, Dennick R (2011) Making sense of Cronbach's alpha. *Int J Med Educ* 2:53
- Ullman JB, Bentler PM (2003) Structural equation modeling. *Handb Psychol* 607–634
- Van Passel S, Lauwers L, Van Huylenbroeck G (2006) Factors of farm performance: an empirical analysis of structural and managerial characteristics. In: Mann S (ed) *Causes and impacts of agricultural structures*. Nova Publishers, New York, pp 3–22
- Veidal A, Flaten O (2014) Entrepreneurial orientation and farm business performance: the moderating role of on-farm diversification and location. *Int J Entrep Innov* 15(2):101–112
- Verhees FJ, Meulenbergh MT (2004) Market orientation, innovativeness, product innovation, and performance in small firms. *J Small Bus Manag* 42(2):134–154
- Wall TD, Michie J, Patterson M, Wood SJ, Sheehan M, Clegg CW, West M (2004) On the validity of subjective measures of company performance. *Pers Psychol* 57(1):95–118
- Weis AJ, Weis T (2007) *The global food economy: the battle for the future of farming*. Zed Books
- Welter F (2011) Contextualizing entrepreneurship—conceptual challenges and ways forward. *Entrep Theory Pract* 35(1):165–184
- Weston R, Gore PA Jr (2006) A brief guide to structural equation modeling. *Couns Psychol* 34(5):719–751
- Wiklund J (1999) The sustainability of the entrepreneurial orientation—performance relationship. *Entrep Theory Pract* 24(1):37–48
- Yamin S, Gunasekaran A, Mavondo FT (1999) Relationship between generic strategies, competitive advantage and organizational performance: an empirical analysis. *Technovation* 19(8):507–518

- Zahra SA, Covin JG (1995) Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *J Bus Ventur* 10(1):43–58
- Zelbst PJ, Green KW, Abshire RD, Sower VE (2010) Relationships among market orientation, JIT, TQM, and agility. *Ind Manag Data Syst* 110(5):637–658
- Zhou B (2016) Lean principles, practices, and impacts: a study on small and medium-sized enterprises (SMEs). *Ann Oper Res* 241(1–2):457–474

3.2 Results from the scoping review

As mentioned previously, the reasoning behind the post-scoping review was to reflect on the conceptualization, operationalization and positioning of the three papers in this thesis.

Farmers strategic choice (or response) in paper I, were conceptualized using market orientation (MO), entrepreneurial orientation (EO), and LEAN production orientation (LPO), and operationalized to examine the difference between how farmers respond to competitive intensity, and how these responses affect farm outcomes. The scoping review shows that EO and MO are conceptualized as antecedents or independent variable (table 3) in agricultural research. For example, Mirzaei et al. (2016) used EO and MO to examine market awareness and its effect on the amount of sales generated. Their findings show that EO and MO are important strategies as farmer moves outside traditional commodity sales, and becomes an important resource in the company, giving the ability to scan for opportunities and improve customer value. Modern markets challenge farmers to adopt to new practices in a changing market environment. Challenges call for actions, such action can be expressed by responding to innovation. Etriya et al. (2018) looked at farmer's response during market transformation (e.g., when a market undergoes a shift from a traditional to a modern market). Their starting point was to investigate whether farmers respond to market transformation by adopting innovations, or if they participated in the development of new innovations. Etriya et al. (2018) found that farmers deal with market change through the adoption of innovation, rather than by generating new innovations themselves. They suggest that farmers embrace market change, evaluate tradeoffs (to adopt innovation or generate innovation) and adapt to stay in business. In line with this, Micheels and Boecker (2017) suggested that exploitation (making use of resources) actions are associated with lower risk than exploration (develop new knowledge), as exploitation implies that it is more beneficial to build business from existing innovation and resources.

In small fruit farm holdings, Dias et al. (2021) found that being EO is related to positive financial performance. However, some problems were discovered in the operationalization of the model, which makes the results difficult to interpret. For example, the results present a larger amount of hypotheses than what is proposed (or, at least clearly pointed out) in their

conceptual model. Looking at the conceptual model by Dias et al. (2021), EO can be seen partly as a dependent variable, but can also be interpreted as a moderator. For example, the dependent variable (Alt 2) is not tested for in relation to the dependent variable (D1), although it is presented as a hypothesis in the results. Another aspect that can be addressed is how EO can be understood as an antecedent in the results, but this is not how the model itself is visualized.

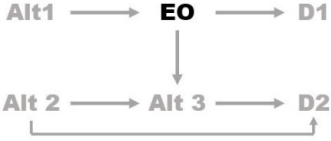
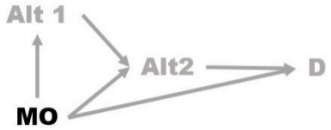
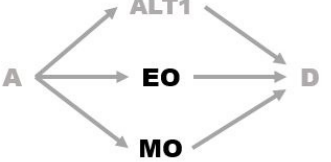
Proactiveness can also be an important factor for product innovation. Iza and Dentoni (2020) found proactiveness to be the most important EO-factor among coffee producers in Uganda. Interestingly, they found that the willingness to invest in product innovation to be higher among the more experienced farmers. This has some implications on the conceptual model. Iza and Dentoni (2020) visualize a model in which EO are presented as an antecedent, but there are no items conceptualizing EO as an independent construct per se. It is unclear how the model and hypothesis are related, thus makes an interpretation of the results a challenge.

In contrast to Iza and Dentoni (2020), Micheels and Gow (2015) found that farmers with greater experience were less open to innovate. This is in the context of changing the farm's business model, which is prompted by a willingness to question the current approach and business model. Micheels and Gow (2015) also showed how learning is a more important trait than MO for increasing farm innovativeness and farm performance. Furthermore, Nybom et al. (2021) investigated farmers choice of strategic orientation when faced with competitive intensity. In this case, EO and MO were operationalized as independent variables in the conceptual model, and the findings showed that MO was perceived to have the higher payoff. Potential issues with the conceptual model operationalized in the article will be further discussed in detail in section 3.2.1.

A similar pattern was found in the operationalization of EO in the systematic review of non-farm businesses by Montiel-Campos (2018). The individual dimensions, i.e. innovativeness, risk-taking and proactiveness are commonly used to measure EO, whereas Covin and Slevin (1989) conceptualized them together as representing strategic posture (the firms overall competitive orientation). In contemporary and dynamic competitive landscapes, farmers have to rethink their business model (Micheels and Gow, 2015).

Table 3. Approaches for understanding the use of EO and MO in agricultural research.

No.	Model	Author(s) and Year	Variables
1		Mirzaei et al. (2016)	EO: Uni, IP, CS MO: Uni, NS A: Environmental Turbulence D1: New Product Sales D2: Number of Marketing Channels
2		Etriya et al. (2018)	EO: Uni, CS Alt1: Innovation Adoption Alt2: Product Innovation Alt3: Innovation Generation D: Farm revenue
3		Micheels and Boecker (2017)	EO: Uni, IPR, CS MO: Uni, NS Alt1: Marketing Innovation D1: Expected Performance D2: Product Innovation
5		Iza and Dentoni (2020)	EO: - D1: Innovativeness D2: Proactiveness D3: Intensions

4		Dias et al. (2021)	EO: Uni, IPR, CS Alt1: Marketing Capabilities Alt2: R&D Capabilities Alt 3: Environmental Sustainability Commitment D1: Environmental Performance D2: Financial Performance
6		Micheels and Gow (2015)	MO: Uni, I, NS Alt1: Learning Alt2: Innovativeness D: Performance
7		(Nybom et al., 2021) (Paper I)	EO: Uni, Conservative posture, CS MO: Uni, NS A: Environmental Turbulence Alt1: LEAN Production Orientation D: Subjective Performance

Notes: EO = Entrepreneurial Orientation; MO = Market Orientation; Alt = Alternative Variable; D = Dependent Variable; Uni = Unidimensional Scale; I = Innovativeness; P = Proactiveness; Risk-taking; NS = Based on Narver and Slater (1990); CS = Based on Covin and Slevin (1989)

However, in a search to define the term business model, Shafer, Smith and Linder (2005) found a variation of the term with varying interpretations. Their mapping (12 definitions, 42 different business model components, and

four overarching categories) shows a great uncertainty among business owners and managers of how a business model is conceptualized, let alone which parts should be included to constitute a business model. This leaves the farmer to create a business model for their company themselves, due to the lack of clear frameworks for what a business model can look like, or how it is used in a business' strategic work.

The findings from the scoping review show how the questions representing EO and MO, to a considerable extent are adopted from Covin and Slevin (1989) and Narver and Slater (1990), see table 3. This introduces a potential bias as it generates an expectation of the results. Smith and Noble (2014) showed how the various parts of each research study can be influenced by bias. Bias can arise in the data analysis, where the researcher searches for data that confirms their hypotheses or personal beliefs, thereby overlooking data that does not confirm the same (Smith and Noble, 2014). Findings in the scoping review points to this source of bias in the diverse use of measurements.

Furthermore, within the papers in the scoping review, a pragmatic reasoning is lacking concerning what it means to use different scales, how this affects results, and the conclusions made. For example, when using a semantic-differential scale, the aim is to obtain the respondents emotional reaction or feelings, i.e. the extent to which something is acceptable/not acceptable to them (Friborg et al., 2006). This is different from using a Likert scale, which provides information on how respondents agree or disagree on a particular statement. The choice of using different measuring scales produce different outcomes, and it is therefore important for the researcher to keep this in mind, both throughout the research journey and when analyzing and comparing previous research outcomes. The findings from the scoping review and how EO and MO have been operationalized (table 4).

In factor analysis, when the analysis has a conceptual basis, the number of factors can be reduced and divided into groups which represent different constructs (Hair et al., 2014). If a factor cross-loads with another concept it is removed. The choice of which factors to group together is depends on how respondents answered questions in the survey. If different items represent a construct (e.g. EO), may change the meaning of the construct (i.e. face validity). It can also mean that even though the questions or statements in a survey have the same source, the final construct representing EO/MO in the

model can consist of a varying arrangement of items. Thus, this makes every model unique, while also creating limitations in making generalizations of the results.

Table 4. Summary of findings from the scoping review and operationalization of EO and MO.

Author	n	Scale	Analysis	Key findings
Mirzaei et al. (2016)	400	7-point Likert scale	PLS-SEM	Farms that are EO/MO are more likely to adopt new products/services using multiple marketing channels.
Etriya et al. (2018)	268	7-point semantic-differential scale and 7-point Likert scale	PLS-SEM	EO is predicted by farmer's level of proactiveness.
Micheels and Boecker (2017)	405 + 126		SEM	MO and EO are important factors in determining rates of product and marketing innovations among farm-based agribusinesses.
Dias et al. (2021)	160	5-point Likert scale, and 9-point semantic-differential scale	SEM	EO generates a significant and positive impact on financial performance.
Iza and Dentoni (2020)	152	5-point Likert scale	CFA	Proactiveness significantly drives farmer's product innovation, and innovativeness hampers MO.
Micheels and Gow (2015)	347	6-point Likert scale	SEM	MO firms are more innovative and more satisfied with performance.
Nybom et al. (2021)	388	7-point Likert scale	SEM	Perceptions of increased competitive intensity increases farmers MO, LPO, but not EO.

n = sample size

Furthermore, when using SEM in order to capture how well the theoretical constructs relate to one another (Hair et al. 2014), it is suggested that "... four to five items per construct may be optimal in terms of the tradeoffs between reliability and model fit" (McQuitty and Wolf, 2013; p. 62). Single-item measure can be used, but "a single-item measure can create identification problems in SEM models" (Hair et al. 2014; p. 649), and therefore relies on the researcher's best judgement (ibid.). In turn, the grounds on which a conclusion is based must be questioned. Is it through looking at the measures from a factor analysis and discussing of the implications of the remaining item loading in the same dimension, or are conclusions drawn from our own beliefs about what a concept means. With this in mind, while each study cannot be relied upon, together they provide meaningful evidence.

3.2.1 Reflection on assumptions in paper I

In this subsection, some examples of the assumptions that have been made in paper I will be highlighted and brought into a reflective discussion about what significance they may have.

In paper I, it is assumed that Swedish farmers are outcompeted by more efficient competitors and, in order to thrive, it is suggested that Swedish farmers have to increase productivity. Given this general frame, whether the assumptions are valid and if the assumptions correspond with the survey questions may be a point of discussion. The farmers' response is conceptualized as "strategic orientations", or "strategic response", and is explained as follows:

"Porter (2008, 1991, 1985) described two main methods of improving performance. When faced with increased competition, Porter suggested that firms could either become more efficient or they could endeavor to differentiate their production to potentially earn higher prices for their production" (Nybom et al., 2021; p. 77).

Paper I examines how CI affects the farmer's strategic choices - "how perceptions of competitive intensity influence different strategic orientations and how they in turn affect firm performance" (Nybom et al. 2021; p. 74).

These orientations (Lean production, entrepreneurial, and market orientation) become representatives of strategies to improve performance.

Aside from generalizations, Davis (1971) suggests researchers use evaluative propositions to make research more interesting—i.e. to deny certain assumptions of their audience. In this context, the evaluation contributes a challenge to the general assessment of something in contrast to the theorists' assessment. For example, Jaworski and Kohli (1993) put forward one reflection in their introduction that, if properly evaluated at the time, would have qualified as an evaluative proposition in paper I:

“Furthermore, this research empirically addresses the issue of whether all businesses should focus on a market orientation. This is an important consideration, because devoting resources to develop a market orientation potentially may be wasteful if the orientation does not lead to higher performance in certain business environments, such as those with low competitive intensity” (Jaworski and Kohli, 1993; p. 54).

This paragraph proposes that, despite any other underlying assumptions, MO may not always have the potential to increase performance or competitiveness, especially if the market in itself fails to contain essential elements, such as strong competition. Furthermore, the proposition opens up a different approach, one which is less about *why/why not* or *if* the farmer chooses to engage in market orientation, but rather if it is suitable for that particular farm to act in terms of market orientation. Is market orientation in the farmers' best interest, or is it a construction by market forces, pushing farmers to rationalize and be more effective? Levins and Cochrane (1996) argue that "Early adopters make profits for a short while because of their lower unit production costs. As more farmers adopt the technology, however, production goes up, prices go down, and profits are no longer possible even with the lower product costs" (p. 550). In addition, many farmers operate in an oligopoly system and their opportunities to act vary depending on the farmers' production orientation. Crop farmers have the possibility of storing and selling batches of their grain at times when prices rise, but milk, meat, and egg farmers are often tied to contracts that, in many cases, are fixed for many years, and can be complicated and expensive to terminate.

Looking at how the entrepreneurial character is presented, the first assumption is that it involves a competitive mindset, compared to a more risk averse conservative mindset. The underlying assumption, therefore, becomes that the firm owner is either entrepreneurial or not, based on their level of risk-taking. However, being entrepreneurial, as defined by Covin and Slevin, (1989), may not always be beneficial to the firm:

“In benign environments, on the other hand, the relationship between an entrepreneurial strategic posture and small firm performance may be much weaker and possibly negative” (Covin and Slevin, 1989; p. 77).

The assumptions around EO and the questions in the survey lacks a certain logic when re-visiting the survey. Covin and Slevin (1989) assumed that management has an either/or relationship to entrepreneurial orientation. The questions used in the survey by Nybom et al. (2021) are mainly based on a conservative posture, and therefore the conclusion that farmers are *not* entrepreneurially orientated in a situation in which competitive intensity increases, may be incorrect. Looking more closely at the items used in the analysis shows that farmers do not seem to turn to a more conservative orientation, making it difficult to make generalizations about farmers' EO from the results. Despite this, conclusions are made that do not fully agree with the results:

“On the contrary, the effect we found for EO suggests that taking large risks, being competitively aggressive, and ignoring caution is negatively related to performance” (Nybom et al., 2021; p. 15)

The intention was to measure entrepreneurial orientation, but the items used in the analysis may reflect a conservative orientation, making the conclusions around EO incorrect.

Lean production orientation was used to represent efficiency, based on assumptions by Karlsson and Åhlström (1996), who view Lean production as a process:

“We need a way to measure progress made in an effort to become LEAN. The choice of the word “progress” is important, since LEAN can be seen as an intended direction, not as a state or as an answer to a specific problem.” (Karlsson and Åhlström, 1996; p. 24).

Given this, the assumption is that Lean production is an intended direction. The term *intended* is a vague statement of what something is assumed to be, and refers to something you want to happen, or a desired state of mind. Karlsson and Åhlström (1996) state that Lean production is not an answer to a specific problem and is instead a philosophy and guiding principle for behavior. However, this is in contrast to Nybom et al. (2021), who make the assumption that lean production is about efficiency and a determinant of subjective performance, given that efficiency is understood as achieving a goal with minimal waste. The shift in interpretation of lean production is demonstrated as follows:

“Internal innovation practices are another means to increase efficiency. This follows the work by Karlsson and Åhlström (1996) who define lean production systems along a variety of practices aimed at improving production efficiency” (Nybom et al., 2021; p. 5).

A shift now seems to be taking place, lean orientation has transformed from a philosophy into something concrete. Therefore, any generalization and conclusion drawn from the results in paper I becomes different when based on the assumption that lean production will lead to efficiency. This is likewise expressed in the discussion where the assumption is more precise and targets routines and employees:

“Therefore, well-developed routines (i.e. lean production routines) should minimize the risk of mistakes by employees and thereby improve efficiency” (Nybom et al., 2021; p. 15).

It is of course possible to analyze many more assumptions. However, this short overview shows that concepts can easily change meaning and be interpreted in many different ways. Therefore, the question of both reliability

and validity are impacted in ways often overlooked by the researcher. The aim of the thesis is not to analyze each article in microscopic detail, but raising these questions may be instructive when analyzing both others' and one's own articles. It raises both questions and provide insights into improving the academic craftsmanship.

3.2.2 Self-reflection on paper I

In this section, I will, through self-reflection, evaluate my thoughts on paper I, while also demonstrating how the doctoral journey contributed to the learning process.

In paper I, the framework developed by Covin and Slevin (1989) was used because at the time of writing it seemed to have the greatest impact in the field of EO (as evidenced by citation count) and because it was widely adopted across disciplines and empirical contexts (see Montiel-Campos, 2018). Similarly, the questions on MO (taken from Jaworski and Kohli, 1993) were selected for the same reasons. The ways in which Covin and Slevin (1989) was adopted in paper I meant that EO as a construct reflected a conservative posture and the data collected on farmers captured risk-averse behaviors. In hindsight, I believe it was a mistake not to also include statements on risk-taking. By not including these questions, I could not, for example, analyze whether the sample groups were risk takers or risk adverse. Meaning that it was not possible to understand whether the results showed a lack of risk aversion (the results showed a negative relationship on EO), or if it meant that they took calculated risks in their strategic choice when faced with competitive intensity. Ultimately, this may have limited the reliability, and hence the validity of the findings.

Moreover, the survey used in paper I lacked several important control variables: for example, it could have been useful to know if the respondents were specialized producers selling in bulk to large market actors (e.g. Lantmännen, Arla, Svenska Foder), or if they were diversified and targeted small scale, value-added products directly to consumers (e.g. through a farm shop, farmers market, online shop). This was something that the peer reviewers asked for in the process of publishing. For example, a comment from one reviewer said:

“It would be interesting to see if there are any differences in the results based on the form of farming”.

In the process of creating the survey the choice was made to use the same measurements as Statistics Sweden (2019). Unfortunately, the measures developed by Statistics Sweden (and used in the survey) made a comparative analysis problematic. The approach left the respondents with too many choices – namely 17 different primary production types. The core problem was that most respondents seemed to carry out a number of types of production and therefore questions about, for example, the units of livestock, pigs, etc., did not work as intended since the respondents listed multiple options. This made it problematic to use, for example, when comparing groups. Consequently, the choice of borrowing the measurements made logical grouping of farmers difficult.

Looking to operationalization decisions, there are several issues that can be discussed, I will here address a couple of examples. I now question the relevance of some of the questions for agricultural companies. To exemplify, here is one MO-statement used in the survey:

“People on our farm share information concerning competitor's activities.”

If I think of myself about 15 years ago when still working on a farm, I would not have known how to respond to this question. What does it actually mean in the context of farming? The same issue relates to several of the questions which are not adjusted to fit a farming context, meaning the reliability of the questions suffers. How do I as a researcher know how the question was understood by the respondent?

Furthermore, something I overlooked until recently is how different conceptualizations of EO affect what is being measured. For example, Covin and Wales (2012) analyzed the measurement of EO and proposed that Lumpkin and Dess (1996) conceptualized EO in terms of something you look for (domain-focused), whereas Miller (1983) conceptualized in terms of what EO looks like (phenomenon-focused). Different assumptions expose issues that should have been taken into account when, for example, the EO

measurements by Covin and Slevin (1989) were used in the questionnaire. Covin and Wales (2012) addressed the question of how the measurements (risk taking, innovativeness, and proactiveness) have different nominal meaning and therefore "... the individual items of the measure are likely to have different antecedents and consequences (Covin and Wales, 2012; p. 691). Despite this, the scale works as a manifestation of entrepreneurship. Covin and Wales (2012) implied that, in order measure if someone is entrepreneurial, the three measurements should be captured separately, and the respondent should score high on each. In retrospect, I believe this was overlooked, and by measuring the three categories separately I could have built a stronger contribution around how entrepreneurial the sample of farmers were and how this could have affected their strategic choice.

Finally, I have come to appreciate the limitations surrounding the LPO construct used. The questions mostly relate to the company's employees, and less so to what is typically measured in Lean. Thus, even if the LPO construct reliably captures what I've labelled "Lean Production Orientation", it is fair to question the content validity. Reflecting on this now, the statements are related to Lean's human resource system, which, according to Hardcopf et al. (2021) relates to managing the production process, focusing on improvement and coordinating decision making across the organization. Later, I found measures for Lean production, those of Shah and Ward (2007) for example, using 10 statements to capture the Lean concept, which could have been adopted to more accurately measure Lean in a farming context. If I could do it again, I would spend more time "cherry-picking" questions from different research to develop a questionnaire which is better suited to the target group I want to investigate. Also, being more careful in the choice of questions and what they actually mean and how this could affect the outcome and result of the data would have been useful. One example of this can be seen in the work of Matsuno et al. (2002), who were careful not to take a "battery" of questions from a published paper, instead using a validated MARKOR scale by Jaworski and Kohli (1993) and including additional (and previously validated) measures into their model. After running confirmatory factor analysis (CFA) on the new model, Matsuno et al. (2022) concluded that the added measures improved the initial (MARKOR) model.

Further, I chose to use structural equation modelling (SEM). The main reason for this was to test for multiple relationships between several

independent and dependent variables simultaneously (Nunkoo and Ramkissoon, 2012). For example, Gefen et al. (2000) ran three different analyses with the same dataset and concluded that the outcome from analysis and "... the resulting set of supported hypotheses in the model may be more or less credible because of underlying data distribution assumptions and the analysis methods employed" (p. 47).

3.2.3 Avenues for future research related to paper I

The review shows that the model operationalized in paper I has not been explored before. The conceptual model contributes insight into how farmers act when faced with competitive intensity. The findings and the conceptual model create an image of the farmer's responses, and the perceived tradeoffs that come with these responses. The reflection on assumptions shows the considerations which need to take place before including questions into a survey. For example, in the section on assumptions, it appeared that only part of the concept of LPO had been embraced and therefore taken on a different meaning (and thus the interpretation of the result will be different). The scoping review showed that farmers evaluate potential tradeoffs between efficient production, potential return and market demand. Rationalization and structural change have forced farmers to change their skillset, and, as suggested in paper I, the low tradeoff from LPO may well be a result from decades of increasing efficiency, where the tradeoff is perceived as low. An important part of efficiency is digitalization, which is in constant development and is a growing part of farm production (Bacco et al., 2019). To further investigate farmer's response and perceived tradeoffs, farmer's response to digitalization should be further explored. Divided into groups (e.g. dairy, meat, crops) the model could control for differences between groups and their perceived benefits from digitalization

References

- Bacco, M., Barsocchi, P., Ferro, E., Gotta, A., & Ruggeri, M. (2019). The digitalisation of agriculture: a survey of research activities on smart farming. *Array*, 3, 100009.
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic management journal*, 10(1), 75-87.
- Covin, J. G., & Wales, W. J. (2012). The measurement of entrepreneurial orientation. *Entrepreneurship theory and practice*, 36(4), 677-702.
- Davis, M.S. (1971). That's interesting! Towards a phenomenology of sociology and a sociology of phenomenology. *Philosophy of the social sciences*, 1(2), pp. 309-344.
- Dias, C., Gouveia Rodrigues, R., & Ferreira, J. J. (2021). Small agricultural businesses' performance—What is the role of dynamic capabilities, entrepreneurial orientation, and environmental sustainability commitment? *Business strategy and the environment*, 30(4), 1898-1912.
- Etriya, E., Scholten, V., Wubben, E., Kemp, R., & Omta, O. (2018). The importance of innovation adoption and generation in linking entrepreneurial orientation with product innovation and farm revenues. *International Food and Agribusiness Management Review*, 21(7), 969-988.
- Friborg, O., Martinussen, M., & Rosenvinge, J. H. (2006). Likert-based vs. semantic differential-based scorings of positive psychological constructs: A psychometric comparison of two versions of a scale measuring resilience. *Personality and Individual Differences*, 40(5), 873-884.
- Gefen, D., Straub, D., & Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the association for information systems*, 4(1), 7.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2014). *Multivariate data analysis (7th Edition)*. In: Pearson Education Limited UK.
- Hardcopf, R., Liu, G. J., & Shah, R. (2021). Lean production and operational performance: The influence of organizational culture. *International Journal of Production Economics*, 235, 108060.

- Iza, C. L. B., & Dentoni, D. (2020). How entrepreneurial orientation drives farmers' innovation differential in Ugandan coffee multi-stakeholder platforms. *Journal of Agribusiness in Developing and Emerging Economies*.
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *Journal of marketing*, 57(3), 53-70.
- Karlsson, C., & Åhlström, P. (1996). Assessing changes towards lean production. *International Journal of Operations & Production Management*.
- Levins, R. A., & Cochrane, W. W. (1996). The treadmill revisited. *Land Economics*, 72(4), 550-553.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management review*, 21(1), 135-172.
- Matsuno, K., Mentzer, J. T., & Özsomer, A. (2002). The effects of entrepreneurial proclivity and market orientation on business performance. *Journal of marketing*, 66(3), 18-32.
- McQuitty, S., & Wolf, M. (2013). Structural equation modeling: A practical introduction. *Journal of African Business*, 14(1), 58-69.
- Micheels, E. T., & Gow, H. R. (2015). The effect of market orientation on learning, innovativeness, and performance in primary agriculture. *Canadian Journal of Agricultural Economics/Revue canadienne d'agroéconomie*, 63(2), 209-233.
- Micheels, E. T., & Boecker, A. (2017). Competitive strategies among Ontario farms marketing direct to consumers. *Agricultural and Food Economics*, 5(1), 1-23.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management science*, 29(7), 770-791.
- Mirzaei, O., Micheels, E. T., & Boecker, A. (2016). Product and marketing innovation in farm-based businesses: the role of entrepreneurial orientation and market orientation. *International Food and Agribusiness Management Review*, 19(1030-2016-83118), 99-130.
- Montiel-Campos, H. (2018). Entrepreneurial orientation and market orientation: Systematic literature review and future research. *Journal of Research in Marketing and Entrepreneurship*.
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *The Journal of Marketing*, 54(4), 20-35.
- Nunkoo, R., & Ramkissoon, H. (2012). Structural equation modelling and regression analysis in tourism research. *Current Issues in Tourism*, 15(8), 777-802.

- Nybom, J., Hunter, E., Micheels, E., & Melin, M. (2021). Farmers' strategic responses to competitive intensity and the impact on perceived performance. *SN Business & Economics*, 1(6), 1-22.
- Shah, R., & Ward, P. T. (2007). Defining and developing measures of lean production. *Journal of operations management*, 25(4), 785-805.
- Shafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. *Business horizons*, 48(3), 199-207.
- Smith, J., & Noble, H. (2014). Bias in research. *Evidence-based nursing*, 17(4), 100-101.
- Statistics Sweden (2019). Agricultural statistics 2019 www.scb.se.

4. Cultural intolerance and standing out

Chapter 4 starts with a brief background providing the story behind paper II. This is followed by paper II, the scoping review, self-reflection on assumptions and on the process of paper II, and avenues for future research.

4.1 Paper II. Farmers that engage in entrepreneurship for the “wrong” reason and the moderating role of cultural intolerance.

The paper is a part of a larger project funded by the Kamprad Family Foundation which looked closely at entrepreneurial failure. The idea behind this paper was to investigate the presence of Jante (the law of Jante) in a sample of agricultural students who would in the near future take on jobs as a farm advisor. Jante refers to a Scandinavian mentality (Sweden, Norway Denmark and Finland) and the idea it that one should “never try to be more, try to be different, or consider oneself more valuable than other people” (Cappelen and Dahlberg, 2018). These advisory roles would lead them to influence many farmers. The aim of the study was to test for the presence of Jante and examine whether it inhibits individuals to pursue entrepreneurial activities.

Partial results from this research have been presented at the IFAMA 2020 CONFERENCE. Paper II received an unexpected amount of attention in the media, with article titles like “Jante directs the advice to farmers” (Land Lantbruk, April 2020); “Farm entrepreneurs affected by the Law of Jante - is it shameful to fail?” (Press release SLU, March 2020; Örebronyheter 03/20); “The Law of Jante is a barrier to innovation in agriculture” (Kvalitetsmagasinet, 03/2020; and Extrakt, 03/2020); “Researchers: The

Law of Jante inhibits innovation in agriculture” (Landets Fria, 03/2020); and “Research on Jante” (Webb-TV Lantbruksnytt, 2020-03-18).

There was an immediate response to this article. Although, it is encouraging to get attention, further research is needed to construct a robust model that is tested in different contexts to ensure validity and reliability. Paper II was limited to examining how a person giving advice is affected by their own Janteness.

Farmers that engage in entrepreneurship for the “wrong” reason and the moderating role of cultural intolerance

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Erik Hunter

Swedish University of Agricultural Sciences, Sweden

Jozefine Nybom 

Swedish University of Agricultural Sciences, Sweden

Eric Micheels

University of Saskatchewan, Canada

Kim Klyver

University of Southern Denmark, Denmark

University of Adelaide, Australia

Abstract

In the agricultural sector, the Law of Jante—a Scandinavian form of cultural intolerance towards standing out, being different and overachieving (akin to the Tall Poppy Syndrome and *The nail that sticks out gets hammered down* culture found in other countries)—may play an important role by influencing when entrepreneurship is an acceptable strategic choice to adversity. Based on a three group, between-subjects experiment of 122 Swedish university students studying agricultural and rural management, we tested whether the advice our participants gave to a fictitious farmer to pursue entrepreneurial activity depended on information regarding the farmer’s motivation to pursue entrepreneurship (experimental treatments included motivation scenarios based on necessity vs. opportunity driven vs. control). Moreover, we test whether entrepreneurial advice is moderated by the participants own “Jante-ness”. Unexpectedly, we found that our participants did not adapt the entrepreneurship advice they give to the situational context, nor does Jante play a moderating role; instead we found that Jante had a significant and negative main effect on the entrepreneurial advice given. This finding suggests that Jante is still very much alive and may play an important role in explaining relatively low rates of innovation and entrepreneurship in (Swedish) agriculture.

Keywords

Agriculture, Context, Entrepreneurship, Jante, Motivation, Tall Poppy Syndrome

Introduction

Structural changes in Western agriculture have seen the average farm size increase and the number of farms decrease. This has led to rationalization, or a rapid decline in midsized, often family-farms that are too small to compete on costs and too large or commoditized to compete in niche markets (Kirschenmann et al., 2008). In light of these trends, agricultural entrepreneurship can be seen as a means to improve farmer livelihoods and contribute to economic growth (De Lauwere, 2005; Dias et al.,

2019). For example, in Europe, teaching farmers’ entrepreneurial skills and instilling a stronger entrepreneurial orientation has been suggested as a way to counter problems of rationalization and structural change (Mikko Vesala et al., 2007). In fact, the European Union has spent billions of Euros promoting entrepreneurship in rural communities

Corresponding author:

Jozefine Nybom, Department of People and Society, Swedish University of Agricultural Sciences, PO Box 190, 234 22 Lomma, Sweden.

Email: jozefine.nybom@slu.se

(EC, 2012). Despite these efforts, there are indications from the community innovation survey that entrepreneurial activity in the form of product and service innovation is still significantly lower in the agricultural sector than societal averages (see e.g. Estadística, 2020; Klaesson et al., 2019).

Entrepreneurial activity is one of a range of options available to farmers who are searching for improved performance. Scholars have known for some time that context affects the rate and type of entrepreneurship (Welter, 2011) and one particularly salient aspect is the social context. For example, individuals surrounded by family and friends who actively encourage entrepreneurship are more likely to pursue entrepreneurial activity (Davidsson and Honig, 2003; Elfring et al., 2021). However, social norms and social cohesion may cause farmers to be informally bound by traditions (i.e. cultural rules) that span generations, locking them into acceptable ways of doing things. While farmers have been shown to place their own boundaries on acceptable opportunities in agriculture (i.e. the concept Room for Manoeuvre by Methorst et al. (2017)), cultural norms may make these informal rules more rigid. This may result in an opportunity set that is focussed on production/production flexibility or stability, as was shown by McLeay et al. (1996). Since entrepreneurship tends to be about newness, incumbent firms operating within cultures characterized by strong cultural cohesion and social embeddedness could have inhibitory effects on entrepreneurial intentions and behaviour (McElwee, 2006).

While social capital and cultural ties have been shown to increase performance of firms (Elfring et al., 2021; Pérez-Luño et al., 2011), high levels of social cohesion and strong ties to one's community may also inhibit decision autonomy and new business creation (Klyver and Arenius, 2020; Li et al., 2013). As Fromhold-Eisebith (2004: p. 752) states: "Social capital additionally creates obligations and expectations among the actors belonging to a group. It implements social norms, often constraints of activity, and changes structures of competition." One culture that has been used in the past to describe Scandinavians and is believed to inhibit entrepreneurship is "Jante". Jante, or "The Law of Jante" is an informal code of conduct that rewards conformity to the group and punishes individual achievement (Cappelen and Dahlberg, 2018; Smith et al., 2003). While some argue that Jante no longer has the social control it once had on entrepreneurs (Hayton et al., 2002), there is evidence in some sections of society and under certain conditions, such as in governing acceptable ways of turning profits among farmers that it still exerts influence (Stenholm and Hytti, 2014). Similar cultures to Jante are found around the world. For example, in New Zealand there is "Tall Poppy Syndrome" that has been used to explain why entrepreneurs risk ostracization for high achievements and actively manage impressions of their success by "staying under the radar", not telling others they owned a business, and concealing their wealth (Kirkwood, 2007). In Jante type cultures it may be the case that, for instance, farmers are less

likely to pursue more ambitious and innovative growth options when they are seen as illegitimate within local customs (Capelleras et al., 2019). In addition, it may be that what is seen as legitimate in terms of opportunity seeking depends on if the entrepreneurial activity is being pursued out of necessity or due to the identification and response to a perceived opportunity for profit (Hechavarria and Reynolds, 2009).

The purpose of this article is to examine how adherence to Jante affects the nature of advice given to farmers. Using a randomized three-group, between-subjects experimental design and a sample of 122 agricultural students, we test whether the level of Jante-ness affects the entrepreneurial advice given. In our experimental design, we also examine whether Jante-ness moderates the relationship between entrepreneurial motivation (due to necessity vs. opportunity vs. no information) and acceptance of entrepreneurship (as measured by entrepreneurial advice).

This paper contributes to the literature in several ways. Prior work has suggested that within the agricultural context, there may be a desire for farmers to encourage others in their network to adhere to cultural norms (Bourdieu, 1985). This is important for agriculture as it has been shown that in the context of farming, social capital is an instrumental asset (Lin et al., 2001) that includes being able to borrow equipment or asking a neighbour for technical advice in planting, while also being a source for new ideas through the connection to local institutions (Micheels and Nolan, 2016). While Jante and similar cultural constraints have been explored in previous entrepreneurship studies, they have either been qualitative in nature, which limited the generalizability of findings (Borch et al., 2008), or were done in contexts outside of agriculture where Jante did not show an effect, thereby limiting the relevance of findings for the agricultural sector (Davidsson and Wiklund, 1997).

Our findings show that, across all treatment scenarios, differences in motivation on the part of the entrepreneur do not influence the nature of advice given by the participants in the study. In addition, we do not find any interaction effects between the type of motivation and level of Jante on the advice given. Perhaps unexpectedly, our results show that Rural and Agricultural Management students were in favour of giving entrepreneurial advice under all scenarios, however, this *advice significantly declined as their level of Jante-ness increased*. In particular, our results show that as the Jante-ness of the students increased, their advice in the areas of innovation, new types of production and product diversification decreased.

Theory and Hypothesis Development

Necessity versus opportunity based entrepreneurship

Entrepreneurship is often characterized by "activity in new markets, process and or products" (Ahmad and Seymour,

2008: 12); entrepreneurship occurs through these activities when new value offerings are created that drive the market process (Davidsson, 2004; Kirzner, 1973). The field of entrepreneurship is (among other things) interested in opportunity exploitation and understanding “why opportunities for the creation of goods and services come into existence” (Shane and Venkataraman, 2000: 218). Answers to this fundamental question are highly dependent on context (Hytti et al., 2018; Welter, 2011; Welter et al., 2019).

Entrepreneurship scholars distinguish between two types of motivations that promote entrepreneurship: necessity-based and opportunity-driven (Dencker et al., 2019). In this framework, necessity-based entrepreneurship is characterized by entrepreneurs starting new firms due to a lack of employment alternatives and survival. Conversely, opportunity-based entrepreneurship stems from the imagination and judgment of the entrepreneur who sees an opportunity that could be exploited. Although, this frame is generally applied to understand start-up activities, we suggest the framework is also applicable when trying to understand how entrepreneurial activities in existing business are motivated. Indeed, Hunter et al. (2021) discovered that necessity driven entrepreneurship also occurs when current business owners fear imminent failure: as the fear of failure in the current business increases, intentions towards entrepreneurial activity increases significantly. Similarly, opportunity-based entrepreneurship could also be a diversification strategy for firms that have available managerial and financial resources on which to draw upon in the search for growth (Levinthal and March, 1993; Morris et al., 2017; Penrose, 1959).

In the agricultural context, the motivation to engage entrepreneurial activity is not only about growth and profit maximization—it is also about survival, stewardship and achieving personal goals (Fitz-Koch et al., 2017). Investigating entrepreneurial motivations (ability, necessity, opportunity) in Swedish SMEs, Davidsson (1991) found that need was the best predictor of growth. Davidsson (1991) reasoned that growth stops in current firms when owners become “satiated” and therefore lacked the motivation to continue growth. This is similar to the ideas of Levinthal and March (1993) where search for new opportunities only occurs when performance falls below some threshold. Consequently, motivation is an important antecedent of (continued) entrepreneurial activity in the agricultural context and, whether based on necessity or opportunity, it explains why some, but not other opportunities come into existence. The findings by Davidsson (1991) may also suggest that, at least in the context of Swedish SMEs, the reasons to engage in entrepreneurial activity have more to do with necessity or needs than it does with profit maximization and growth. If true, this is surprising as the narrative surrounding entrepreneurship is stories of entrepreneurs who took risks to become richer and create new economic activity—this is in stark contrast

to the picture of a satisficing entrepreneur who engages in entrepreneurship only to survive, pass on their business to the next generation, or earn just enough to be happy. Speculating further, there are at least two complimentary explanations for why necessity rather than opportunity should motivate entrepreneurship. Risk aversion would explain why once the entrepreneur’s needs are met, the motivation to continue taking entrepreneurial risks subside; conversely, for current business owners, the motivation to start new entrepreneurial activity may be related to loss aversion and driven more by need or necessity (e.g. earn enough to survive) than it will be driven by opportunity (e.g. earn more than enough to survive). Based on this we hypothesize that:

When an individual’s motivation to engage in entrepreneurial activity is based on necessity, advice givers will be more likely to promote entrepreneurial activity than if the motivation was based on opportunity (H1a) or when no information about motivation is given (H1b).

However, explaining differences in entrepreneurial motivation leaves much to be desired when examined in context. Without context, we must assume that loss and risk aversion are equally distributed in the population. Within context, we can explore and control for cultural elements that may influence how individuals view risk and loss and under what motivational conditions they are acceptable. In the next section, we introduce The Law of Jante and theorize how it influences engagement in entrepreneurial activity.

The Law of Jante and when motivation to become an entrepreneur is acceptable

The Law of Jante (Jante) refers to a widespread Nordic (Denmark, Sweden, Norway, Finland and Iceland) mentality that “one should never try to be more, try to be different, or consider oneself more valuable than other people (Cappelen and Dahlberg, 2018: 419). Robinowitz and Carr (2011) view Jante as a “cultural millstone” in Scandinavia that subtly enforces prescriptions and proscriptions (Scott, 2016: 16) for moderation and humility in behaviour (Kaminsky, 2007; Scott, 2016: 16). In writing about Jante for the first time, Sandemose (1934) laid out ten laws of Jante that included *You’re not to think you are anything special; You’re not to imagine yourself better than we are; You’re not to think you know more than we do and You’re not to think you are more important than we are*. Although Sandemose (1934) was writing a satirical book about the Danish town of Jante (where everyone knew everyone), he later explained that Jante was not restricted to any town or country.

The law of Jante is considered a mindset that is passed down by generations where each generation acts as agents through socialization (Ahlness, 2014). Looking into Norwegian literature, Ahlness (2014) found that children are exposed to the Jante mindset early on through children's books where Janteness is conveyed as anti-individualistic (Ahlness, 2014) as opposed to loyalty towards a community (Rahm et al., 2019). Björklund (2018) found that the Jante mindset affects how farm entrepreneurs avoid sharing their success stories with other farmers. In this respect Jante may negatively affect social capital by suppressing information and stifling opportunity recognition (Lin et al., 2001). The mindset of Jante is also present in the Swedish and Finnish educational system where adherence may lead to reputational advantages and expressive actions that improve life satisfaction (Lund, 2020). However, Wolfensberger (2015) argues that it inhibits gifted students from excelling.

Researchers have noticed similarities to Jante in other cultures: Australians and New Zealanders' have the Tall Poppy Syndrome and some Asian cultures revere the proverb "The nail that sticks out gets hammered down" (Klyver et al., 2011; Klyver and Bager, 2012). The Tall Poppy Syndrome refers to conspicuously successful individuals whose distinction attracts envy and hostility and who need to be cut down to size (Mouly and Sankaran, 2000). Similarly, the nail that gets hammered down may be used as a metaphor to remind individuals that the success of the collective is what matters, while individual success will be punished (Grossman and Taylor, 1995). This fits with previous research showing that deviating from the group and its prevailing norms can undermine group cohesion and be perceived as violating group identity (Klyver et al., 2011; Portes, 1998). The common denominator across these cultures seems to be a negative (perceived) social consequence that awaits individuals who do things differently, stand out from the group, or try to be better than the group.

As we defined earlier, entrepreneurship is about *newness* through innovation, diversification and product development. Because newness implies being different, it would seem that entrepreneurship runs afoul of cultures where Jante is deeply embedded—arguably even more so when cultural norms shun individual success. It is through this lens that the findings by Davidsson (1991) showing that SMEs are more motivated by need than opportunity begin to take on new meaning. In New Zealand, there is evidence that entrepreneurs purposefully stay under the radar and avoid telling people about their business and success to avoid a negative public reaction—even limiting their growth to avoid attention (Kirkwood, 2007). In Sweden, one study found that equality (egalitarianism) predicted entrepreneurial intentions (Theis, 2014). Although there is a paucity of studies specifically looking at correlations between Jante and entrepreneurship, the current literature suggests that the relationship is negative.

Entrepreneurial advice

Social relationships are an important source of entrepreneurial advice and motivation. In the Middle East, Bastian and Tucci (2017) found that entrepreneurs draw on advice during all stages of the venture—however advice is most relied upon during the pre-startup phase (e.g. idea generation and opportunity recognition). Using a large Swedish sample, Davidsson and Honig (2003) found social capital "to be (a) very strong" predictor of engaging in nascent entrepreneurship and that receiving active encouragement from family and friends is an important element of this dynamic (p. 302). Cooke and Wills (1999) note that embeddedness is an important component of social capital, and as such may play an important role in the relationship between social capital and innovative activities. Citing the work of Granovetter (1985), Cooke and Wills (1999) suggest that strong ties can inhibit economic development. Particularly within cultures where 'sticking out' is viewed unfavourably, strong ties to local communities or to local customs may lead to fewer entrepreneurial activities that are less innovative than might otherwise be observed. While valuable in some aspects, these strong personal ties to networks and customs may give the firm less room to manoeuvre in terms of entrepreneurial activity, unless the individual explores a wider network where advice givers are not bound by local customs (Klyver and Arenius, 2020; Methorst et al., 2017).

While it has been argued that rural firms have less access to high-quality business advice compared to their urban counterparts due to lacking competition (Martin et al., 2013), there is little in the way of evidence to draw upon regarding whether the advice they receive from advisory services is ignored. We assume therefore that advice from family, friends, and advisors is an important influence on decisions to engage in entrepreneurial activity (Sanchez-Famoso et al., 2019). With this assumption made, we offer our final hypothesis which builds on hypothesis 1a and 1b (conceptual model, Figure 1):

When an individual is motivated to engage in entrepreneurship for reasons other than necessity, greater levels of Jante in the advice giver will moderate (negatively) the entrepreneurial advice given (H2).

Methods

Participants

The participants for this study were all students at the Swedish University of Agricultural Sciences studying BSc Agricultural and Rural Management (in Swedish *Lantmästare*). The programme is a three-year, multidisciplinary programme that includes courses in production

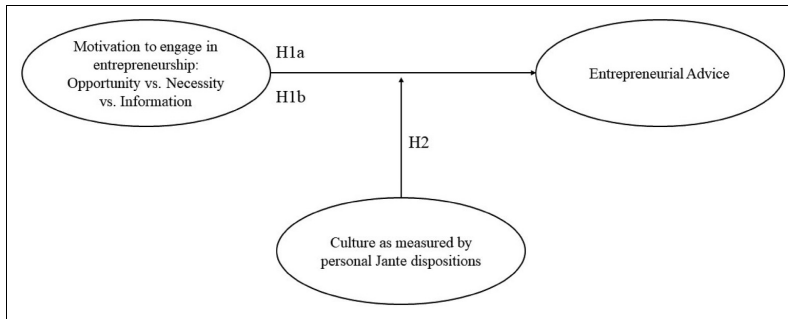


Figure 1. Conceptual model showing the relationship between entrepreneurial motivation and entrepreneurial advice while moderated by the advice givers' Jante-ness.

management, natural science (e.g. chemistry and biology) and business administration (e.g. marketing, accounting, finance, and strategy). Roughly half of the students in this programme are from southern parts of Sweden. Cohort size each year is around 50, therefore approximately 150 Farm Management students are in the programme at any particular time. The minimum requirement to study in this programme is at least two years' experience working on or with a farm. As a result, students tend to be a couple of years older than the typical university student. Most of them come from the countryside, having grown up on a farm and attended high schools related to farm studies. All of the students in the programme have Swedish as their first language and with only a few exceptions, all of them identify as being ethnic Swedish. Upon completion of their degree in farm management, these students have typically either returned to work on their family farm, or gone into positions as farm advisors, sales representatives, or working with governmental organizations. Taken together, the cohort of students that participated in this study have had considerable exposure to Swedish agriculture and arguably are very similar regarding cultural values related to farming and agriculture.

Procedure

A three-group, randomized, between subjects experimental design was used to test the hypotheses in this study. To begin, all participants were required to read the following scenario:

Last year Johan took over the family farm from his parents, becoming the fourth generation to work the farm. Over the years, the farm, more or less, produced and sold the same products—mostly cereals and grains. The size of the farm has remained unchanged over the years ranging from 0 to 2 employees excluding family.

Following this information, each of the three groups received different information regarding Johan's

motivation for pursuing innovation as follows (see italic text for differences in group treatments):

Johan is not satisfied with the farm's development

Group 1, necessity entrepreneurship: *Profitability the last years has been worse than his competitors.*

Group 2, opportunity entrepreneurship: *Profitability the last years has been better than his competitors.*

Group 3, no information given about profitability being better or worse than the competition.

Johan is not happy with that and wishes to increase profitability. Johan has decided to risk everything by investing the family savings in an innovative product that he believes will increase profitability.

The different information given to the three groups acted as our treatment (independent) variable. Following the scenarios, participants were asked to finish reading the survey and to answer all questions.

Measures

As described in the previous section, entrepreneurial motivation was operationalized through the experimental treatment which gave information that Johan was motivated by either necessity, opportunity, or no information (control group). Immediately following the scenario, students were asked "What should Johan do in his situation?", followed by ten strategic alternatives measured on a five-point Likert scale with "Totally Disagree" and "Totally Agree" as end points. The ten alternatives were based on McElwee's (2006) farm change strategy framework and can be found in the first column of Table 1. Using principal component analysis (PCA), we explored the factor structure of the 10 items used to operationalize McElwee's (2006) farm change strategy framework and found four "distinct" components with an eigenvalue greater than 1. With varimax rotation and side-loadings of < 0.30 suppressed,

the items loaded relatively clearly onto their expected components that we labelled as “Give up advice” (component 1), “Entrepreneurial Advice” (component 2), “Production Advice” (component 3) and “Economize Advice” (component 4).

Since the dependent variable (DV) of interest for this study was entrepreneurial advice (and not advice related to the other strategic choices), we followed up the PCA with a reliability analysis on the three items that loaded strongest on component 2 (i.e. Entrepreneurial Advice). The three items demonstrated acceptable reliability (McDonald’s $\omega = .615$) and were combined by calculating their statistical mean to create the scale Entrepreneurial Advice (see Table 2).

The next set of questions captured Jante by asking participants: “Personally, I think it is ok if someone believes that they” followed by 9 Jante-statements (see Table 2). These items were also measured using a five-point Likert scale with end points 1 = *Totally disagree*; and 5 = *Totally agree*. Following the recommendation of Cappelen and Dahlberg (2018), we treat Jante as a formative construct and combine all items using the statistical mean to create the formative construct we refer to as “Jante”. The coding of our Jante items meant that strongly agreeing with Jante in the survey implied a low Jante disposition. For this reason, we reverse coded the items when developing our scale.

Finally, previous research has found that farmers become less innovative with age (Diederens et al., 2003) and gender differences related to things like fear of failure could impact the entrepreneurial advice given. (Cañizares and García, 2010). Consequently, we control for gender

by asking participants to tick a box indicating if they are “male”, “female” or “other”. Age was captured by asking participants to state their actual age.

Statistical analysis

All data for the analysis was first entered into SPSS and we used PCA to identify factor structure and reliability analyses to reduce dimensionality and create reliable scales. Following this, we analyzed the descriptive statistics (Table 3). A univariate General Linear Model (GLM) was used to analyze Entrepreneurial Advice as our DV; the fixed factor was the experimental group (independent variable or IV) and Jante (IV), age, and gender were added to the model as covariates. To test our hypotheses, we first ran an interaction model where the DV and all IVs were included, along with the interaction effect experimental group treatment*Jante. This was followed up with main effects models presented in the next section.

Results

In total, 122 farm management students participated in the experiment. They averaged 24 years of age and among them, 47% were female and 53% male. Random assignment to treatment group resulted in a near even split between groups (Table 3). Our first hypothesis states that: When an individual’s motivation to engage in entrepreneurial activity is based on necessity, advice givers will be more likely to promote entrepreneurial activity than if the motivation was based on opportunity (H1a) or when no information about motivation is given (H1b). We followed this up with a second hypothesis that states: When an individual is motivated to engage in entrepreneurship for reasons other than necessity, greater levels of Jante in the advice giver will moderate (negatively) the entrepreneurial advice given (H2).

Starting with H2, we develop a moderation model in SPSS using univariate GLM. We used Jante (reverse coded) as a moderating variable between the treatment variables (necessity entrepreneurship vs. opportunity entrepreneurship vs. control) and Entrepreneurial Advice. Before interpreting the main results of H2, we confirmed that none of the main assumptions needed to run a model in GLM, such as Homogeneity of Residual Variances (Levene’s $p = 0.79$) or Normality of residuals (Shapiro-Wilk $p > 0.05$) were violated.

Proceeding to the main results of this hypothesis test (see bolded text in Table 4), no interaction effect (moderation) for treatment*Jante was found: $F(2, 120) = .03, p = 0.97$. Based on this result, we reject H2. Hypothesis H1 predicted that entrepreneurial motivation would have a negative effect on Entrepreneurial Advice in some scenarios. Namely, when a person seeking advice is motivated to engage in entrepreneurship because of necessity, entrepreneurial advice will be more likely than if the motivation

Table 1. PCA rotated component matrix using McElwee’s (2006) strategic management options.

Items Measured	Component			
	1	2	3	4
Total Variance Explained	1.80	1.76	1.56	1.43
Find a new job	0.87			
Sell Farm	0.85			
Broaden (diversify) production		0.80		
Consider other products		0.63	0.36	
Invest in innovation		0.56		
Expand business and get bigger			0.86	
Increase sales volume			0.77	
Look for partners to collaborate with		0.34		0.75
Vertically Intergrate (reduce number of middlemen)				0.65
Be satisfied with the current situation and don’t make any changes	0.32	0.52		-0.57

Note. ‘Varimax’ rotation was used. Side-loadings $<.30$ were suppressed.

Table 2. Operationalization of measures and experimental treatments included in the models tested.

Variable	Stem and measurement items
Ent. Advice (McD. $\omega = .615$)	<p><i>What should Johan do in his situation?</i></p> <ol style="list-style-type: none"> 1. Broaden (diversify) production 2. Invest in innovation 3. Consider other products <p>(1 = Totally Disagree—5 = Totally Agree)</p>
Jante (Formative index)	<p><i>Personally, I think it is ok if someone believes that they:</i></p> <ol style="list-style-type: none"> 1. are anything special 2. as good as others 3. are smarter than others 4. are better than others 5. know more than others 6. more important than others 7. are good at anything 8. can teach others anything 9. that anyone cares about you <p>(1 = Totally disagree—5 = Totally Agree)</p>
Treatment	<p><i>Last year Johan took over the family farm from his parents and is the fourth generation to work the farm. Over the years the farm business produced and sold, mostly the same products—grains (cereals). The size of the farm business has remained steady over the years with between 0 and 2 employees including family members. Johan is not happy with the farm business' development.</i></p> <ol style="list-style-type: none"> 1. Treatment better: Profitability over the years has been worse than the competition. 2. Treatment worse: Profitability over the years has been better than the competition 3. Treatment control: No information given <p><i>In any case, Johan is not happy with that and wishes to improve profitability. Johan has decided to risk everything by investing the family savings in an innovative product that he believes will increase profitability.</i></p>

Table 3. Descriptive statistics for model variables.

Variables	Mean	SD	Number of observations
Age	24.4	1.93	121
Jante	2.66	0.53	122
Ent. Advice	3.68	0.65	121
Frequencies			
Gender Female	47%	-	57
Gender Male	53%	-	65
Treat. Worse	33%	-	40
Treat. Better	32%	-	39
Treat. Control	35%	-	43

Table 4. Main results for the univariate GLM showing the insignificant interaction effect in bold that led to rejecting hypothesis 2.

ANOVA Omnibus tests	SS	Df	F	p	η^2
Model	5.76	7	2.10	0.05	0.11
Age	2.34	1	5.95	0.02	0.05
Gender	0.09	1	0.22	0.64	0.001
Jante	2.05	1	5.23	0.02	0.041
Treatment	0.79	2	1.00	0.37	0.016
Treatment * Jante	0.02	2	0.03	0.97	0.001
Residuals	44.35	113			
Total	50.11	120			

Note: The dependent variable is Entrepreneurial Advice. $\eta^2 =$ eta squared.

was related to opportunity (H1a) or no information (H1b). Hypothesis H1 predicted that entrepreneurial motivation would have a negative effect on Entrepreneurial Advice in some scenarios. Namely, when a person seeking advice is motivated to engage in entrepreneurship because of necessity, entrepreneurial advice will be more likely than if the motivation was related to opportunity (H1a) or no information (H1b).

To test this hypothesis, we used hierarchical multiple regression with variables added stepwise. In Model 1,

(see Table 5) the controls age and gender were added. Age had a significant ($p=0.029$) and negative main effect on Entrepreneurial Advice, while Gender was not significant at $p=0.489$. The adjusted R square for model 1 is .03 with age capturing most of the variance. In model 2 (also Table 5) we add two of our three treatment variables as dichotomous variables and Jante (reverse coded).

However, while entrepreneurial advice was lower when the individual seeking advice was motivated by opportunity entrepreneurship, as compared to necessity entrepreneurship, or the control as predicted by H1a and H1b, the differences were not-significant ($p = 0.536$ and $p = 0.154$). As a result, we reject hypothesis H1a and H1b.

Table 5. Stepwise regression analysis assessing main effects of experimental treatment (H1a & H1b) and Jante on Entrepreneurial Advice.

Predictors of Entrepreneurial Advice	Model 1				
	β	SE	Beta	t	p
Age	-0.07	0.03	-0.20	-2.21	.029*
Gender	0.08	0.12	0.06	0.69	.489
R	0.22				
Adj. R ²	0.03				
	Model 2				
	β	SE	Beta	t	p
Age	-0.07	0.03	-0.22	-2.46	.015*
Gender	0.06	0.17	0.05	0.51	.612
Treatment Worse	-0.09	0.14	-0.06	-0.62	.536
Treatment Better	-0.20	0.14	-0.14	-1.43	.154
Jante	-0.28	0.11	-0.23	-2.52	.013*
R	0.34				
Adj. R ²	0.07				
Change in R ²	4.9%				

Note: * = result is significant at $p < 0.05$.

Unexpectedly, we found a negative and significant main effect for Jante on entrepreneurial advice in model 2 ($p = 0.013$). The more Jante our participant was, the less likely it was that they gave entrepreneurial advice. The scatter plot in Figure 2 (below) shows that as the Jante-ness of the advice giver increases, Entrepreneurial Advice tends to decrease. The effect size of Jante relative to the other variables in model 2 is the largest (Beta = -0.23) followed by age, which was also significant ($p = 0.015$) and had a similar effect size (Beta = -0.22). The Adjusted R square for model two is .07 and the unique contribution of Jante is greater than the other variables in the model to change in R square is 4.9% (see Table 5).

Discussion and conclusion

In this study we designed an experiment to test whether the advice provided by Agricultural and Rural Management students relating to the pursuit of entrepreneurial activity differed depending on the underlying motivations of the receiver of advice to engage in entrepreneurship. We theorized that the advice given would be moderated by how “Jante” the individual giving advice is. We found that differences in the underlying reasons for engaging in entrepreneurship did not significantly change the entrepreneurial advice given. It did not matter in our treatment scenarios if the farmer seeking advice was motivated to engage in entrepreneurship due to necessity (i.e. because profitability

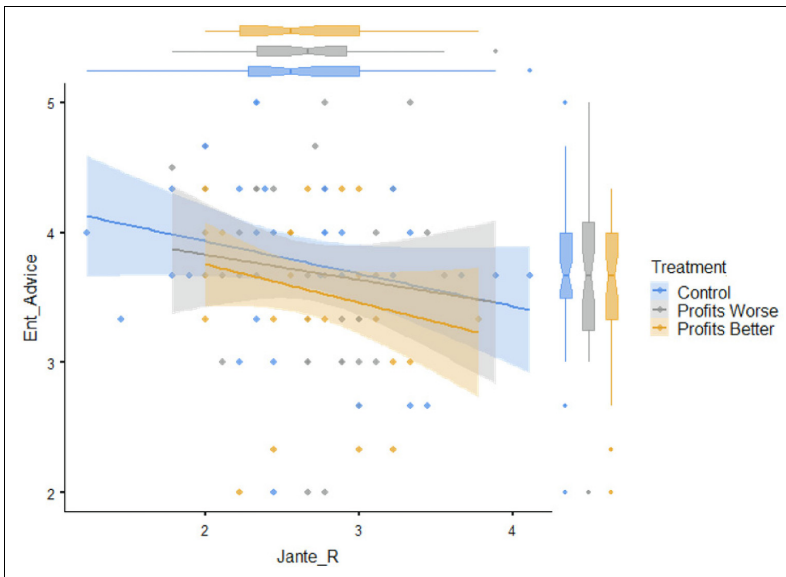


Figure 2. Scatter plot showing the relationship between Jante and Entrepreneurial Advice sorted by experimental treatment (profits worse is the necessity entrepreneurship condition while profits better is the opportunity entrepreneurship condition).

was worse than competitors over time) or opportunity (i.e. profitability was better than competitors over time). *Moreover, when investigating whether Jante and our treatment scenarios interacted, we did not find an effect.* This suggests that the Jante culture does not make exceptions for those who have a “good excuse” to be entrepreneurial.

Surprisingly, the Rural and Agricultural Management students tended to be positive overall towards giving entrepreneurial advice under all scenarios, however, this *advice significantly declined the more Jante they were.* Instead of using information about past profitability and motivation to inform others on whether to pursue entrepreneurship, Jante-ness was better predictor of the advice provided. As the Jante-ness of the students increased, they tended to offer less advice on pursuing entrepreneurial activities such as innovation, new types of production and product diversification.

We believe that these findings are important for three reasons. First, the results extend findings of Cooke and Wills (1999) by showing that cultural ties, characterized by Jante-ness, may lead to fewer entrepreneurial activities—at least in an agricultural context. While Jante and similar cultural constraints have been explored in previous entrepreneurship studies, they have either been qualitative in nature—limiting the generalizability of findings (Borch et al., 2008)—or were done in contexts outside of agriculture where Jante did not show an effect and had limited relevance for the agricultural sector (Davidsson and Wiklund, 1997).

This finding contributes to knowledge on why farmers differ in their strategic decision-making as culturally biased or even culturally embedded professional advice may inhibit perceived room for maneuvering (Methorst et al., 2017). This opens up opportunities for entrepreneurship scholars to isolate the influence of Jante (or similar phenomenon such as The Tall Poppy Syndrome) in sectors outside of agriculture and to capture its inhibitory effects indirectly through advice given to others.

Second, it is widely known that the agricultural sector tends to lag behind other sectors when it comes to entrepreneurial activities such as innovation and diversification (Pindado and Sánchez, 2017). If similar cultures to Jante exist in other agricultural contexts or countries, our findings may help to explain why entrepreneurship is less frequently adopted. We submit that entrepreneurial tolerance and the cultural aspects that constrain it are important for understanding why certain forms of entrepreneurship are pursued or avoided in different contexts (Shane and Venkataraman, 2000).

Third, our findings are a reminder to advisors to reflect on their cultural biases when advising clients, friends, and family to pursue entrepreneurship. Within the Swedish agricultural context, advisors who are deeply embedded in the agricultural community may unwittingly encourage others in their network of relationships to adhere to cultural norms (Bourdieu, 1985). If these norms are related to Janteness, they may deter entrepreneurial advice. A

greater level of introspection may help them provide more nuanced advice related to the situation rather than their cultural prejudices. Policy makers wanting to increase farm entrepreneurship may find it helpful to provide farmers with advisors from outside of their typical peer groups. This may help to enhance creativity and innovation by enhancing cognitive frames and “counteracting bounded rationality” (Bajaba et al., 2021).

Finally, for farmers weighing the strategic decision of engaging in entrepreneurship, this study suggests that others, especially “Jante” individuals may hold it against them. From a social capital perspective, ignoring embedded norms (e.g. the rules of Jante) may generate greater entrepreneurial activity and improved economic outcomes, but result in sanctions by the community. Coleman (1988) refers to losing family, religious and community ties as examples that lower social, physical, mental and life satisfaction returns (Lin et al., 2001). We encourage future research to explore these sanctions/outcomes in the context of Jante to see how they influence farm entrepreneurship decision making.

This study did have several limitations that reduced the generalizability of the findings. The data are based on a homogenous sample of Agricultural and Rural Management students and therefore, the results cannot be generalized to other groups. It may be the case that our students are more open to external ideas since leaving their home community than farmers who have not. In fact, they were more positive as a group towards entrepreneurship than we expected. Nevertheless, there was enough Jante variation within this group to establish a negative effect on entrepreneurial advice. This is encouraging for our results since we would expect more robust effects to be found in “real world” farming communities. The decision to sample these students was done to maximize the internal validity of our findings, however this came at the expense of external validity. Moreover, the experiments were ill equipped to capture the complexity of real-world scenarios where for example, the degree of opportunity or necessity is important, as are social — psychological factors, which we did not consider in this study. This said, we argue that our results contribute to theoretical generalizability, even if statistical generalizability is low (Mook, 1983). In operationalizing McElwee’s (2006) farm development strategies and using a subset of them to capture Entrepreneurial Advice, we missed an opportunity to capture a fuller range of entrepreneurial activity that we believe would also have increased the validity of our DV.

Now that we have established Jante may affect entrepreneurial decision-making, we encourage future researchers to explore other contexts in which cultural intolerance towards entrepreneurship may exist


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ORCID iD

Jozefine Nybom  <https://orcid.org/0000-0002-9403-2403>

References

- Ahlness EA (2014) Janteloven and social conformity in Thorborn Egner's literature. 2014 NCUR.
- Ahmad N and Seymour RG (2008) Defining entrepreneurial activity: definitions supporting frameworks for data collection.
- Bajaba A, Le S, Bajaba S, et al. (2021) Immigrant founder chief executive officers, firm innovation, and performance: The role of cultural distance and top management team and board social capital. *The International Journal of Entrepreneurship and Innovation* 22(3): 1–11.
- Bastian BL and Tucci CL (2017) Entrepreneurial advice sources and their antecedents: venture stage, innovativeness and internationalization. *Journal of Enterprising Communities: People and Places in the Global Economy* 11(2): 214–236.
- Björklund JC (2018) Barriers to sustainable business model innovation in Swedish agriculture. *Journal of Entrepreneurship, Management and Innovation* 14(1): 65–90.
- Borch JO, Førde A, Rønning L, et al. (2008) Resource configuration and creative practices of community entrepreneurs. *Journal of Enterprising Communities: People and Places in the Global Economy* 2(2): 100–123.
- Bourdieu P (1985) The social space and the genesis of groups. *Information (International Social Science Council)* 24(2): 195–220.
- Cañizares S and García F (2010) Gender differences in entrepreneurial attitudes. *Equality, Diversity and Inclusion: An International Journal* 29(8): 766–786.
- Capelleras JL, Contin-Pilart I, Larraza-Kintana M, et al. (2019) Entrepreneurs' human capital and growth aspirations: The moderating role of regional entrepreneurial culture. *Small Business Economics* 52(1): 3–25.
- Cappelen C and Dahlberg S (2018) The Law of Jante and generalized trust *Acta Sociologica* 61(4): 419–440.
- Coleman JS (1988) Social capital in the creation of human capital. *American Journal of Sociology* 94: S95–S120.
- Cooke P and Wills D (1999) Small firms, social capital and the enhancement of business performance through innovation programmes. *Small Business Economics* 13(3): 219–234.
- Davidsson P (1991) Continued entrepreneurship: ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing* 6(6): 405–429.
- Davidsson P (2004) *Researching Entrepreneurship*. New York: Springer.
- Davidsson P and Honig B (2003) The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing* 18(3): 301–331.
- Davidsson P and Wiklund J (1997) Values, beliefs and regional variations in new firm formation rates. *Journal of Economic Psychology* 18(2–3): 179–199.
- De Lauwere C (2005) The role of agricultural entrepreneurship in Dutch agriculture of today. *Agricultural Economics* 33(2): 229–238.
- Dencker J, Bacq SC, Gruber M, et al. (2019) Reconceptualizing necessity entrepreneurship: a contextualized framework of entrepreneurial processes under the condition of basic needs. *Academy of management review*(ja).
- Dias C, Rodrigues R and Ferreira J (2019) Agricultural entrepreneurship: going back to the basics. *Journal of Rural Studies* 70: 125–138.
- Diederer P, Van Meijl H, Wolters A, et al. (2003) Innovation adoption in agriculture: Innovators, early adopters and laggards. *Cahiers d'Economie et de Sociologie Rurales* 67: 29–50.
- EC (2012) Rural entrepreneurship. *EU Rural Review*.
- Elfring T, Klyver K and van Burg E (2021) *Entrepreneurship as Networking: Mechanisms, Dynamics, Practices, and Strategies*. New York: Oxford University Press.
- Estadística IND (2020) Community innovation survey in enterprises. Year 2019. Definitive Results. [Press release]. https://www.ine.es/en/prensa/eie_2019_en.pdf (Accessed 2021-12-29).
- Fitz-Koch S, Nordqvist M, Carter S, et al. (2017) Entrepreneurship in the agricultural sector: A literature review and future research opportunities. *Entrepreneurship Theory and Practice* 42(1): 129–166.
- Fromhold-Eisebeth M (2004) Innovative milieu and social capital—complementary or redundant concepts of collaboration-based regional development? *European planning studies* 12(6): 747–765.
- Granovetter M (1985) Economic action and social structure: The problem of embeddedness. *American Journal of Sociology* 91: 481–510.
- Grossman D and Taylor R (1995) Working with people: cultural diversity on the unit. *The American Journal of Nursing* 95(2): 64–67.
- Hayton JC, George G and Zahra SA (2002) National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship theory and practice* 26(4): 33–52.
- Hechavarria DM and Reynolds PD (2009) Cultural norms & business start-ups: The impact of national values on opportunity and necessity entrepreneurs. *International Entrepreneurship and Management Journal* 5(4): 417–437.
- Hunter E, Jenkins A and Mark-Herbert C (2021) When fear of failure leads to intentions to act entrepreneurially: insights from threat appraisals and coping efficacy. *International Small Business Journal* 39(5): 407–423.
- Hytti U, Blackburn R and Tegmeier S (2018) *The Dynamics of Entrepreneurial Contexts*. Cheltenham, UK: Edward Elgar Publishing.
- Kaminsky D (2007) The zorn trials and the jante Law: On shining musically in the land of moderation. *Yearbook for Traditional Music* 39: 27–49.
- Kirkwood J (2007) Tall poppy syndrome: implications for entrepreneurship in New Zealand. *Journal of Management & Organization* 13(4): 366–382.
- Kirschenmann F, Stevenson G, Buttell F, et al. (2008). Why worry about the agriculture of the middle. *Food and the mid-level farm: Renewing an agriculture of the middle* 1(1): 3–22.
- Kirzner I (1973) *Competition and Entrepreneurship*. Chicago, IL: University of Chicago Press.

- Klaesson J, Johansson S, Bjerke L, et al. (2019) Innovationer i jordbruket och på Sveriges landsbygder - En sammanställning av Jordbruksverkets innovationsundersökning 2017. Available from <https://webbutiken.jordbruksverket.se/sv/artiklar/utv193.html>:
- Klyver K and Arenius P (2020) Networking, social skills and launching a New business: A 3-year study of nascent entrepreneurs. *Entrepreneurship Theory and Practice*: 1–28.
- Klyver K and Bager T (2012) Entrepreneurship policy as institutionalised and powerful myths. *International Journal of Entrepreneurial Venturing* 4(4): 409–426.
- Klyver K, Ewald MR and Hindle K (2011) Social networks and new venture creation: The dark side of networks. In: Hindle K and Klyver K (eds) *Handbook of Research on New Venture Creation*. Edward Elgar Publishing, pp. 145–159.
- Levinthal DA and March JG (1993) The myopia of learning. *Strategic Management Journal* 14(S2): 95–112.
- Li Y, Wang X, Huang L, et al. (2013) How does entrepreneurs' social capital hinder new business development? A relational embeddedness perspective. *Journal of Business Research* 66(12): 2418–2424.
- Lin N, Cook K and Burt RS (2001). *Social Capital: Theory and Research*. 1st ed. New York: Routledge, 1–333. <https://doi.org/10.4324/9781315129457>
- Lund R (2020) The social organisation of boasting in the neoliberal university. *Gender and Education* 32(4): 466–485.
- Martin LM, Warren-Smith I, Schofield C, et al. (2013) Exploring SME advice and training needs for entrepreneurial rural firms. *The International Journal of Entrepreneurship and Innovation* 14(2): 95–102.
- McElwee G (2006) Farmers as entrepreneurs: Developing competitive skills. *Journal of Developmental Entrepreneurship* 11(03): 187–206.
- McLeay F, Martin S and Zwart T (1996) Farm business marketing behavior and strategic groups in agriculture. *Agribusiness: an International Journal* 12(4): 339–351.
- Methorst RR, Roep DD, Verhees FF, et al. (2017) Differences in farmers' perception of opportunities for farm development. *NJAS-Wageningen Journal of Life Sciences* 81: 9–18.
- Micheels ET and Nolan JF (2016) Examining the effects of absorptive capacity and social capital on the adoption of agricultural innovations: A Canadian Prairie case study. *Agricultural Systems* 145: 127–138.
- Mikko Vesala K, Peura J and McElwee G (2007) The split entrepreneurial identity of the farmer. *Journal of Small Business and Enterprise Development* 14(1): 48–63.
- Mook DG (1983) In defense of external validity. *American Psychologist*, 38, 379–387.
- Morris W, Henley A and Dowell D (2017) Farm diversification, entrepreneurship and technology adoption: analysis of upland farmers in Wales. *Journal of Rural Studies* 53: 132–143.
- Mouly V and Sankaran J (2000) The tall poppy syndrome in New Zealand: An exploratory investigation. *Transcending Boundaries: Integrating People, Processes and Systems*: 285–289.
- Penrose E (1959) *The Theory of the Growth of the Firm*. New York: John Wiley & Sons.
- Pérez-Luño A, Medina CC, Lavado AC, et al. (2011) How social capital and knowledge affect innovation. *Journal of Business Research* 64(12): 1369–1376.
- Pindado E and Sánchez M (2017) Researching the entrepreneurial behaviour of new and existing ventures in European agriculture. *Small Business Economics* 49(2): 421–444.
- Portes A (1998) Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology* 24(1): 1–24.
- Rahm G, Rystedt I, Wilde-Larsson B, et al. (2019) Workplace bullying among healthcare professionals in Sweden: A descriptive study. *Scandinavian Journal of Caring Sciences* 33(3): 582–591.
- Robinowitz CJ and Carr LW (2011) *Modern-Day Vikings: A Practical Guide to Interacting with the Swedes*. Boston, MA, USA: Intercultural Press.
- Sanchez-Famoso V, Pittino D, Chirico F, et al. (2019) Social capital and innovation in family firms: The moderating roles of family control and generational involvement. *Scandinavian Journal of Management* 35(3): 101043.
- Sandemose A (1934) En flykting korsar sitt spår: berättelsen om en mördares barndom: Tiden.
- Scott S (2016) Politeness as collective facework: The case of Swedish Jante Law. *Studies in Symbolic Interaction*: 1–35. ISSN 0163-2396.
- Shane S and Venkataraman S (2000) The promise of entrepreneurship as a field of research. *Academy of Management Review* 25(1): 217–226.
- Smith PB, Andersen JA, Ekelund B, et al. (2003) In search of Nordic management styles. *Scandinavian Journal of Management*, 19(4), 491–507.
- Stenholm P. and Hytti U. (2014). In search of legitimacy under institutional pressures: A case study of producer and entrepreneur farmer identities. *Journal of Rural Studies*, 35, 133–142.
- Theis A, 2014. *Entrepreneurial activity and The Jante Law*. Master of Strategic Entrepreneurship. University of Southern Denmark, Kolding.
- Welter F (2011) Contextualizing entrepreneurship—conceptual challenges and ways forward. *Entrepreneurship Theory and Practice* 35(1): 165–184.
- Welter F, Baker T and Wirsching K (2019) Three waves and counting: The rising tide of contextualization in entrepreneurship research. *Small Business Economics* 52(2): 319–330.
- Wolfensberger MVC (2015) Sweden: incentive to move towards more differentiation. In: Wolfensberger MVC (ed) *Talent Development in European Higher Education: Honors Programs in the Benelux, Nordic and German-Speaking Countries*. Cham: Springer International Publishing, pp. 139–152.

4.2 Results of the scoping review

The law of Jante (from here on “Jante”) seemed to not have been explored in depth and belongs to a small research field. Similar expressions of cultural intolerance are found in other countries, such as “Tall Poppy Syndrome” – aversion to the success of others (Kirkwood and Warren, 2020), and “The nail that sticks up get hammered down” – exclusion of those stand out from the collective (Jackson, 2001). The overview (table 5) shows that, although these expressions are often considered as having the same meaning, there are small differences. In a Scandinavian context, the meaning connects to ideas of putting the collective before the individual, while in an Anglo-Saxon context it is more connected with ideas of jealousy. Due to the differences in how cultural intolerance is conveyed, this scoping review will focus Jante.

Table 5. A compilation of different cultural perspectives on cultural intolerance.

Syndrome	Country	Expression	Authors
Law of Jante	Denmark, Norway, Sweden, Finland, Iceland	Putting society before individual accomplishments, not being jealous of others (Modesty Code).	Hunter et al. (2022); Cappelen and Dahlberg (2018); Trotter (2015) Rahm et al. (2019)
Tall Poppy Syndrome (TPS)	USA, UK, NZ, and other Anglosphere countries	Cutting down the tall poppy, aversion to the success of one’s peers (Envy).	Kirkwood and Warren (2020).
Crabs in a barrel syndrome (CBS)	Philippines, and parts of Asia and Latin America	Involves pulling down anyone who achieves or is about to achieve success greater than your own (Envy).	Miller (2019); Bulloch (2017)
The nail that sticks up gets hammered down.	Japan	Excluding those who are too different or conspicuous through criticism or sanctions (Exclusion/Sanction).	Jackson (2001)

Trotter (2015) examined the symbolic nature of Jante and found that it contributes to negative expressions of personal pride (you should not think you are better than someone else). Jante can, however, serve as an excuse for finding oneself in a negative situation, such as a lack of success. Furthermore, Trotter (2015) suggested that children are taught the Jante in school, and therefore are affected at an early age by these unwritten laws in society and therefore Jante become an accepted part of society, and also functions as a type of social control in the community. Since the Scandinavian countries are relatively small nations, social belonging and the individual's contribution to the collective is important, and trusting other members of society is vital for this. To understand the concept of the trust of members of the society (i.e., generalized trust), Cappelen and Dahlberg (2018) examined the 10 rules of Jante and their relationship to generalized trust. However, no connection could be found between the 10 laws of Jante and generalized trust; instead, Cappelen and Dahlberg (2018) found regional varieties of Jante in different parts of Norway.

Furthermore, Hunter et al. (2022) examined Jante in an agricultural context. Their findings showed that cultural intolerance can predict the extent to which entrepreneurial advice is given based on the advisor's own level of 'Janteness'. These results suggest that the advisor's Janteness can influence entrepreneurial activity by the farmer. The farm advisors Janteness may manifest in different layers and can be directed through actions, or the lack thereof. Bromgard et al. (2014) examined Jante and its influence on expressions of "pride" between US American and Norwegian university students, asking the students to look at images of a person expressing pride (rating on a 7-point Likert scale) and asked to what "... extent that the target person possessed the following 11 trait/states: annoying, friendly, getting pleasure from another's misfortune ("schadenfreude"), warm, pride, trustworthy, loyal, dominate, honest, happy, and smug" (p. 376). Their findings showed a clear distinction between the groups. American students linked pride to the following expressions: *pride, trusting, loyal, and honest*; whereas Norwegian students linked pride to the following expressions: *annoying, schadenfreude, smug, and negative*. Clearly the results point to different perceptions of pride, although some questions can be raised within this. As the results show cultural differences, it is still unclear how Jante is connected to the expression of pride per se.

Jante has also been used to study bullying among nurses (Rahm et al., 2019). The nurses self-reported situations where they felt oppressed and exposed to bullying. However, it is unclear how Jante fits into the study. The results are not clearly stated, and it is challenging to understand how Jante is operationalized, making it important to interpret the results carefully. One related concept to Jante is Tall Poppy Syndrome (a term used in Anglo-Saxon countries). From the scoping review, an article on TPS was selected for a read through as its focus was on entrepreneurship. Kirkwood and Warren (2020) made the assumption that TPS exists and influences entrepreneurs. They conducted interviews with entrepreneurs in New Zealand, trying to understand the role of TPS, entrepreneurial success and the social legitimacy of entrepreneurs. The findings showed that the interviewed entrepreneurs had different strategies and coping mechanisms in situations where TPS emerged. Some entrepreneurs accepted that TPS was a part of New Zealand culture, while others stopped reading online comments where envy was given free rein. The latter action was an attempt by the entrepreneurs to protect themselves from being affected by negative comments from anonymous detractors, but they experienced a lack of support of how to handle these comments.

4.2.1 Reflection on assumptions in paper II

Paper II examines social norms in the context of the Scandinavian countries and whether Jante influences the entrepreneurial advice given. Two assumptions are made, firstly, that the advice given depends on the receiver's motivations (i.e., the farmer) and secondly, that the messenger (i.e. the advisor) has influence in this situation.

Firstly,

“...we tested whether the advice our participants gave to a fictitious farmer to pursue entrepreneurial activity depended on information regarding the farmer's motivation to pursue entrepreneurship” (Hunter et al., 2022; p. 1).

Secondly,

“...experimental treatments included motivation scenarios based on necessity vs. opportunity driven vs. control” (Hunter et al., 2022; p. 1).

The assumption in paper II was that different motivations for pursuing entrepreneurship would make it more or less acceptable for them to take big risks (e.g., if their farm was failing, they were left with no other choice but to be entrepreneurial and take risks). Thus, it was assumed that the motivation to take risks would moderate the advice given. However, this assumption was wrong. Instead, it was the level of Janteness from the person giving advice which could predicted the entrepreneurial advice given.

The characteristics of the entrepreneur have been frequently debated among researchers (see Filion, 2021; Shane and Venkataraman, 2000; Busenitz and Barney, 1997; and Gartner, 1988). The entrepreneur can be an individual able to identify opportunities and gather necessary resources for the task (Carton et al., 1998), show competitive aggressiveness (Anderson and Eshima, 2013; Lumpkin and Dess, 1996; Lumpkin and Dess, 2001), or be an innovative risk-taker (Casillas and Moreno, 2010). These specific characteristics of the entrepreneur have been suggested to drive business development and have an indirect impact on economic growth (Wennekers and Thurik, 1999). Discussing these assumptions is important as they influence how entrepreneurship is measured and the understanding of the interpretations.

For example, Welter (2011) frames social context from a social network perspective (e.g. capital, employees) and in terms of family embeddedness (household and family) but also points out the one-dimensional nature of the research due to its focus on the business context:

“Besides the business context, which has been widely researched in entrepreneurship studies, such a context lens includes somewhat neglected aspects of social, spatial, and institutional contexts” (Welter, 2011; p. 169).

In hindsight, as paper II looked into cultural intolerance, following the recommendations of Welter (2011) would have strengthened the assumptions in the paper, adding to a neglected area within the research field.

4.2.2 Self-reflections on paper II

In contrast to paper I, where the research field is more established, paper II represented questions and concepts that have a smaller research community. This was a surprise as the phenomena of Jante is well-known in Sweden (and other Scandinavian countries). Moreover, Weijo (2019) has suggested that Jante affects consumer behavior and is often expressed through the distinct rejection of individuals perceived as being status-hunting. Further, the research field around Jante has not been fully explored, and, without inspiration from a previous conceptual model, this project faced the possible risk of generating no findings. In hindsight, instead of designing an experiment,

I could have conducted a more exploratory type of research to better establish the construct and hypothesize about their relationships. For example, rather than relying on anecdotal evidence, interviews could have established the presence of Jante in the farming community. Interviews have their advantages when “There is insufficient known about the subject to be able to draft a questionnaire” (Rowley, 2012; p. 262), and could also have contributed to an understanding of how these values and beliefs affect decision making in the organization (Symon and Cassell, 2012).

Using interviews to gather insights might have prevented some of the miscalculations associated with paper II. For example, it was assumed that Jante would moderate the relationship between farmers who engaged in entrepreneurship for reasons related to opportunity vs. necessity. However, no difference was found with the control group (provided with no information), which was unexpected. In the second analysis, the sender (giving advice) was influenced by their level of Jante, meaning that the higher they scored in Jante influence (measured by Sandemose’s (1934) ten laws of Jante, where the respondents replied to each law using a 7-point Likert scale), the less entrepreneurial advice they tended to give. I believe the findings are interesting as it shows how decisions around investment may be influenced by the person giving advice in a business situation. If I could do it over again, I would make a number of key changes. For example, I

would still conduct an experiment, but as a pilot to build on. In a second step, using the information from the experiment, I would interview both farmers and advisors. The session could begin with the same survey to measure Janteness. I would take inspiration for such an exercise by using the work of Kirkwood and Warren (2020), who looked at celebrity entrepreneurs and the ways in which self-promotion and being successful may be viewed as socially unacceptable. After interviewing farmers and advisors, I would use the data to construct a survey, including the statements on Jante. Using a different method would likely create a different result. When conducting interviews with farmers, I think it is important for the researcher to have less knowledge of farming than I have, as my own background in farming may have given rise to a bias in both interview (reading too much into farmers response) and in the analysis of (transcribed) data.

4.2.3 Avenues for future research related to paper II

There seems to be a theme of Jante having a negative (perceived) social consequence for individuals who do things differently, stand out from the group or try to be better than the group. Therefore, building on the operationalization of Jante in paper II, a couple of suggestions for future research can be made.

Firstly, Ahlness (2014) suggested that the Jante mindset is passed down from generation to generation, with each generation acting as agents through socialization. In agriculture, many farms are passed down through generations with the family. Therefore, a mixed study (qualitative/quantitative) could be conducted to investigate the generational aspects of Jante on the farm. Is Jante passed down between generations? If so, is there a link between farm development and generational Janteness?

Second, building on the findings from Kirkwood and Warren (2020) a mixed study (qualitative/quantitative) could be conducted to examine whether Jante is a barrier to sharing successful farm business management, and in turn if this affects the farmer's early adoption of innovation.

Thirdly, it would be useful to ask whether a person's level of Janteness changes over time. A longitudinal study could be conducted among agricultural students at the Swedish university of Agriculture. It could follow one group of students over three years, using a survey to determine their level of Janteness over time, supported with follow-up interviews.

References

- Ahness, E.A. (2014). Janteloven and Social Conformity in Thorbørn Egner's Literature. 2014 NCUR.
- Anderson, B. S., & Eshima, Y. (2013). The influence of firm age and intangible resources on the relationship between entrepreneurial orientation and firm growth among Japanese SMEs. *Journal of business venturing*, 28(3), 413-429.
- Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of business venturing*, 12(1), 9-30.
- Bromgard, G., Trafimow, D., & Linn, C. (2014). Janteloven and the expression of pride in Norway and the United States. *The Journal of social psychology*, 154(5), 375-378.
- Bulloch, H. C. (2017). Ambivalent moralities of cooperation and corruption: Local explanations for (under) development on a Philippine island. *The Australian Journal of Anthropology*, 28(1), 56-71.
- Cappelen, C., & Dahlberg, S. (2018). The Law of Jante and generalized trust. *Acta Sociologica*, 61(4), 419-440.
- Carton, R. B., Hofer, C. W., & Meeks, M. D. (1998, June). The entrepreneur and entrepreneurship: Operational definitions of their role in society. In Annual International Council for Small Business. Conference, Singapore (pp. 1-12).
- Casillas, J. C., Moreno, A. M., & Barbero, J. L. (2010). A configurational approach of the relationship between entrepreneurial orientation and growth of family firms. *Family business review*, 23(1), 27-44.
- Filion, L.J. (2021). Defining the entrepreneur. In: *World Encyclopedia of Entrepreneurship* Edward Elgar Publishing.
- Gartner, W. B. (1988). "Who is an entrepreneur?" is the wrong question. *American journal of small business*, 12(4), 11-32.
- Hunter, E., Nybom, J., Micheels, E., & Klyver, K. (2022). Farmers that engage in entrepreneurship for the "wrong" reason and the moderating role of cultural intolerance. *The International Journal of Entrepreneurship and Innovation*, p. 1-11.
- Jackson, J. (2001). Cross-cultural case discussions in international business: encouraging "the nails to stick up". *Journal of Teaching in International Business*, 13(1), 67-86.

- Kirkwood, J., & Warren, L. (2020). Legitimizing entrepreneurial success in an environment of Tall Poppy syndrome: Lessons from celebrity entrepreneurs in New Zealand. *The International Journal of Entrepreneurship and Innovation*, 21(2), 101-112.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management Review*, 21(1), 135-172.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of business venturing*, 16(5), 429-451.
- Miller, C. D. (2019). Exploring the crabs in the barrel syndrome in organizations. *Journal of Leadership & Organizational Studies*, 26(3), 352-371.
- Rahm, G., Rystedt, I., Wilde-Larsson, B., Nordström, G., & Strandmark K, M. (2019). Workplace bullying among healthcare professionals in Sweden: a descriptive study. *Scandinavian journal of caring sciences*, 33(3), 582-591.
- Rowley, J. (2012). Conducting research interviews. *Management research review*, 35(3/4), 260-271.
- Sandemose, A. (1934). En flykting korsar sitt spår: berättelsen om en mördares barndom: Tiden.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, 25(1), 217-226.
- Symon, G., & Cassell, C. (2012). *Qualitative organizational research: core methods and current challenges*. Sage Publications, ISBN: 978-0-85702-411-4 (pbk).
- Trotter, S. R. (2015). Breaking the law of Jante. *Myth and Nation*,
- Weijo, H. A. (2019). Democracies of taste ruled by the law of jante? Rudiments of a nordic sociology of consumption. *Nordic Consumer Culture: State, Market and Consumers*, 25-47.
- Welter, F. (2011). Contextualizing entrepreneurship—conceptual challenges and ways forward. *Entrepreneurship theory and Practice*, 35(1), 165-184.
- Wennekers, S. & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13(1), pp. 27-56.

5. Founder identity – Darwinians, Communitarians and Missionaries

Chapter 5 contains the background and motivations behind paper III. The following sub-section contains a discussion of the results from the scoping review, leading to the positioning of paper III, and an extended self-reflection. It reflects my thoughts on operationalization and problematization, and the learning process which took place. This chapter also contains an addition section discussing the questionnaire. The chapter ends with suggestions for avenues of future research related to paper III.

5.1 Paper III. Social identity and the moderating role of family influence in sustainable decision making.

The inspiration for paper III came from participation in a webinar on social entrepreneurship (ESBRI, 2021). During the webinar, a discussion ensued about the vastly different motivations held by founders in their entrepreneurial pursuits. The idea of different types of entrepreneurs was interesting and, therefore, I searched for articles in this area. This is when I found a paper by Sieger et al. (2016), who developed a scale to categorize the social identity of the entrepreneur. With this in mind, I brought it up in conversations with farmers I met in private discussions. One farmer mentioned the desire to help his community prosper, while another talked in length about the importance of passing a farm with healthy soil conditions to his son, which, although risky, required new thinking and ways of managing the business. It was somewhat surprising that financial motivations were not always or even mostly the driving factor. The discussion led to a number of unanswered questions: How common was it for farmers to prioritize other

factors besides maximizing their financial outcomes? Did the farmers who were driven by non-financial drivers act on and achieve their goals? If not, what was holding them back? Were they more or less financially secure in doing so?

In the process of searching for ideas how to approach these questions, a scale developed by Sieger et al. (2016) was identified and would be used to create the foundation for classifying farmers based on their stated identities. More so, this scale was shown by subsequent researchers to predict different types of entrepreneurial pursuit (see e.g. Sieger et al., 2016; Ko and Kim 2020; Clarysse et al., 2023), although not in the agricultural sector (most previous research using this scale was focused on family businesses in non-agricultural sectors), and was not related to some of the “hot” discussion topics regarding sustainability (e.g. social and environmental) that were debated at the meeting.

Furthermore, as farm businesses are often family owned and operated, there is a potential for families to influence a farmer’s decision making. The research done in paper I showed the importance of the external environment on strategic orientation. Thus, the findings of paper I led to the decision to include environmental hostility as a potential mediating factor in the farmer identity—family influence process.

When the founder social identity types were established by Sieger et al. (2016) (Darwinians—driven by profit and success; Communitarians—driven by a desire to serve the community; and Missionaries—driven by a greater cause) were applied to a sample of Swedish farmers, the identities were connected to statements that were inspired by the main sustainability areas; economic, social, and environmental. The assumption was that Darwinians, for example, who were characterized as having a focus on improving their business, would correlate with stronger economic outcomes.

The data for this paper was collected in 2021 and is currently in the final stages of submission, and due to this, the manuscript will be referred to as “Paper III” in the text.

5.2 Paper III. Social identity and the moderating role of family influence in sustainable decision making.

The FSI framework provides information on the entrepreneurs' social motivation to be in business and reflects how the firm owners perceive entrepreneurship. Sieger et al. (2016) suggests that the entrepreneur interprets entrepreneurship differently through self-conception, and in turn this self-conception influences how they act in business. The findings from the scoping review show that there is growing interest in the FSI framework in the field of entrepreneurship.

The FSI framework has been operationalized by a number of researchers in recent years. For example, Ko and Kim (2020) found that the FSI framework could predict intentions of pursuing social entrepreneurship, i.e., entrepreneurship that acts on opportunities which result in social value and welfare. Furthermore. Their findings showed that Missionaries are motivated by social entrepreneurship, whereas Darwinians lacked this ambition. This illustrates how the identity groups differ and how their motives are correlated with different entrepreneurial approaches. This also paints a picture of Missionaries as being pragmatic, people who put social value before profit. Gender differences have also been seen within the identity groups. Estrada-Cruz et al. (2019) suggested that men are likely to identify with the Darwinian identity (profit), while women tended to identify with the Missionary identity (job creation), while both genders could often identify with the Communitarian identity (growth in sales). The results from the scoping review suggest that the identity groups (through social motivation) create a unique set of values in the firm, which in turn is the foundation for competitive advantage (Greening and Turban, 2000).

The desire to develop one's ideas and to push to achieve growth appears to differ between the different identity groups. Clarysse et al. (2023) suggested that the aspiration for growth differs between identity groups and found that aspiration not only depend on outcome expectations, but also whether these expectations are relevant to the entrepreneur's salient founder identity. Being an entrepreneur can also be expressed through seeing the world as a single, common place, with the mindset of thinking without borders becoming a way to create advantages in a larger context – all in line with how the identity groups are described (Fauchart and Gruber, 2011;

Sieger et al., 2016). However, the FSI framework has some shortcomings that have not been addressed in previous work.

In the papers generated from the review, there were several that had problems with factor loadings within the Darwinian construct, including Sieger et al. (2016). The threshold for the least number of items in factor analysis is two, but one item can be acceptable if the questions are simple in nature (Hair et al., 2014). However, each main construct (Darwinian, Communitarian, and Missionary) consists of three sub-constructs – Basic Social Motivation, Basis for self-evaluation, and Frame of reference, which in turn are represented by two items. In total, there are six items per identity group, and according to Sieger et al. (2016), the purpose is to capture the respondent’s identification with a particular group.

Table 6. Overview of articles from scoping review.

Author(s)	Method	Number of items	(N)²
Clarysse <i>et al.</i> (2023)	Quantitative	15-item scale ¹	171
Murad <i>et al.</i> (2022)	Quantitative	15-item scale ¹	260
Ko and Kim (2020)	Quantitative	15-item scale ¹	725
EstradaCruz <i>et al.</i> (2019)	Quantitative	Frame of reference	179
EstradaCruz <i>et al.</i> (2019) ^B	Quantitative	Frame of reference	5076
Harlow and Chadha (2019)	Qualitative	Based on Fauchart and Gruber (2011)	18
Sieger <i>et al.</i> (2016)	Quantitative	15 item scale ¹	282

¹ The 15-item validated scale by Sieger et al. (2016).

² Number of valid responses

Previous research (spanning multiple countries and subject areas) adopting the FSI framework by Sieger et al. (2016) has used the 15 item validated scale version. However, Sieger et al. (2016) scale was originally comprised of 18 items and, depending on whether the 15 item or 18 item scale is used, the outcome differs in important ways. For example, the analysis in paper III revealed significant differences in cross loadings across identity constructs. In fact, when used on the Swedish sample, the 18-item scale had fewer cross loading issues than the 15 item scale, which may make

it more suitable to the “Alpine Region” where it was originally validated by Sieger et al. (2016). This indicates that the Sieger et al. (2016) FSI framework needs further validation across contexts and regions. The articles found through the scoping review are not always helpful in this regard as they do not report all factor loadings.

5.2.1 Reflection on assumptions in paper III

Paper III can be characterized as a traditional gap filling expedition, focusing on neglected aspects in the literature (Alvesson and Sandberg, 2011). However, gap filling can be risky when previous research is mirrored and basic assumptions are not challenged or discussed – i.e. a kind of neglected bias of the researcher.

Theory is a support system that researchers can rely on to make sense of the world; it allows them to organize topics in ways that can be observed, measured and understood. Alvesson and Sandberg (2011) stated that without an initial understanding of a phenomenon, it is difficult to know what to look for. In entrepreneurship, previous studies have made it possible for us to conceptualize entrepreneurship as a subject today. A common assumption expressed about entrepreneurs is that they are innovative, competitive risk takers (Van Praag, 1999). In agriculture, the farmer is often portrayed as either an entrepreneur, who takes great risks and receives high rewards, or as a producer, who avoid big risks and reaps lower rewards (Vesala et al., 2007; Stenholm and Hytti, 2014).

Alvesson and Sandberg (2011) refer to this type of research as “in-house assumptions”, which can be explained as seeing entrepreneurship as represented by specific characteristics that an individual possess, i.e., the characteristics that make an entrepreneur. In line with this, the FSI framework by Sieger et al. (2016) makes several assumptions. Firstly, at a general level, the assumption is that there are different entrepreneurial identity groups, and that these different groups have individual traits that can be measured and categorized. Secondly, on a sublevel, each identity group is assumed to have specific characters: Darwinians are based on self-interest; Communitarians are based on a concern for their community; and Missionaries are based on a society-at-large philosophy. In turn, the results from Sieger et al. (2016) show additional motives for the entrepreneur to be in business.

The underlying assumption in paper III is that the FSI framework applies to farm entrepreneurs as well, and thus reveals farmers' social motivation to be in business. Looking into the paper with a critical mind, the gap-spotting is found in, the phrase "... it is less clear"

"...it is less clear how identity influences sustainability goals in the context of family farms and a hostile environment".

Sandberg and Alvesson (2011) suggest that a reason as to why gap filling continues to be the most common way to construct research questions is because it is considered to be "uncontroversial and safe". The pressure to publish quickly can, however, also be a driver of gap filling as a methodology (Tadajewski and Hewer, 2011). However, gap filling research also fulfills the purpose of developing existing literature, although, even when a gap exists in the literature, it does not necessarily mean it requires gap-filling (Alvesson and Sandberg, 2011). With gap-filling, the researcher risks only contributing similar knowledge (Tadajewski and Hewer, 2011), with redundant research risking being unpublished (Chatterjee and Davidson, 2021).

With this in mind, the use of gap spotting works in this research as it fills a gap in farming literature. It shows that farmers are entrepreneurs with different motives for being in business. Nevertheless, there is always room to discuss the researcher's own assumptions and how they are reflected in the construction of research questions. For example, Alvesson and Sandberg (2011) wrote that researchers are likely to "... reproducing the assumptions underlying their own perspective" (p. 252). This is a point that should be considered, and in paper III, a personal assumption can already be found in the introduction:

"However, the FSI framework overlooks the influential role the family play or the hostility present in the environments..."
(Paper III; p. 2).

Although family member influence on small family firms has been established in the literature (Chrisman et al., 2012), the main reason behind

the choice of family influence as a moderating factor in paper III was because family farms are small units and are dependent upon each other. Also, in real life farming, many farmers refer to how family members influence the farm business. Moreover, this reflects the researcher's underlying assumptions that family members can influence the strategic decisions of the farm. The scale allows one to explore family influence ranging from intense involvement to non-existent (Klein et al., 2005). In order to test for family influence on the farm, one section from the F-PEC scale was selected (P – power). Previous research building on the F-PEC scale by Astrachan et al. (2002) used the scale as an instrument to evaluate financial performance and profit growth in relation to measure revenue per employee (Rutherford et al., 2008). Furthermore, Alves et al. (2020) explained why some family firms perform better than others, suggesting that family culture possibly determines family firm performance. This suggests that family members should also be able to influence other decisions concerning the farm, such as strategic decision making.

The reason for choosing environmental hostility is similar to the reasoning behind choosing family influence. A fluctuating market can affect farm businesses differently depending on production orientation, with crop farmers having a greater freedom to change direction depending on demand or current prices. Grain farmers have the opportunity to store the grain awaiting a better price in contrast to dairy and meat farmers, who, in most cases, sell their product directly without the possibility to store their produce. One option for meat and milk farmers is to differentiate their business in order to increase margins, although this also leads to risk increases. Nevertheless, no matter what choice the farmer makes, it takes time and capital (financial and knowledge) to change the farm's production orientation. Hence, the personal underlying assumption is that farmers can choose if they want to adopt and follow market (relatively slow) fluctuations or (faster) changes in consumer market trends. Also, it is assumed that the three identity groups respond differently to environmental hostility. This gives an idea of the complexity that surrounds quantitative research.

To extend the discussion, it can be disputed whether the research questions are considered interesting when using the lens of Davis (1971). In this case, Davis stated that "... a new theory will be noticed only when it

denies the truth” (p. 311). The question is if the FSI framework by Sieger et al. (2016) challenges any established truths about the entrepreneur.

Further, Davis (1971) suggests that research should be “rhetorically interesting”. This expression refers to when researchers try to make something interesting, using expressions such as “It has long been thought...; but this is false...; we have seen instead that...; further investigation is necessary to...” (Davis, 1971; p. 312). Going back to paper III, there are attempts to create “interest”, for example, the phrase “It has long been thought...” emerge from the underlying assumption that “*previous literature has categorized farmers based on their identity as a producer, or entrepreneur*” (Paper III; p. 17). This is followed by a “We have seen instead that...” statement in the next paragraph:

“...the results from this survey shows a behavior and rationale which is different from... the polarizing view of the farmer (Paper III; p.17).

The “We have seen instead that...” statement may be a result of a perception that the entrepreneur is someone with unique and distinct abilities, reserved for certain individuals (Gartner, 1990). When looking at this through the generalization lens of Davis (1971), the question could be reversed. What is identified as a low ability to adopt to entrepreneurship is really a general phenomenon reflecting Sweden as a nation. According to the Swedish Entrepreneurship Forum (GEM, 2022), entrepreneurship activities in Sweden tend to be less common compared to other high-income countries. This is despite the fact that the government provides financial grants with the purpose of stimulating increased entrepreneurship. Therefore, when, for example, the Swedish National Food Policy advocates that farmers should be more entrepreneurial in order to increase production, it is therefore my interpretation that the governmental stakeholders are expressing a dissatisfaction towards farmers for not engaging enough in entrepreneurship. However, even if the government’s purpose for grants is to stimulate the level of entrepreneurship activities, research shows that the approach of targeting an entire group (in this case farmers) has the least effect on the size of the grant, in relation to entrepreneurial activity (Li, 2002). On a final note,

it can therefore be suggested that there is a gap between theory, a government's purpose, and what a farmer needs.

5.2.2 Comments on the questionnaire paper III

Here, I will give some comments and reflections on the survey. Firstly, when conducting the scoping review, there were issues with the Darwinian part in the questionnaire by Sieger et al. (2016). Also, as mentioned earlier, the authors decided to remove three items from their initial scale to receive a rotation matrix with no double loadings, according to protocol for obtaining validity. However, when items are removed from a scale like this, which measure specific characteristics in blocks, one also risks losing parts of a total picture.

Instead of removing items, perhaps it would be beneficial to look more closely at the questions themselves. Looking at Sieger et al. (2016), item A1 and A2 (p. 548) represents founder's social motivation when starting a venture. Item A1 was removed due to cross-loading, which is interesting in itself as it states:

“I will create my firm in order... to make money and become rich”
(p. 552).

This question portrays Darwinians as entrepreneurs with a business school mind set (i.e., following a strategy that ensure profit). Removing this item may increase the validity of the scale, but may also remove part of the founder's social motivation to start a business. Moreover, it appears as if the issues are related to the Darwinian side, which may mean that the question is incorrect. However, in paper III, when farmers were confronted by the claim, A1 and A2 did not cross-load, nor did the items load in other components. Lastly, there is the question of whether there is a clear connection between making money and becoming rich. This can be perceived as two different statements, therefore suggesting that the concepts have different meanings. Making money may suggest the idea of making a profit in general, whereas becoming rich can be an expression suggesting the making of large sums of money fast; therefore, *making money* would seem to be the more appropriate term to use in this context.

In the next section on Communitarians, Sieger et al. (2016) show the ways in which item B4 for Communitarians loads into the Darwinian factor. This item belongs to the second construct frame, which embraces how the respondents evaluate themselves as founders. The statement (B4) is expressed as:

“As a firm founder it will be very important to me... to be able to express to my customers that I fundamentally share their views, interests, and value” (Sieger et al., 2016; p. 552).

This claim deviates in its character from the other items in the Communitarian group. The approach in the rest of the statements about Communitarians is about what the founder can do for their community, while the statement in B4 is about communicating their own values. This shift of approach becomes clear when looking at item B3, the joint construct to B4. Item B3 states that it is very important:

“...to provide a product/service that is useful to the group of people that I strongly identify with” (Sieger et al., 2016; p. 548).

To build on the same approach, changing the phrasing of what is important could be changed from:

“...to be able to express to my customers that I fundamentally share their views, interests, and value” (Sieger et al., 2016; p. 548)

Instead asking:

“...to share views and values with the group of people my business targets”.

In paper III, the text in these particular items was changed as the original questions are difficult to apply to Swedish agriculture as the vast majority

deliver their products to cooperative companies. Therefore, item B3 was changed to (Paper III; p. 11) “As a farmer, it is very important to me to...

“...encourage the use of best practice methods that are useful to the group of people with whom I identify”

And B4 was changed to:

“...that my customers (dairy, slaughterhouse, private customers, etc.) know that I share their values”.

Both of items loaded into the same factor as the rest of the statements for Communitarians.

In conclusion, although a large number of the statements in the survey needed some form of re-wording to adapt them to farm businesses, the core of the statements have retained their spirit of attracting different identity groups. However, the Darwinian scale could benefit from a second review of how the statements are formulated in order to better capture the Darwinian spirit.

5.2.3 Self-reflections on paper III

In paper III, the FSI framework was tested on a sample of Swedish farmers. This process was relatively straightforward as the questions existed and were validated by Sieger et al. (2016). However, few if any published papers testing the framework on farming were identified. This made it interesting to examine whether this applied to farmers and, in so doing, to investigate the external validity. However, there are some problems that I did not truly reflect on when reading the article or when doing the analysis. It wasn't until the process of writing the thesis that the thoughts emerged.

Another thing that still bothers me is how sustainability items were selected. Here, my initial thought was that the identity types from FSI would match the different sustainability items (economic, social, and environmental). However, if I could redo the survey, these statements would have been selected with greater care. In retrospect, I should have made a better search for more accurate items to operationalize the sustainability

factors. This is an important aspect since the choice of items influence analysis and conclusions (Latruffe et al. 2016). There were several choices in terms of sustainability items, but at the time of creating the survey I suffered from a degree of tunnel-vision, which prevented me from considering other options. Today, I would have clearly specified what, for example, is meant by economic sustainability. Does it mean maximizing profit, or does it mean that profit must not come at the expense of the environment? There are some published papers that I would look to for inspiration on how to create sustainability statements in my next publication such as, Lebacqz et al. (2013); Latruffe et al. (2016); and Pannell and Glenn (2000).

Finally, I would also make a different choice and utilize the full F-PEC scale. Looking at it now, the question I have is how much information on family influence is actually reflected. It could be argued that completely removing this part from the analysis might be needed, as I question what it really adds; the same could apply for the items on environment hostility. This is perhaps the real reason for paper III still being a manuscript, as I am conflicted about the layout. What comes to mind when writing this is how I just wanted to test the FSI framework on farmers? After my reflections on items in this part, what I actually would like to do is to make suggestions on how the FSI framework could be improved to become more accurate.

5.2.4 Avenues for future research related to paper III

The FSI framework provides a clear image of the entrepreneur's self-concept, and how it affects firm creation and firm outcomes. The FSI framework can be advantageously used within agriculture to further explore how different identities affect farm businesses.

As the FSI framework gains attention, a variety of conceptualizations will emerge. From the scoping review it can be noted that the framework has only sparsely been adopted into farming. The operationalization in paper III can clearly be improved, as discussed in the self-reflection. However, the avenues for further research are many.

I propose two main suggestions for future research using the work of Sieger et al. (2016). Firstly, examining the link between the identity groups and certain key aspect of the firm creation process (i.e., differences in how the identities view and select opportunities or how they create farm identity)

would be of interest. Secondly, an interesting suggestion connected to paper II is that of the cultural level of entrepreneurship; how cultural influences (like Jante in paper II) affect social identities in entrepreneurship, looking at the distribution of Darwinians, Communitarians and Missionaries.

The FSI framework can also be applied in different farming contexts, such as when comparing groups. We can use it to ask whether there is an over-representation of either identity group among different types of farmer (crops, dairy, pigs, poultry, micro diaries on farms, etc.). Furthermore, the framework can be applied to investigate whether any of the identity groups have a greater inclination towards application for targeted grants, such as investment grants aimed at diversifying the farm business. Here, one could also test whether those seeking various forms of investment grant are driven by necessity or are opportunity driven entrepreneurs. For example, Block and Wagner (2010) suggested that opportunity driven entrepreneurs are more productive and earn more than necessity driven entrepreneurs.

References

- Alves, C. A., & Gama, A. P. M. (2020). Family business performance: a perspective of family influence. *Revista Brasileira de Gestão de Negócios*, 22, 163-182.
- Alvesson, M. & Sandberg, J. (2011). Generating research questions through problematization. *Academy of management review*, 36(2), pp. 247-271.
- Astrachan, J. H., Klein, S. B., & Smyrnios, K. X. (2002). The F-PEC scale of family influence: A proposal for solving the family business definition problem1. *Family business review*, 15(1), 45-58.
- Block, J. H., & Wagner, M. (2010). Necessity and opportunity entrepreneurs in Germany: characteristics and earnings differentials. *Schmalenbach Business Review*, 62, 154-174.
- Chatterjee, S., & Davison, R. M. (2021). The need for compelling problematisation in research: The prevalence of the gap-spotting approach and its limitations. *Information Systems Journal*, 31(2), 227-230.
- Chrisman, J. J., Chua, J. H., Pearson, A. W., & Barnett, T. (2012). Family involvement, family influence, and family-centered non-economic goals in small firms. *Entrepreneurship theory and practice*, 36(2), 267-293.
- Clarysse, B., Andries, P., Boone, S., & Roelandt, J. (2023). Institutional logics and founders' identity orientation: Why academic entrepreneurs aspire lower venture growth. *Research Policy*, 52(3), 104713.
- Davis, M.S. (1971). That's interesting! Towards a phenomenology of sociology and a sociology of phenomenology. *Philosophy of the social sciences*, 1(2), pp. 309-344.
- Estrada-Cruz, M., VerdúJover, A. J., & GómezGras, J. M. (2019). The influence of culture on the relationship between the entrepreneur's social identity and decision-making: Effectual and causal logic. *BRQ Business Research Quarterly*, 22(4), 226-244.

- Estrada-Cruz, M., Verdú-Jover, A. J., Gómez-Gras, J. M., & Martínez, J. M. G. (2019)^B. Entrepreneurial social identity and stakeholders: The socio-economic implications. *Journal of Enterprising Communities: People and Places in the Global Economy*.
- Fauchart, E., & Gruber, M. (2011). Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of management journal*, 54(5), 935-957.
- Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business venturing*, 5(1), 15-28.
- GEM (2023). Entrepreneurship in Sweden. National GEM-Report 2023. Entrepreneurship Forum, Seden.
- Greening, D. W., & Turban, D. B. (2000). Corporate social performance as a competitive advantage in attracting a quality workforce. *Business & society*, 39(3), 254-280.
- Harlow, S., & Chadha, M. (2019). Indian entrepreneurial journalism: Building a typology of how founders' social identity shapes innovation and sustainability. *Journalism studies*, 20(6), 891-910.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. (2014). *Multivariate data analysis (7th Edition)*. Pearson Education Limited UK.
- Klein, S. B., Astrachan, J. H., & Smyrnios, K. X. (2005). The F-PEC scale of family influence: Construction, validation, and further implication for theory. *Entrepreneurship theory and practice*, 29(3), 321-339.
- Ko, E. J., & Kim, K. (2020). Connecting founder social identity with social entrepreneurial intentions. *Social Enterprise Journal*.
- Latruffe, L., Diazabakana, A., Bockstaller, C., Desjeux, Y., Finn, J., Kelly, E., Ryan, M., & Uthes, S. (2016). Measurement of sustainability in agriculture: a review of indicators. *Studies in Agricultural Economics*, 118(3), 123-130.
- Lebacqz, T., Baret, P. V., & Stilmant, D. (2013). Sustainability indicators for livestock farming. A review. *Agronomy for sustainable development*, 33, 311-327.
- Li, W. (2002). Entrepreneurship and government subsidies: A general equilibrium analysis. *Journal of Economic Dynamics and control*, 26(11), 1815-1844.

- Murad, M., Ashraf, S. F., Syed, N., Munir, M., & Butt, R. S. (2022). Entrepreneurial social identities and nascent entrepreneurial behaviour: Mediating role of entrepreneurial self-efficacy. *Entrepreneurial Business and Economics Review*, 10(1), 129-143.
- Pannell, D. J., & Glenn, N. A. (2000). A framework for the economic evaluation and selection of sustainability indicators in agriculture. *Ecological economics*, 33(1), 135-149.
- Rutherford, M. W., Kuratko, D. F., & Holt, D. T. (2008). Examining the link between “familiness” and performance: Can the F–PEC untangle the family business theory jungle?. *Entrepreneurship theory and practice*, 32(6), 1089-1109.
- Sandberg, J., & Alvesson, M. (2011). Ways of constructing research questions: gap-spotting or problematization?. *Organization*, 18(1), 23-44.
- Sieger, P., Gruber, M., Fauchart, E., & Zellweger, T. (2016). Measuring the social identity of entrepreneurs: Scale development and international validation. *Journal of business venturing*, 31(5), 542-572.
- Stenholm, P. & Hytti, U. (2014). In search of legitimacy under institutional pressures: A case study of producer and entrepreneur farmer identities. *Journal of Rural Studies*, 35, pp. 133-142.
- Tadajewski, M., & Hower, P. (2011). Intellectual contributions and ‘gap-spotting’. *Journal of marketing management*, 27(5-6), 449-457.
- Van Praag, C. M. (1999). Some classic views on entrepreneurship. *De Economist*, 147, 311-335.
- Vesala, K.M., Peura, J. & McElwee, G. (2007). The split entrepreneurial identity of the farmer. *Journal of Small Business and Enterprise Development*.

Webinar

- ESBRI (2021). “Social entrepreneurship - a solution for social and environmental challenges” with Professor Siri Terjesen. Date of webinar: 2021-03-18.

6. Discussion: Practical implications and insights

6.1 Utilizing farm entrepreneurship

One message from national food policies (Regeringen, 2015; 2017), and the EU (2022) common agricultural policy (CAP) is that farmers should increase their level of entrepreneurship, become more market orientated (MO), and increase production levels. The findings in paper I show that farmers, when faced with competitive intensity, experience a higher perceived return when responding with MO. The implication of this finding is that farmers benefit from being MO. While more research is (always) needed, helping farmers to develop their MO may be an area that (the Swedish) government should prioritize. Furthermore, entrepreneurial orientation (EO) is an important construct used in research and demonstrated in practice to benefit companies EO (Lumpkin and Dess, 1996). The findings from paper I show that not being entrepreneurial orientated, that is maintaining a conservative posture (or being risk-averse) does not correlate with increased perceived farm performance. I believe that it can be beneficial to expand on the conversation, where it is not only about whether farmers need to become *more* entrepreneurial, but also to include the potential need of support (e.g. increased learning) in order to *progress* as entrepreneurs. Moreover, learning is also important to improve market awareness (Mirzaei et al., 2016), including the possession of relevant resources and know-how (Hall, 1993) to benefit from competitive intensity.

This is in line with the findings from the scoping review, where learning was shown to be important in order to develop the business (Micheels and Gow, 2015). Experience also creates knowledge, Iza and Dentoni (2020) were able to show that more experienced farm entrepreneurs are more inclined to adopt innovation.

Based on the conceptual model in paper I, findings in the scoping review, and the initial discussion in this chapter—I interpret this as a representation of the dynamic capabilities on the farm. Dynamic capabilities is a framework, grounded in the resource-based view and the growth of the firm by Penrose (1959). In the early 1990's, when global recession was followed by financial uncertainty and volatile markets, Teece and Pisano (1994) stated that "... winners in the global marketplace have been firms that can demonstrate timely responsiveness and rapid and flexible product innovation" (p. 1), which becomes a part of the firms competitive advantage, which here is defined as "...a focal firms comparison with rival(s) along any comparable dimension of competition" (Ma, 2000; p. 23). For example, dynamic capabilities have been assigned different meanings, such as routines to change routines (i.e. being prepared to change the business model) (McKelvie and Davidsson, 2009). The drive behind innovative pursuit is to re-combine the firm's resources and create new sets of competitive advantage (Teece et al., 1997; Pisano, 2015; Eisenhardt and Martin, 2000), and to identify possibilities and make adequate choices, thereby creating competitive advantages (Prange and Verdier, 2011; Helfat and Peteraf, 2009). Hence, dynamic capabilities to be one representation of the farms' resource base, and the farm entrepreneur's ability to maximize utility relative to market conditions, in order to create and sustain competitive advantages. Furthermore, Teece (2011) suggests that since intangible assets are heterogeneous (i.e., difficult to imitate for competitors), they will provide a higher strategic value than tangible assets (in a farming context, tangible assets can be land, machinery, housing).

The strategic orientations – entrepreneurial orientation, market orientation, and Lean production orientation in paper I – are examples of intangible resources (i.e. farmers learning and know-how), and therefore are unique to every farm. If treated as intangible resources in the dynamic capabilities framework, the strategic orientations in paper I can be recognized as valuable assets. If dynamic capabilities are conceptualized as

the embodiment of intangible resources, the value of different dynamic capabilities can be recognized and measured. The value for the farmer is to understand the level of uniqueness and how these intangible resources can help with improving farm performance, and, in the end, farm survival.

This type of entrepreneurship requires constant improvement work and reexamination of proven methods, and it may take persistence to stand out from the community and the social context in which farmers exist.

6.2 Cultural intolerance and standing out

Cultural intolerance in Scandinavia and Jante involves a code of conduct which disincentivizes standing out from the crowd. Findings in the scoping review showed that the related Tall Poppy Syndrome ensured entrepreneurs purposefully stayed under the radar when talking about their business (Kirkwood and Warren, 2020). Based on the results in paper II, it can be assumed that Jante has an effect on farm entrepreneurship as well.

In paper II, Jante's impact on the advice given was a surprise. The findings are interesting as advisors often act as knowledge facilitators. Thus, if the advisor working with the farmer scores high or low in Jante, the learning process becomes influenced by the persons "Janteness". Furthermore, in hypothetical terms, if that person were to give advice to someone who may come from a non-entrepreneurial environment, it could become a barrier to engagement in entrepreneurial activities. The findings indicate that there are different levels of Janteness, if these factors are not taken into consideration, targeted contributions may be completely ineffective.

Paper II showed how Jante can be operationalized and the effects it has on the advice given. Future research could build on the work in paper II by including both the advisors' and the farmers' Jante-profiles. Based on this profiling, a discussion could take place on the potential influence from the advice given and whether the farmer carries out any entrepreneurial activities based on the discussion (and advice given). Through the improved model, an updated survey could be sent out as a pilot to refine the instrument. A qualitative study could also be conducted with a sample of advisors and farmers to examine the advisor and their client's perception of Jante.

The farm advisor's Janteness is likely to affect some individuals more than others, and may depend on the farmer's self-concept. The entrepreneur's self-concept can be operationalized through the FSI framework, leading to the next part of the discussion, the founder identity of the farm entrepreneur.

6.3 Founder identity: Darwinians, Communitarians and Missionaries

How farmers pursue entrepreneurship becomes a reflection of themselves as entrepreneurs. Although farmers identity is complex and cannot easily be categorized and reduced into groups (Iles et al., 2020), whereas Fitz-Koch (2020) posited that categorizing entrepreneurial identities can be valuable when attempting to understand how opportunities are valued differently among entrepreneurs. Further, Powell and Baker (2014) found a distinct difference in strategic responses from different founder identities. Thus, how the entrepreneur self-identifies affects outcomes.

Findings from the scoping review shows, in line with the identity groups by Sieger et al. (2016), how entrepreneurs act on different opportunities. Some entrepreneurs may act on opportunities that benefit social value (Ko and Kim, 2020), where others may act on cost-efficiency to increase profits (Fauchart and Gruber, 2011), or act on supporting their local community (Sieger et al. 2016). Even if farming is complex in nature, categorization can help farmers and advisors when discussing new opportunities (e.g. whether to invest in a solar power park at the farm in order to deliver power to the nearby community), market changes (e.g. consumer trend changes, demand and quality on produce), and value adding strategies (e.g. investing in small-scale and value adding through product development). In this situation, the advisor would be able to adapt the advice given to the farmer depending on the farmer's founder identity. It can also help the farmer to understand their own motivations for being in business, which in turn can help to define business goals and what opportunities they may benefit from.

Furthermore, the FSI framework can help researchers investigate the presence of different types of entrepreneurial identities and whether certain identities might be more common in different branches of agriculture. The investigation could be broad and, by mapping the presence of identity

groups, the results could help unpack the motivations behind farming. The results could also provide information on things like social entrepreneurship in the context of farming.

6.4 Conclusions

From identifying and operationalizing strategic orientations (such as EO, MO, LPO) in paper I, have contributed to an understanding of how farmers strategically respond to competitive intensity, and in turn how this influences their performance. To avoid the race to the bottom, i.e. where productivity improvements lead to lower costs and market prices, but not improved margins (Taylor and Ömer, 2019)—farmers may consider alternative strategies, such as those that include developing their market orientation, which allows them to grow with the market rather than becoming a victim of structural change and rationalization. Often, the main choice is to either grow in size or, therefore, benefit from cost-efficiency, or to differentiate and gain a deeper understanding of market mechanisms and what customers want, and deliver greater value than competitors.

Further, the findings contribute to an understanding of how advice on pursuing entrepreneurial activities, such as innovation, new types of production, and product diversification, can be influenced by the sender of a message. This is important as cultural ties, characterized by Janteness, may lead to fewer entrepreneurial activities in agriculture. This contributes to knowledge on why farmers differ in their strategic choice, as biased advice may inhibit the perceived room for maneuvering.

Swedish farmers fall into different groups of entrepreneurs in line with the FSI framework. These identity groups are Darwinians (driven by profit and success), Communitarians (driven by a desire to serve the community), and Missionaries (driven by a greater cause). The social identity framework provides us with information on Swedish farmers' social motivation to stay in business, and the rationale of the farm entrepreneur. It also uncovers how the identity groups view business opportunities and their motivations to reach their goals and achieve desired outcomes.

6.5 Limitations

The thesis has contributed to research by conceptualizing farmer's strategic orientations, farm advisors Janteness and the effect on advice given, and founder social identity in farmers. There are limitations found in the many perceptions of concepts, such as the many definitions of the entrepreneur. If there is a lack of consensus to the meaning or definition of a concept, it creates uncertainty in how the respondent interprets the question, and also how we can interpret the results. However, there are also limitations to take into consideration. The work is limited by the conceptualizations and operationalization choices in the papers. For example, the results will be limited based on the choice of measurements used in the survey, which in turn can become the limitation of a specific concept. The choice of scale can limit how the results can be compared to other studies. For example, in paper I, the choice of using a Likert scale makes it difficult to compare results to other studies using a semantic differential scale.

The sample groups used may also be a limitation. In paper II, the groups were homogeneous groups of students of the same age with similar backgrounds, making any generalization of the results difficult. Furthermore, the real-world scenarios in paper II are limiting since they simplify a much more complex real-life situation. The sample group in paper III was of full-time farmers. This limits the knowledge to full-time farmers only and cannot be applied to part-time farmers or micro farmers, who were not represented.

Finally, limitations also include that e.g. paper I, conservative posture was used to measure EO, i.e. the findings show that farmers' strategic response is not to be risk-adverse, however, it is not possible to conclude if they take risks as these questions were not measured in the survey. Also, in paper II the hypotheses were driven by a theory that is not confirmed, therefore the data had to be explored, and the main effect on advice given was a surprise. Lastly, paper III is still a manuscript that is not peer-reviewed, and therefore the scientific contribution and is still unknown.

References

- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they?. *Strategic management journal*, 21(10-11), 1105-1121.
- EU (2022). Small farms' role in the EU food system. European Union: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733630/EPRS_BRI\(2022\)733630_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733630/EPRS_BRI(2022)733630_EN.pdf) (Accessed 2023-04-15).
- Fauchart, E., & Gruber, M. (2011). Darwinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of management journal*, 54(5), 935-957.
- Fitz-Koch, S. (2020). Who am I, and if so, how many? Identity dynamics in agricultural entrepreneurship. Doctoral dissertation, Swedish University of Agricultural Sciences. <https://res.slu.se/id/publ/104565>.
- Hall, R. (1993). A framework linking intangible resources and capabilities to sustainable competitive advantage. *Strategic management journal*, 14(8), 607-618.
- Helfat, C. E., & Peteraf, M. A. (2009). Understanding dynamic capabilities: progress along a developmental path. *Strategic organization*, 7(1), 91-102.
- Iles, K., Ma, Z., & Erwin, A. (2020). Identifying the common ground: Small-scale farmer identity and community. *Journal of Rural Studies*, 78, 25-35.
- Iza, C. L. B., & Dentoni, D. (2020). How entrepreneurial orientation drives farmers' innovation differential in Ugandan coffee multi-stakeholder platforms. *Journal of Agribusiness in Developing and Emerging Economies*.
- Kirkwood, J., & Warren, L. (2020). Legitimizing entrepreneurial success in an environment of Tall Poppy syndrome: Lessons from celebrity entrepreneurs in New Zealand. *The International Journal of Entrepreneurship and Innovation*, 21(2), 101-112.

- Ko, E. J., & Kim, K. (2020). Connecting founder social identity with social entrepreneurial intentions. *Social Enterprise Journal*, 16(4), 403-429.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- Ma, H. (2000). Competitive advantage and firm performance. *Competitiveness Review: An International Business Journal*.
- McKelvie, A., & Davidsson, P. (2009). From resource base to dynamic capabilities: an investigation of new firms. *British Journal of Management*, 20, S63-S80.
- Micheels, E. T., & Gow, H. R. (2015). The effect of market orientation on learning, innovativeness, and performance in primary agriculture. *Canadian Journal of Agricultural Economics/Revue canadienne d'agroeconomie*, 63(2), 209-233.
- Mirzaei, O., Micheels, E. T., & Boecker, A. (2016). Product and marketing innovation in farm-based businesses: the role of entrepreneurial orientation and market orientation. *International Food and Agribusiness Management Review*, 19(1030-2016-83118), 99-130.
- Penrose, E.T (1959). *The Theory of the Growth of the Firm*. New York: John Wiley. ISBN: 978-1-61427-536-7.
- Pisano, G.P. (2015). A Normative Theory of Dynamic Capabilities: Connecting Strategy, Know-How, and Competition. Harvard Business School Technology & Operations Mgt. Unit Working Paper(16-036).
- Powell, E. E., & Baker, T. (2014). It's what you make of it: Founder identity and enacting strategic responses to adversity. *Academy of Management Journal*, 57(5), 1406-1433.
- Prange, C., & Verdier, S. (2011). Dynamic capabilities, internationalization processes and performance. *Journal of World Business*, 46(1), 126-133.
- Regeringen (2015). Attraktiv, innovativ och hållbar – strategi för en konkurrenskraftig jordbruks- och trädgårdsnäring 2015): SOU.
- Regeringen (2017). En livsmedelsstrategi för Sverige – fler jobb och hållbar tillväxt i hela landet 2016/17). Swedish Government.

- Sieger, P., Gruber, M., Fauchart, E., & Zellweger, T. (2016). Measuring the social identity of entrepreneurs: Scale development and international validation. *Journal of Business Venturing*, 31(5), 542-572.
- Taylor, L., & Ömer, Ö. (2019). Race to the bottom: Low productivity, market power, and lagging wages. *International Journal of Political Economy*, 48(1), 1-20.
- Teece, D. & Pisano, G. (1994). The dynamic capabilities of firms: an introduction. *Industrial and corporate change*, 3(3), pp. 537-556.
- Teece, D.J., Pisano, G. & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), pp. 509-533.
- Teece, D. J. (2011). Achieving integration of the business school curriculum using the dynamic capabilities framework. *Journal of Management Development*, 30(5), 499-518.

Popular science summary

Just like in many other industries, Swedish agriculture is in constant flux. There are many factors that influence farmers' strategic choices. The rationalization of agriculture has created larger, but fewer, farms, increasing competition. In a way, rationalization has improved the farming methods for producing food, but the increasing volumes this has created has caused the sale prices to fall, further increasing competition. Within this environment, it is important to understand how farmer's self-identification as entrepreneurs influences strategic choices, and how these choices affect farm performance.

This thesis sought answers to these questions by sending out questionnaires to Swedish farmers. The findings showed that when farmers' feel pressure from competitors, market orientation was found to give the best payoff (in relation to perceived performance in the farm business), on the other hand, efficiency (in the form of Lean) is a chosen strategy but does not result in improved financial performance. An entrepreneurial orientation (in this case risk-averse) was not a strategic choice for the farmers in this case. A development of the model that was created can in the future be used, for example, to benchmark Swedish agriculture.

Furthermore, the impact of the Scandinavian phenomenon of Jante (a social code, similar to Tall Poppy Syndrome) on advice given to a farmer was investigated. The findings showed that the advisor's own Jante level (which was measured with Jante's ten laws originally laid out by Axel Sandemose) influenced how they gave advice. A person who, for example, can be described as having a strong Jante mentality, tends to give less entrepreneurial advice. This is interesting as it suggests that, depending on

the Janteness of the advisor, there may be an effect on a farmer's strategic choices around investments or possible investments on the farm.

The farmer's self-perceived identity may also play a part in how they view the role of entrepreneur. By examining farmers' social identity, the findings show that different entrepreneurial identities are related to different sustainability goals. These can affect the ways the entrepreneur views opportunities that arise, and which opportunities are of interest to them based on their identity profile. These results create an opportunity for further research on the importance of categorizing entrepreneurs for advisers, and may be of use when planning, for example, policy documents that aim to stimulate entrepreneurship in agriculture.

Populärvetenskaplig sammanfattning

Precis som i många andra branscher befinner sig det svenska lantbruket i en konstant förändring. Det finns många faktorer som påverkar lantbrukarens strategiska val. Rationaliseringen av lantbruket har skapat större, men färre gårdar som i sin tur skapat andra konkurrensförhållanden. På ett sätt har rationaliseringen förbättrat jordbrukets metoder att producera livsmedel, samtidigt har den ökande volymen bidragit till att försäljningspriset sjunkit, vilket också bidrar till priskonkurrens. Vad gör lantbrukaren för strategiska val i denna miljö, och hur identifierar sig lantbrukarna som entreprenörer?

Denna doktorsavhandling sökte svar på dessa frågor genom att skicka ut frågeformulär till svenska lantbrukare. I analysen framkom det att när lantbrukare upplever en ökad konkurrens, är marknadsorientering det strategiska val som anses ge bäst utdelning (i förhållande till upplevd prestation i lantbruksföretaget), men samtidigt upplevs effektivitet (i form av Lean), som strategi, inte ge samma utdelning. Entreprenörorientering (i detta fall att vara riskobenägen) var inte ett strategiskt val i detta fall. En utveckling av modellen som skapades kan i framtiden användas till exempel till benchmark inom svenskt jordbruk.

Vidare undersöktes om det skandinaviska fenomenet Jantelagen påverkan för råd som ges till en lantbrukare. Resultatet visade att rådgivarens egen Jantenivå (vilket mättes genom att använda de Jantes tio lagar av Axel Sandemose) påverkade hur de gav råd. En person som exempelvis har ett högt inslag av Jantementalitet, tenderar att ge mindre entreprenöriella råd. Detta är intressant eftersom det kan möjligtvis påverka hur en lantbrukare agerar, beroende på vilken Jantementalitet som rådgivaren har i en situation som kan handla om investeringar eller möjliga investeringar som lantbrukaren står inför.

Lantbrukarens egenuppfattade identitet kan även det spela en roll i hur de ser på rollen som entreprenör. Genom att undersöka lantbrukarens sociala identitet visar det sig att olika entreprenöriella identiteter har olika huvudmål. Dessa huvudmål kan ge sig till uttryck i hur entreprenören ser på möjligheter som uppstå, men också vilka möjligheter som är intressant baserat på identitetsprofil. Dessa resultat skapar möjlighet till vidare forskning om betydelsen av att kategorisera entreprenörer för rådgivare, men även vid utformning av exempelvis policy dokument som syftar till att stimulera entreprenörskap inom lantbruket.

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This compilation thesis investigates how the external environment (competitive intensity), social environment (advisors & family) and internal environment (identity) influences strategic choices related to strategic orientation and entrepreneurship as well as outcomes related to performance.

Jozefine Nybom received her doctoral education at the Department of People and Society, Swedish University of Agricultural Sciences, Alnarp. She obtained her Master of Science in Environmental Management for Business at Cranfield University, United Kingdom.

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