Bringing innovation back in—strategies and driving forces behind entrepreneurial responses in small-scale rural industries in Sweden

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Abstract
Purpose – The paper contributes to the debate about local food and conceptualization of rural entrepreneurship by analysing the performance of small-scale dairies departing from their relation to innovations, innovative activities and risk.
Design/methodology/approach – The authors use phenomenography to identify representative categories, and to draw conclusions about how these are consistent or different from dominant definitions of rural entrepreneurship and self-employment. The authors conducted semi-structured interviews, participatory workshops and compiled a database of all small-scale dairies established between 1968 and 2020.
Findings – A focus on innovations contributes to differentiate between rural entrepreneurship and self-employment and how these interact in the process of economic growth. Innovations are seldom disruptive. Instead, innovative behaviour is strongly related to business models and to imitation. Social capital and collective action play a key role for the innovative capacity of small businesses, especially to realize disruptive innovations, such as the establishment of a new market.
Research limitations/implications – The innovative capacity of rural businesses can be understood through their ability to break patterns, alter institutions and turn embeddedness into assets. Rural entrepreneurship and self-employment are intertwined in the economic growth process.
Practical implications – Innovative behaviour is a significant aspect for firm survival over time, and it is also strongly related to new business models. Most rural firms can be characterized as self-employment, the latter are essential because they provide rural livelihoods and help bring maturity to newly established markets.
Social implications – The right type of support, e.g. adopting enabling industrial regulations and granting access to constructive experiences of others, contributes to the innovative behaviour of small-scale rural firms.
Originality/value – This study differentiates rural entrepreneurship from rural self-employment by analysing the role of innovation. The authors show how innovations and innovative behaviour work their way through the process of economic growth and how innovation can break patterns by turning rural embeddedness into assets; and how innovative behaviour related to self-employments contributes to the creation of value and interacts with entrepreneurship in the process of economic growth.

Keywords Innovation, Business models, Local food, Self-employment, Rural entrepreneurship

Paper type Research paper
Introduction
This study contributes to the conceptualization of rural entrepreneurship by highlighting the role of innovation in the creation of economic value in rural areas. We clarify theoretical differences between entrepreneurship, (e.g. entrepreneurial activities based on innovations that change markets regardless of where these innovations are developed and introduced). Rural entrepreneurship, defined as the creation of value departing from, or in spite of local resources and spatial characteristics of rural spaces; “entrepreneurship in the rural”, i.e. innovating economic activities of firms that are located in rural spaces, but are not dependent on the spatial or physical context of rurality (Korsgaard et al., 2015) and rural self-employment, e.g. conducting an economic activity to generate an income (Blanchflower, 2000; Bögenhold and Klinglmair, 2015; Faggio and Silva, 2014; Livanos, 2009).

Empirically, this research contributes with insights into how small-scale rural industries emerge and develop over time, and how innovations and innovative behaviour can be understood. The study highlights the small-scale dairy sector in Sweden between 1968 and 2020, a period corresponding to the rise of the mentioned industry and its way to maturity. Results are based on company data, semi-structured interviews, participatory workshops and are analysed using phenomenography.

After this introduction, the article illustrates relevant contextual issues. This is followed by a conceptual and methodological discussion. Results are presented in the subsequent section, and in the last section conclusions, as well as theoretical and practical implications are highlighted.

Literature review
The emergence of small-scale dairies in Sweden is related to the “rise of local food”, a phenomenon that has been well-studied in international literature. This academic discussion highlights the changing nature economic activities in rural spaces following a policy shift from a focus on productivity in agriculture, to rural development; farmer’s and local communities’ responses to the globalization of food markets; the rise of new patterns of consumption; and a redefinition of food quality by adding concepts like proximity and sense of place (Feagan, 2007; Kneafsey et al., 2013; Marsden, 1998; Marsden et al., 2000; Renting et al., 2003). The local food discussion includes three main furrows: (1) producer–buyer selling arrangements, food schemes, sales channels and organizational solutions in the establishment of short food chains; (2) producer and consumer interactions, including social, cultural, environmental and other values that motivate and influence or motivate the production and consumption of local food; and (3) consumer commitment, consumer involvement, prosumption and non-economic values embedded in certain types of local food (Enthoven and Van den Broeck, 2021).

The local food discussion includes new environmental, cultural, economic, social and health-related values involved in a bottom-up response against the globalisation of food. Many studies depart from food security and food safety concerns in the wake of food scares, leading to a growing interest in improved traceability; a call for resilience in the food system; and concerns about environmental challenges and climate change (Hendrey et al., 2019).

Entrepreneurship and the role of innovations have been neglected in the local food debate. Studying entrepreneurship in the local food context can problematize and increase our understanding of the dynamics behind rural enterprise and how innovations work their way through emerging rural industries (Korsgaard et al., 2015; Pato and Teixeira, 2014; Gaddefors and Andersson, 2019). Understanding rural firms as part of contemporary change in society and what makes rural industries emerge or fail is crucial to the design of rural development policies.

Rural entrepreneurship is characterized by an emphasis on empirical studies and a limited contribution to theory building (Pato and Teixeira, 2014). Previous studies argue that rural entrepreneurship is different from other types of entrepreneurship (Korsgaard et al. (2015))
because it is embedded in the characteristics of rural spaces and suffers from lack of agglomeration effects (Alsos et al., 2011; Gadde Fors and Anderson, 2019; Korsgaard et al., 2015; McElwee and Smith, 2014; Pato and Teixeira, 2014). Korsgaard et al. (2015) argue that rural embeddedness is linked to low population density, the inability of markets to offer sufficient economic opportunities for businesses and a short supply of qualified labour. Moreover, the distance to markets with sufficient purchasing power can be substantial. Consequently, running a business is more expensive in rural than in urban areas (Gadde Fors and Andersson, 2019; Korsgaard et al., 2015).

Rural areas also offer business opportunities. The physical characteristics of rural spaces can be commodified through rural tourism and help generate local income through agriculture and forestry (Rytkönen and Tunón, 2020). In various academic debates, it has been argued that it is possible to generate positive spin-off effects in lagging regions by mobilizing social capital and promoting mutual benefits for local enterprises (McKeever et al., 2014).

In recent years, rural entrepreneurship is increasingly being conceptualized, although empirical studies are still in majority (Pato and Teixeira, 2014; Smith, 2017; Stathopoulou et al., 2004). Empirically oriented studies often focus on managerial issues, but use entrepreneurship in their vocabulary without implementing central concepts used by entrepreneurship theory, for example, innovation. There is a need to highlight and articulate concepts that are relevant for the study of enterprise in rural spaces, and differentiate between entrepreneurship and management (Gadde Fors and Andersson, 2019; Korsgaard et al., 2015).

This study contributes to the ongoing discussion about rural entrepreneurship by identifying conceptual gaps and links among three concepts, namely entrepreneurship, rural entrepreneurship and self-employment.

Entrepreneurship
Entrepreneurship is often labelled as a vehicle for innovation. It is a specific type of economic activity in which firms and individuals exploit economic opportunities by finding new ways to combine available resources (Sarasvathy et al., 2010). Based on the legacy of Joseph A. Schumpeter (1947), entrepreneurship is often defined as “the creative response”, conceptualized as the initiation of innovation, “economic pioneering” and economic leadership in which the entrepreneur assumes financial risks in constantly changing and unpredictable economic environments (Knight, 1942), or as “those situations in which new goods, services, raw materials and organising methods can be introduced and sold at greater than their cost of production” (Shane and Venkataraman, 2000). Entrepreneurship leads to qualitative changes in the economy which are essential to overall economic development. Recent research highlights how market imbalances, and contextual pre-conditions might sustain or hamper new opportunities (Sarasvathy et al., 2010); how and when challenges are turned into opportunities depend on the level of risk, uncertainty and ambiguity (Aldrich, 2009; Davidsson, 2015). This is often related to effectuation, a concept that describes how entrepreneurs think and make decisions when they act on opportunities (Matalamäki, 2017). Moreover, context has become conceptualized as definable features that influence entrepreneurship, such as infrastructure, spatial and geographical issues, social aspects, networks that promote or hamper entrepreneurship and the quality of government and institutions (Aldrich, 2009; Autio et al., 2014; Korsgaard et al., 2015; Martinez et al., 2011; Zahra et al., 2014).

Rural entrepreneurship
The rural entrepreneurship debate shares some of the assumptions presented above. However, a key difference is that rural entrepreneurship is embedded in specific rural contexts. Furthermore, embeddedness is not a factor that exclusively influences entrepreneurship in rural settings. Embeddedness was linked to the entrepreneurship debate by scholars like...
Granovetter (1985, 2005), Casson and Casson (2013) and Thornton et al. (2011). Their main argument is that social networks and non-economic institutions condition the outcomes of all economic activity. Rural entrepreneurship cannot be understood without defining rural embeddedness. The latter has been defined as the influence of local context and physical aspects of rural areas on economic life. According to Korsgaard et al. (2015):

it is constituted by the practices that take place in a location and the relations that engage with the locations so that social practices are influenced by the place and the place is shaped by its practices.

Rural entrepreneurship is dependent on resources connected to agriculture, natural resources and specific types of landscape; a long distance to the nearest market and the availability (or lack of) qualified labour. Rural enterprises need to collaborate with the local community to solve everyday business problems, and they are often influenced by the characteristics of each season (Fortunato, 2014; Fuller-Love et al., 2006; Marques et al., 2019). Recent research shows that disadvantages caused by embeddedness can be turned into advantages. Rural firms, especially family-owned firms, can obtain financial and non-financial benefits through their knowledge of and relation to their local community (Batú et al., 2019). Detailed knowledge about the local market helps rural enterprises to develop appropriate business models (de Guzman et al., 2020). Innovations are considered essential for economic development in rural areas (Fortunato, 2014; Pato and Teixeira, 2014; Smith, 2017; Stathopoulou et al., 2004). However, innovation is not always highlighted in rural entrepreneurship research. Research often relates innovation to diversification and multi-tasking (Bock, 2004), and research does not always focus on investments, start-ups and risk-taking (Ellis and Bosworth, 2015).

**Self-employment**

The number of rural firms has declined over the last century. With fewer firms, agglomeration effects have disappeared, which in turn leads to a stand-still in the labour market. Risk of becoming unemployed is a driving force behind rural start-ups (Faggio and Silva, 2014; Yu and Artz, 2019). Some scholars differentiate self-employed, whose business goal is to avoid unemployment (Faggio and Silva, 2014) from “opportunity” entrepreneurs, whose business goal is to exploit a market opportunity (Figueroa-Armijos and Johnson, 2012).

Self-employed people might be driven by freedom, managing their own time or by self-fulfilment. Self-employment is also frequent in some professions, such as hairdresser or farmer (Blanchflower, 2000; Bögenhold and Klinglmair, 2015; Faggio and Silva, 2014; Livanos, 2009). Farmers are the most important self-employment category in rural areas. In Sweden, most farmers inherit their farm. Farming is therefore related to the management of a legacy that can be passed on to future generations. The latter can affect the willingness to innovate, especially when innovation includes a financial risk. Another category of rural self-employed includes artisans who use resources that are only available in rural spaces. Self-employment makes an important contribution to rural economies (Faggio and Silva, 2014).

This study taps into the differentiation of entrepreneurial elements, e.g. innovations, risk-taking and opportunity, from elements related to self-employment, lack of local employment, freedom seeking and self-fulfilment.

**Methodology**

The overarching method is phenomenography, an interview-based approach used to identify commonalities and variations in populations’ perceptions. The analysis was conducted according to Akerlind (2012) following three steps:

(1) Identifying a suitable dominant perception/theory (e.g. rural entrepreneurship as the existence of innovations, risk-taking and seizing opportunity; and self-employment, e.g. acting on lack of local employment, freedom seeking and self-fulfilment.
Semi-structured interviews were conducted between 2010 and 2020 during three succeeding projects.

1. Between 2010 and 2015, semi-structured interviews were conducted with 42 small-scale dairy owners. The project studied the potential contribution of geographical indications to economic growth in rural areas in Sweden (Rytkönen, 2016).

2. Between 2016 and 2019, interviews were conducted with 13 small-scale dairy owners within the frame of an applied project that worked with business model development targeting summer farmers, a category in which many have chosen to establish a dairy (Tunon et al., 2019; Rytkonen and Tunon, 2020). In this project, the data in hand were collected through participatory business development workshops and semi-structured interviews were also conducted with key informants (public officers, dairy experts, etc.).

3. In a currently ongoing project that focuses on competitiveness in the agro-food sector, a database including 235 small-scale dairies was compiled in two steps. Businesses were identified using public records from The Swedish Company Registration Office; Allabolag.se, a public database operated by a valuation corporation; Wayback machine; regional food artisan associations; regional tourism information sites; Google and by asking key informants, such as members of the board of the Small-scale Dairy Association. In the second step, data were complemented with information about dairies’ business activities, collected from their respective websites.

The database includes small-scale dairies established between 1968 and 2020. It includes information, such as firm data, owner information, ownership, financial data, business models, type of animal, product information and location. An overview of the database can be found in Table 1. Data collection was a challenging task, because the administrative authority responsible for keeping records over small rural firms has changed. Some types of ownership have been abandoned over time following new legislation, and some firms are classified in vague statistical categories. Farms that establish a dairy on the farm are not obliged to register a new firm when they diversify nor add a new statistical category to their public records. The database is unique because it contains rich data about the population, it offers a basis for generalization and enables us to draw robust conclusions. Database content was analysed following the categories identified during the phenomenographic analysis.

A methodological implication of the database is that, by extracting data from different digital sources, we are able to improve the quality of research and go beyond the limited empirical scope that single case studies about rural entrepreneurship often offer (Pato and Teixeira, 2014).

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Limited liability</th>
<th>Sole proprietorship</th>
<th>Physical person</th>
<th>Cooperative</th>
<th>Association</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>66</td>
<td>133</td>
<td>13</td>
<td>8</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Production orientation</td>
<td>Mixed production (cheese and other products)</td>
<td>Standard products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>202</td>
<td></td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Overview of the database.
Findings
As discussed earlier, small-scale dairies are not a uniform population (Table 1). A large share of the population produces premium, artisanal dairy products and cheese. The forerunners are all found within this category. A second category produces standardized dairy products, such as milk, yoghurt and industrially produced cheese. Most of these are owned by several farms that establish a joint venture to avoid the dependence on large dairies. Firms in this category compete in the standardized dairy market with a focus on their local and regional market. A third category is composed of micro-dairies that sell milk and yoghurt directly to consumers. Farmers use self-service vending machines installed on the farm or a nearby village, from which customers buy milk. This category has increased in recent years. Most small-scale dairies are also involved in rural tourism and are important tourism destinations in their respective municipalities (Interviews 1–55).

The very first dairies were established in Jämtland, a northern inland province in Sweden. From Jämtland they spread to other parts of the country. The year of establishment offers some clues about the start-up context.

During the twentieth century rationalization of the agro-food sector led to the rise of large dairies. In the 1970s, most small-scale dairies had disappeared. In the inland northern parts of Sweden, rationalization had reached extreme levels and depopulation had become a major challenge for municipalities and regional authorities. When the regional dairy Milko threatened to close down their goat cheese production, some goat farmers were motivated to take control of the elaboration of their milk. Moreover, five people with no previous connection to agriculture, established goat farms with the specific purpose of producing and selling cheese. There were different motives behind the earliest start-ups. Some informants did not want to move to a city, others lacked alternative sources of livelihood and some were returnees who wanted to “move back home” and live close to nature. The earliest start-up decisions were made under great uncertainty and substantial risk because there was no existing market for premium artisanal cheese (Interviews 1–24).

In 1977, regional authorities in Jämtland supported the establishment and development of small-scale dairies to prevent families from moving from the region. In 1995, regional authorities started a regional center for artisanal food (Matora). A dairy school, Rösta Skolmejeri, was established and curdling courses were organized. The latter soon attracted participants from all over the country. Regional authorities also equipped several mobile dairies that were leased out to start-ups for 300\(€\)/year during three years. These dairies were used to decrease entry barriers by helping start-ups to build up a customer base and establish a production line before having to invest in a dairy (Interviews 1–24). After 1995, the number of start-ups per year increased. It is likely that the newly organized support influenced start-up decisions.

By the year 2000, the idea of starting a small-scale dairy had gained a foothold among dairy farmers with cow farms. International milk prices were exceptionally low between 2000 and 2001, and the Swedish EU membership (1st of January 1995) had raised the level of competition. From the early 1990s, conventional dairy farms were able to improve their settlement price by shifting to organic production (Informant 27). However, when the price of organic milk fell, incentives to diversify and establish small-scale dairies increased. The successful examples of goat cheese dairies represented an opportunity to escape from the economic stress created by volatile milk prices. Many established new dairies, while others chose to sell smaller amounts of milk to a small dairy in addition to their commitment as suppliers to a large diary (Informants 27 and 51).

After 2003, the start-up rate accelerated, driven by the CAP’s decoupling reform and the articulation of rural development policies that promoted rural start-ups and farm diversification (Statens Offentliga Utredningar, 2006). A key decision in the new policy was creating a National Resource Centre for Artisan Food, Eldrimner. The new organization
took advantage of previous activities conducted by Matora (courses, workshops and study trips) and established the annual National Championship in Artisan Food. The competition promotes quality and creates incentives for new start-ups (Eldrimner, 2021).

Moreover, the demand for local food has increased, driven by second-home tourism and by an increasing interest of the press. One of the pioneers reflected on this in the following statement:

The first year after we built the village dairy, we had some occasional passers-by on their way to Norway who stopped to buy cheese. But a journalist made a documentary about us. After the documentary was shown on TV it was incredible: Ten thousand people visited the dairy that summer! (Informant 2).

Since 2015, dairies that sell milk directly to consumers using vending machines have become more common. Milk procurement prices have fallen, especially since Russia imposed an embargo against European products (Lingheimer et al., 2016; Skvarciany et al., 2020). Moreover, milk demand has dropped in the wake of the rise of vegetarian alternatives (Fuentes and Fuentes, 2017). Diversification is also a response to rising demand for local food (Rytkönen et al., 2018). Many farms with vending machines are located close to the large cities. Our results indicate that most vending machines were established between 2017 and 2020 (Database entries 174, 178, 179, 201, 207, 208, 209, 210, 211).

Innovations and innovative behaviour

The most important innovation highlighted in this study is the opening of a new market. Consumers were not familiar with dairy products from small-scale dairies. The new small-scale dairies broke existing patterns. The forerunners were clearly innovators although their initial drivers were related to classical self-employment motives: Lack of opportunities; living close to nature; working with animals.

An additional innovation was the establishment of a small sales cooperative, Jämtspira, inspired by Southern European cheese syndicates. Small-scale dairy cooperatives had previously disappeared in Sweden in the wake of agricultural regulation. Jämtspira became a key instrument in the opening of a new market for artisanal premium cheese, and it became an umbrella under which firms could cooperate (Stryjan and Fröman, 1991). Jämtspira was supported by the large regional dairy (Milko) by granting Jämtspira access to Milko’s cold chain (Informants 1–20). “This was a win-win. Milko’s trucks were travelling the roads anyway and we got a small income that helped cover fuel costs” (Interview CEO of Milko, 2011).

Milko also gave Jämtspira ownership of one of its regional cheese brands, Vålåloffen, free of charge (Informant three; Interview CEO of Milko, 2011). Jämtspira was active between 1983 and 2010 and in all it involved 20 informants. Jämtspira was important for dairies especially during the start-up phase (Informants 1–24).

Seven additional cooperatives were established between 2008 and 2011, however, all except one have focused on production of standardized dairy products (milk, yoghurt, industrial cheese) answering to a rising demand for local and regional food. These dairies compete in the regular market against large dairies like Arla Foods and their main driving force is low procurement prices. But this is a tough template to follow. The regular market is highly competitive and requires that dairies achieve economies of scale, which is difficult to reach in a local market (Database entries 2, 11, 26, 104, 106, 109, 125).

In 2010, an additional form of cooperation was established. Three of the forerunners and largest cheese dairies in Jämtland realized that there was a potential opportunity in the regional capital, Östersund. They opened a delicatessen that was deliberately described to customers as a farm store, “Ost och Vilt Gårdsbutik’. The store became a storefront and
serving point for the owners and other food artisans in the region, it helped establish direct contact with urban customers all year around (Informants 1,3,4).

**Products.** Cheese is not an innovation, but in the early stages of industrial development, frontrunners developed a local cheese. This cheese was a modern version of the traditional “old”, “home-made” local white goat cheese, which still was produced in marginal quantities in summer farms. Instead of looking like “hairy hares” (Informant 3) the new cheese was semi-hard, had solid white mould and appealed to modern consumers because it looked “clean” (Informants 1–24). The County Administrative Board in Jämtland supported product development by employing a French expert to teach Swedish producers the art of making cheese. This led to the development of several cheeses inspired by well-known foreign role models. The dairies used new funny names that alluded to the original, e.g. Roquefort became “Rocka fett” (rock a lot) and blue cheese became “Get blå” (blue goat) (Stryjan and Fröman, 1991). The use of foreign recipes and know-how solved the problem created by the previous loss of local knowledge and expertise (Interviews 1–24).

When the market had become established and the interest for traditional food had matured, an Interreg project initiated in 2004 worked with the restoration of old cheese cellars and re-starting production of traditional cellar-stored cheese (Berglund, 2006). In other parts of Sweden traditional cheese was recreated using old recipes and historical knowledge. “Food with history” became a branding tool used in market differentiation. For example 12 firms in the database sell “typical regional cheesecake” (database entries 25, 32, 74, 79, 88, 99, 102, 135, 137, 145, 189 and 221); four sell “genuine Småland cheese” using the historical recipe for priest cheese, a generic cheese type (database entries 93, 138, 143 and 200); and others re-established production of Wrångelback cheese (Informant 27) and “farm cheese”, using original historical recipes (Informants 38–40).

**Business models.** Contemporary business models played a key role in the development of the industry. The original and dominating business model was a separation of farming from the elaboration of farm produce. Farmers produced their milk, but at the farm gate they transferred the responsibility for value creation to a large regional or national cooperative. The establishment of small-scale dairies altered the position of those farmers that became responsible for creating, delivering and capturing value. Collaboration has been important for changes in business models, but other elements must also be included. The following business models were identified:

1. Running a small-scale dairy and selling premium products (cheese, whey cheese, cheesecakes, butter and premium ice-cream). Most dairies produce their own milk;

2. Elaborating standardized dairy products (milk, yoghurt, fermented milk, cream) and selling through grocery stores. These dairies are either limited liability companies or cooperatives, owned by the farmers that produce the milk;

3. Combining dairy production with tourism (guided tours, establishing a farm café, a B&B), sometimes including a farm and sometimes not;

4. Selling milk on the farm using a pasteurization and vending machine.

Within the mentioned categories, each firm has developed their own unique version of business model. Some examples are “cow safari” (tourists ride in an open wagon into the field where cows are grazing) and crowd-funding (adopting a cow). This type of solution focuses on creating an emotional link between the product and the consumer. Another example is a cooperation between four Swedish farmers and a dairy in Aland, a Finnish island located close to Sweden. Farmers reduce their costs for fixed investments and employer liability by leasing elaboration and packaging costs from Aland. They can focus on primary production and selling their products under the local brand “Roslagsmjölk” (Database entry 162).
In the fourth category, some examples are “single cow milk” (using cows as a marketing argument), or “summer milk” (drawing on the benefits using hay and fresh pastures on milk quality). In general, being innovative means finding solutions that generate a business advantage. Many innovations were regular practices in other parts of Europe when they were introduced, but in the local Swedish context they were something new, none of them were disruptive.

Changing institutions and risk-taking. One of the main postulates in entrepreneurship theory is that entrepreneurship creates qualitative change that permanently alters market conditions (Schumpeter, 1947). This postulate has gone undisputed in entrepreneurship research, one example is the debate about how entrepreneurs seize opportunities and respond to threats by exploiting existing resources in new ways (Aldrich, 2009; Davidsson, 2015; Sarasvathy et al., 2010).

The first small-scale dairy start-ups broke the pattern in an already mature business sector. A central institutional issue is that modern dairy industry regulations were established to improve food safety focusing on large industrial firms. Industrial regulation indirectly helped speed up the process of industrial rationalisation (Morell, 2001). Before 2009, food industry regulations were the same for small and large companies. Previous legislation required investments in large sewage, modern infrastructure and facilities for employees (even when there were no employees). The public hygiene control over small dairies was exercised by municipalities, where there was no previous experience of controlling small-scale-dairies. This circumstance caused low legal certainty, because there was large variation in the implementation of current legislation. Informants argue that they had to “take on a fight” with their respective municipalities, because most investments they were asked to make were unreasonable for a small-scale operation (Informants 1–55). The Small-Scale Dairy Owners Association and Eldrimner initiated a dialogue with the government, which led to legislative change and the adoption of the “Industry Guidelines for Small-Scale Dairies” in 2009. The guidelines are specially adapted for small-scale dairies and include instructions to help firms and municipal inspectors to implement current food legislation and hazard analysis and critical control point (HACCP) regulations. Institutional changes show that this new industry organized and acted proactively to decrease risk and uncertainty (Rytkönen, 2016; Eldrimner, 2009).

Self-employment
Many start-ups were motivated by a search for income, personal freedom and certain types of lifestyles. This does not mean that self-employed remain passive income generators, as many dairies show innovative features during their lifetime. The access to knowledge and accumulated experience in the growing trade, new regulations and a growing demand for local food were some of the crucial factors behind start-up decisions.

Imitation
Imitation plays a key role in the development of the business. A surprisingly high number of informants argue that they dared to establish their business because they had seen the experiences of others. Many informants relied on the help and support of more experienced dairy owners during the start-up phase. Over time, many of the dairies copied products, services and solutions developed by others. Most informants developed innovative business models along the way; only a few have remained satisfied with just generating an income, or were forced to refrain from innovating due to a lack of resources.

The start-up decision is often a family decision. Ten informants (out of 56) claim that they had been asked by their spouses to establish a dairy. The alleged reason was that the spouse’s farm was financially challenged by low milk prices. Two informants were forced to leave their
business because they divorced their spouse, and it was impossible to separate the dairy (often owned by women or couples) from the farm (often owned by men). Two informants failed because they underestimated the amount of work needed to establish a dairy in addition to running a farm. The remaining six are still in business. The latter have taken advantage of the rising demand for artisanal cheese and the boom in rural tourism. The presence or absence of innovative behaviour influences potential income, but income is also influenced by seasonal aspects. Small-scale dairies located close to a ski center can potentially have two seasons, summer and winter (Informants 7, 8, 10, 13, 14, 19, 22, 23, 28, 37), but those located far away from urban centers, main roads or tourist attractions have only one season (summer). Their survival is dependent on having a proactive year-around sales strategy (Informant 4, 7 and 10).

Lack of employment and personal freedom
Many informants inherited their farms. The investment in a dairy was often made soon after they took over the farm, especially since it might take a couple of decades to become debt-free. Many young farmers see generational change as an inevitable legacy, regardless of whether their personal goals are in line with becoming a farmer or not (Joosse and Grubbström, 2017; Nordström Källström, 2008). Informants over 50 argued that the most important element behind or against innovations was their children’s willingness to take over, especially when investments were needed. All informants expressed a desire to pass on a business that was debt-free, but most children were reluctant to take over because they had seen their parents work so hard.

Two additional elements influencing innovative behaviour were (1) lack of financial resources. This affected informants who had limited savings and were only able to get into the business because they were able to benefit from reduced entry costs, renting a subsidized mobile dairy and participating in state-financed curdling courses. (2) The other element was personal priorities. For a few informants, running the business was the only way to achieve their goals in life.

Running a small-scale dairy is hard work. Several informants argued that they felt that their bodies had been worn out. Informants who work alone in their businesses are especially vulnerable, regardless if they produce their own milk. Results show that working solo is related to a limited capacity to innovate. In the database, 147 entries correspond to business owners who are sole owners (88 women and 59 men). Some of these have support from family members, others work alone.

Informants who work alone suffer from a lock-in effect. They are often forced to limit their sales, especially if they have a dairy herd (Informants 1–55). Selling outside the place of production takes extra time. Establishing contacts with good selling points is time-consuming and means being away from the business. This makes it difficult to, for example, generate an income from selling kids’ meat and forces informants to sell part of their products through market vendors or rural food stores, reducing profit at the same time that control over how products are displayed is lost (Informants 1, 3, 4, 13, 14, 16, 17, 19, 23, 24, 36 and 40). Banks are reluctant to lend capital to sole proprietors. They are considered a high risk for failure. Sole proprietors are in turn more reluctant to take loans they might not be able to pay back (Informants 1–55).

Discussion and conclusions
This study aimed to conceptualize rural entrepreneurship by highlighting the role of innovation in the creation of economic value in rural areas and by differentiating rural entrepreneurship from self-employment. The table below summarizes results (see Table 2)
Rural entrepreneurship and self-employment

Our results confirm the hypothesis that a focus on innovations helps answer the question of what entrepreneurship is, and what it is not. Moreover, results indicate that rural entrepreneurship and rural self-employment interact and are interdependent in the creation of economic growth.

Start-up motives had limited importance for the degree of innovation. Only forerunners ran economic risks under true uncertainty. Most new firms are motivated by classic self-employment motives, creating an employment for oneself, self-fulfilment, generational shift mostly in business that include agriculture, moving to the countryside to live a certain type of life, et cetera. Over time, driving forces behind a business might change and most businesses become innovative, they develop new business models that include new practices and new products. The degree of innovative behaviour might increase or decrease several times during the lifetime of a firm. The dairies in this sample were innovative and entrepreneurial during certain periods, taking risks under varying degrees of uncertainty and discovering and seizing opportunities, while during other periods they remained unchanged or stagnated. A theoretical implication is that rural entrepreneurship, defined as path-breaking innovations, is not constant in the life cycle of firms (Table 2). Entrepreneurship and self-employment interact in the lifecycle of a rural industry. Therefore, including firm’s actions over time offers more robust conclusions. In addition, a number of previous studies highlight embeddedness as a business barrier (Fuller-Love et al., 2006; Kalantaridis and Bika, 2006), we argue that rural entrepreneurship is characterized by the ability to turn embeddedness into assets. This strengthens recent research in which embeddedness is seen as an essential element in strategic business decisions (Korsgaard et al., 2015; Marques et al., 2019).

Imitation proved to be an important element in the innovative behaviour of firms. This indicates that established practices in one geographical context can create business advantage for firms elsewhere.

Innovations are also strongly related to business models. In entrepreneurship theory, innovation means identifying and exploiting market opportunities by using available

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Table 2. Summary of main categories, commonality and variation between outcome space and existing theory
resources in new ways. An important lesson from this research is that to understand the innovative capacity of rural businesses, it is necessary to look for the ability to break patterns and alter institutions or other market features that most business owners would interpret as obstacles to make things differently. In rural entrepreneurship this ability is related to what many scholars define as social capital (Halstead et al., 2021; Lang and Fink, 2019) or collective action (Davoudi et al., 2008). It is this ability that differentiates rural entrepreneurship from self-employment.

An increased number of dairies helped forerunners in the industry to go beyond being a peculiar phenomenon in a distant location. They helped bring maturity into the newly established market. In the mainstream of entrepreneurship research the role of imitation is highlighted because it played a key role in the diffusion of innovations, it helps industries to mature and contributes to economic growth (Baumol, 2010; Schmitz, 1989). It is therefore justified to bring in imitation in future studies of rural entrepreneurship and rural self-employment.

Future research and policy implications
From the conclusions stated above, future research can take on new challenges highlighted in recent research. Some researchers argue that it is necessary to include new units of analysis, sampling, multilevel models that enable a deeper understanding of the diversity of entrepreneurship. Such a line of research can rely on the contextualization debate highlighted by researchers such as Welter and Baker (2020). The hypothesis tested by this article can also contribute to future research concerning a recent redefinition of venture creation, a concept that was previously tightly connected to the creation of new organizations. Davidsson (2021) argues that venture creation should focus on new business activities in businesses everyday life. Such an approach can deepen our understanding on the origins of entrepreneurial actions (Davidsson, 2021).

As previously argued, self-employment might also constitute an important complement to rural entrepreneurship in the process of economic growth. This specific circumstance and how rural entrepreneurship and self-employment interact as innovations work their way in the local economy require further research.

Rural development policies see rural entrepreneurship as a key to solving many challenges. Results in this article offer new explanations to the process economic growth in rural areas. Policies can benefit from promoting interaction between ecosystem actors. Investing in the dissemination of knowledge, highlighting positive experiences from local area, but nevertheless from places located far away, can be fruitful and inspire business renewal, promote innovation, innovative business models and ultimately rural development. In addition, the continuing effect of the pandemic on self-employment deals an important area for future research. Research could explicitly focus on small scales dairies as a study variable linked to effects of economic impact, and self-employment.

References


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