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Agricultural Cooperative Development and Institutional Change: Swedish Examples from 1990 to 2020

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ABSTRACT

This paper shows how cooperatives' changing organizational structures can be explained by the Theory of Institutional Change. When a cooperative's decision makers receive exogenous signals, endogenous processes concerning organizational adaptations start. Radical changes are met with resistance, such as the conversion of a traditional cooperative into an entrepreneurial cooperative (where members have individual ownership) or a farmer-controlled business (external investors participate in ownership and governance). Cooperative memberships and leaderships may have change agents who advocate for new institutions while gatekeepers try to resist them. The development of Swedish agricultural cooperatives from 1990 until 2020 illustrates this theoretical reasoning.

Keywords: *traditional cooperative; hybrid cooperative; cooperative life cycle; cooperative demise; agricultural policy*

1 Introduction

Agricultural cooperatives are successively changing their organizational models, whereby such models can be understood as a specific set of institutions. This study suggests that the Theory of Institutional Change could contribute to help explain why cooperatives change their models. A large number of previous studies address how cooperatives develop, for example, from the traditional model to a hybrid cooperative model of one type or another, or how they convert into or are acquired by investor-owned firms. Many of these studies present specific case cooperatives (Gunnarsson Myrelid, 1999; Anderson and Henehan, 2001; Bijman and Hendrikse, 2004; Kenkel and Hagerman, 2004; Fulton and Hueth, 2009; Lamprinakis and Fulton, 2011).

Several researchers have suggested theoretical explanations for how cooperatives choose an organizational model, by which they have applied a range of theoretical approaches, though mainly economic ones: agency theory (Cook, 1995; Chaddad and Iliopoulos, 2013), property rights theory (Fulton, 1995), life-cycle theory (Hind, 1999; Cook, 2018), transaction cost theory (Harte, 1997), corporate governance theory (Holmström, 1999; Nilsson, 2018), financial theory (Lang and Fulton, 2004), cultural theory (Hogeland, 2006, 2013), or social capital theory (Nilsson et al., 2009; Nilsson et al., 2012b). These theoretical approaches specify factors that induce cooperatives to choose an organizational model that may strengthen the cooperatives' performance and value to the members.

Each cooperative organizational model comprises institutions concerning internal governance structure, financial solutions, and member incentives schemes. However, as the literature on cooperatives' choice of organizational models focuses predominantly on economic factors, there is no theoretical treatise on the mechanisms behind cooperatives' institutional changes. An institutional change entails "a change in the value structure of the institution." (Bush, 1987, p. 1078). According to Kingston and Caballero (2009), a wide variety of theories help contribute to explaining institutional changes. Among these theories are some economic theories, institutional theory (the concepts of path dependency, inertia and "tragedy of the commons"), as well as theories from history and political science. In the present study, Aoki's Theory of Institutional Change is chosen as the foundation (2007, 2011).

Aoki (2007, 2011) integrates variables from political science, economics, sociology, and other social science disciplines. The theory's interdisciplinary character is promising because cooperative development depends on both social factors within the cooperative society and economic factors within the cooperative business firm. When explaining the development of investor-owned firms, economic factors dominate because the driving force is the owners' quest for a return on their investments. In a cooperative context, social capital can be considered more basic than financial capital (Valentinov, 2004a, b). There must be a sufficient amount of social capital within a group of producers, and they all must recognize that they have high transaction costs when acting in markets with an unbalanced power relationship. In this manner, social forces facilitate them to mitigate a market failure. Similarly, a combination of social and economic factors explains how members make decisions about their cooperative's organizational model.

A challenge to explaining cooperative development is that the population of cooperatives is heterogeneous, as cooperatives exist in many industries, countries, and legal settings. Consequently, it is not possible to present empirical evidence about organizational changes in a sample of cooperatives that exist or have existed. Instead, the analysis becomes more easily understood if the examples have some common traits. The present study uses the development of Swedish agricultural cooperatives to illustrate theoretical reasoning, and the study is limited to the period 1990–2020, during which many cooperatives reconsidered their organizational model (Morfi et al., 2021). During this period, the strength of agricultural cooperatives generally declined in Sweden. In the dairy sector, the cooperatives' share of the milk intake fell from 99% to about 70%. In the grain and farm inputs sector, the cooperatives used to have a market share of 80–90%, but it is now about 70%. The cooperatives in the meat industry used to have 80% of the market, but since 2007 there are no longer any meat cooperatives.

Thus, the aim of this study is to demonstrate how the Theory of Institutional Change can explain how agricultural cooperatives have changed their choice of organizational models. Previous research that explains this phenomenon is integrated into the Theory of Institutional Change.

A presentation of the Theory of Institutional Change is given in Section 2. This theory is used to classify various cooperative organizational models, and provide an account of how the theories suggested by other researchers can be incorporated into the Theory of Institutional Change. Section 3 explains why Swedish agricultural cooperatives are suitable for empirical illustrations, and it presents case descriptions of how cooperatives in the major agricultural industries have reconsidered their cooperative structures. Section 4 discusses theoretical interpretations of these case descriptions. Conclusions are presented in Section 5.

2 Conceptual framework

2.1 The Theory of Institutional Change

Cooperatives' decisions about their structures and strategies depend on various values, norms, rules and opinions, held by individuals within the cooperative, including members, elected representatives and managers. However, various stakeholders, such as business partners, the local community, the government, personal acquaintances, and others, influence these individual views. Based on North (1990), Aoki (2007, p. 6) defines institutions as "self-sustaining, salient patterns of social interactions, as represented by meaningful rules that every agent knows and are incorporated as agents' shared beliefs about how the game is played and to be played."

The institutions provide incentives and criteria for the decisions made by individuals, groups, and organizations. Cooperative decision makers have reasons to consider the institutions that exist among the stakeholders on whom the cooperative is dependent. This presupposes that the individuals receive signals from the environment and forward this information to others within their organization. Decisions about organizational design take place in the interplay between institutions that exist inside and outside an organization.

Institutional changes occur because of the interaction between endogenous processes within social systems and exogenous signals to these systems (Aoki, 2007, 2011). The endogenous processes take place when individuals have social exchanges that are triggered by signals from outside. Exogenous signals originate, for example, from political decisions, shifting consumer demand, competitor actions, and technological development. As the individuals perceive the exogenous changes, they consider whether their cooperative should adapt and, if so, how. However, certain institutions within the cooperative may inhibit adaptation to the environment.

People's views not only determine their own behavior, but also affect others' views of reality and thereby their actions, which in turn influence others, and so forth. Institutional change is about how individual views guide the way social systems function. When people change their norms or perceptions, there are opportunities for organizational changes in the form of working procedures, investments, organizational arrangements, interpersonal relationships, and choices of collaborative partners. These changes give rise to additional institutional changes, which in turn lead to other organizational changes.

Different sets of institutions can be expected within different sectors of society. Aoki (2007) identifies four domains. This classification is relevant not only because institutions are likely to influence each other within each domain, but also because institutional changes in one domain affect how actors within another domain perceive reality and, consequently, change their actions, causing others to change, and so forth. These domains are:

- *The economic exchange domain* comprises the values and norms within cooperative business firms, investor-owned firms, and other actors within the value chain, including farmers.
- *The organizational exchange domain* involves a variety of organizations, such as cooperative boards, management, and staff, as well as various units within cooperative societies, cooperative apex organizations, and other firms in the value chains.
- *The political exchange domain* comprises politicians in various organizational contexts, their voters, and lobbying organizations.
- *The social exchange domain* comprises the farmers, their families, and friends. The general public is also interested in agriculture, taxation, food product origins, and other related topics.

People act in their own interests, but due to interplay with others who act in a similar way, individual interests may change over time. For example, politicians have the power to influence economic development, and business people influence citizens' views of society. When "the rules of the political exchange game start to be modified, that would … have feedback impacts on the corporate organization field in one way or another" (Aoki, 2011, p. 28). Because exogenous events change the conditions for an institution within an organization, the proponents of this institution have a reason to consider their perceptions. Consequently, these individuals affect the conditions of other actors, who thus have to change their views. The processes are reciprocal. For example, a firm must consider how competitors, customers, and suppliers will react when it launches an innovation.

As some individuals perceive that they will benefit from certain institutions, they will argue for institutional change. Likewise, adversaries may advocate for the status quo. Cooperative ideology persists in many cooperatives because people have stakes in advocating for this institution (North, 1990). Nevertheless, people often have to adapt or risk losing in the end, but the adaptations might be slow and incomplete. It may take time for new norms and values to merge with existing ones.

Institutional changes often depend on the activities of some enthusiasts. Change agents promote an institutional change, whereas gatekeepers try to prevent this change. Both change agents and gatekeepers are people who benefit from certain institutions. These individuals try to orchestrate an interplay between exogenous and endogenous forces (Seo and Creed, 2002). They want to create clusters, together with those who embrace the same institutional setup. Successful change agents are better able to "embed their change initiatives within frames or models available in the broader society" (Seo and Creed, 2002, p. 236–237). Therefore, some change agents succeed in convincing other actors to adopt their ideas about, for example, how to organize a cooperative.

Institutional changes are characterized by inertia (Nilsson, 1997). Because the proponent of a new institution is often met with resistance from other actors, the changes take place successively and in small steps. The concept of path dependency is a hallmark in literature on institutional change (North, 1990). Organizations may face difficulties in relationships with their stakeholders caused by lags in institutional change. An institutional change is seldom a result of deliberate action. Rather, institutional change takes place organically and in an iterative manner. Such a change develops when individuals face increasingly high transaction costs in their exchanges with others. New institutions result as existing ones become mixed or influenced by others. Existing institutions cross-fertilize each other and incorporate elements from each other, by which new elements continuously emerge. Existing institutions may not be completely abandoned but instead survive in a modified form. New ideas are born as existing ideas are integrated into others. All ideas exist among individuals acting within various social contexts. Institutional change results from competition between different norms, rules, ideologies, ideas, and other notions. They are linked to *tensions* between actors within organizations, for example, between their leadership and membership, competing firms, or the producers at different stages of a value chain.

2.2 Institutional attributes of cooperative models

Cooperative organizational models can be described in terms of institutional structures. Even though each cooperative model comprises a variety of institutions, there are resemblances between the institutions within one model and differences between the institutions of the different models. Explanations for how institutional changes affect the cooperative choice of organizational models require a classification of cooperative models. The literature provides many classifications (Chaddad and Cook, 2004; Chaddad and Iliopoulos, 2013; Grashuis, 2018). The classification chosen for this study was inspired by Nilsson (2001). The classification in Figure 1 contains three theoretically defined models of cooperatives, namely the traditional, collectivistic one, and two non-traditional, hybrid, ones. The figure's fourth category comprises firms in which farmers collaborate, though not within a cooperative. Organizations can convert from any single model to any of the other ones, depending on exogenous influences and endogenous processes. They can also maintain their existing model for an extended period of time, making only minor organizational changes.

The point of departure for the classification of cooperative models is the criteria of cooperatives, suggested by Dunn (1988): An organization is a cooperative if members (a) *benefit from their role as patrons,* i.e. trading partners to the cooperative firm; (b) *govern* the firm; and (c) *have ownership*. This definition is flexible enough to allow not only traditional cooperatives but also various hybrid cooperative models with different institutional norms and rules (Hansmann, 1996).

All three cooperative models presuppose that their members benefit from their business with the cooperative, but there are differences when it concerns governance and ownership. Members have different notions of the three member roles, as shown in models I, II, and III. Figure 1 indicates that the members may have different views of their patron role (the vertical axis) and their owner role (the horizontal axis).

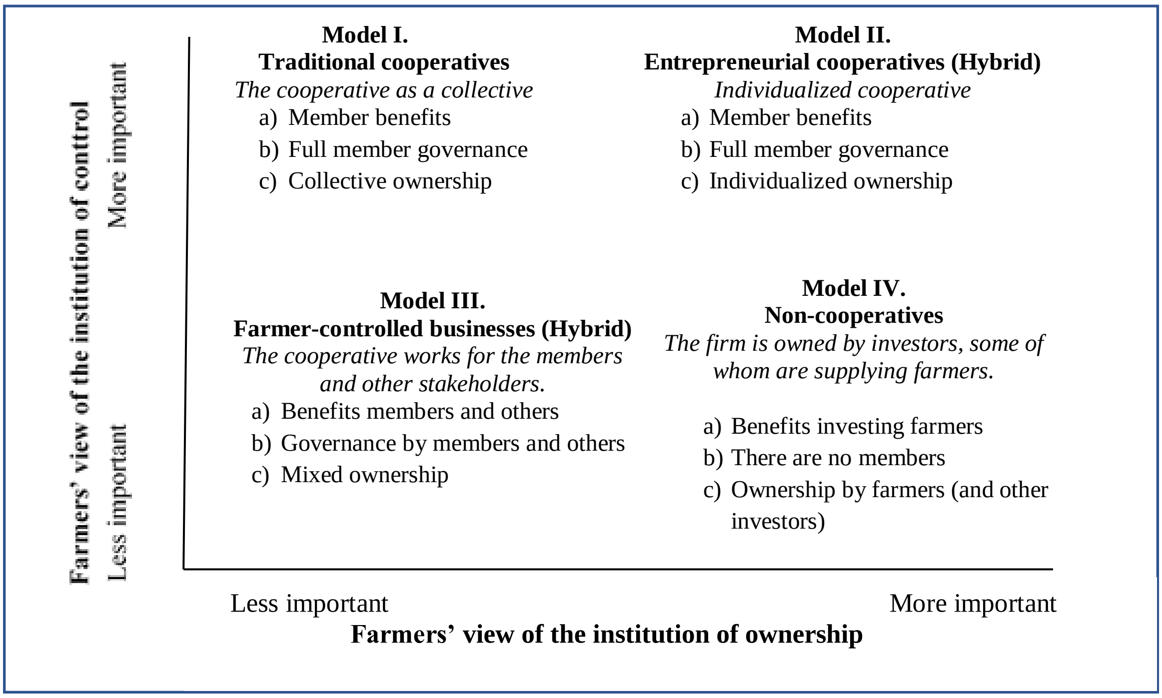

***Figure 1**. Farmer-owned organizational models categorized as the farmers' institutions in terms of their roles as control holders and property rights holders (inspired by Nilsson, 2001)*

- Model I represents *traditional cooperatives.* Cooperatives have, since their infancy in the 19th century, predominantly consisted of traditional cooperatives. They are important institutions where members receive benefits in their patron role and there is joint ownership and full member control. Member relationships are characterized by values such as equity, equality, fairness, and solidarity, all of which are expressions of a collective mentality (Hakelius, 1996). The members appreciate that they only need to invest small amounts of capital, if any at all (Fahlbeck, 2007). This means that the cooperative has limited opportunities for investing in capital-demanding processing. The collectivistic attributes of this organizational form imply that there is a large amount of social capital on the side of the members.
- Model II can be labeled *entrepreneurial cooperatives.* The main institutional element of this hybrid cooperative model is that the members appreciate the institution of individualized ownership and consequently receive remuneration in both their patron and their investor roles (Hakelius and Nilsson 2020).
- Model III, or *farmer-controlled businesses,* comprises hybrid cooperatives where the members own and govern the cooperative, together with external investors. There is an institution concerning joint ownership. Because the members do not have full ownership, their control power is more or less limited. Member benefits as patrons are circumscribed by the fact that external investors will reap part of the profits, but members get the other part of the profits (Ollila et al., 2014).
- Model IV consists of firms that are *not cooperatives* according to the above criteria. This model may represent a profit-seeking firm, controlled by one or a few farmers, perhaps together with external investors. The firm markets the farmers' own products as well as products from other farmers.

2.3 Economic factors and institutional change

An often-mentioned raison-d'être of traditional cooperatives is that their attributes lead to low transaction costs for the members. The traditional cooperatives' historical strength is in their ability to offer large volumes of raw products of consistent quality at a low cost. They have low processing costs, or dominant market positions, or both. The cooperative principles stimulate a large number of farmers to deliver large volumes of produce, which is processed to the stage where the products can be sold to a large market (Ollila, 1994; Nilsson, 1998). However, due to the intensified competition of liberalized markets, technological development, and other factors, an increasing number of cooperatives are no longer able to offer low transaction costs to their members (Harte, 1997). The locus of power in the value chains has shifted to firms that control genetic materials and to large processing and retailing firms (Fulton, 1995).

Traditional cooperatives often try to keep their low-cost advantage through mergers (van der Krogt et al., 2007). Because a merger is a failure for at least one cooperative, elected representatives will often postpone it. As a result, mergers may take place long after a cooperative approaches the brink of insolvency. The leadership may also refrain from revealing the cooperative's severe financial situation. Endogenous processes can explain this. Mergers lead to larger and more heterogeneous memberships, poorer member involvement develops, and members become reluctant to invest in and govern their cooperative (Cook, 1995; Nilsson, 2018).

Many cooperatives that have experienced intensified competition invest in more lucrative downstream or upstream stages of the value chains (Nilsson, 2018). Both horizontal and vertical integration means that the cooperatives have become so large that member governance suffers. The leadership of large cooperatives tends to adopt the management institutions of investor-owned firms (Bager, 1994), and management often wants expansion (Hind, 1997). Institutions within the organizational exchange domain, i.e. management culture, are at odds with the institutions within the social exchange domain, i.e. values within the farmer member community (Hogeland, 2006, 2013). The amount of social capital within the membership shrinks as membership becomes larger and more heterogeneous (Borgen, 2001; James and Sykuta, 2006; Österberg and Nilsson, 2009; Nilsson et al., 2012b; Feng et al., 2016). Likewise, there is a risk for agency problems when a cooperative has large and complex business operations (Fulton and Hueth, 2009; Cadot, 2015). Somebody other than the members (probably management) may take control. There may be transaction specificity in terms of human capital in the sense that the leading figures have skills, reputations, and other resources that are valuable for their present positions but that would not be valuable in another career. Therefore, they are not receptive to exogenous influences, and they promote endogenous processes that preserve the status quo. Members of a large membership are not able or even willing to control management (Gaurwitsch and Nilsson, 2010).

When cooperatives grow very large, so-called vaguely defined property problems may arise: the horizon problem means that members do not want to wait for the cooperative to provide benefits; the free-rider problem says that, due to collective ownership, a member can reap benefits without contributing accordingly; the portfolio problem says that the cooperative's assets do not benefit all members (Cook, 1995). These problems can be amended with clearly defined property rights, such that the cooperatives' capital issues are ruled by the market mechanism (Holmström, 1999). This implies that the traditional cooperative is substituted with a hybrid cooperative with property rights in the hands of either the individual farmers or non-member investors.

3 Empirical observations

3.1 Data sources

While it is not possible to conduct a formal test of the Theory of Institutional Change's assertions about cooperative development, it is possible to illustrate these statements with the help of empirical observations. Examples from Swedish agricultural cooperative development in the period 1990–2020 were chosen for study. There are two reasons for this choice.

First, many Swedish cooperatives reassessed their organizational models in the period 1990-2020, especially after the country's accession to the European Union (EU) in 1995. Previously, Swedish agriculture operated under a national agricultural policy, which meant heavy governmental support and protection. All agro-food value chains were inefficient in an international comparison (Rabinowicz et al., 1986; Rabinowicz, 2004; Hendriks and van de Klundert, 1995). The prices of agricultural products were set during annual negotiations between the government and the agricultural apex organization, and one criterion was that farmers would have the same income as industrial workers. Swedish agricultural policy limited foreign competition through high tariffs, and it prevented domestic competition by granting regional monopoly and monopsony rights to cooperatives (Micheletti, 1987). It supported strong cooperative apex organizations, which thus could build extensive production facilities and market-dominating brands. These organizations contributed to homogenizing the structure of cooperatives. As taxpayers and consumers paid for the support to agriculture, most agricultural organizations and farmers were supportive of the regulations. In this way, institutions within the political exchange domain dominated the agricultural sector.

When cheap food products from other EU member countries reached the Swedish market in 1995, the cooperatives had to lower their sales prices and consequently lower the amount paid to members. Many cooperatives undertook reorganizational measures because their financial status deteriorated drastically. The foreign competition meant strong exogenous impulses, which led to endogenous processes. There were many mergers, but some cooperatives also introduced new ownership and governance structures. Inertia in the endogenous processes prevented any reorganization for some cooperatives, so in the end, the cooperatives were sold to other firms.

Second, there are numerous empirical studies on how Swedish agricultural cooperatives have developed from about 1990 until 2020. Some of these sources are articles in international scientific journals, others are PhD and MSc theses[1]. The examples cover most of the cooperatives in the three main agricultural industries: grain marketing and farm supplies, dairy, and meat.

3.2 Swedish cooperatives since the early 1990s

Swedish legislation on cooperatives is based on the principles in the International Cooperative Alliance, although it permits variations in financial and governmental aspects. The former national agricultural policy favored traditional cooperatives, and virtually all farmers were members. The main exception was the potato starch cooperative, which has been an entrepreneurial cooperative since its establishment in 1927, i.e. with closed membership and tradable delivery rights. Many cooperatives have continued to follow the traditional cooperative model. However, in 2020, most farmers belong to an entrepreneurial cooperative, because the largest grain marketing cooperatives has introduced individualized ownership (Hakelius and Nilsson, 2020).

The national agricultural policy paid more money to the cooperatives and the apex organizations than these organizations could pay to the farmers. As the excess money was kept in these organizations, they became very rich. Equity ratios could be up to 80% (Hendriks and van de Klundert, 1995). The cooperative organizations' financial strength declined during the years after the EU association, and many cooperatives considered how they could raise capital in alternative ways. Many cooperatives were actively searching for exogenous influences related to how cooperatives are organized elsewhere, although mainly in neighboring countries. The institution of external co-ownership was rejected and still is today. External co-owners may occasionally exist in some downstream subsidiaries. No farmer-controlled businesses exist in Sweden. Some foreign cooperatives own productive operations in Sweden (Nilsson and Lind, 2015). Many Swedish farmers may, however, be unaware of the fact that these firms are profit-seeking and are not Swedish cooperatives (Hess et al., 2013; Nilsson et al., 2014). While external co-owners were disregarded, members were more accepting of the institution of individualized ownership in the form of preferred shares, although it took several years for this idea to mature, and it matured only in the largest cooperatives.

In the era of the national agricultural policy, the standard solution for problem-burdened cooperatives was mergers (Utterström, 1980). The notion that a poorly performing cooperative could merge with a better-performing cooperative is still a firmly rooted institutional element in the minds of the farmers. During the crisis after the Swedish EU incorporation, endogenous processes often resulted in the enrollment of external experts on the boards of directors. This practice is still found in the largest cooperative. Another rapidly evolving institutional practice was whether cooperatives should recruit a chief executive officer who had a good record from a non-cooperative business, even though this person was not familiar with cooperative capital restraints and member orientation.

In the crisis years, the institution of forming strategic alliances developed. Cooperatives tried to form collaborative arrangements with other Swedish cooperatives or with those in neighboring countries (Hedberg, 2004). Only a few alliances were actually formed, but they were soon dissolved because the partners had incompatible objectives, namely to find markets for their own members' products.

After the Swedish association with the EU, institutional signals no longer came from the political exchange domain. Signals from the economic exchange domain hit the cooperative business firms. The number of cooperatives fell drastically through mergers and acquisitions. About twenty cooperatives are estimated to remain, depending on the criteria used (Hakelius, 2018). The numbers of farmers have fallen. Many farmers with smaller operations stopped farming while farmers with the large and professional operations remain. The size of farm operations has increased, and the average age of Swedish farmers has risen (Morfi et al., in press).

There are only a few examples where a group of farmers jointly established limited liability companies (Model IV in Figure 1), by selling, for example, meat products from their own and other farmers' production on local or regional markets. Cooperatives have converted into investor-owned firms several times, namely when failed Swedish cooperatives were acquired by Finnish, Danish, and French profit-driven firms. This happened to the largest Swedish meat cooperative (Nilsson and Lind, 2015), the second largest meat cooperative, the second largest dairy cooperative, and a large regional grain marketing cooperative. The common denominator behind these acquisitions seem to be that cooperatives made too heavy investments.

[1] Space does now allow references to all the empirical studies, which serve as the basis of this paper. A list of references can be obtained upon request to the author.

3.3 Grain marketing and farm supply cooperatives

There were regional cooperatives in the grain marketing and farm supply industry during the era of the national agricultural policy, as well as local cooperatives, the oldest one with roots in the 1880s. A jointly owned, second-tier organization worked with extensive upstream and downstream operations. All the cooperatives operated within strictly defined geographical borders, and consequently, no competition existed. This pattern remained during some years after the Swedish EU marriage in 1995, despite rising competitive pressure from other EU member countries. The leading figures in the regional cooperatives wanted to preserve the status quo and therefore their positions.

A group of directors and top executives in the federative organization were worried because of exogenous information about rising foreign competition. Endogenous processes within this group resulted in plans for a nation-wide merger. These change agents orchestrated a recidal change. Other directors and the management, most of whom could be expected to be gatekeepers as they had positions to defend, were caught by surprise as the plan was publicly announced. Despite protests from gatekeepers in some regional cooperatives, an almost nationwide cooperative was created in 2001 through a merger between nine regional cooperatives. All the merging partners were traditionally organized, and so was the resulting cooperative. The merger proposal promised regional autonomy to assure support from members of the regional cooperatives. It soon became clear that such autonomy led to suboptimal operations, and members had to accept centralized leadership from headquarters a few years later.

This cooperative leadership recognized that it would have problems raising a sufficient amount of capital, and member satisfaction declined (Nilsson et al., 2009). In 2009, the cooperative took measures to solve these problems. In a path-dependency like process, it has successively introduced two classes of shares that are appreciable and tradable within the membership; member satisfaction rose substantially after the introduction of individual ownership to members (Feng et al., 2016; Hakelius and Nilsson, 2020). In this manner, the formerly traditional cooperative was converted into an entrepreneurial cooperative. The conversion took place in small steps over some years. The cooperative had three classes of shares in 2020: common shares are a traditional type requiring members to invest in proportion to their volume of trade; preferred shares are tradable between members at a market price; bonus shares are emitted to members every year based on member investment in the cooperative and on member volume of trade with the cooperative (Hakelius and Nilsson, 2020).

Some regional and local grain marketing cooperatives have merged with the market dominating cooperative in recent years, while investor-owned firms have acquired others. Some small cooperatives have retained their traditional organizational structures, which can be explained by a large amount of trust and good locations. One local cooperative with about 100 members has operated within the same municipality since 1907 (Feng et al., 2016).

3.4 Dairy cooperatives

The dairy cooperatives are and have always been traditional cooperatives. After the EU accession, exogenous signals in the form of low-priced imports created major problems for the largest Swedish dairy cooperative. As a consequence, it merged with the dominating Danish dairy counterpart. The merger was initiated by the chief executive officers of the two cooperatives. These individuals functioned as change agents, convincing the chairpersons, who in turn convinced their boards. The merger was announced as a “merger of equals” to persuade members to accept the proposal, but this was not correct (Nilsson and Madsen, 2007). The Swedish cooperative had accumulated a large amount of unallocated capital during the era of the national agricultural policy, while the Danish dairy cooperative had market access, competencies, and other skills, and the merger resulted in Danish dominance. The newly formed cooperative has retained its traditional cooperative model. Swedish farmers have a mixed view of the transnational dairy cooperative.

Two smaller Swedish dairy cooperatives merged with a transnational dairy cooperative in the 2010s. Sweden’s second largest dairy cooperative was forbidden from merging with transnational cooperative by anti-trust regulations, so it was sold to a French investor-owned firm. In addition to the market-dominant transnational cooperative, there are two regional dairy cooperatives and two local cooperatives (Hakelius et al., 2013; Lööf and Sigurd, 2020).

3.5 Meat cooperatives

The cooperative slaughterhouse industry in the early 1990s consisted of five regional cooperatives and one apex organization, all traditionally structured. All firms experienced major losses as the Swedish EU accession resulted in cheap imports. The standard answer was a merger into a nationwide cooperative. A merger did, however, turn out to be difficult because the leaderships of the two largest cooperatives could not agree on the conditions of the merger. A compromise was to form a strategic alliance in 1999 with the chance of a future merger. However, even after the merger was conducted in 2001, the two groups had conflicting opinions, for example, about the closure of production plants and the composition of the board. The dispute delayed the amalgamation for several years. The cooperative continued operations in the same manner, and the result was additional losses. The exogenous signals were clear, i.e. members received low prices, but diverging endogenous processes prevented an agreement.

The decline of the meat cooperative accelerated, because a new institution evolved among the breeders, namely an anti-cooperative attitude, especially among members with a larger production volume. Thus, the cooperative lost both equity capital and deliveries. In 2007, the cooperative was sold to a Finnish profit-seeking firm (Pyykkönen and Ollila, 2012; Nilsson and Lind, 2015). A regional cooperative that did not take part in the alliance was later acquired by a Danish profit-seeking enterprise. Consequently, no Swedish meat cooperatives exist anymore.

4 Discussion

The Theory of Institutional Change states that institutions change as individuals, groups, and organizations influence each other. Thus, new institutional setups develop by which organizational changes may occur. In a cooperative context, farmer-members, elected representatives, and management tend to adapt their institutions to institutions within the most important societal domains. As the institutions in the economic, organizational, political and social domains are constantly changing, their relative importance for the cooperatives is changing. Because exogenous influences result in endogenous deliberations, cooperative decision makers will reconsider the organizational structure.

Because there is a variety of institutions within each of the four domains, the cooperatives' adaptations of their institutions may be of quite different kinds. Cooperatives that adapt to the markets for low-cost production and those that aim for niche markets will have dissimilar institutions. Which route to take depends on the steps that the cooperative has taken previously, i.e. the concept of "path dependency" applies (North, 1990).

In the endogenous processes, cooperative decision makers typically advocate for different solutions, because they lean towards different exogenous signals. The fact that people have deviating opinions is also related to their own conditions and those of their like-minded. Gatekeepers, i.e. those who oppose to changes, may do so because they have an interest in the status quo. Change agents, on the other hand, want the cooperative to adapt its institutions in another domain. Both change agents and gatekeepers may, however, have personal interests to defend (Fulton and Hueth, 2009; Lamprinakis and Fulton, 2011).

Endogenous processes are typically characterized by tensions, which means that it takes much time for new institutions to be accepted (Nilsson et al., 2012b). It takes time for both gatekeepers and change agents to convince others of their perspective about the institutions that they represent. The chances for successful endogenous processes depend on the position of the gatekeepers and change agents. Having access to information channels and having built up social capital within the membership, top management, as well as a chairperson and the board of directors, has a higher chance of succeeding as either a gatekeeper or a change agent.

This study operates with three main categories of cooperatives, each with a specific set of institutions. The collectivistic attributes of *traditional cooperatives* entail a focus on production, which means that the endogenous processes are less receptive to exogenous impulses. Farmers have incentives to produce large volumes of products but weak incentives to provide capital for investments. Nor are farmers able to govern a firm that operates on fluctuating markets (Ollila, 1994; Fulton and Giannakas, 2013). The traditional model is based on institutions such as joint ownership, democratic governance, and equality. Each merger means that a partly new, larger cooperative is established. Mergers are associated with institutions, which are well known in the cooperative sector. However, merger decisions are often postponed due to inertia within the endogenous processes; boards and managers may be gatekeepers who do not provide full information to members, and there is a risk for hubris. Gatekeepers may try to hinder the influence of exogenous impulses and foster change-resistant endogenous processes. Such conservatism has good potential in producer-led organizations.

A merger indicates a failure at least for one cooperative. Some of the members belong to another cooperative. Mergers give, however, rise to increasingly large and heterogeneous memberships with a subsequent reduction in the amount of social capital. There is less room for the institutions of trust, solidarity, and community. Leadership has a greater chance to choose among the exogenous impulses, as member involvement declines, and to influence the endogenous processes. A different set of institutions are likely found within the leadership, thus agency problems may follow (Cook, 1995; Harte, 1997).

The members of an *entrepreneurial cooperative,* i.e. those with individualized ownership, have a reason to be open to market signals, and be interested in producing what the markets demand (van Bekkum, 2001; Kyriakopoulos et al., 2004; Cechin et al., 2013). With increasing size of their farming operations and more professionalization, there is a higher probability for an individualistic mentality within the memberships (Hakelius and Nilsson, 2020).

Some cooperatives survive thanks to a niche strategy (Feng et al., 2016). They may be characterized by much social capital, i.e. institutions such as community, trust, and loyalty within small and homogenous memberships. The same applies to newly established cooperatives, whether or not these are traditional or entrepreneurial.

In a *farmer-controlled business,* both members and external investors want the highest possible profits. There may be difficulties in striking a balance between the institutional sets among the cooperative members and the investors because they belong to different domains, but on the other hand, there is the chance that both parties will be receptive to impulses from both domains (Pyykkönen and Ollila, 2012).

When institutional changes within a cooperative lead to success, other cooperatives may follow. This behavior corresponds to an isomorphic development, where cooperatives are influenced by non-cooperative firms (Bager, 1994). It is more likely when cooperatives have centralized leadership. It is unlikely that initiatives for changing institutional structures originate from the grassroots members. Member dissatisfaction with a cooperative's existing institutional structure is generally observed in reduced memberships and lower member involvement.

5 Conclusions

This study demonstrates that the Theory of Institutional Changes may explain how institutional changes force agricultural cooperatives to consider their choice of organizational model. An account of the development within the Swedish agricultural cooperative sector during three decades shows the applicability of the theoretical framework. In a similar way, the framework may be used to understand how cooperatives develop under other circumstances.

Previous research about cooperatives' choice of strategies and structures mainly comprises economic explanations. The Theory of Institutional Change allows these variables, while also incorporating social and psychological factors, and it assumes that values change slowly and are influenced by the values of others. The theory takes into account that parallel institutions exist simultaneously and that various norms and values may both amalgamate and develop into new ones.

The globalization of markets and the liberalization of agricultural policies entail changing competitive conditions, which imply strong exogenous signals that are the impetus for endogenous process within the member organizations. It is, however, impossible to forecast the outcome of the endogenous processes because of the actions of key individuals.

The importance of key individuals is striking when applying the Theory of Institutional Change to the development of cooperatives. Top management and directors, whether change agents or gatekeepers, have decisive influence on how cooperatives develop. This means that it is not possible to predict whether a cooperative will maintain its existing organizational model or change into another form. Researchers in the field of cooperatives have largely ignored the importance that specific individuals and their social interaction have on cooperative decision-making.

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