Institute of Agricultural and Environmental Sciences
Chair of Economics in Rural Economy

Taavi Kiisk and Rando Värnik

Case studies with best practices in agricultural cooperatives: similarities and differences at the EU level

Good governance practices in agricultural cooperatives – GGPAC
(2021-1-RO01-KA220-VET-000025577)

Tartu, 2023

About the authors:

- Taavi Kiisk is a junior research fellow at the Estonian University of Life Sciences.
- Rando Värnik is a professor and the head of the Chair of Economics in Rural Economy at the Estonian University of Life Sciences.

The Estonian University of Life Sciences is the only university in Estonia whose priorities in academic and research activities provide the sustainable development of natural resources necessary for the existence of Man as well as the preservation of heritage and habitat. The university is one of the top 100 universities in the world in the field of agriculture and forestry and among the top 1 000 universities in the world. The Estonian University of Life Sciences also belongs to the top 1% most cited research facilities in the world.

The publication is one of the deliverables of the Erasmus+ project "Good Governance Practices in Agricultural Cooperatives – GGPAC" (2021-1-RO01-KA220-VET-000025577). The project aims to support managers of agricultural cooperatives in their work by contributing to promoting good governance practices in agricultural cooperatives and developing the necessary competences through training managers in addition to exchanging new and innovative practices, including multidisciplinary approaches.

Project partners:

AGRICULTURAL ECONOMICS RESEARCH INSTITUTE
HELLENIC AGRICULTURAL ORGANIZATION "DEMETER"

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Estonian University of Life Sciences

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Overview of cooperatives in the European Union

Cooperatives in the European Union (EU) are organisations owned and controlled by their members, who can concurrently be the cooperatives' customers, suppliers, or employees. The purpose of all cooperatives is to meet the needs and aspirations of their members in an equitable and democratic way. This is reflected in the International Cooperative Alliance's (ICA) definition, according to which "a cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise" [16].

Cooperatives operate in a variety of sectors, including agriculture, banking and finance, retail, and social services. Activities that cooperatives carry out include:

- Agricultural cooperatives play a significant role in ensuring the livelihoods of farmers by improving their bargaining power and promoting sustainable and efficient agricultural practices.
- Banking and financial cooperatives provide access to financial services to their members, including savings and loans, and insurance.
- Retail cooperatives play a major role in providing essential goods and services to communities.
- Social cooperatives provide a range of services to vulnerable groups, such as elderly people, disabled persons, and children.

Cooperatives in the EU have a social role, but they simultaneously serve an economic purpose. There are about 250 000 cooperatives in the EU, which are owned by 163 million citizens of the union – this amounts to roughly one third of its population – and employ 5.4 million people [17]. Cooperatives also hold a significant market share in several EU member states:

- Agricultural cooperatives have a 50% market share in France, 55% in Italy, 79% in Finland and 83% in the Netherlands.
- Forestry cooperatives have a 31% market share in Finland and 60% in Sweden.
- Banking cooperatives have a 21% market share in Germany, 31% in Austria, 35% in Finland, 37% in Cyprus and 50% in France.
- Retail cooperatives have a 20% market share in Sweden and 36% in Finland.
- Pharmaceutical and health care cooperatives have a 18% market share in Belgium, 21% in Spain and over 50% in Greece [17].

Comprehensive information about the market share of cooperatives in the EU is scarce. Availability is better in certain industries, agriculture being one of those. Yet the latest available data about the agricultural sector is still from 2010, which is depicted below (Figure 1).

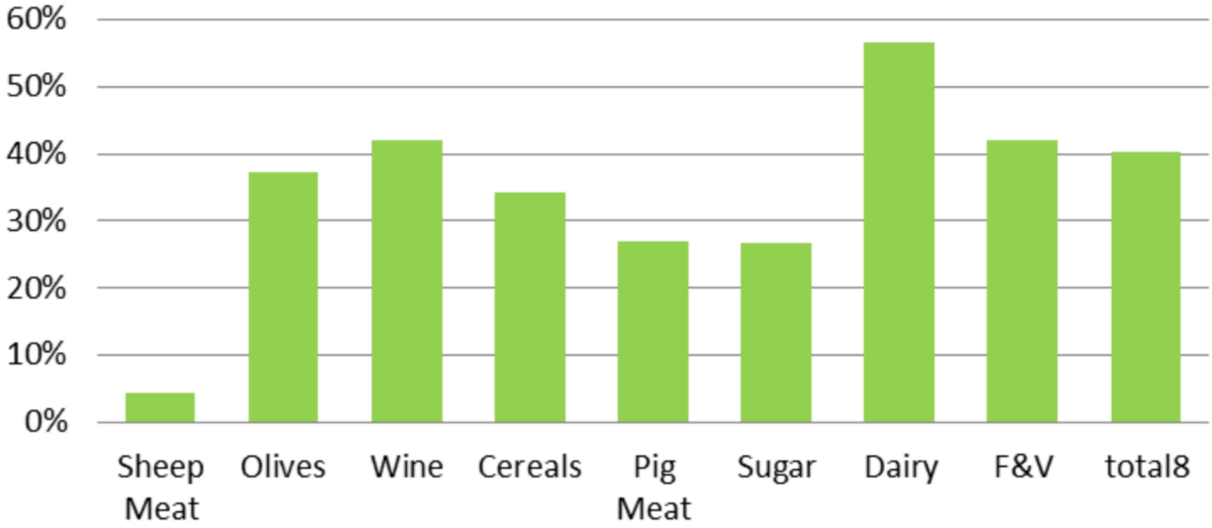

Figure 1. Market share of cooperatives in the EU per sector in 2010 [6]

Market share of cooperatives in the EU varies by country and broadly reflects how advanced is its agriculture. Figure 2 describes how market share ranges from over 70% to less than 10% with an average market share of 40%. Low market shares of Romanian, Bulgarian, Luxembourgian and Cyprian cooperatives do not necessarily reflect reality, but rather the low quality or unavailability of data [6].

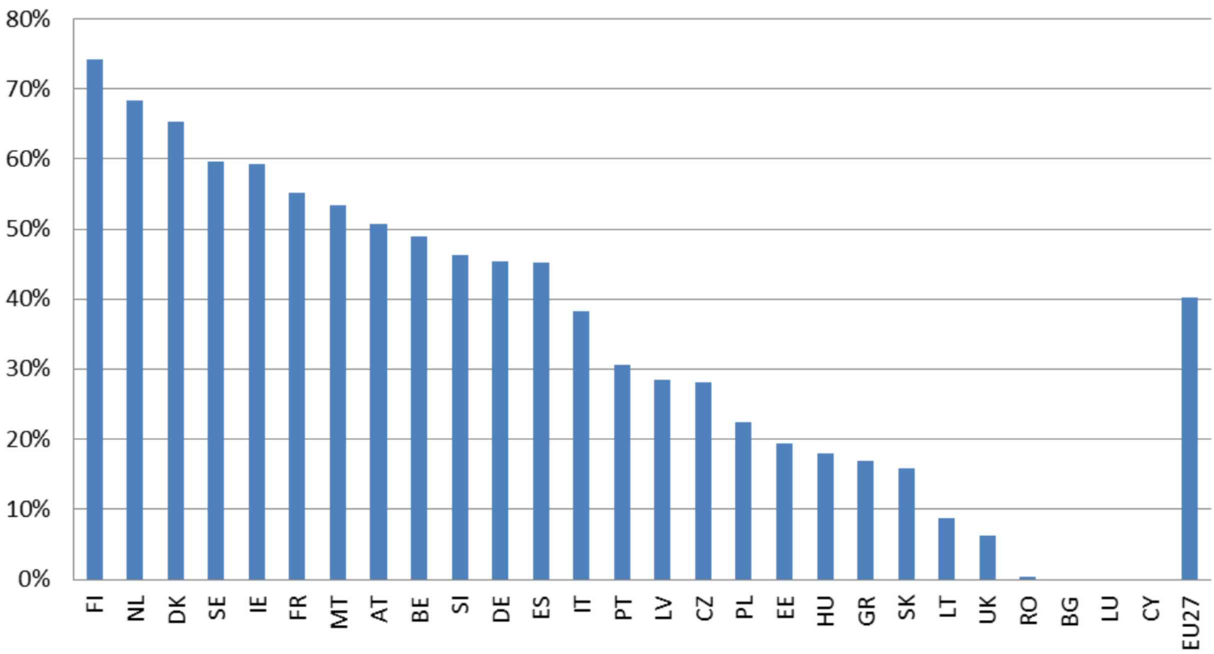

Figure 2. Market share of cooperatives per country in 2010 [6]

Another way to assess the importance of cooperatives in the EU is to observe the member intensity[1] in individual countries. It is an imperfect measure that was constructed to address the unavailability of quantitative data, although member intensity still serves as a useful indicator. Figure 3 shows the member intensity in EU member states – or how cooperative is each country.

Figure 3. Membership intensity in EU member states in 2010 [30]

The EU recognises the importance of cooperatives and has taken several steps to support and promote their development. It has established a legal framework for cooperatives, which sets out the rights and obligations of cooperatives, their members, and other stakeholders. This framework includes EU legislation on company law, social policy, and competition policy, among others. The EU also provides funding to cooperatives through various programs and

[1] Member intensity or membership intensity combines quantitative and qualitative data in situations where it is impossible to determine how many of all agricultural holdings are members of a cooperative. The indicator includes the share of cooperative members from all agricultural holdings and information about how actively agricultural producers participate in the activities of cooperatives. Member intensity is measured on a five-point scale. [29]

initiatives, such as the European Regional Development Fund (ERDF) and the European Agricultural Fund for Rural Development (EAFRD).

Recently, the EU has also been working to enhance the competitiveness and sustainability of cooperatives. This has involved promoting entrepreneurship and innovation in the cooperative sector, improving access to finance, and enhancing the skills and capacities of cooperative members. The EU has also been working to raise awareness about the benefits of cooperatives and to promote their integration into the EU economy.

Despite these efforts, cooperatives in the EU face several challenges, including the limited availability of financing, the need for increased technical and management skills, and the need for greater recognition and support from the EU and national governments. To address these challenges, the EU and national governments must continue to provide support and resources to cooperatives and promote their development by fostering bottom-up initiative.

Cooperatives play a significant role in the EU, providing essential goods and services to communities, improving the livelihoods of farmers, and promoting sustainable and efficient practices. The EU recognizes the importance of cooperatives and has taken several steps to support and promote their development. However, to ensure their continued success, the EU and national governments must continue to provide aid and resources to cooperatives and promote their development.

Cooperatives have a special place in the EU policymaking. Supporting cooperatives is one of the measures to foster social economy in the EU. The legal form of a European Cooperative Society (SCE) is one of the prominent signs, especially combined with increasing the amount of funding only available to a producer organisation (PO)[2].

Being a union of 27 member states, agricultural cooperatives of the EU are diverse and reflect local circumstances. Even the four partner countries of the GGPAC project are an example of this. Table 1 summarises the basic facts and figures about the agriculture and agricultural cooperatives in the GGPAC partner countries Estonia, France, Greece, and Romania.

[2] Recognised producer organisations and associations of producer organisations are forms of cooperatives that meet the recognition criteria.

Table 1. Comparison of basic agricultural indicators and agricultural cooperatives in Estonia, France, Greece, and Romania (in 2020 unless stated otherwise)

	Estonia	France	Greece	Romania
Utilised agricultural area (ha) [23]	975 320	27 364 630	2 822 890	12 762 830
Agricultural holdings (holdings) [23]	11 370	393 030	530 680	2 887 070
Average holding size (ha/holding) [23]	85.8	69.6	5.3	4.4
Number of agricultural cooperatives	113 [43]	2 200 [54]	6 464 (2000) [12]	1 766
Most common sector	cereals [43]	wine [26]	fruit and vegetables [34]	cereals [10]
Most common function	marketing [43]	marketing [26]	marketing [34]	marketing [10]
Total number of agricultural cooperative members	2 109 [43]	398 000 [54]	746 812 (2000) [12]	8 473
Average membership	19 [43]	181 [54]	116 (2000) [12]	5

Exactly like the GGPAC partner countries, so too differ the best practices used in the case studies outlined in this publication. While the case studies originate from a specific context, the best practices derived from those are applicable elsewhere. Since the best practices focus on governance, that is the subject of the next section – although solutions are often not only limited to governance and address ownership as well.

Cooperative governance, corporate governance, and management

When discussing cooperatives, eventually a trinity of concepts inevitably arises. The trinity includes cooperative governance, corporate governance, and management[3]. The concepts have similarities but also fundamental differences, especially in the context of cooperatives.

Corporate governance refers to the system of rules, practices, and processes by which a company is directed and controlled. It involves balancing the interests of a company's many stakeholders, such as shareholders, management, customers, suppliers, financiers, government, and the community. The aim of corporate governance is to promote fairness, transparency and accountability in a company's operations and decision-making.

Cooperative governance refers to the system of rules, practices, and processes by which a cooperative is directed and controlled by its members. It involves balancing the interests of a cooperative's members and stakeholders as well as ensuring that decisions are made in the best interests of the cooperative and its members. Interests of involved parties almost inevitably diverge – for instance, a manager could seek to maximise the profit of the cooperative to earn a bonus while members may desire new or complementary services that bring new costs[4]. The aim of cooperative governance balance all that by promoting fairness, transparency, and accountability in a cooperative's operations and decision-making.

Management refers to the process of planning, organizing, directing, and controlling the activities of an organization to achieve its goals and objectives. It involves the coordination of resources, such as people, finances, and technology, to achieve specific goals and objectives. Effective management is essential for the success of an organization and involves making decisions, setting policies, and allocating resources.

When applied in a cooperative, corporate governance regulates how the cooperative conducts business. Cooperative governance defines how the cooperative as an organisation evolves and deals with its members. Management is guided by both and describes the daily operations of the cooperative.

[3] Ownership is equally important, but its intricacies are beyond the scope of this publication. Governance and ownership both addressed in the organisational design of cooperatives. It is possible to discuss both concepts separately, although governance and ownership are analysed together in practice.
[4] The dilemma is commonly known as the agency problem.

Cooperative governance is of utmost importance to a cooperative. But it does not mean that the cooperative can disregard corporate governance – on the contrary, corporate governance is crucial. Cooperative governance and corporate governance limit the decision-making capability of the management to keep its actions in line with the aims of the cooperative and its members. Good governance – both corporate and cooperative – is a prerequisite of good management and not vice versa.

Selecting an appropriate cooperative governance model is challenging. The appropriate model depends on the specific circumstances of a particular cooperative, its institutional environment, the needs and expectations of the cooperative's members, and market conditions. No universal governance models exist, but researchers have observed and made generalisations from the governance of European cooperatives.

Studying cooperative governance is a relatively recent trend in academic discourse. Research has led to defining several governance models used by European cooperatives[5]. One of the studies found in the footnotes lists innovations that coincide with changing governance models:

1. Appointing one or more professional managers who take over the executive tasks of the board of directors [5].
2. Introducing proportional voting according to the value of transactions between the member and the cooperative or their capital contribution [5].
3. Introducing non-member experts into the board of directors to strengthen its expertise in marketing, finance, legal issues, or another area [5].
4. Introducing non-member experts into the supervisory board to enhance its monitoring capacity [5].
5. Legally separating the cooperative association and the cooperative firm [5].
6. Introducing a member council or a board of representatives that takes over some of the rights and obligations usually held by the general assembly [5].
7. Establishing hybrid ownership structures that include different types of owners [5].

Innovating in internal governance has potential pitfalls. Cooperatives are free to experiment, although they need to take care to avoid infringing on the three basic principles of a cooperative: user-ownership, user-control, and user-benefitting [20]. Of course, these limits are not absolute

[5] Those who have a deeper interest in the internal governance of agricultural cooperatives in the EU can read about their internal governance from this article. More information in connection with ownership is available in this article.

– a cooperative can relax or completely disregard those principles. Albeit it also means that the cooperative would transform into something unlike a traditional cooperative or stop being a cooperative.

The choices that each cooperative must make depend on which phase of their life cycle the cooperative is in. Understanding the life cycle of a cooperative is made simpler by Michael L. Cook's[6] life cycle framework that is composed of five phases (Figure 4):

1. justification;
2. organisational design;
3. growth–glory–heterogeneity;
4. recognition and introspection;
5. choice [14].

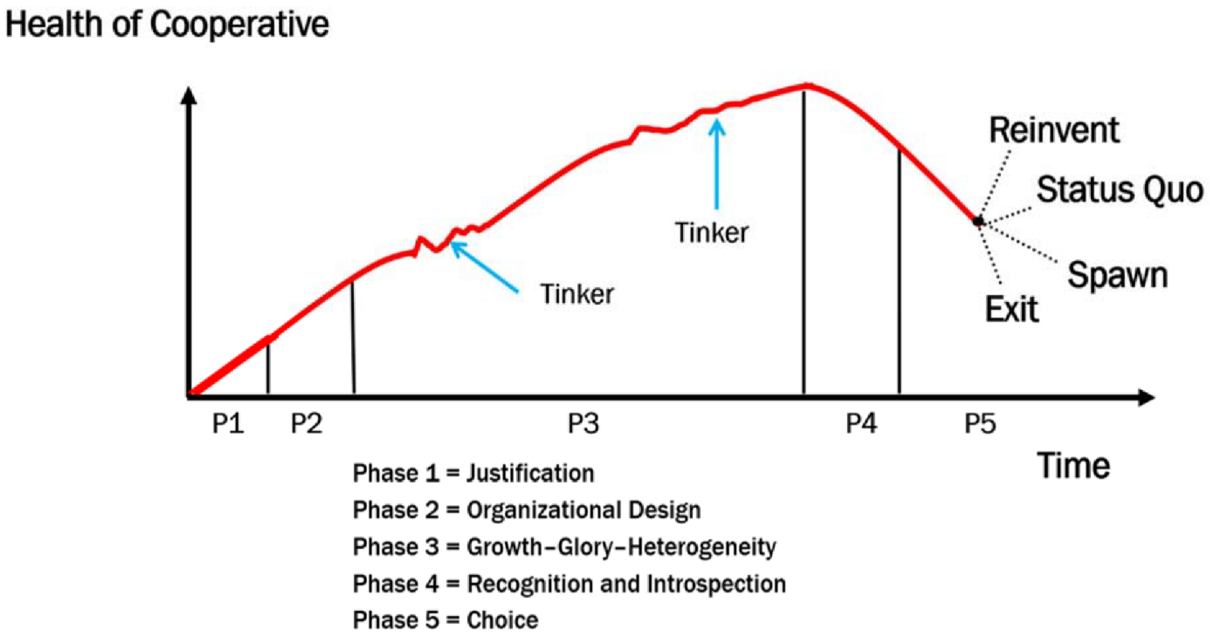

Figure 4. The life cycle of a cooperative [14]

Many of the cases explored in this publication have passed phase five of the framework and started a new life cycle. The fact that cooperatives can experience multiple life cycles at all is a sign of their longevity as an organisation. However, it is not only the end that matters, rather what happens in phase three – tinkering or modifying practices and processes without altering

[6] Department of Agricultural and Applied Economics, Partridge Chair of Cooperative Leadership, and Executive Director of the Graduate Institute of Cooperative Leadership at the University of Missouri

fundamental elements of the organisational design – is what ensures the longevity of a cooperative [14].

The cooperative life cycle framework deserves more attention, which is why those who have an interest should refer to another publication among the deliverables of the GGPAC project. The toolkit "Lead a strategy in an agricultural cooperative: methods of strategic business analysis for agri-cooperatives"[7] analyses the life cycle framework in detail to aid in conducting strategic business analysis of agricultural cooperatives. Researchers from the Agricultural Research Institute (AGRERI) are developing the toolkit in question.

[7] At the time of writing, the toolkit is not yet published.

Best practices of agricultural cooperatives in the European Union

Selection principles

Identifying best practices is a treacherous task. How to define what is good? A solution to that is to approach the issue from the problems that the best practices resolve. Authors of the publication adopt exactly that approach.

Insights from the work of Michael L. Cook and Constantine Iliopoulos[8] was invaluable to compiling this publication. Cook and Iliopoulos [1] observe four generic solutions that agricultural cooperatives use to alleviate issues with ownership costs:

- user alignment;
- member retention;
- supply-demand balancing;
- transparency.

The generic solutions incorporate a plethora of specific solutions used by agricultural cooperatives. This publication includes some used by European agricultural cooperatives[9]. Although the very existence of generic solutions implies that cooperatives worldwide share similar problems and use similar solutions.

The case studies originate from academic literature and research reports, notably from the European Parliament's (EP) pilot project "Support for Farmers' Cooperatives"[10]. Regrettably, no follow-up study has been undertaken, but the results of the project have stood the test of time and offer a unique chance to compare agricultural cooperatives in EU member states. The case studies observed in the project have the added benefit of sharing a similar structure and being comparable.

Lack of available data is a concurring theme when studying EU cooperatives, which is why the availability of information was one of the criteria for selecting the cases. In addition to having a detailed-enough case, the subject cooperative also had to be still operating in 2023. Selected cooperatives are united by the trait that they all have something unique or noteworthy.

[8] Director of and Senior Researcher at AGRERI, Adjunct Professor of Strategy at the MBA in Agribusiness Program, Agricultural University of Athens, a co-founder of the Co-opAbility Institute, a visiting research fellow at the Leibniz Institute of Agricultural Development in Transition Economies (IAMO)
[9] Solutions adopted in the rest of the world are collected in this book chapter.
[10] Information about the EP pilot project is available on the European Commission website.

REO Veilling

Profile:

- Name: REO Veiling
- Country: Belgium
- Type: marketing cooperative
- Sector: horticulture (fruits and vegetables)
- Functions: auctioning and packing
- Members: ~1 400 (2012) [55]

REO Veiling is a respectable example of a horticultural cooperative from the Benelux region. Agricultural cooperatives in the Benelux region stand apart from those in other EU regions by using traditional pricing methods. Challenges of Benelux cooperatives in general and REO Veiling in particular are a product of transforming market conditions and financing growth, which are shared by other EU cooperatives.

REO Veiling has a long history that began in the Belgian town of Roeselare in 1942, when 25 local agricultural producers established the cooperative. Due to the raging Second World War, the cooperative could only hold its first auction more than a year later. Throughout the years REO Veiling relocated and expanded to keep up with the horticultural production in the West Flanders region of Belgium. The cooperative transformed its operations and adopted new functions to cater to the needs of its members. [33]

REO Veiling faced two challenges:

- Fair pricing. Since members expect that the cooperative negotiates a fair price on behalf of them, the expectation institutes a need for a transparent mechanism to determine prices. Members also must trust that the output of the mechanism benefits them.
- Preventing free riding. As cooperatives provide services and make investments to enable production or develop markets, members support them or are charged for those services. There is a risk that farmers sell some of their produce to competitors or processors that offer better prices or other short-term benefits. [55]

REO Veiling maintains its traditional auction clock[11] as the cooperative's principal mechanism to determine produce prices [55]. This instils trust in farmers that the cooperative offers them

[11] A Dutch auction starts with a very high price that gets progressively lower until someone places a bid.

fair prices [55]. While using the auction clock looks anachronistic at first, it has hidden benefits. REO Veiling uses the auction clock to tell its compelling story and the auction clock is even present in the cooperative's logo.

Implementing bilateral transactions and futures contracts was recognised as a threat to transparency, which could create problems in the membership if product prices in direct transactions settled by REO Veiling were lower than the prices paid to other producers in similar auctions [55]. This highlights how the traditional auction clock method instils transparency and equality in transacting with the cooperative, despite the advantages of alternative solutions.

The cooperative opted for a major internal reorganisation to adopt to changing market conditions. REO Veiling did this in 2008 when it added a commercial service to its core activity and employed former crop advisors as market and product managers. Changes included training to the cooperative's staff and increasing the auction margin that members pay. [55]

The new organisational structure separated the traditional auction clock to maintain trust in REO Veiling and concentrated futures negotiations in another commercial entity. The commercial entity of the cooperative negotiates future contracts directly with buyers [55]. Lengths of the contracts vary from one week to one year [55]. Including futures contracts was not unique to REO Veiling, most Belgian auction cooperatives chose the same strategy [55].

The cooperative introduced a system of binding supply agreements to reduce the supply fluctuations stemming from free riding and resulting price volatility in the auction system. It also guaranteed threshold supply to invest in value-adding activities such as packaging. Producers must determine the quantity of produce that they are going to deliver and deviations from the stated amount are monitored. [55]

Additional services also bind members to the cooperative, despite the strict requirements. One of those noteworthy services is collecting vegetables straight from members' farms. A joint enterprise founded by REO Veiling and a private firm handles the transportation. [55]

REO Veiling's case emphasises how transparency and trust matter to the longevity of a cooperative. Switching completely to binding futures contracts would have been economically justified, but an accompanying opaque pricing system would have eroded members' trust.

Making the switch could have attracted business from non-members at the expense of members, which is an unsavoury trade for a cooperative.

REO Veiling managed to address its free riding problem by balancing supply and demand as well as retaining its members. The specific methods that the cooperative used were 1) binding member contracts, 2) offering additional services to members and 3) retaining the transparent auction clock pricing method. The latter is what makes REO Veiling and other horticultural cooperatives of Belgium and the Netherlands unique, highlighting how traditional and transparent pricing methods continue to be relevant.

Valio

Profile:

- Name: Valio Oy
- Country: Finland
- Type: limited company acting as a second-tier processing cooperative
- Sector: dairy
- Functions: processing
- Members: 13 [1]

Even a brief look at Valio's profile reveals what makes the organisation unique. It uses a non-cooperative legal form yet is owned by cooperatives, which means that one can refer to it either as a company or a second-tier cooperative[12]. This is why throughout the case Valio is referred to as a company, even though it is owned by cooperatives.

Finland's largest milk processor Valio was established by 17 cooperative dairies in 1905 with the aim to control butter export [41]. Since then, it has vastly expanded its activities in scale and scope to processing about 80% of Finnish raw milk and producing a variety of dairy goods and functional foods. Valio's case stands out among other case studies because it acts as a second-tier cooperative, despite having a limited company legal form – Valio's thirteen owners unite thousands of Finnish milk producers. The reasons why Valio ended up using a non-cooperative legal form are closely tied to the history and trends of the Finnish dairy sector, realities of export-oriented businesses and expectations of Valio's owners.

[12] A second-tier cooperative or a federated cooperative is a cooperative whose member-owners are cooperatives. A primary or a local cooperative has non-cooperative members.

Mid-1980s were a turbulent time in the Finnish dairy sector, which led Valio to look for solutions to external challenges. Among them was Finland's accession to the EU, which meant that milk production quotas would soon apply to Finnish milk producers to access the single market. Valio's structural change committee appointed by its board of directors listed major challenges in 1987:

- Subsidy levels decrease due to changes in the agricultural support system.
- Milk production self-sufficiency rate declines from 125% to 115%.
- International trade becomes more liberal.
- Competition and price regulation legislation changes.
- The food system and consumption patterns change drastically. [41]

Having consulted with members, the structural change committee narrowed potential development choices to two: 1) forming a single cooperative based on the organisation or 2) establishing a second-tier cooperative that consists of regional cooperatives. Both options had pros and cons, as becomes apparent from Table 2. [41]

Table 2. Comparison of a the primary and second-tier cooperative models [41]

	Primary cooperative		Second-tier cooperative
+	Centralisation of marketing eliminates competition between cooperatives.	+	Managerial and operational efficiency is higher.
+	Problems of operating multiple organisations are be eliminated.	+	Possibilities for members' influence are better.
+	The entire production and processing chain is arranged efficiently, and investments are planned based on general needs.	+	Regional cooperatives retain their regional image.
+	Coordination of raw material and products is easier.	+	Many improvements like coordination of raw materials, flexibility in pricing and differences in producer pricing decrease.
+	Pricing milk products is easier, products are priced according to demand and profits are maximised.		
+	Unified producer milk price could be offered.		
-	Bureaucracy may increase.	-	Mutual competition in the market is reflected in producer prices and makes it more difficult to conduct marketing policy.
-	The power of producer-members and their influence in decision making may decrease.	-	National coordination of production is more difficult. Regional cooperatives keep their own raw material base and market areas, making switching products between cooperatives more difficult and the interest to market other cooperatives' products may be low due to envy.
-	Possible bad management may be reflected to the entire milk system.	-	Coordination of investments based on general needs is more difficult when a regional cooperative invests in a way that is

- Personnel's commitment to work for the cooperative may be lower than in the regional cooperative model, which may also apply to milk producers. - The marketing function’s ability to respond to regional demand changes may be lower. - A monopoly-like corporate image may become stronger, causing a negative attitude in the society to strengthen.	inappropriate from the point of view of the whole organisation.

Despite favouring the regional model, opposition was common among small dairy cooperatives. Discussions continued for years, during which the operating environment evolved. An emerging fear that regional dairies become strong enough to survive on their own and make the second-tier cooperative redundant prompted Valio’s director to propose an idea that was initially disregarded – transforming Valio into a shareholder company. [41]

The company’s shares would be held by member cooperatives and the second-tier cooperative. The model aimed to reduce operating costs by improving the organisation’s structural efficiency and removing duplicate activities. Up to 20% in cost savings were expected, but the move had both up- and downsides (Table 3). [41]

Table 3. Pros and cons of establishing a shareholder company [41]

Pros	Cons
+ Production coordination is simpler. + Problems of operating multiple organisations are eliminated. + The producer price level is unified when the company pays the same price to all member cooperatives. + Production activities are rationalised through specialisation. + Marketing and material operations are more efficient and economical. + Price competition between cooperatives is eliminated. + It is possible to optimise pricing according to changing consumer preferences without affecting producer prices in various regions. + A large enterprise has more negotiating power than a group of smaller enterprises. + New product development becomes more important. + Liberalisation of international trade is not just a threat but also an opportunity.	- Bureaucracy and governance get more rigid. - Distance between the enterprise and the members increases. - Insufficient understanding of local markets.

The reasoning behind Valio's plan was that the relative advantage of the cooperative form of business diminishes after collecting and safely storing milk [41]. In other words, the argument is that processing and other types of complex operations are simpler to manage in a non-cooperative enterprise. While the decision was justified, it led to some member cooperatives leaving the company (and later merging with Valio), a "milk war" and questions about abusing the overwhelming market power – all of which proved not to be fatal for Valio [41].

Valio has reformed its governance extensively, which allowed it to become more vertically integrated in strategic decisions. Its governance bodies are like those in regular cooperatives:

- A general meeting of all shareholders that makes the most impactful decisions.
- A supervisory board that monitors the board of directors and executives.
- A board of directors that is responsible for strategic decision-making (directors must be from owner cooperatives).
- An executive board that includes the CEO and their staff. [49]

Having a simplified governance structure allows Valio to organise its operations efficiently. Most operational decisions are made at the operational level, making Valio one of the best-performing dairy processing companies in Europe [41]. To ensure that interest of milk producers and its owner cooperatives are protected, Valio measures its performance by using different indicators, one of them being particularly noteworthy.

Valio's unique performance indicator is milk return [41]. It is calculated from milk margin:

$$\begin{aligned} milk\ margin = net\ sales - (&other\ costs\ excluding\ depreciation \\ &+ the\ price\ paid\ for\ raw\ milk \\ &+ interest\ on\ shareholder\ loan\ paid\ to\ owners) \end{aligned}$$

Having calculated the milk margin, one can calculate the milk return:

$$milk\ return = \frac{milk\ margin - depreciation - financing\ for\ investments}{milk\ volume\ supplied\ by\ the\ producers}$$

This indicator distinctly values milk, making it a fairly "cooperative-like" indicator [41]. It also gives credibility to those that allude to Valio as a company acting as a second-tier cooperative. Profit is important, but earning a sufficiently high milk return is at least equally important.

Finland has a high milk self-sufficiency ratio, while it is lower than it used to be. In the 2010s it hovered around 110%, but in the 1990s it was about 130%. The high self-sufficiency rate is a leftover from an era of closed markets, tight price control and import restrictions – not from a conscious effort to expand export markets. [41]

Having a surplus of milk implies maintaining a low profitability, which makes paying high milk prices a challenge. A highly competitive milk market also means that there are ample incentives for milk producers to free load – use the cooperative when it benefits them and take their business elsewhere if competitors offer better prices. [41]

Interestingly, Valio’s membership contract mentions nothing about milk price or quantity. It only pledges that Valio receives all the delivered milk and pays as high a price for it as possible. In practice, despite there being no such obligation, producers rarely sell their milk to somewhere other than Valio. Members must also sign a quality contract, which includes following quality standards and undertaking training. [41]

Challenges facing Valio include:

- Ownership. Valio’s growth strategy is autonomous, relying on high value products and niche markets in Finland and abroad. Since it does not actively acquire other companies nor merge, it only needs capital for foreign investments. Valio could acquire the capital from owners or debt capital, but owners would rather use the capital for their farms. [41]
- Internationalisation and growth. Valio has not been eager to engage in foreign markets as a processor, with Estonia being the only exception. And it only acquired the Estonian unit to protect their domestic market and reach the Russian market. Valio competes in external markets by exporting high value products instead of expanding its facilities abroad. [41]
- Supplier issues. Valio has noteworthy production facilities in Estonia, yet Estonian milk producers cannot become members [41]. The cooperative aims to fulfil the interests of its Finnish owners, but also operates responsibly elsewhere [41]. Valio’s dominant market position in Estonia and the fact that it operates on a non-cooperative basis in the country causes some ire among Estonian milk producers.

Those challenges can be summed up in two generic problems: internal free riding and portfolio problem. Valio chose the generic solution of user alignment, which it does by paying the same price to milk producers in all member cooperatives – depending on the quality of milk.

Dividends and interest paid on loans to Valio reflect the patronage of each cooperative member, linking earnings to use.

Paying the same price to milk producers in all member cooperatives is also why Valio accepts no foreign members. Membership would be tempting for Estonian milk producers, especially since there are two production facilities in Estonia. Although accepting foreign members would cause controversy in Valio's owner cooperatives.

Valio's case highlights how an enterprise does not have to be a cooperative to serve farmers' interests. It must only operate like one. Measuring performance is an integral part of this, which is why Valio uses a performance indicator as specific as milk return. It enables the company's owners and their thousands of member milk producers to ensure that Valio serves their interests.

Conserve Italia

Profile:

- Name: Conserve Italia
- Country: Italy
- Type: second-tier processing cooperative
- Sector: fruits and vegetables
- Function: processing
- Members: 39 [40]

Conserve Italia aims to "be a leader company in Europe in the sector of preserved foods to achieve the highest value on fruit and vegetables supplied by associated farmers and give to consumers, thanks to food chain control and own brands reliability, guarantees on quality and food safety" [41]. It is a second-tier cooperative composed of 39 members with 34 cooperatives as ordinary members, three subsiding members and two financing members [40]. Member cooperatives of Conserve Italia unite 14 000 producers of fruit, tomatoes, and vegetables [40].

The history of Conserve Italia is deeply rooted in the development of the cooperative movement in the Emilia-Romagna region. The cooperative was founded in 1976, but its origins trace back to 1966, when local farmers and cooperatives established the CALPO Consortium ("Cooperative Associate Lavorazione Prodotti Ortofrutticoli"). After acquiring several private processing plants over the years, CALPO and 14 other cooperatives established Conserve Italia

– originally to sell their products, but they quickly realised that it was also necessary to plan and develop a common production system to standardise finished products. [9]

Having expanded its operations by domestic acquisitions, Conservative Italia entered the United Kingdom's market. Afterwards, it entered other European markets by acquiring French, German and Polish companies and establishing subsidiaries even as far as in Australia and the United States (US). Conservative Italia's turnover grew from 12 million euro in 1979 to 872 million euro in 2021. [9]

Most members of Conserve Italia are cooperatives that deliver it produce. These cooperatives provide capital to Conserve Italia in proportion to their patronage potential. Ordinary members also finance the cooperative via capital retains that are kept in allocated equity reserves. An ordinary member has a minimum of one vote and a maximum of five with the number of votes being proportional to the amount of capital provided. [9]

There are also subsiding members, whose membership is linked to the capital provided (not connected to the quantity or value of raw materials delivered). Subsiding members contribute capital by purchasing capital shares of 50 euro that are registered and transferable. Return on these shares cannot be more than 2% higher than the dividends paid to ordinary members. Voting rights reserved for subsiding members are allocated based on their capital contribution, but the number of votes is limited to five. Being a subsiding member does not rule out delivering produce to the cooperative. [9]

Conserve Italia also has financing members, whose membership in the cooperative is based on the contributed capital. Capital shares bought by these members are registered and transferable with each share valued at 100 euro. Contributions from financing members are kept in a specific allocated equity fund and the return on capital shares cannot exceed 10%. The votes reserved for financing members are allocated according to the amount of capital invested. [9]

Despite provisions for capital contributing members to vote, at least 2/3 of total general assembly votes are allocated to ordinary cooperative members. Cooperative Italia's defined membership policy is directly connected to its mission statement and expansion in foreign markets. Whenever Cooperative Italia acquired a company, it reformed its supply network by replacing existing suppliers with new or existing members of the cooperative. [9]

Conserve Italia has a broad processed fruit and vegetable product portfolio. It uses a strategy to place the cooperative's brands in various market segments in a complementary way to strengthen its market position. Conserve Italia uses internal and external growth strategies with the latter referring to acquisitions and establishment of processing and marketing companies in Italy and abroad. The cooperative's strategy has been successful as it has strengthened the market and product position of Conserve Italia in the processed fruit and vegetable industry. [9]

The cooperative expanded abroad to meet the objectives set by Conserve Italia's management and approved by its members. Acquisitions allowed Conserve Italia to access additional processing capacity, distribution and commercial networks, and brands well known in foreign markets. Despite operating abroad, no foreign farmers or their cooperatives are not members of Conserve Italia. [9]

Foreign members are not accepted because the cooperative's primary goal is to serve its Italian members. Accepting foreign members is also made difficult by potential perplexity, opposition and deeply rooted cultural differences between potential foreign members and existing Italian members. Differences in European agricultural markets and the diversity of institutional environments in European countries further complicate matters. [9]

This does not mean that Conservative Italia disregards local farmers in foreign markets. The cooperative invests heavily in buildings and stabilising close relationships with farmers who supplied the company after each accusation. Farmers or their cooperatives are often offered a minority stake in local subsidiaries of Conserve Italia. This process was successful with the cooperative's large processing subsidiary in France, but less so in Spain – primarily due to the higher fragmentation among the suppliers who deliver fruit to the Spanish processing subsidiary. [9]

Conserve Italia became a second-tier cooperative in 1994 after it assumed control over the processing plants of its members, already holding marketing responsibilities. Relationships with members vary depending on the type of produce. Operational relations are mostly arranged directly between farmers and Conserve Italia, apart from fruit for consumption. In that case, its first-tier member cooperatives handle operational arrangements with farmers. [9]

It does not seem that the distance between its members and the management of Conserve Italia has increased nor do the members perceive that it is turning into an investor-oriented firm (IOF). Representatives of the cooperative are aware of the risk and take efforts to keep representative bodies active in defining strategic purposes and ensure that managerial decisions are in line with farmers' interests. Leadership of member representatives plays a key role in keeping strategy and objectives of Conservative Italia focused on farmers' needs. [9]

Conserve Italia's case supports the hypothesis that internationalising cooperatives opt to use a different institutional arrangement for dealing with suppliers due to a different institutional environment [9]. As mentioned before, even within the EU single market exist national markets with wildly different institutional environments. But the fact that Conserve Italia continues to expand abroad implies that there is merit to overcoming the institutional differences.

The case also suggest that second-tier cooperatives tend to go closer to farmers over their life, stressing the need to cater to their interests to attain success. This is evident because Conserve Italia went from a third-tier to second-tier cooperative in 1994. Becoming a primary cooperative is theoretically possible, should the need to further rationalise the supply chain management become necessary. [9]

Conserve Italia's case also shows that larger cooperatives are not less likely to accept foreign suppliers as members than small cooperatives. The reasons why no foreign suppliers became members are unrelated to the size of the cooperative, the reasons lie in the expectations, interests, and attitudes of existing members. Participation of the representative bodies in defining strategic purposes and supervising the alignment of the management's work and farmers' interests reduces the risk of becoming an IOF. [9]

Developments of Conserve Italia do not seem to have caused significant competitive pressures among its members. This is because 1) the focus product categories of Conserve Italia (fruit, tomato, and vegetables) remain the same; 2) no foreign members were accepted during internationalisation, which could have led to discontent from domestic members; 3) the economic growth of Conserve Italia primarily involves its original members. [9]

Conserve Italia also maintains several so-called product committees, which serve as separate product and governance pools. A committee exists for each of its primary types of agricultural products: fruit, tomato, and vegetable. In combination with a proportional representation system, the cooperative has managed to avoid tensions among members that supply products – something that is uncommon among multipurpose and diversified cooperatives. [9]

The underlying problem that initiated Conserve Italia's growth was the need to achieve a dominant market position to better serve its members. The cooperative used three generic solutions to achieve that: supply-demand balancing, user alignment and transparency. Generic solutions took the form of practical mechanisms:

- Establishing Conserve Italia as a single sales organisation for its member cooperatives.
- Allocating control rights partially based on investment (in addition to the delivery of produce).
- Allowing non-member investors and issuing multiple types of stock.

Conserve Italia's case highlights the importance of safeguarding the interests of members even during internationalisation. Internationalisation leads to increased capital requirements, which necessitates finding external capital. Integrating it without infringing on a cooperative's nature is a challenge, albeit not an insurmountable one. Including external capital and allocating accompanying control rights must be done transparently to not alienate cooperative members.

Agrial

Profile:

- Name: Agrial
- Country: France
- Type: multipurpose cooperative
- Sectors: cereals, dairy, beverages, fruit and vegetables, pork, poultry, and eggs
- Functions: marketing, processing, and packaging
- Members: 12 000 [56]

Agrial was founded in 2000 when three cooperatives from the Normandy region – Agralco, Coop-Can and Orcal – merged to create a new cooperative. Despite being founded in the 21st century, Agrial thrives on more than a century of cooperative heritage. One of the earliest milestones was the Soignon dairy, which was founded by a cooperative of 80 goat farmers in 1895. [47]

Founders of Agrial had the foresight to recognise the need to respond to the accelerating pace of environmental change, which is why CASAM (one of Agrial's founding cooperatives) introduced its Green Plan in the late 1970s. Agrial continued its climate-conscious legacy when it unveiled its four-pillar Climate Plan in 2021. Another founding cooperative of Agrial, Coop-

Can, joined the 100 Quintals club in the early 1980s – a club whose members are Europe's most efficient cereal producers. [47]

Internationalisation of Agrial began when a to-be subsidiary of the cooperative set up a production plant in England, after which Agrial purchased several other foreign processing facilities [27]. The cooperative expanded even across the Atlantic Ocean in 2012, when it acquired Manzana, a California-based organic apple producing company [47]. Thanks to acquisitions and establishing new facilities, Agrial operates industrial facilities in 11 countries in Europe, Africa, and North America [48]. It also means that Agrial's internationalisation is primarily limited to the vegetable chain with the aim to provide a stable, all-year-round supply of produce to distributors [27].

Agrial is a large cooperative by all measures, but it is not a market leader in most of its sectors. Ready-to-eat vegetables are a notable exception – Agrial is the European leader in that area. The cooperative organises its activities in three main sectors (data is from 2010):

- Cooperative agricultural activities contribute 47% of the group turnover.
- Distribution subsidiaries contribute 10% of the group turnover.
- Transformation activities, such as poultry, cider, and vegetables, contribute 43% of the group turnover. [27]

Because the fruit and vegetable market in France is mature, companies must expand abroad to grow. Growing by mergers was reinforced by the trend of farm holdings becoming larger and more business-oriented, while their number decreased. Expansion abroad also helps to meet the needs of their consumers, who wish to enjoy certain vegetables all year. For this purpose and to adopt different competitive strategies for each sector, Agrial has developed its unique structure. [27]

The premise for Agrial's organisational reorganisation was simple. It set out to achieve the economic performance targets set by farmers [27]. The cooperative's aim to remain as close to farmers as possible made the reorganisation delicate. That is why Agrial was reorganised based on proximity logic with members and territory, combining product chain value and territory in the process [27].

Agribusiness investments require significant funding, yet having an adequate supply of raw materials is equally important. Controlling production costs is important for members as well as cooperatives. What makes the equation tricky is reaching a critical size to be competitive while maintaining a human-size cooperative. [27]

Agrial elected to decentralise its organisation to reinforce the human dimension. It developed a specific upstream organisation model of a production-oriented cooperative based on proximity with its members. All efforts were taken to meet the expectations of members – they fully accepted the growth of the cooperative as an organisation, but they also wanted Agrial to retain its human dimension. [27]

The cooperative reached that aim by setting up 14 regions or 14 mini-cooperatives, each one of those acting as an autonomous decision-making centre. Mini-cooperatives are restricted to 500–600 members and take advantage of their geographic proximity. A similar principle applies to the production organisation, which is organised in kind. [27]

This satisfies members' needs for a human-size organisation and counters competition, which is amplified by the diversity of regional production and Agrial's extensive operating territory. The cooperative does not offer a uniform average price for its services and supplies, each mini-region defines its price policy, manages its human resources and most decision-making powers concerning members' activities are also delegated to mini-regions. [27]

The decentralised structure also means that Agrial's headquarters in Caen employs only a about 20 people who provide group management services. Operating such a decentralised organisation involves many rules, three rules or principles of which are particularly important:

- Each mini region is a profit centre, which must obtain 1.5% profitability of the net result.
- The Agrial CEO is authorised to manage all 9 000 group employees.
- There is a distinction between policymaking and managing producer organisations. If the CEO is authorized to manage 9 000 group employees, every activity director is directly associated with a chairman or a member of the board of directors. [27]

The 2011 structural reform brought together 16 strategic activities and eight sectors (four upstream and four downstream). Those strategic activities are independent and form alliances among themselves whenever necessary. Although all activities must reach a fixed profitability margin of 1.5% of the net result. [27]

Agrial's governance seeks to keep close to its members while having high economic performance. The organisation is founded on an efficient style of management and decision-making in the organisation. All (important) decisions are taken by the group board and all operational management is delegated to the managing director. Agrial noted how cooperative unions are not particularly effective due to the dilution of power, which is why it has not transformed into a second-tier cooperative. [27]

Different elected governance bodies include some 400 persons. The group board is composed of all 14 regional chairmen and two sector delegates, and the executive board includes 15 members. General assembly does not participate in producer organisations' decisions, which is where the board comes in. The chairman of the board and the CEO keep contact daily. [27]

While the previous paragraph described how is Agrial and its business units governed, there is also a parallel structure of regional mini cooperatives. Those territorial section assemblies (mini cooperatives) complement the organisational governance system. The chairman of the board and the CEO attend the two annual meetings of each section. Supervisory boards are also elected, with 50% of their members being from the same sector and 50% from another. [27]

To ensure that the user control principle is not infringed, Agrial uses a separate legal body to gather capital. It has a holding company, Agrial e enterprise, which is open to IOFs or other investors. Members of the cooperative can also purchase shares and Agrial offers shares for its employees. [27]

Multipurpose cooperatives like Agrial exist due to the diversity of their members' productions and to manage risks. Different professional activities within the cooperative are kept separate to manage relations with members directly. If those relations concern adding value to members' produce, marketing or processing, cooperatives tend to use subsidiaries. [27]

Running a vertically integrated organisation includes dissociating results and autonomizing the different fields of activities as profit centres, even if losses are covered mutually and financing (new activities) also occurs on a mutual basis [27]. Without each field of activity having enough flexibility, operating a multipurpose cooperative is not feasible.

Multipurpose cooperatives inevitably hold potential for conflicts between animal and vegetable producers, especially when it comes to investments. Agrial has chosen to address the issue by decentralising its decision-making process. Defining what actions are taken independently and which actions are common is crucial for the cooperative's coherence. [27]

Cooperative activities in the agricultural sphere tend to develop within cooperative groups. The trend is especially notable in France, where the weight of these groups within the whole cooperative perimeter increased at a steady pace during the 1995–2005 period. It originated from investments in subsidiaries which themselves are not cooperatives. [27]

Agrial developed its strategic thinking in 2006 to address both the future evolution of its structure as an enterprise and its relationships with farmers, employees, and managers. It considered major trends such as the decline in the number of farmers, specialisation in cereals and animal rearing and rising professionalization that obliges cooperatives to anticipate those developments and change to adapt to the new needs of their members. Agrial identified the need to foster competitiveness by improving product value chains and gathering more remuneration for farmers, which is why the cooperative engaged in mergers and acquisitions. [27]

What sets Agrial as a cooperative group apart from an IOF is the stability of capitalistic property which allows its industrial strategy to be put into practice and permits the perpetuation of the group. Members' engagement in choosing investments acts as a force that guarantees the interest of the investment. Although the status as a cooperative does not hinder economic development, it should be reimagined to be in accordance with the functioning of the present-day economy. Agrial's external growth strategy that is based on mergers or takeovers designed to maintain leadership is a sign of adopting. [27]

Returning to our case study framework, the problem that provoked Agrial to expand abroad and restructure itself was the maturity of the French horticultural market, leaving very limited domestic growth opportunities. Agrial chose to address the issue by applying the generic solutions of user alignment, supply-demand balancing and transparency. It divided its operations into autonomous mini cooperatives and business segments, which enabled Agrial to remain close to members despite growing. Using a system of mini cooperatives and group-level governance means that decisions are transparent and interests of the entire group as well as its regional organisations and members are protected.

BayWa

Profile:

- Name: Bayerische Warenvermittlung Aktiengesellschaft (BayWa AG)
- Country: Germany

- Type: multipurpose limited company
- Sectors: food, energy, heating, mobility, construction, and housing
- Functions: marketing, processing, and packaging
- Members: N/A [18]

Baywa is an example how a cooperative has transformed its operations to meet the challenges of a changing economy and society. Internationalisation is its key to success, even though it led BayWa to become less cooperative-like. The company still aims to retain its cooperative roots by strictly controlling its shareholder structure. But since BayWa remains a limited company, it is referred to as such throughout the case study, even though there are reasons to claim otherwise – at least conceptually.

BayWa was established in 1923 amid the hardships in post-First World War Germany. Grain, fertilisers, feed, and machinery formed the focus of the company's activities. BayWa came to be because BZDK, founded in the late 19th century, decided to separate its banking and trading business to minimise the risks to the latter. The trading business is what became BayWa. [4]

Urbanisation led to decreasing availability of rural work force, paving the way for mechanisation. BayWa recognised this and provided agricultural producers with a variety of in-demand agricultural equipment. Increasing business volumes enabled BayWa to grow significantly in the 1960s, owing much to mechanisation efforts of German farmers. [52]

BayWa entered the building materials market in the 1970s, one of its current core areas of activity. Seeing the potential and the need for energy conservation, it integrated energy saving measures and solar energy into its portfolio. All the while cooperatives held most of the company's share capital – despite the increasing importance of its new activities such as mineral oils, building materials and retail. [21]

Owing to the effects of intensive agricultural production and man-made ecological disasters in the 1980s, environmental conservation became increasingly relevant. BayWa spearheaded innovative solutions like the first Fendt tractor engine running on a diesel and rapeseed oil mix and integrating on-board computers and microprocessors into farm equipment. The 1980s were a pivotal time from the standpoint of BayWa's ownership, since one of its shareholders, Bayerische Raiffeisen-Zentralbank (BRZ), collapsed. [46]

BayWa started its major internationalisation effort in 2012 by acquiring the supply-chain managing company Cefetra B.V. and purchasing a majority holding in the northern German company Bohnhorst Agrarhandel GmbH, which opened the gates to the global grain market. Even before that BayWa acquired Turners and Growers Ltd in 2011, the market leader in New Zealand, what entered BayWa into the global fruit business. [53]

The company operates in its three segments directly as well as via its subsidiaries, which belong into the group's consolidated companies. Agriculture remains the largest from those three segments, itself divided into agricultural trade, fruit, and agricultural equipment business units. BayWa also provides the necessary support and training services. [27]

Throughout its existence BayWa aimed to steadily strengthen its market position in the company's core segments. BayWa began developing its traditional strengths and competences in regional home markets before transferring the developments and expanded activities to international markets. Expanding internationally by acquisitions and mergers enabled BayWa to improve its market position and increase the revenue from international operations. [27]

BayWa's structure has changed a lot during its 100 years of operations. It began as a second-tier cooperative in 1923, with 1 462 primary cooperatives as shareholders, despite using a non-cooperative legal form. Using the limited company legal form sets BayWa apart from many cooperatives, either primary or second-tier, which utilise a legal form of a cooperative. [27]

The first major change came in 1960, when BayWa's general assembly elected to transition former voting shares into registered shares with limited transferability. In 2000, members chose to restructure BayWa as a public company, issuing about 35% of its shares as limited voting common shares. BayWa decided to go public to raise capital for its strategic initiatives that would help the company grow beyond its pure farm supply and grain distribution origins. [27]

Going public caused controversy, because owner cooperatives of BayWa ensured control of the company by issuing a special class of shares with super voting rights (ten votes per share). The mechanism was criticised heavily, and the share price plummeted. Despite initial controversies and issues, the move enabled BayWa to implement its growth strategy to become a global player in the company's business segments. In addition to providing capital, going public allowed BayWa to alter the package of covenants in its bond indentures, making those similar to the bond indentures of investment grade firms. [27]

BayWa uses a governance structure composed of the management board and the supervisory board. The former is composed of five representatives responsible for specific businesses and the latter includes up to 16 members [51]. The supervisory board forms several committees: a mediation committee, a strategy committee, a board committee, a loans and investment committee, an audit committee, and a nomination committee [51]. BayWa also instituted a cooperative council, which is an advisory body that aims to preserve cooperative interests [3].

To ensure financial stability, BayWa targets an equity ratio of at least 30% in the medium and long term, although the actual ratio usually fluctuates around the 30% mark. Short-term debt is only used to finance short-term funds for working capital. [27]

BayWa devised its two-pronged strategy to respond to decreasing government interventions and rapid integration of technology into mainstream agriculture. To those ends, BayWa updated its grain handling business and started to offer services beyond simply handling grain. Funding limitations contributed to shaping the strategy, which inevitably incorporated growth. [27]

Internationalisation was the mean to bypass limitations of BayWa's home markets, all for the sake of reinforcing its market positions in core segments of agriculture, building materials and energy. BayWa's internationalisation strategy combines focusing on traditional strengths and core competences with expanding new, profitable activities. Divesting non-core activities helped BayWa to reach the necessary capitalisation. [27]

BayWa's case illustrates how difficult it is to finance growth. The company addressed the issue by implementing the generic solution of transparency, even though it caused financial distress in some cases. Accepting external investors by going public is a transparent way to finance growth.

After having evolved this much throughout its existence, it is hard to call BayWa a cooperative at this point. However, the company values its cooperative heritage to an extent that BayWa established a specialised advisory body to safeguard the interests of cooperatives. What one can take away from this case is that interests of beneficiaries dictate the form, not vice versa.

Cooperativa Oleícola Alto Palancia

Profile:

- Name: Cooperativa Oleícola Alto Palancia (Altura)
- Country: Spain

- Type: secondary processing cooperative
- Sector: olive oil
- Functions: marketing, processing, and packaging
- Members: 1 500 [44] [42]

Altura is the first of three observed Spanish olive-oil[13] production cooperatives. What makes Spanish olive oil cooperatives remarkable is their market share. Olive oil production in Spain is dominated by cooperatives that produce about 70% of all olive oil produced in Spain. [42]

Altura produces extra-virgin olive oil and organic olive oil, and its products are labelled as protected designation of origin (PDO). The initiative to convert to producing organic olive oil came from members, who were later dissuaded by the costs of opening a separate processing line for organic oil and certification costs. Despite aid from a Local Action Group, Altura incurred significant financial and additional operational costs. [42]

To avoid potential tensions with non-organic farmers, the actual costs of producing organic oil are unknown to most members. Especially the transaction costs associated with certifying the organic oil and the amortisation of the equipment. Altura uses information asymmetry to reduce potential tensions with non-organic farmers. [42]

Ultimately there was no widespread movement to become organic, with low profitability named as the primary reason. Altura keeps processing organic olive oil because it grants a quality label to its products. Despite setbacks, the cooperative still seeks to increase the number of organic olive growers. [42]

Altura's organic farmers have no nearby alternative outlets for their olives. The cooperative built a production line specifically for organic oil, meaning that if there were no organic farmers, Altura's processing capacity would become oversized. This means that there is a high mutual interdependence between organic olive growers and the cooperative. [42]

Altura itself does not bear additional costs associated with monitoring organic farming practices, but farmers must pay a certification fee to the regional organic agency. Even though the cooperative does not need to supervise organic farmers directly (it is done by the organic certification agency), farmers' potential opportunistic behaviour is discouraged because there

[13] Unless stated otherwise, olive oil refers to extra-virgin olive oil.

are no other cooperatives nearby that could accept organic olives. Being rejected by Altura and transporting produce to another cooperative would be prohibitively expensive. [42]

Transitioning to organic farming is demanding even while supported by public institutions and the cooperative itself. But it provides added value by higher output prices and lower ecological effects, the latter of which is increasingly valued among consumers and supports the sustainability of agricultural production and the environment. Altura's remote location is both a blessing and a curse, because 1) local organic farmers have no economical alternatives where to sell their olives and 2) the cooperative takes on significant risks since if organic farmers lose their harvest or cease to operate, it is left with excess processing capacity that increases costs.

Controversies about organic farming in the cooperative began as regular olive farmers became aware of the costs associated with organic olive oil processing. Having an issue with transparency led Altura to do something controversial as well – implement a policy of reverse transparency. Reverse transparency means that information about organic processing is withheld from non-organic producer-members.

Having a similar policy in place is highly situational. Cooperatives usually aim to reduce information asymmetry by sharing information within the cooperative and even with non-members in some cases. Altura can use a policy of opacity only because there is a clear justification for organic oil processing, and it is not having an adverse or detrimental effect on the overall performance of the cooperative.

Cooperativa de Viver

Profile:

- Name: Cooperativa de Viver (Viver)
- Country: Spain
- Type: multipurpose cooperative
- Sectors: olive oil, nuts, almonds, wine, petrol, and electricity
- Functions: marketing, processing, packaging, and retail
- Members: 500 [1]

Viver was established in 1990, although its roots trace back to 1915. In 1990, 242 members founded the cooperative with the aim to offer olive oil milling services to members. Since then, Viver has broadened its product and service portfolio and classifies itself as a modern and innovative agri-food company. [31]

After a decade of operations, Viver started to diversify. Its new business directions included handling almonds and walnuts, operating a petrol station and retail sales. In 2010s, Viver started installing solar panels, opened new supermarkets, established an online retail store, launched a natural cosmetics line that includes extra virgin olive oil and new wine brands as well as agrotourism activities. [31]

Viver differentiates its products by using a quality scheme called oil-from-tears. It is open to all members, who are then supervised by technical staff to ensure that they meet the farming requisites. The quality scheme includes both farming and processing practices:

- Olives must be of the Serrana variety.
- The cooperative monitors crop treatments.
- The olives enter the mill before any others.
- The olives are milled without heating and filtering the oil. [42]

Oil produced within the quality scheme receives a different label from the rest of the oil produced by Viver. Advantages to farmers are practical (their olives are processed first, which reduces climatic risks) and social (improved reputation). This led to a situation where in practice, staff select participants based on trust and reputation – a potential source for frictions in the membership. [42]

Farming practices included in the quality scheme could reduce yields, which are compensated by price premiums or other management advantages. Mono-variety olive production brings more value if olive oil is sold as such, but it also adds physical specificity to farmers' olive plantations. Compared to organic farming in Altura, Viver has a lower mutual interdependence between the cooperative and its farmers. [42]

Meaning that olive producers are not locked in, they can sell their products elsewhere. But it also implies that producers would lose a price premium by doing so. Viver's quality scheme is more flexible than Altura's organic oil production, although not having organic certification makes the products a harder sell for consumers who are not familiar with Viver.

Viver's quality scheme relies on informal and trust-based governance, including liabilities and rights that are informally agreed. Having information about members and trust mechanisms that attenuate the risk of opportunism make using informal agreements possible and reduce monitoring costs. Trust could erode when the number of participants increases. [42]

Expanding into complementary business segments reduces risks and brings additional value to Viver's olive producers. Its problems stemmed from a high variance in member-patrons' quality of olive oil. This led Viver to use two generic solutions: user alignment and supply-demand balancing. Both were put into practice by dividing produce into separate product pools by implementing the quality scheme.

Cooperativa Agraria de Vall de Almonacid

Profile:

- Name: Cooperativa Agraria de Vall de Almonacid (Vall d'Almonacid)
- Country: Spain
- Type: processing cooperative
- Sector: olive oil
- Functions(s): marketing, processing, and packaging
- Members: 140 [2]

Vall d'Almonacid was founded in 1989 by residents of the Vall de Almonacid village. Vall de Almonacid itself is a small village located in the Sierra de Espadán Natural Park, which gives the cooperative a strong social dimension. Vall d'Almonacid markets its olive oil using the brand Ayr. [2]

The cooperative produces a unique type of product – extra-virgin olive oil extracted from olives of the local variety Serrana de Espadán grown only within the bounds of the National Park. Vall d'Almonacid's articles of association obliges members to fulfil the requirements and give almost all their produce to the cooperative, retaining only a small share of oil for personal consumption. Vall d'Almonacid uses the PDO label since 2009. [42]

Traditions and the cooperative's requirement mean that farmers cultivate mono-variety olives and become more settled as they transact with Vall d'Almonacid. It also implies that the cooperative relies upon its members since it cannot source the olives elsewhere. There is a high degree of interdependence between Vall d'Almonacid and its members, a dependence that is more important for the cooperative – it cannot resort to using olives sourced from elsewhere due to the reputation of its products. [42]

Vall d'Almonacid's unique olive oil makes governance more sophisticated. The uniqueness of its olive oil is controlled technically by the cooperative and socially by its members, which decreases transaction costs borne by the cooperative and enables Vall d'Almonacid to pay its members more. This is possible due to the deep social embeddedness of the cooperative and since locals perceive that this exclusivity differentiates members of Vall d'Almonacid from olive farmers around Spain. [42]

Vall d'Almonacid faced the problem of remaining competitive and adapting to the external environment. It chose the generic solutions of supply-demand balancing and user alignment to address the issue. Specifically, it implemented both generic solutions by making the delivery of almost all members produce to the cooperative mandatory.

The last bit is important due to the strategy that Vall d'Almonacid chose. Using olives of the Serrana de Espadán variety allows the cooperative to differentiate its products and emphasise the quality of the olive oil that it produces. As mentioned before, it also makes the cooperative vulnerable if local olive farmers were to stop patronising the cooperative. Farmers have alternative outlets for their products, Vall d'Almonacid has no alternative sources for its inputs.

Imposing contractual requirements onto farmers is a common solution to similar situations. It gives the cooperative certainty that it can procure that necessary quantity of olives to mill oil. Ensuring that the conditions remain favourable to farmers is crucial – if not, then they can either voice their concerns or exit the cooperative. The latter is obviously undesirable from the standpoint of the longevity of the cooperative.

PINDOS

Profile:

- Name: Agricultural Poultry Cooperative PINDOS (PINDOS)
- Country: Greece
- Type: multipurpose cooperative
- Sector: poultry
- Functions(s): procurement, processing, and marketing
- Members: 500 [50]

PINDOS was established in 1958 by seven farmers from Ioannina in northwestern Greece [32]. More than six decades later the cooperative that initially produced 500 chickens per week now process over 600 000 chickens per week [32]. About 900 personnel work to operate PINDOS's automated breeder houses, broiler houses, hatcheries, a feed mill, and a slaughterhouse [50].

What makes PINDOS special is its market share, which makes it an outlier among Greek agricultural cooperatives [35]. PINDOS holds a 37% market share in the Greek poultry market, being the single largest domestic market actor – cooperative or not [28]. With an annual turnover of 286 million euro in 2021, the cooperative ranks among top ten biggest Greek major food industry businesses [28].

Roots of modern Greek agricultural cooperatives trace back to early 1900s. Government interventions and using cooperatives as political platforms led to focus shifting away from the members' issues that cooperatives were originally founded to solve. Farmers even began to view cooperative membership as a mean for gaining access to political parties in power. [35]

Legislative experimentation and excessive government intervention led to enormous issues for agricultural cooperatives in the 1980s and 1990s. Market share of cooperatives dropped to unprecedentedly low levels and many faced internal strife due to political influence. Challenges posed by globalising competition and EU agricultural policy forced Greek government to rethink how they regulate cooperatives. [35]

The government implemented a simpler and more general law that reduced government interventions into cooperative affairs [35]. Yet that was not the end of government interventions, although now more limited in scope [35]. Despite the difficulties, PINDOS is an example of a cooperative that has achieved success through adversity.

PINDOS faced both economic and institutional difficulties, which it managed to overcome by adopting its strategy. The cooperative's original purpose was defensive – to protect producers from the dominance of middlemen, processors, and retailers [35]. Decades later, PINDOS operates by an offensive strategy with the aim to capture additional rents in the poultry supply chain and distribute those to its members [35].

The cooperative achieved its remarkable market position by vertical integration to 1) improve product quality, 2) minimise transaction and production costs, 3) bypass wholesalers and 4) gain bargaining power [35]. To those ends, PINDOS modified its ownership, governance, and operational structures. The cooperative:

- Adopted the member-investor cooperative ownership model with vertical investments [35]. Members are free to invest more than is their proportion of business and they are entitled to returns based on their shareholding [11]. This provides members an incentive to invest in the cooperative and reduces the need for external financing.
- Uses the extended traditional governance model, which makes the cooperative more professional [35]. The model includes the general assembly of members, responsible for the most influential decisions, the board of directors elected from membership, which handles strategic management and oversees the management, and the hired management that is responsible for the daily operations of the cooperative [5]. Greek law compels a cooperative to have a supervisory committee to monitor the board and management, which PINDOS instituted in 2012 [35].
- Is fully vertically integrated and covers every link of the supply chain. PINDOS produces feed, processes chicken, and distributes the produce to its customers in Athens, southern-central Greece, and the Peloponnese peninsula. [35]

PINDOS is diversifying its product and service portfolio to become a socially responsible, leading poultry supplier in Greece. It emphasises cooperation with the local community and invests in sustainable enterprises. Green PINDOS is the embodiment of the initiative – it is a subsidiary of PINDOS that seeks to use renewable resources for energy production and transform poultry waste into a usable asset. [35]

One of the foremost challenges of PINDOS – and cooperatives in general – is keeping members engaged in its activities and avoiding free riding. PINDOS achieves continuous member engagement by applying two generic solutions: user alignment and supply-demand balancing. Specific measures employed by PINDOS to avoid free riding include:

- Imposing an up-front equity requirement on new members.
- Restricting membership to ensure the cooperative has the capacity to serve all members.
- Making delivery rights partially transferable and appreciable.
- Making switching to an alternative provider costly.
- Operating as a spatial monopsony.
- Emphasising PINDOS's history.
- Communicating with members effectively. [35]

Effective communication is particularly highly appreciated among the cooperative's members. Member gatherings are not restricted to annual general assembly meetings, PINDOS organises additional explanatory meetings. During these meetings, information is passed to members, the board explains the rationale behind its decisions and members can voice their concerns and needs. Smaller group discussions are held to focus on the issues of smaller member subgroups – this ensures that interests of minorities are not ignored. [35]

Members believe that most effective means of communication are 1) visits to local coffee shops, where board members meet with members to discuss their issues and 2) daily contacts with employees of PINDOS, who visit members' farms to deliver inputs or provide advice. Cooperatives usually place sanctions on free riders for non-participation, but PINDOS chose not to – the cooperative argues that penalising non-participation in annual meetings or other events could distort trust. Instead, it relies on a comprehensive system of incentives for members to keep using the cooperative. [35]

PINDOS incorporates all links of the poultry supply chain – from feed to consumer product distribution –, which makes the cooperative's value proposition enticing to farmers. Since it manages to minimise transaction costs within the supply chain, PINDOS can offer competitive prices for members' produce. Advisory services are equally important, especially as employees already have a working relationship with PINDOS's members and offer better advice than outside advisers can.

The case of PINDOS exemplifies how a cooperative can succeed even in adverse institutional conditions and uncertainty. PINDOS's purpose has changed during its nearly seven decades of operations, but its aim of providing value to chicken farmers has not. Having a clear purpose is a prerequisite of success, but members must also be aware of the purpose and agree. Effective communication is the key to achieving that.

ThesGi

Profile:

- Name: Farmers' Cooperative of Thessaly ThesGi (ThesGi)
- Country: Greece
- Type: multipurpose cooperative
- Sector: cereals, energy plants and legumes
- Functions(s): procurement and marketing
- Members: 56 [39]

ThesGi was established in 2013 by 30 young farmers from the Thessaly region of central Greece[14]. Effects of the 2007–2008 financial crisis provided the incentive to undertake collective action. The cooperative handles a relative diverse portfolio of produce – its members primarily cultivate cereals, cotton, animal feed crops and garlic.

The motivation to form ThesGi was threefold: 1) increasing profit margins by more efficient handling of members' produce along respective supply chains, including standardisation and marketing, 2) utilising economies of scale through handling inputs, products, and services centrally, and 3) creating direct links between ThesGi, its members and the local society to meet its needs. Encouragement from its sister cooperative ThesGala[15] and a clear purpose sped up the founding process.

In terms of governance and ownership, ThesGi is a traditional cooperative. Only members have ownership rights and investments are non-proportional to members' share of business. Four POs operate within ThesGi: cereals, cotton, animal feed and vegetable POs. The cooperative's membership is open to all farmers from the Thessaly region that produce at least one of the products handled by ThesGi.

In return for joining and buying a non-transferable voting share (that is returned to each member when they exit), members receive higher prices for the products that they deliver to ThesGi, get on-farm technical assistance and training, support in applying for EU subsidies and lower farm input prices. Exiting has limitations – it cannot happen before three years have passed since the member joined and they must give written notice a year in advance.

ThesGi uses the extended traditional model of internal governance, which includes a general assembly, board of directors and management. The general assembly approves the most important decisions, the board of directors is responsible for strategic and policy decisions, and daily operational decisions are delegated to the professional management.

As the cooperative is still growing, it aims to address multiple critical issues:

- Developing the cooperative's sales network.
- Preparing to handle new products and crops.
- Bargaining on behalf of its members in contract farming negotiations.

[14] The case is described specifically for this publication with help from Constantine Iliopoulos.
[15] ThesGala or the Cooperative of Thessaly-Pieria Cattle Farmers is a dairy cooperative operating in the same region. It is known for innovative ideas like selling milk and dairy products from vending machines.

- Improving organisational processes.
- Aligning member interests with the goals and objectives of ThesGi.

Abovementioned issues reflect how the cooperative itself views the situation. Fundamentally, ThesGi must attract more members to become more professional and offer members more value. The cooperative applies the member retention solution to increase their loyalty.

Aligning member interests with the goals and objectives of ThesGi is a sign of that. If there were discrepancies between the expectations of members and the actions of the cooperative, the rift would eventually become fatal for the cooperative. Members recognising that it does not serve their interests means that they have no incentive to remain as the cooperative’s member.

ThesGi is slowly growing, which is why aligning member interests becomes crucial. A larger membership means more diverse interests, presenting the cooperative with a sophisticated balancing act. Recognising potential issues is the first step in addressing those, which becomes a continuous effort throughout the existence of the cooperative.

KEVILI

Profile:

- Name: Farmers’ Cooperative KEVILI (KEVILI)
- Country: Estonia
- Type: multipurpose cooperative
- Sector: cereals and oilseeds
- Functions(s): procurement and marketing
- Members: 178 [24] [36]

Estonian agricultural cooperatives are not numerous, particularly those that unite hundreds of agricultural producers. Estonia is a small country, which implies that its cooperatives are also small compared to their equivalents abroad. Still, there are Estonian agricultural cooperatives that stand out among the rest.

KEVILI is undeniably one of the most positive examples of an Estonian agricultural cooperative. In addition to operating well as a cooperative organisation, it has managed to gain a significant market share in the Estonian cereals, oil seeds and protein-rich plants market. KEVILI is the largest grain cooperative in Estonia by a wide margin in terms of turnover and membership – according to its 2022 annual report, the cooperative had a turnover close to 148 million euro[16] and 175 members.

The cooperative offers a wide spectrum of services to its members. KEVILI provides members with agricultural inputs, markets members' grain and rapeseed, forwards market information, exchanges information and offers consultation, undertakes development projects, fosters international cooperation, and conducts training for members [24]. In addition to this, the cooperative also enables credit to members for purchasing inputs.

Estonian agriculture underwent a transformation in the early 2000s to remain competitive as a fresh EU member. KEVILI was established in 2005 to enable Estonian farmers to enter export markets. Until then, Estonian grain cooperatives had mixed success – while some managed to operate effectively, existing cooperatives started to reach their limits. KEVILI was established by 15 grain growers to overcome those limits, accepting members from then defunct grain cooperatives. [37]

KEVILI built two grain terminals (in 2013 and 2016) and is currently building a third., which enable the cooperative to service the entire mainland Estonia. Terminals were financed by member investments and bank loans, and members who invested in the terminals also receive interest. KEVILI participated in establishing the Golden Fields Factory OÜ forage factory to valorise and export the hay that cooperative members produce. Now the spin-off enterprise operates independently and KEVILI is only a shareholder but continues to supply the company with forage produced by its members.

To better serve its members, KEVILI employs 40 personnel that are directed by a professional manager. The board of directors appoints and monitors the manager while the general assembly approves the most important decisions. Members, directors, and staff meet often in social events and trainings organised by KEVILI.

Members themselves value these events highly. Trainings by KEVILI staff or other experts are popular among members and provide them with much needed expertise. Members and staff go on joint hunting trips, visit colleagues abroad on study trips and go on field walks. The latter are particularly popular among KEVILI's members.

[16] Up to 2021, the turnover hovered close to 100 million euro. The spike in 2022 is caused by effects of the full-scale Russian invasion of Ukraine and the multiple resulting crises that caused input and output prices to rise.

Simply put, a field walk is a type of informal practical training, during which KEVILI's staff and members visit one of their member farms. This enables members to mingle and establish trust with the cooperative's personnel. Social events improve the cohesiveness of an agricultural cooperative – especially in Eastern Europe, where trust is not a given due to Soviet heritage.

Another intriguing aspect about KEVILI is its internal communication. KEVILI operates three WhatsApp groups only open to members – one for grain market data, one for agronomical information exchange and one for trading agricultural equipment. Those groups offer enough value that non-members have expressed interest to pay to access the WhatsApp groups. Of course, requests of such nature have been and are going to be denied.

KEVILI faces traditional challenges of cooperatives – ensuring member participation and financing its operations. In broad terms, the cooperative addresses those issues by applying the generic solutions of user alignment and member retention. Member retention is evident from studying KEVILI's practice of fostering open communication and establishing trusting relationships among its membership and staff by organising practical socialising events.

User alignment is the most recent development, stemming from KEVILI's need to secure sustainable funding. The cooperative achieved that by implementing a base capital plan in 2020. According to the plan, members must pay a fixed amount of capital to KEVILI based on the amount of arable land that they use. The capital investment is returned to members after a certain period or when a member chooses to exit the cooperative.

Rules enable members to make the capital investment over a period of a few years. Yet there were members that chose to leave KEVILI instead, although the amount of such members was insignificant. Implementation was preceded by a lengthy process of explanation by the cooperative's personnel, manager, and directors.

KEVILI highlights how a cooperative must ensure its sustainability as a social and economic entity. Establishing effective relations with members and among the membership is a foremost task of a cooperative. Building on that enables designing sustainable financing mechanisms.

SCE E-Piim

Profile:

- Name: Limited Liability SCE E-Piim (SCE E-Piim)

- Country: Estonia
- Type: processing cooperative
- Sector: dairy
- Functions(s): processing
- Members: 200 [22]

The European dairy sector is squarely within the realm of agricultural cooperatives. Even the Estonian dairy sector is dominated by the Finnish dairy cooperative Valio, which operates as a regular limited liability company in Estonia. But Estonia has a dairy cooperative that ranks among the largest dairy processing enterprises in the country and other Baltic states.

SCE E-Piim is the largest dairy cooperative in the Baltic states. Its roots trace back to 1910, when the cooperative's predecessor was established [22]. During the Soviet occupation all dairy cooperatives were nationalised, and their facilities were operated by state-owned holdings. After Estonia regained its independence in 1991, the process of denationalisation began, and new dairy cooperatives started operating the previously state-held facilities.

Stiff competition meant that surviving was difficult for small dairy cooperatives. For that reason, Järva-Jaani Dairy Cooperative and Haimre Milk Cooperative merged to form E-Piim in 1997, Põltsamaa Dairy Cooperative merged with it in 1998 [22]. In 2020, E-Piim and a Latvian dairy cooperative Piena celš merged to join SCE E-Piim [22].

SCE E-Piim unites over 200 milk producers from Estonia and Latvia, who supply 450–500 tonnes of milk per day for the cooperative's two processing facilities in Estonia and one in Latvia [22]. The cooperative also operates more than 25 retail outlets in Latvia and two farm supply stores in Estonia [22]. SCE E-Piim owns subsidiaries to facilitate its operations, with the cooperative being the majority shareholder in all.

Competition in the dairy sector is ruthless, which is why size matters. Valio entered the Estonian market to protect its domestic market in Finland, becoming the dominant force in the Estonian dairy sector [45]. Economies of scale and massive purchasing volumes have led to a situation where Valio's Estonian subsidiary dictates milk purchasing prices in Estonia (and to a lesser extent in Latvia and Lithuania).

To compete with Valio, SCE E-Piim (and its non-cooperative competitors) had to grow. SCE E-Piim undertook an unprecedented step in the region and became a European Cooperative Society (SCE)[17]. It managed to increase its membership (and milk volume) by more than 25%.

Since competition drove down milk prices, SCE E-Piim must innovate and invest. It is building a dairy processing facility with the capacity to process one thousand tonnes of milk per day. The cooperative instituted the Caring Farm quality programme for its members that measures the environmental impact of members' milk production and helps members to make their milk production more sustainable. Branding and design of SCE E-Piim's products reflect their efforts towards environmental sustainability.

To address its challenges, SCE E-Piim uses supply-demand balancing. The cooperative recognised that members alone do not have the investment capability to invest in the new processing facility. This is why SCE E-Piim brought a foreign investor aboard, who provides the capital that government subsidy and members cannot provide.

Due to legislative limitations and members' expectations, the investor could not invest in the cooperative directly. That would have also infringed on cooperative principles. Instead, a joint venture Meierei B.V.[18] acquired 24.99% of SCE E-Piim's subsidiary AS E-Piim Production [22].

SCE E-Piim's governance and ownership facilitated the entry of an investor. The cooperative uses the corporation model of internal governance, where the cooperative and its subsidiary are separate legal entities (Figure 5). The general assembly of members elects the board of directors from among themselves and the directors also serve in the supervisory board of the cooperative firm (AS E-Piim Production). Due to the foreign investment, Meierei B.V. is represented in the supervisory board of AS E-Piim Production but has no say in the internal affairs of the cooperative SCE E-Piim.

[17] A European Cooperative Society (Societas cooperativa Europaea, SCE) is a legal form of a cooperative that facilitates cooperatives' cross-border and trans-national activities. EU legislation stipulates that an SCE must include members from more than one EU country.
[18] Meierei B.V. is co-owned by two family-owned private companies from the Netherlands, Royal A-Ware, and Interfood Group.

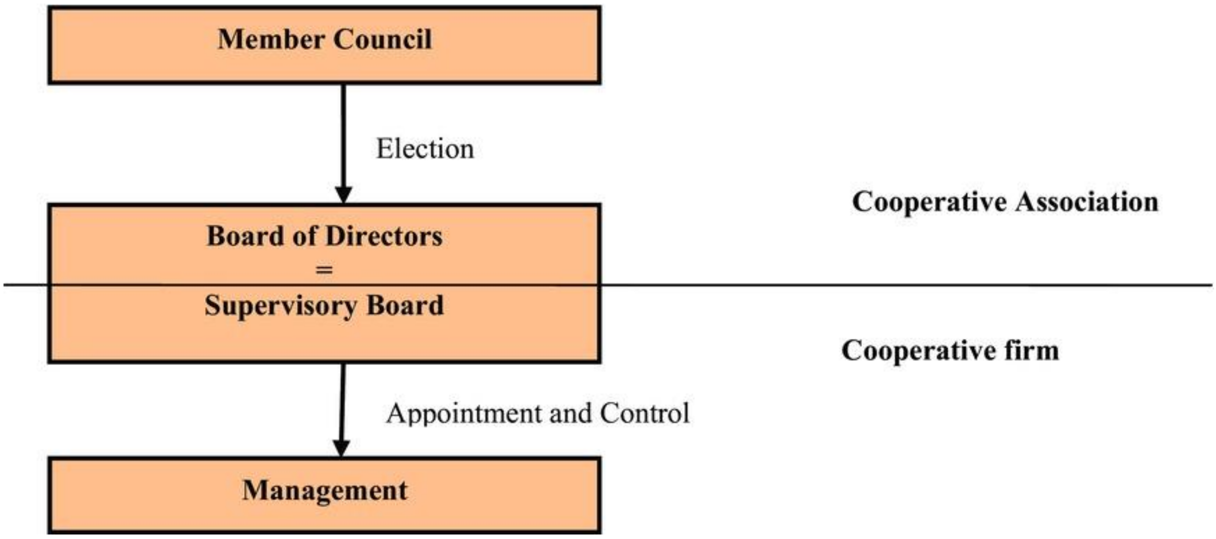

Figure 5. The corporation model of internal governance [5]

Operating a cooperative that has members in two countries brings its own difficulties. SCE E-Piim solved potential frictions between members from two countries by overrepresenting Latvian members in the board. One third of all board members are from Latvia, despite them making up roughly 25% of the total membership and milk delivered.

Time will tell if SCE E-Piim's efforts bear fruits. Incorporating Dutch investors forces the cooperative to review its corporate governance practices, which has spillover effects on its cooperative governance. Ensuring the adequate representation of stakeholders is crucial, which, in turns, makes following good cooperative governance practices vital to minimise frictions.

Limagrain

Profile:

- Name: Groupe Limagrain Holding S.A. (Limagrain)
- Country: France
- Type: multipurpose cooperative
- Sector: field seeds, vegetable seeds and cereal products
- Functions(s): marketing, processing, and research and development
- Members: 1 300 [38]

Limagrain is an international cooperative group that in one form or another deals with seeds. Focus on seeds enabled the cooperative to become the fourth largest seed company in the world and expand its activities into 49 countries [38]. Limagrain sums up its nature in three tenets:

progress (progressing to meet food, social and environmental challenges), perseverance (persevering to prepare for the future) and cooperation (cooperating to find meaning to their actions) [38].

Defining themselves as a seed company, Limagrain seeks to improve the adaptability of crops and preserve their growing environments by genetic progress [38]. Improving plant genetics helps agricultural production systems to achieve higher agronomical and environmental performance [38]. Research and development is an avenue that farmers struggle to utilise alone, which makes cooperatives particularly valuable.

Limagrain emphasises that 16.2% of its seed sales revenue is invested into research and 28% of the personnel working in their seed activity work in research. Investing in research is the original reason why Limagrain was established in 1965. Farmers aimed to bring value to their region by creating high-performance corn varieties. [38]

As a natural progression, Limagrain's board of directors decided to diversify into vegetable seeds in 1975 to spread out its risks [38]. Instead of starting from nothing, Limagrain acquired Vilmorin, a prestigious seed company whose history goes back as far as the 18th century [38]. Here appears the common theme of Limagrain's expansion – all steps are fundamentally tied to their core business of seeds.

Limagrain's push to globalise began in 1979, when it set up its first research station in the US. In 1983, the cooperative began to construct integrated cereal chains supported by production contracts which increase the value of crops in the members' region. The consolidation of integrated chains was complete in 1995, when the cooperative acquired Jacquet – a manufacturer of consumer bakery products. The following decades include a steady expansion to all regions of the world and new acquisitions. [38]

Limagrain's actions are emblematic of supply-demand balancing. Throughout its existence, Limagrain has integrated more links of the cereals value chain, meanwhile remaining true to its original cause – providing high-quality seeds. The cooperative can provide members with seeds, purchase and process their produce, and produce consumer goods. An integrated value chain brings stability to members and maximises their value-add by minimising transaction costs.

Limagrain benefits from an exceedingly well-defined economic justification. Seeds are vital to all forms of plant cultivation and become even more important as time passes. Effects of the climate change and the need for adverse weather condition and pest resistant cultures makes Limagrain's work increasingly relevant. A clear and justified purpose is the fundamental prerequisite of a cooperative's success.

Gheorghe Doja

Profile:

- Name: Gheorghe Doja Agricultural Cooperative (Gheorghe Doja)
- Country: Romania
- Type: multipurpose cooperative
- Sector: horticulture (fruits and vegetables)
- Functions: auctioning, storage, and marketing
- Members: 10 (collaborates with 50 local producers)

Gheorghe Doja Agricultural Cooperative operates in the Gheorghe Doja commune, located in the Ialomita county of southeast Romania[19]. The cooperative has 10 members with shares and collaborates with 50 local producers. Gheorghe Doja specialises in marketing fruits and vegetables, primarily handling watermelons, yellow melons, kapia peppers, gooseberries, tomatoes, courgettes, zucchini, green onions, squash, and autumn cabbage.

Four economic agents dealing with the wholesale trade of fruit and vegetables are active in the Gheorghe Doja commune, which have a total turnover of 35.9 million lei[20]. Two of those are agricultural cooperatives and two are limited liability companies. The economic entities rank in the top 10 at county level in terms of turnover classified by their CAEN code[21], with the first place occupied by Gheorghe Doja. The area of Gheorghe Doja commune is known nationally as an important melon growing basin.

In 2013, five young farmers decided to join and set up an agricultural cooperative called Gheorghe Doja Agricultural Cooperative. Seven years after its establishment, the cooperative has grown its membership to 10, of which five are legal entities, three are sole proprietorships, one is a licensed individual, and one is a natural person – this makes the cooperative a grade II cooperative according to Romanian classification. The arable agricultural area of cooperative

[19] The case study was written with assistance from Maria Găman, the European Business Managers of UNCSV.
[20] About 7.2 million euro on 29 June 2023.
[21] Classification of Activities in the National Economy (CAEN) is a business activity classification system used in Romania. It is a national designation of Nomenclature statistique des activités économiques dans la Communauté européenne (NACE).

members ranges from 8 ha to 43 ha. Together they cultivate vegetables on 200 ha, plus about 800 ha of cereals and oilseeds. [19]

In 2015, the agricultural cooperative purchased a 7 800 m^2 plot of land and started building an 800 m^2 warehouse for members' produce. The facility includes all the necessary utilities, including a washing and packing station for vegetables and fruits, a seedling plot, space for machinery, storage of plant protection products and fertilizers, a separate platform for fuel tanks, a phytopharmacy and administrative buildings. In 2017 they bought a second warehouse of about 1 700 m^2 with a bank loan for eight years. [19]

Gheorghe Doja is constantly looking for solutions to the problems faced by both the cooperative and its members through the direct relationships it has established with suppliers, customers, and authorities (Table *4*). Problems faced by the cooperative stem from the legal and public policy environment that it operates in and from the actors with whom Gheorghe Doja interacts. The most urgent problems faced by members currently being solved through projects and lobbying, are difficulties in accessing European funds, decaying irrigation infrastructure and the lack of consolidation procedures with the need to modernise very old infrastructure, and the lack of labour (shortage of people and very high labour costs with day labourers).

Table 4. Comparison of an investor-oriented firm a cooperative business model

	Investor-owned firm	Cooperative
Value proposition	Meeting customer needs and maximizing shareholder returns.	Maximising member benefits.
Identification of market segments	Target the most profitable opportunities.	Target areas of greatest interest to members.
Value chain setup	Suppliers and customers are outsiders to the company.	Suppliers and customers are owner-members of the company.
Estimated cost and potential profit	Reduces costs with suppliers and premium customers.	Offers higher prices to member suppliers and lower prices to non-member customers.
Position in the value chain	Blocking substitution threats and forming strategic alliances with complementary actors.	Blocking substitution threats and forming strategic alliances with members.
Competitive strategy	Exploiting future opportunities with existing resources.	Giving members the best value.

The cooperative has recommendations and alternatives to solve or at least alleviate the issues:

- Cooperatives can be the main engine for sustainable development of local communities, if they are supported to develop organically, and a period of sedimentation is accepted in the first years of operation of cooperatives.

- Priorities should be set based on experience, profitability, capacity to unite the community (number of members) and to absorb production (area potential).
- Urgent allocation of resources to upgrade irrigation infrastructure, reduce canal losses and costs.
- Purchasing specialized trailers and harvesting equipment and conveyor belts.
- Installing mobile solar panels on buildings to provide the necessary electricity for agricultural cooperative activities.

In the future, Gheorghe Doja plans to 1) invest in value addition and processing, 2) expand the warehouse area, cooperative production capacity and membership and 3) invest in renewable energy, photovoltaic panels to reduce electricity costs by 80%.

Gheorghe Doja uses the member retention generic solution, one of the only options for a small cooperative. The cooperative's challenges with depreciated infrastructure mean that it must focus on improving the economic outlook of the cooperative's members and increase the size of its membership. Given Gheorghe Doja's low double-digit number of members, it does not currently face major governance issues. As the cooperative must and continues to grow, frictions among membership increase and Gheorghe Doja's members need to review their cooperative governance practices.

Fermierul Nădlăcan

Profile:

- Name: Agricultural Cooperative Fermierul Nădlăcan (Fermierul Nădlăcan)
- Country: Romania
- Type: multipurpose cooperative
- Sector: wheat, maize, sunflower, sugar beet, rapeseed, soya, barley, oats and lucerne
- Functions: auctioning, storage, and marketing
- Members: 19

The Agricultural Cooperative Fermierul Nădlăcan operates in Nădlac, located in the Arad County of the western part of Romania. Establishing the cooperative aimed to improve the quality and value of the members' produce, to obtain better prices for it, a more efficient supply of inputs and increasing the members' total income from farming. Members started the business because they were dissatisfied with the poor marketing of their products (cereals, technical plants, and oilseed crops), and the high input costs, resulting in low income from their farming activities. [25]

Fermierul Nădlăcan offers many services to members:

- Preparing documents for applying for diesel subsidy.
- Inserting field plot data measured and digitised with the cooperative's GPS device into the APIA[22] information system.
- Preparing documents to benefit from exemptions in the cooperative law.
- Organising input procurement tenders.
- Marketing of members' produce.
- Hiring an agricultural expert.
- Consulting in the submission and implementation of European projects.
- Sharing cooperative's equipment for agricultural work.
- Representing members' interests in interacting with local and public institutions.
- Organising specific events for members and exchanging experience.
- Managing members' accounts.

The Fermierul Nădlăcan is constantly seeking solutions to members' problems and is involved in their implementation through direct relationships it has established with suppliers, customers, and authorities. For public policy issues that they are unable to solve on their own, at the local level, they turn to UNCSV – the National Union of Plant Sector Cooperatives –, which they have been a member of since June 2018.

Many of the cooperative's problems stem from the legal and public policy environment in which they operate and from the actors they interact with. The most pressing issues faced by members that the cooperative is trying to address through projects and lobbying are access to water and irrigation on their land, land ownership or rents and unfair competition.

To benefit from higher off-harvest prices for grain production, farmers build metal silos or granaries. Farmers who produce more prefer to store the produce in their own storage facilities on the farm. These facilities are usually sized to cover about half of the grain produced. The

[22] The Agency for Payments and Intervention in Agriculture (APIA) is Romania's national agency that organises European funds allocated to agricultural development.

cooperative purchased land to build a storage area for agricultural products (silo), a storage hall and an industrial scale, which helps to store the produce that members are unable to.

Through an investment project, Fermierul Nădlăcan built a 6 000-tonne reception, conditioning, and storage system (silos), a 315 m^2 hall for parking agricultural machinery, with the complex being equipped with all the necessary equipment: an LPG platform, generator, NIR instrument, generator, wall-mounted boiler, concrete platforms, walkways, and changing rooms. For managing the cooperative's activities efficiently, a bridge was purchased as part of the same project, which optimised the technological flow. At the same time, the cooperative purchased a sugar beet harvester, a multi-purpose loader with a telescopic arm and a seed selection and treatment station, which serve all members of the cooperative.

After constructing the storage facilities, one of the main objectives is to have members purchase all inputs through the cooperative, or rather to create an input warehouse that serves all members to help them keep constant stocks of all the necessary products. The cooperative has not faced major crises and it has been able to get involved in significant projects with European funding, raising the necessary co-financing and guarantees without serious problems.

From the beginning, the members of the cooperative envisioned a structure of complementary cooperatives to fulfil the following functions by carrying out their respective activities:

- An agricultural purchasing and sales cooperative, which organises both purchases of the materials and the technical means necessary for agricultural production and sales of agricultural products.
- An agricultural cooperative for processing agricultural products, offering branded products with a permanent presence.
- An agricultural cooperative for the exploitation and management of agricultural, forestry, fishery, and livestock land.

It was intended that the cooperative would establish a centralised system of accounting, invoicing, recording, and keeping track of the quality, quantity and value of members produce. At the same time, at the request of members, the cooperative will provide them with specialist technical assistance.

The cooperative brings social and economic benefits:

- Optimising the production costs and efficiency of farming activities by transferring some of the burden of purchasing inputs on the cooperative and marketing of jointly produced goods. This reduces production costs (inputs), standardises the quality of members' primary production and ensures better prices in terms of quality and quantity, as well as comparative information on prices charged by traders.

- Making joint investments to add value to primary agricultural production and balance incomes in the agri-food chain leads to a higher level of social stability for members.
- Increasing profitability of the business in the medium and long term, adding value to farmers and cooperatives by generating economic value for their members, enabling them to carry out relevant economic activities to survive in the market survival and sustain social and economic development.
- Cooperative members are well informed, can be actively involved and can propose measures to make the socio-economic activity of the cooperative more efficient. They receive the rights they are entitled to once their obligations to the cooperative are met.
- Democratic control and fair distribution of the cooperative's results according to the economic activity of each member.
- Increasing the ability to cope with the risks of market volatility compared to the individual attempts of recovery activities by each producer.
- Providing specialised services and information to members that would be too costly to obtain individually.

Fermierul Nădlăcan applies the member retention generic solutions and ultimately aims to use supply-demand balancing. The former seeks to retain and increase membership by offering services wanted by members and binds them to the cooperative. The latter is something that the cooperative seems to be aiming for, since it wishes to eventually process produce and offer branded products (on its own or in an associated cooperative). Those aims become viable as the cooperative continues to grow while minimising frictions in its membership.

Recommendations to agricultural cooperatives

Agricultural cooperatives tend to be local in nature, which makes formulating universal recommendations difficult. But there are general principles and actions that agricultural cooperatives can apply to improve their governance capacity and performance. This chapter explores some of those possibilities based on the previous cases and authors' own research into Estonian agricultural cooperatives[23].

All studied cooperatives aim to grow to better fulfil members' interests. As the cases show, there are various routes to achieve the goal, but the aim of growth is some of the few absolute things in cooperative studies. Growth brings tangible economic benefits like enhanced economies of scale and scope as well as qualitative improvements in the cooperative as an organisation.

This is why the primary goal of a cooperative should be to increase its size and professionalism. A cooperative may achieve this by merging with other cooperatives in their field of activity, implementing an aggressive strategy to expand its membership, integrating vertically with other actors of the food supply chain – with sufficient economic justification –, form a second-tier cooperative with other regional cooperatives or establish joint ventures, unions, and associations with other cooperatives.

Only after growing can a cooperative become more professional. Or to put it more explicitly, growth in size is a prerequisite of professionalism. Professionalism implies shifting daily management of the cooperative's operations to a hired management and other staff, so members can focus on their own enterprises and concentrate on strategic management. One of the first steps that a cooperative should undertake is to implement a governance model that optimises the use of members' and cooperative's resources.

Growth is not an aim in itself, but rather a mean to achieve other goals and objectives. It also means that there is a fundamental reason why a cooperative exists at all. A cooperative should explain the true reason of its establishment to members. Without a clear and understandable economic justification, a cooperative has almost no chance to attain good governance capability and business success. A clear economic justification is the fundamental prerequisite of success and good governance.

[23] Authors thank Constantine Iliopoulos for his invaluable contribution to the original report.

Successful cooperatives make ample use of board committees, which act as a governance training ground for members and involve those that have not yet served in the board of directors. Board committees address a specific issue, are led by a director, and include other directors as well as members. A cooperative may have audit, compensation, strategic planning, director candidate training and naming committees. Benefits of committees are twofold: they solve specific issues and offer participating members an insight into the operations of the board.

Members are at the core of all cooperatives, which is why a cooperative should educate their members. Education becomes crucial when a cooperative faces novel challenges, for example, resulting from the Green Deal, changing consumer preferences and effects of the climate change. Member education is one of the cooperative principles, but educating members is also another prerequisite of success. In the context of cooperative governance, a cooperative cannot implement good governance practices without educated members because they would not otherwise realise the necessity of those measures.

Training directors is equally if not more important. A cooperative should integrate partaking in cooperative governance (as opposed to corporate governance) training into the director election process. Training activities should be mandatory for all directors. Director training needs to address two parts: 1) how to perform as a director and 2) how to perform as a cooperative director. Similar training should be mandatory for management and other staff of the cooperative as well since they too need to understand the intricacies of cooperative governance.

A cooperative must define the kind of expertise that it needs, has, and lacks. Involving non-member experts into the board of directors is a viable solution to improving the decision-making process of the board. Experts would help directors who are members of the cooperative fulfil their governance duty by supporting them with relevant knowledge and help them supervise the management more efficiently. Diversifying the board by involving external directors has an added benefit of avoiding group-think issues.

The organisational design of a cooperative must fit its economic justification, goals, and objectives. This is why the cooperative should consider restructuring its organisation, especially in terms of its ownership and governance model. Cases studied in this publication indicate how organisational redesign has helped cooperatives overcome difficulties. An indicator of such a need is if the prices paid to members for their produce or average prices asked from members for inputs are no longer competitive with the average prices of the sector and region. Particularly if the cooperative has a high probability of frictions between members – for instance, when most members have contributed less equity capital into the cooperative than is their proportion of patronage with the cooperative. Rethinking the ownership model of the cooperative enables it to balance member investments or seek financing from non-members if necessary.

Measuring the performance of an enterprise is vital to understanding how well it serves the interests of its owners or stakeholders. It is simpler in IOF-s that aim to earn and maximise profit. However, cooperatives must develop cooperative-specific performance indicators, which measure the true objectives of both members and managers as well as how well an organisation meets those. Developing and implementing these simplifies decision-making and minimises frictions between members as well as between members and the management.

In addition to assessing the performance of a cooperative, it is also important to evaluate the board of directors itself. Board of directors' evaluations should include a full board assessment and individual assessments of directors, both of which would incorporate self-assessment and external, impartial assessment. During board performance evaluations, it is sensible to assess the board's structure and the effectiveness of its processes.

The first notion addresses how well a board of directors fulfils its roles of control, service, and strategic planning. For instance, the evaluation determines if the existing board committees are adequate and fulfil their purpose. Board processes refer to internal processes of the board of directors and they measure how coherent the board is, the effectiveness of its decision-making and operations.

During the director candidate selection process, a cooperative should formulate the set of skills sought from directors and compare those to the profiles of candidates. Non-member experts should be invited to the board of directors, if there are blanks in board competences that candidates from the cooperative cannot fill. Every director contributes to the operations of the decision-making body with their expertise and the board's diverse knowledge base improves the cooperative's governance capability – but it must be fit for the purpose of the cooperative.

A cooperative must always balance conformity (good corporate governance) and performance (strategy and value creation). The cooperative's management has the implicit task of transforming the organisations to achieve its objectives without antagonising its membership by making constant and unjustified changes. However, seeking balance requires educating all parties that include members, directors, managers, and staff. Even while having the expertise, the directors’ tasks are demanding because a board of directors must incessantly balance a plethora of important variables – representing members’ interests, their opinions, expertise, consideration, power, legitimacy, responsibility, transparency, learning, innovation, and risk.

If members lack unity or there are frictions in membership due to heterogeneity of members’ preferences as opposed to unity promoting trust and creativity, good governance is unthinkable. This is why investing into creating a community is not a waste of resources but a necessary step towards success. Good governance leads to good management, not vice versa.

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