LTA 4/99 • P. 449–470

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Co-operative Organisational Models as Reflections of the Business Environments[1]

1. ADAPTABILITY AS A CONDITION FOR SUCCESS – ALSO FOR CO-OPERATIVES

One of the most basic notions in business is that organisations must reflect the characteristics of their business environment in their own organisational structure, otherwise they will not be competitive (Kast & Rosenzweig, 1979). A successful firm is the one that adjusts its product offerings to changing demand and that has the ability to adapt to a variety of demand changes, also large ones and rapid ones. Likewise, efficient firm is able to incorporate the traits of the labour markets, the capital markets, etc. into its own structure. All in all, the attributes of the organisation should be a mirror of the attributes of its various markets.

Business people often assert that the intensity of competition is steadily increasing, even at an increasing rate. Such claims may be correct as more and more markets are becoming more and more turbulent. Today, changes in business environments are quicker and more comprehensive than ever before. As concerns the European agribusiness the following may be mentioned:

1 The author would like to express his gratitude to Dr. Karin Hakelius for valuable comments.

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Political changes

- A new Common Agricultural Policy is underway, though neither the contents nor the dates are known as yet, only that a substantial liberalisation can be expected.
- Liberalisation can be expected also on the global scene, following WTO (GATT) negotiations.
- The enlargement of the European Union towards the East will mean both new demand and new competition for part of the producers though the consequences are still unclear.
- As the European Monetary Union is soon in operation, a trend towards harmonisation of the economies of the member states can be expected, implying i.a. fewer differences in tax systems, more homogeneous product mixes as well as consumption patterns (Traill 1997; Traill 1998).

Technological changes

- The rapid development of information technology will bring about tremendous changes in all sections of business.
- For many years the relative costs of transportation have fallen as a consequence of new technology, and this trend can be expected to continue, creating a global market for still more products.

Economic changes

- Retail chains are gaining considerable strength through mergers, acquisitions and alliances. Hence, retailing is increasingly an internationally operating industry, and the chains' private brands are ever more widespread (Grunert *et al.* 1996; Steenkamp 1997; Traill 1997).
- Consumer demand is undergoing changes in many respects, the main trend being increased diversification, i.a., towards convenience as well as ecological and ethical concerns (Grunert *et al.* 1996; Grunert *et al.* 1997).
- European consumers are changing in terms of demographics (Traill 1997). There also seems to exist a trend towards a homogenisation of eating habits in various parts of Europe (Angulo *et al.* 1997; Traill 1997, p 43; Steenkamp 1997). More important are, however, the behavioural and attitudinal changes – the least common denominator is volatility (Grunert *et al.* 1996; Grunert *et al.* 1997; Steenkamp 1997).
- Multinational food conglomerates function as so-called enterprise hunters, always interested in buying firms with strong brands and consumer appeal. Knowing that the leading brands are the most profitable ones, they tend to sell less profitable brands in the product portfolio. Owning brands with the strongest consumer appeal, they

want to sell the same brands internationally, though production takes place in countries with the most favourable production conditions (Traill 1997).

Agribusiness firms have responded in different ways. Large mergers and acquisitions have taken place, whereby multinational firms have strengthened their positions. Technological developments have been made use of in different respects; information technology, logistics, transportation, production, etc.

Also the part of the agribusiness industry which comprises agricultural co-operative firms has followed the paths of amalgamations, internationalisation and technological advancement. These changes within the co-operative sector are presently quite rapid (Cropp 1997; Grunert *et al.* 1997; Lagnevik & Kola 1998; Rogers 1997). Many co-operatives have, however, also done something else, viz., conducted profound changes in their co-operative business form. Actually, it seems that the reorganisation processes right now (1999) are more intense than ever before.

The present article focuses on these changes concerning organisational models for marketing co-operatives within the agricultural field. It seeks to suggest answers to a few questions:

- How could the various co-operative organisational models be classified into categories from a market adaptation point of view, and what are the core attributes of each model? (Section 2)
- What market conditions are the various organisational models suited for, and why so – what is the business rationale behind each model? (Sections 3 and 4)
- What will the agricultural co-operatives look like in terms of organisational models a decade from now? (Section 5)

2. ORGANISATIONAL MODELS FOR AGRICULTURAL CO-OPERATIVES

2.1. The concept of co-operative models

For many decades, a co-operative was a co-operative! With due respect to the requirements of the various industries, all agricultural co-operatives had almost the same organisational characteristics, generally expressed in terms of co-operative principles such as open membership, unallocated equity capital and governance according to one-member-one-vote (Barton 1989; Nilsson 1996). Hence, there is every reason to use the label *traditionally organised co-operatives* for this organisational model – it has existed since the middle of the 19th century.

During the last decade or two, a growing number of agricultural co-operatives with quite different attributes have come into being, both through new establishments and through transformation of existing traditional co-operatives. *Entrepreneurial co-operatives* is suggested as a

generic label. This shift in organisational models for agricultural co-operatives is a one-way trend, viz., from the traditional model to different entrepreneurial models. The reason is simple: the changes in the agribusiness environment described in the preceding section require new types of organisations, and organisations which are adaptive and learning in relation to the increasingly turbulent markets. Hence, it is understandable that the concept of co-operative models has now become quite popular (Hansmann 1988; Barton 1989; Cook & Tong 1997; van Dijk 1997; Torgerson *et al.* 1997).

The characteristics of these new organisational models vary a lot but the main difference is in the ownership, whereby also a number of other factors are affected. Ownership in the new forms is no longer only collective. In some cases it may be purely individual ownership, while in other cases there is a blend of collective and individual ownership.

Table 1 suggests four main groups of entrepreneurial co-operative organisational models except for the traditional one. This classification is based upon comprehensive empirical studies of agricultural co-operatives in the fifteen EU member states, conducted in 1997 (Agricultural Co-operatives ..., 1997 – Table 1 deviates from the original in two respects: some rows have been moved and two columns have changed place).

Being very different from the traditional form of co-operatives, entrepreneurial firms still deserve to be called co-operatives. Just like the traditional co-operatives the entrepreneurial ones are a type of vertical integration and hence they constitute an instrument for a group of businessmen to ameliorate a badly functioning market. Likewise, they are in accordance with the definition that is generally recognised by researchers on agricultural co-operatives:

> *First, the user-owner principle.* Persons who own and finance the co-operative are those using it. *Second, the user-control principle.* Those who use the co-operative have control of the co-operative. *Third, the user-benefits principle.* Benefits of the co-operative are distributed to its users on the basis of their use. (Barton 1989, p 1; italics added).

Within these boundaries there are many ways of organising co-operatives, i.e., a large variety of other characteristics can be added. Some of these properties follow from the legal and other institutional settings, others are due to tradition. Hence, the various co-operative models, including the traditional one, should be regarded as special types.

Nevertheless, depending on how the constituent definitional elements are understood, there may be some uncertainties as to how the new organisational types adhere to the concept of co-operatives. Hence, if the ownership criterion is interpreted as full ownership some of the new organisational models must be rejected as co-operatives, but if it is understood as majority ownership they are co-operative models. Exactly the same can be said about the control criterion. The benefit criterion, on the other hand, is not negotiable – all the co-operative models

TABLE 1. Main structural characteristics of EU agricultural co-operatives (Source: Agricultural Co-operatives in the European Union. Trends and Issues on the Eve of the 21st Century. Eds. Onno-Frank van Bekkum and Gert van Dijk. Assen: van Gorcum 1997, p. 171)

Attributes	Co-operative Organisational Models				
	Traditional co-operative	Participation shares co-operative	Co-operative with subsidiary	Proportional tradable shares co-op	PLC co-operative VE
Entry	Free	Free	Variable	Restricted	Variable
Individualised equity	No	Only for investors	Only for investors	Yes	Yes
Assets appreciation	No	For investors	Yes	Yes	Yes
Voting scheme	Equality	Members: use Investors: share	Members: use Investors: share	Use/Share-based	Share-based
Majority of decision control	Members	Members	Members via the co-op	Members	Investors
External participation	No	Yes	Yes	Limited, or without voting	Yes
Members' equity contribution	Equal	Equal	Equal via the co-operative	Use-based	Shares
Return on income	Use-based	Members: use Investors: share	Members: use Investors: share	Use/Share-based	Share-based
Value-added activities	Limited	Yes	Yes	Yes	Yes
Professional manager	No	Not always	Yes	Yes	Yes

have the objective of providing the best possible benefits to the members/patrons. Hence, the three criteria can be regarded as hierarchically ordered:

1. The ultimate criterion is that the member shall have the best possible *benefits* from the co-operative.
2. If the benefits can be increased by allowing *ownership* to external parties (for example by attaining economies of scale or scope through the partnership), this is an acceptable step for a co-operative, provided that the external partner does not get decisive control.
3. If the external partner is willing to invest only on the condition that he is granted some *control* this may be an acceptable sacrifice, though that control must not impede the member benefits.

In the same manner, one could question whether traditional co-operatives with their collective ownership live up to the definition – they bear resemblance to foundations as the members' property rights are very restricted. If, however, collective ownership is accepted as real ownership, this is still a co-operative.

The four entrepreneurial organisation models mentioned in Table 1 express more and more radical deviations from the traditional type as one continues from the left to the right. As concerns *legal form;* in the first three ones there are still co-operative societies with members. In the last one the entire co-operative is organised as a PLC (public limited company) and hence, instead of members the patrons are share-holders. *Co-operative ideology* which is important to the traditional co-operatives loses more and more significance when going to the right in the table, and current or *mainstream economic thinking* becomes increasingly applicable.

What unites the entrepreneurial models is that there are investors who get remunerated for their investments in the form of ROI (return on investment). This profitability component in the firms' objective function may explain the label entrepreneurial. There are, however, different types of investors. In the participation shares co-operatives (hereafter only termed *participation co-operatives*) and the co-operatives with subsidiaries (hereafter *subsidiary co-operatives*) the investors consist of non-members, while the proportional tradable shares co-operatives (hereafter *NGCs or new generation co-operatives*) and the *PLC co-operatives* have members/patrons as investors. Hence, the first two can be called *external-investor co-operatives,* and the two last ones *member-investor co-operatives* (See Table 2). New generation co-operatives is the term used for the about 200 proportional tradable share co-operatives which have been established in North America, mainly during 1990 (Harris *et al.* 1996; Nilsson 1997).

The difference between the participation co-operatives and the subsidiary co-operatives is that the former has non-members as investors in the co-operative society itself while the latter has non-members as co-owners of the PLC subsidiary, though still having only members in the co-operative society that owns the remainder of the subsidiary.

Hence it may be understood that the four entrepreneurial models can be grouped within a matrix (see Table 2, rows "Core investors" and "Business operations in ..."): Participation co-operatives and new generation co-operatives have their business operations conducted within a co-operative society, while subsidiary co-operatives and PLC co-operatives have a PLC for the businesses.

For the sake of simplicity the four entrepreneurial models are lumped into two categories when analysed in section 4 (See head of Table 2). The participation co-operatives and the subsidiary co-operatives have relatively much in common as do the tradable share co-operatives and the PLC co-operatives. Talking about heterogeneity, it should also be noted that each category contains many sub-models that could vary to some extent, for example, there might

be external owners of PLC co-operatives and NGCs. Hence, the five co-operative models presented here should be interpreted as ideal types in a Weberian sense.

Important to note is also that there are possibilities to use more than one model in a specific co-operative organisation. For example, while some of the business operations are conducted in a traditional organisational framework, other businesses may be separated into a subsidiary that is owned together with others. Or while the co-operative is basically traditionally organised, some of its activities may be in the hands of the members who own tradable shares (e.g. Skånemejerier – Bärnheim & Nilsson, forthcoming). Or a new generation co-operative may sell participation shares to persons who are supportive to the co-operative. Hence, the concept of co-operative organisational model does not necessarily apply to the entire co-operative enterprise but rather to its various SBUs (Strategic Business Units). Each branch of business operations could have its own organisational model.

On the other hand, it is not possible to mix the attributes from different co-operative models to create another model as the different attributes of the models presented here together form a coherent whole. Any attempt to do so may result in a co-operative where its characteristics counteract each other. The consequence may be an inefficient organisation because of bad market adaptation.

2.2. The traditional co-operative model

The characteristics of the traditional co-operative model presented in Table 1 are some of the main so-called co-operative principles as well as some other features observed in actual co-operatives:

- The ownership is in the form of a co-operative society – not a PLC or any other legal form – and this society is open, i.e., there is a clause in the bylaws saying that new members may join the society. Hence, there is free entry.
- The enterprise is owned by the society, i.e., collectively. There is often no individual ownership to the equity, or if there is, this is limited and under collective control.
- The open membership as well as (frequently) the lack of ownership shares imply that there is no trade of shares, and hence, the members cannot realise changes in the value of the assets.
- The members' governance of the firm is equal, irrespective of their volume of trade with the co-operative or their volume of shares, if any. One member, one vote applies.
- Hence, the control is fully in the hands of the members.
- External partners have no influence neither as shareholders nor in the governance.

- To the extent that the members have individual ownership of stock, this ownership is equal or otherwise based on administrative rules
- The profit made by the co-operative is not reimbursed to the members as return on investment but as patronage refund, i.e., it is allocated in proportion to the members' deliveries to the co-operative.
- Traditionally organised co-operatives tend to have none or only limited business activities that may be called value-added, i.e., they rather work with less advanced operations.
- Hence, it is understandable that these co-operatives most often do not need top-qualified management.

2.3. The participation co-operative model

Participation share co-operatives have characteristics that deviate from the traditional co-operatives in a number of respects:

- The discriminating feature is that non-patrons may own shares in the co-operative society, for example, in the form of B-shares or certificates. The purchase of these shares is voluntary, though the co-operative may restrict it to a specific group of investors such as members (in an investor role), other co-operatives, staff or local citizens.
- The ownership of the investor shares is, of course, individualised.
- These shares are tradable and hence there may be an appreciation of them.
- The investors may have a voting right in the general assembly or the board.
- The majority of the voting rights are, however, in the hands of the patrons, i.e., the co-operative society.
- While the members benefit from the co-operative in the form of good trading conditions as in a traditional co-operative, the investors get a remuneration for their capital, either at a fixed rate or depending on the profits attained.
- Given that the equity basis of the co-operative is extended through external investors, there are more resources for R&D and advanced products.
- Hence, there is also a higher probability of a qualified management.

2.4. The subsidiary co-operative model

Co-operatives may run larger or smaller parts of their business operations within subsidiary firms owned together with outside partners. In case a subsidiary is owned 100% by a traditional co-operative firm, then also the subsidiary should be categorised as traditionally run. The core difference is whether there is an investor with ROI interests:

- Depending on what the co-operative decides, the external ownership may be open (the stock exchange) or closed (selected investor partners).
- The stock owned by the external investors is individual property.
- The investors' stock is subject to appreciation – on the day the shares are for sale, the investor hopes to get a good price.
- The external owners have seats in the general assembly and the board.
- The co-operative holds the majority of seats in the board.
- The profits are divided between the patron-members (via the co-operative society) and the external shareholders, each receiving remuneration in proportion to their ownership.
- This organisational model gives the possibility to raise a much larger amount of capital than the preceding one, and hence, the chances for value-added business are better.
- Thereby, there is also a highly qualified management.

2.5. New generation co-operatives

As the proportional tradable shares co-operative model is more or less synonymous with the new generation co-operative model, which is the name for the co-operatives which started in North Dakota and Minnesota during the last decade, it is well described in the literature. Hence, the attributes are the same:

- The co-operative is run as a society but the membership is not open. Members are those who have bought delivery rights from the co-operative, and hence the membership is restricted.
- The delivery rights are tradable at a market rate, hence fully individualised and appreciable.
- The voting power is usually equally distributed but also differentiation according to volumes is fully possible.
- The members are in power, though there may also be a minority of external investors.
- There is a strict proportionality between the member's investment in the co-operative and the volume of deliveries stated in the delivery contract.
- The member gets his share of the profits as patronage refund but due to the proportionality between deliveries and investments, the amount is equal to what he would get if the profits were allocated according to investments.
- The tradable delivery rights as well as the fully individualised ownership have the

effect that the business operations of the co-operative and the membership can be brought in perfect harmony. Thereby, this model is suitable for value-added activities, though of a very focused character.

- So, the co-operative has a top-qualified leadership.

2.6. The PLC co-operative model

The PLC co-operative organisational model is closely related to the NGC model, the difference being basically the choice of legal form. Hence, members become share-holders, though still remaining patrons to the co-operative. This has the effect that the voting power is according to investments, and that the profits are allocated to the shareholders as return on investments, not patronage refund. In practice, this may mean very little compared to the new generation co-operatives.

Just like a NGC, a PLC co-operative may have also external owners – the suppliers may feel tempted to grant even a fairly large portion of the stock to outside parties. If, however, the external shareholders' share of the votes exceeds 50%, the firm can no longer be called a co-operative.

3. THE TRADITIONAL CO-OPERATIVE ORGANISATIONAL MODEL

3.1. The rationales for the traditional co-operative model

The traditional co-operative model has existed for well over one hundred years and it is still the most widespread co-operative model in the agricultural sector. Hence, it has proven its viability on competitive markets (Sexton & Iskow 1993; Søgaard 1994; Gentzoglanis 1997) in spite of the fact that it has been subject to much criticism, accused for being inefficient not the least because of the vaguely defined property rights (e.g., Porter & Scully 1987; Ferrier & Porter 1991). There is, however, only limited understanding of why this co-operative model will lead to efficient firms and under which conditions they are efficient.

The most common economic theoretical tool for vertical integration is the *transaction cost theory* (See Table 2). This has, of course, also relevance to traditional co-operatives (Bonus 1986; Schrader 1989; Staatz 1987; Ollila 1989; Staatz 1989; Fahlbeck 1996). It does, however, not explain why the members choose to organise the co-operative traditionally. To understand this, *neo-classical economic theory* (LeVay 1983; Tennbakk 1996) combined with *game theory* is more instrumental (Sexton 1986). Briefly explained: when the average cost curve of the processing activities is constantly declining and the price is independent of the volume supplied, the firm (or rather its owners) has an incentive to increase the volume as much as possible. Also a *property rights theoretical perspective* is appropriate; the best owners of a firm

TABLE 2. Characteristics of agricultural co-operative models

Attributes	Co-operative Organisational Models				
	Traditional co-operative	Participation shares co-operative	Co-op with subsidiary	Proportional tradable shares co-op	PLC co-operative
Main categories	Countervailing power co-ops	Entrepreneurial co-operatives External-investor co-ops		Member-investor co-ops	
Core investors	None	Non-members		Members	
Business operations in ..	Society	Society	PLC	Society	PLC
Theoretical rationale for co-operative business	Neo-classical t. Game theory Transaction cost t. Property rights t.	Neo-classical theory Game theory Transaction cost theory Property rights theory Agency theory		Transaction cost theory	Property rights theory Agency theory
Co-operative ideology	Yes	Less, and only in the co-operative society		No	
Success factor	Economies of scale	Economies of scale and scope		Economies of scope – streamlining	
Focus	Trade conditions	Patrons: trade conditions; Investors: ROI		ROI	
Mission	Defensive	Offensive		Offensive	
Best strategy (M. Porter)	Cost leadership	Product differentiation		Focus	
Member roles	Patron	Patron & eventually investor		Patron and investor	
Investments/ product unit	Small investments/ product unit	Large investments/ product unit		Large invest-ments/product unit	Product
Type of business operations	Low value-added Primary processing Domestic & exports Member related	Also value-added Diversified processing Also international Also non-member-related business		Value-added Advanced processing Domestic & exports Also non-member-related business	
Technology	Simple, well-known	Also advanced technology		Advanced technology	
Orientation	Production orientation	Market orientation with production restrictions		Market orientation	
Market type	A stable market	Turbulent markets		Turbulent markets	
Market signals	Product markets	Product market; Risk capital market		Risk capital market;	Product market

are those whose inputs to the firm's operations are the most uncertain ones (Fulton 1995).

Looking at the core characteristics of the traditional model, a common pattern evolves: this type of co-operative will have the effect of raising the production volume of the co-operative (Nilsson 1998). The unallocated capital as well as the gratis allocated capital means that the co-operative is able to raise the price paid to farmers for their raw product. The fact that the firms are organised as societies with open memberships is further evidence for the volume maximisation goal. There is normally a special type of norm – a *co-operative ideology* – the effect of which is to ease the recruitment of suppliers (Hakelius 1996).

It is generally recognised that in the collection and the primary processing of agricultural commodities the *economies of scale* are substantial. The larger the production, the lower the costs and then, provided that the revenues are more or less independent of the sales volume of the individual co-operative, the larger the profits. Hence, a traditionally organised co-operative is able to pay a higher price to the farmers than any other organisational type would, or otherwise offer better *trade conditions.* So, it is no wonder that agricultural co-operatives have become dominating at most raw product markets.

Thereby, traditional co-operatives could be regarded as the farmers' way of defending their interests on the markets – they have, in the vocabulary of J.K. Galbraith (1993), the role of the farmers' *countervailing power* in relation to independent buyers. That is also to say the traditional co-operatives serve a *defensive* role.

An important proviso is that the co-operative should operate on markets where its sales volumes do not influence the price negatively. This is supported by empirical observations. The traditional type of agricultural co-operative has generally been successful on markets so huge that the co-operative's volume is only a very small fraction, and likewise on markets that are regulated by governmental agricultural policy. A quick look at the major markets in most countries reveal that very often, if not most often, co-operative firms dominate in selling unprocessed or slightly processed agricultural raw products. Traditional co-operatives simply constitute an exceptional tool for selling large quantities of commodities at low prices. Expressed in the words of Michael Porter (1980), these co-operatives constitute an excellent way of applying a *cost leadership strategy* (See Table 4).

An important element in the traditional organisational model is that the individually owned (allocated) capital should be small and that the members do not receive any remuneration for their investment in the co-operative society. Due to the members' small investments the gratis capital is an acceptable sacrifice for them. According to the transaction cost theory member investments in the co-operative have the purpose of safeguarding their large investments in their farm enterprises, and so, the amounts should be as small as possible – this is not meant to be risk capital but rather its opposite.

Thus the members *are only patrons, not investors.* Any other policy would risk driving the members away and so, the goal attainment of volume maximisation would be threatened. However, this policy has also another effect, viz. that the capital base for traditionally organised co-operatives tends to be quite weak when related to the volumes of raw products processed. Contributing to this is the fact that the collection of unallocated capital by the retention of net earnings may also be a problem as farmers demand the best possible prices in order to produce large quantities and to remain members-suppliers.

The low amount of equity capital in traditionally organised co-operatives does, however, not necessarily need to be a problem. The co-operatives are organised in order to market the members' raw products, either unprocessed or only moderately processed. Due to the *low degree of processing and limited business sophistication* the *amount of investments* is small. Traditionally organised co-operatives do not need a lot of capital in order to fulfil their mission for the members because the tasks to be performed could apply a *simple, well-known technology.*

As traditional co-operatives are fully owned by producers they are inherently *production oriented.* This does not, however, necessarily mean a drawback, as they are working with low processed standard products on large markets which are also *stable markets* in the sense that the rate of product development is low. The average pricing principle used in relation to the members (as opposed to marginal pricing in any other business) does not harm the economy of the co-operative as the markets are extremely large compared to the co-operative's output. Likewise, the fact that the *market signals* from the raw product market are dominating over market signals from the capital market has less significance due to the small investments.

3.2. Threats for traditionally organised co-operatives

During the last few decades and especially in the last one, competitive pressure on the commodity markets has increased so much that many traditional co-operatives have tried to earn more money by going value-added, reaching for new markets where the number of competitors is smaller and the customers are less price sensitive and more attracted by various product attributes. In some cases they have thereby also transformed their co-operative organisational model, but not always. For those co-operatives which have not conducted the appropriate adaptive measures as to organisational form, some problems are most probable. Actually, considering the presently vivid debate on the governance and financial structures of co-operatives, these problems are evident in many cases.

These problems are related to the criticism that many scientists have directed towards co-operatives for being inefficient. Very often the basis of this critique is the vaguely defined property rights in co-operatives (Furubotn & Pejovich 1972; Jensen & Meckling 1976; Jensen & Meckling 1979; Fama 1980; Fama & Jensen 1983; Condon & Vitaliano 1983; Vitaliano 1983;

TABLE 3. Property rights and agency theoretical problems in traditional co-operative with different business strategies

Property right/agency theoretical problems	Traditional co-operatives working in their proper domain	Traditional co-operatives working in entrepreneurial co-operatives' domains
Common property problem (Free-rider problem)	As the membership is homogeneous and the assets are small, free-riding does not pay to the member	Open membership combined with large assets mean that members have incentives to make use of the assets without contributing accordingly, reaping benefits at the expense of others
Portfolio problem	The business activities of the co-operative are so limited that members benefit from all investments, especially as the membership is homogeneous because of the limited scope of the co-operative's business	As the investments are varied many of them are not in accordance with the members risk preferences, and it is impossible to judge whether the money would be better invested in the members' own firms
Horizon problem	As the investments are limited and the type of business is fairly stable over time, the investments are mainly reinvestments – hence, a member's share of the fortune of the co-op may amount to about the same as when that member entered the co-operative	Many investments may have a payback period longer than many members' remaining membership period; these members have reason to be opposed to such investments
Decision making problem	As the business operations are so focused the manager has no difficulties to judge what is in the interests of the members	As the co-operative gets a complex structure with business operations on turbulent markets the management has difficulties to see what is in the best interests of the members
Follow-up problem	The business is so simple and so production related that the members can be well informed and can control it	Due to lacking abilities and lacking motivation the inherently production oriented members do not control the co-operative's all business branches appropriately, thereby giving management the possibility to act autonomously

Condon 1990; Harte 1997). When the scholars use empirical illustrations, it seems that they find traditionally organised co-operatives which are operating outside their business domain – firms that have collected a sizeable amount of capital, are investing this money in business operations far away from the members, work with highly processed products, etc., contrary to what was described above.

TABLE 4. Different co-operative organisational models' suitability for different strategic choice.

Competitive strategy (Michael Porter)	Traditional co-operative	External-investor co-operative	Member-investor co-operative
Cost leadership	Good prospects for successful business following from large volume	The external investors would hardly accept a volume maximisation objective	The co-operative can't create volume enough to be competitive
Differentiation	The co-operative faces grave property rights problems (capital, involvement, control ..)	Good prospects for diversified business due to large capital and involved owners	The co-operative can't raise capital enough to work effectively on several markets.
Focus	The co-operative faces grave property rights problems	Waste of resources if the co-operative focuses on one market only	Good prospects for success on a specified market

It is difficult to counter the allegations made by these writers and it is easy for anybody to find further examples of co-operatives with considerable property rights problems. However, if traditionally organised co-operatives stick to the strategy of low investments, low value-added, low R&D, production orientation, etc., delineated above, the critics' arguments do not hold true. Table 3 gives an overview of how these problems are connected to traditional co-operatives' choice of business strategy (Nilsson forthcoming).

Table 3 indicates that a traditional co-operative has good prospects to be successful when it comes to applying a cost-leadership strategy, while problems are due to become grave if it tries to follow one of the other strategic classes that Michael Porter (1980) proposes, i.e., the differentiation or focus strategies. Similarly, one may, according to Table 4, find that these two strategies are the best ones for the external-investor and the member-investor co-operative forms, respectively.

4. ENTREPRENEURIAL CO-OPERATIVE MODELS

4.1. External-investor co-operatives

External-investor co-operatives can vary a lot, depending on how large a share is owned by outside parties, and on the identity of the investors – *members in an investor role,* institutional investors, the stock exchange, etc. The following applies mainly to firms where the investors own a relatively large share and have a clear interest in good returns on their investments. Hence, the following is more applicable to subsidiary co-operatives than to participation co-operatives because in the latter category, the investors are most probably members who may

have a propensity to regard their shares as patrons and less as investors or otherwise non-members with small investments.

In external-investor co-operatives there is still a co-operative society as owner or co-owner of the enterprise, normally with a majority of the votes (Ketilson 1997), and hence, one may fear that the enterprise is monitored in pretty much the same way as traditional co-operatives. Both the participation co-operative model and the subsidiary model involve co-operative societies that are collectively owned, i.e., there are no tradable shares in the co-operative society. So, one may expect some property rights problems within the co-operative societies, especially as the type of business is large and advanced. Still, these problems are for several reasons due to be smaller than would be the case if a traditionally organised co-operative was to run the same type of business on its own:

1. The co-operative society does not need to own the same large amount of assets as the investors are supplying money.
2. The external investors have an interest in keeping a close eye on the management in order to secure that the firm is run in a business-like manner, and there is also a chance that the co-operative is more thoroughly scrutinised by stock analysts and the mass media.
3. It is also in the members' own best interest that the firm is run efficiently based on an *ROI objective,* as they must reasonably realise that the members and the investors are mutually dependent upon each other. The fact that external investors are involved is due to create a more business-oriented attitude within the co-operative society, i.e., there will be no cross-subsidisation between member groups, strict cost-related pricing, etc.
4. Likewise, it is in the members' interest that the external-investor co-operative is run efficiently because then the investors are willing to pay more money for a small share of the firm, and so a larger share of the profits is allotted to the society to better the *members' trading conditions.* The investors are more willing to invest larger amounts of capital.
5. The very fact that the co-operative society invites external co-owners may be an indication that the *co-operative ideology* has weakened, and the fact that the society runs the firm together with others will suppress ideological considerations still further.
6. Through the existence of external investors the firm gets market *signals also from the capital market,* and a variety of business decisions are based on that information – how much to invest, what to invest in, whether to issue new shares and when so, etc. As the co-operative is working with market-oriented business activities, the co-operative society must reasonably appreciate to get this information.

Hence, the existence of external owners would lead to a type of behaviour other than in traditional co-operatives, viz. market-oriented business, with ROI as the ultimate objective. The fact that there is still a co-operative society with producers as members does give some restrictions to the *range of market opportunities* looked at. For example, products with no or little contents from the farmers' commodities are not likely.

The two main differences in comparison to a traditional co-operative is that an external-investor co-operative has more capital and a more profit-oriented attitude towards business. These two factors mean that the external-investor co-operative can invest in more advanced production and marketing, working with *highly processed and even value-added products* and reaching out for the often *turbulent consumer markets.* Expansion becomes an important goal, i.e., the strategy is offensive. In Michael Porter's (1980) terminology, the strategy chosen is *differentiation.* (See Table 4)

The literature specifically on external-investor co-operatives is next to non-existent. Nevertheless, there would be a large variety of theories to explain these co-operative models. *Property rights and agency theories* were suggested above. The rationale behind these co-operative forms is partly the same as in the traditional co-operative case, i.e., to reap *economies of scale,* but to explain the forward integration, the *transaction cost theory* is more instrumental.

4.2. Member-investor co-operatives

In the two member-investor co-operative types, NGCs and PLCs, the members own shares that are tradable, negotiable and appreciable. This means that the property rights problems are small, provided that the market for shares can be made to function properly. No member has a chance of being a free-rider at the expense of the others. All investments are capitalised into the value of the shares, which solves the horizon problem. The portfolio problem gets an effective solution as the co-operative's members become not only patrons but also investors. The decision-maker and the follow-up problems are less serious as the members have an incentive to keep a close eye on the management.

The literature on NGCs has during a few years become extensive and is expanding rapidly (e.g. Hackman & Cook 1997; Zeuli 1998), while literature on PLC co-operatives is more scarce (Harte 1997; Gunnarsson 1999). Nevertheless, it is possible to discern some theoretical tools used to understand these organisational forms. Member-investor co-operatives are clear-cut examples of vertical integration like so often in business, and hence *transaction cost theory* is self-evident (Williamson 1985). *Property rights and agency theory* was already mentioned. As these co-operatives' competitive edge is not in creating large scale and low average costs, the *neo-classical and game-theoretical theories* cannot serve as economic-theoretical rationales like they do for traditional co-operatives. The member-investor co-operatives cannot be suc-

cessful through economies of scale but rather *economies of scope,* creating vertical chains where each processing stage is perfectly linked to all others.

As the investors comprise (almost) exclusively members, the amount of capital is rather limited, though larger than a corresponding traditional co-operative. In member-investor co-operatives the members' investments are truly risk capital, and hence, they are willing to invest larger amounts. As the investments are made for a very specified purpose, a *focus strategy* is applied (See Table 4). Instead of volume these co-operatives are heading for *highly processed, preferably unique products.* In order to reduce the high risk exposure, these co-operatives have *highly professional managers* and use an *advanced technology.*

The objective of the firm can be understood as the aim to maximise the value of the members' combined assets in their own farm enterprise and their shares in the co-operative. Hence, the members' two *roles as patrons and investors* are of equal importance, whereby also the members forward *market signals* to the co-operative in both roles. In their investor role they have an interest in the co-operative to be *market-oriented, profitable, offensive and expanding.*

5. AGRICULTURAL CO-OPERATIVES IN THE FUTURE?

The future of European agricultural co-operatives will be varied given that the present trends towards still more open markets with still more intense competition continues (Cook 1995; Ollila & Nilsson 1997; Rogers 1997). Of course, forecasts are always uncertain – the only certain forecast is that the present structure with a dominant group of traditional co-operatives will not proceed.

> Existing farmers' co-operatives have a long tradition of treating their members equally, but this may hinder making certain arrangements for subgroups of their members, such as Efficient Consumer Response Arrangements with retailers, in which only members with advanced facilities and superior production processes can participate. ... Another drawback of co-operatives is that their locus of power (and perspective), even if they have integrated processing and distributing facilities, is close to primary production and far moved from the market. This does not make them very suitable for taking the guiding role in an AVAP (Agrifood Value-Added Partnership) the very purpose of which is to derive competitive advantage from adding those values that consumers want. (Wierenga 1997, pp. 52–53)

Various entrepreneurial co-operatives in the agribusiness sector are likely to be established during many years to come. These will exhibit a still more heterogeneous pattern, working in a variety of industries and being organised in many different ways. In terms of turnover the external-

investor co-operatives will be by far the most dominating though their number will not be very large. The number of member-investor co-operatives will become much larger but as they are devoted to focused activities mainly on market niches their aggregate turnover will be limited.

Even though the trend towards more entrepreneurial co-operatives can be expected to last the traditional co-operative model will not disappear. On the contrary, there will always be economic rationales for a business form that is constructed in order to attain considerable economies of scale in the collection and primary processing of agricultural raw products. The ongoing process of mergers and acquisitions will lead to extremely large co-operatives of the traditional type, resulting in pan-European enterprises.

It is, however, probable that the traditional co-operatives will more and more establish subsidiaries together with external capital owners, thereby contributing to the growth of entrepreneurial co-operatives. These subsidiaries will take care of the value-added operations. In a lesser degree the traditional co-operatives may let some branches be run within firms that have resemblance to member-investor firms.

Not many of the existing agricultural co-operatives could be expected to transform themselves into a member-investor co-operative. The number of such co-operatives will increase markedly, but then as the result of new establishments. Groups of non-members as well as members of existing co-operatives will find that they can make money by focusing on a specific market niche. The extent of such NGCs and PLC co-operatives is highly contingent upon whether the existing co-operatives are able to exploit the market opportunities appropriately.

While the process of transition from traditional to entrepreneurial co-operatives may be rapid in the near future, there is still considerable hesitation within many traditional co-operatives. A plausible explanation is the very characteristics of the traditional co-operative model – these may lead to some change resistance. To the extent that a traditionally organised co-operative has already tried to go value-added within its existing organisational model, the property rights problems may have become so grave that change initiatives have poor prospects – due to low member involvement the members might regard the co-operative as an external trading partner, or the management has taken control and it has an interest in maintaining the status quo, or a strong ideological conviction may prohibit any change action, or having no or small investments in the co-operative the members do not feel any responsibility, or a large amount of unallocated capital may give a false sense of security.

Many traditional co-operatives may be too late in restructuring themselves whereby they will run into economic difficulties. The outcome will, however, seldom be cessation of operations and dissolution of the co-operative, but rather these co-operatives are taken over by other co-operatives that have conducted their transformation on time – also take-over bids by investor-owned processors are possible. ■

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