

FARMERS' COOPERATIVES IN THE EU: POLICIES, STRATEGIES, AND ORGANIZATION

by

Jos BIJMAN*

Wageningen University, The Netherlands

and

Constantine ILIOPOULOS

Agricultural University of Athens, Greece

ABSTRACT: *The importance of cooperatives for European farmers has often been claimed but empirical studies to support this claim are scarce. This special issue presents a number of articles on the recent development and status of agricultural cooperatives in the European Union, based on original data collected in the EU-wide study 'Support for Farmers' Cooperatives'. The articles focus on trends in the internal organization, the institutional environment, and the strategies that cooperatives have developed in supply chains and markets. This introductory article presents data on the market shares that cooperatives hold in different sectors and countries, and introduces the three key determinants of performance of cooperatives: policies, strategies and internal organization. Finally, the article develops a future research agenda.*

Keywords: market shares, agricultural cooperatives, internal governance, public policies, marketing strategies

Agrargenossenschaften in der EU: Grundsätze, Strategien und Organisation

Die Bedeutung von Genossenschaften für europäische Bauern ist oft proklamiert worden, fand aber selten Unterstützung durch empirische Belege. Diese Sonderausgabe präsentiert eine Reihe von Beiträgen über die jüngste Entwicklung und den Status von Agrargenossenschaften in der Europäischen Union, basierend auf Originaldaten, die in der EU-weiten Studie „Support for Farmers' Cooperatives“ zusammengetragen wurden. Die Beiträge fokussieren auf Trends bei der internen Organisation, dem institutionellen Umfeld und den Strategien, die Genossenschaften in Lieferketten und Märkten entwickelt haben. Dieser Einführungsbeitrag präsentiert Daten über die Marktanteile der Genossenschaften in verschiedenen Sektoren und Ländern und stellt die drei

*The articles in this special issue of APCE are based on results from the project 'Support for Farmers' Cooperatives (SFC)' which was financed by the European Parliament and managed by the European Commission, DG Agriculture and Rural Development (Contract Number: 30-CE-0395921/00-42). The authors gratefully acknowledge this financial support. We also thank all national experts for their great contribution to the SFC project. E-mail: jos.bijman@wur.nl; iliopoulosc@agreri.gr

Determinanten der Performance von Genossenschaften vor: Grundsätze (policies), Strategien und interne Organisation. Am Ende des Beitrags wird eine Agenda für künftige Forschung entwickelt.

Cooperativas agrícolas en la UE: Políticas, estrategias y organización

La importancia de las cooperativas para los agricultores europeos ha sido reivindicada frecuentemente, pero raramente ha sido contrastada empíricamente. Este número especial presenta algunos artículos relativos a recientes desarrollos sobre el estatuto de las cooperativas agrícolas en la Unión Europea, basados en datos originales obtenidos en el marco del estudio europeo "Support for Farmers' Cooperatives". Estos artículos tratan principalmente de las tendencias en la organización interna, el entorno institucional y las estrategias desarrolladas por las cooperativas en las cadenas de aprovisionamiento y en los mercados. Este artículo introductorio presenta datos sobre las cuotas de mercado que las cooperativas detentan en diferentes sectores y países e introduce los tres principales factores determinantes de los resultados de las cooperativas: políticas, estrategias y organización interna. Para concluir, el artículo propone un conjunto de futuras investigaciones.

Coopératives agricoles dans l'UE: Politiques, stratégies et organisation

L'importance des coopératives pour les agriculteurs européens a souvent été prétendue mais rarement étayée par des données empiriques. Ce numéro spécial présente quelques articles traitant des développements récents et du statut des coopératives agricoles dans l'Union européenne, basés sur des données originales collectées dans le cadre de l'étude européenne "Support for Farmers' Cooperatives". Ces articles traitent principalement des tendances dans l'organisation interne, l'environnement institutionnel, et les stratégies développées par les coopératives dans les chaînes d'approvisionnement et les marchés. Cet article introductif présente des données sur les parts de marché que les coopératives détiennent dans différents secteurs et pays et introduit les trois facteurs déterminants principaux de la performance des coopératives : politiques, stratégies et organisation interne. Pour conclure l'article propose un cahier de recherches futures.

1 Introduction

Throughout the world, cooperatives are and for a long time have been important institutions for strengthening the economic position of farmers. They are engaged in collective bargaining with sellers of farm inputs or buyers of farm outputs. In recent decades, the concentration among food retailers has reinforced the need for farmers to build countervailing power. Another major function of cooperatives relates to the reduction of transaction costs in the sales relationship between farmers and their customers. As quality control and quality assurance have become increasingly important, due to more strict public and private requirements, cooperatives also perform the role of coordinator in guaranteeing high quality in the supply chain.

Cooperatives have a long history in the European Union (EU), often going back to the 19th century, when many countries developed cooperative legislation. Over the years, legislation has been adjusted to new developments, but the basic principles are still the same. Cooperatives continue to be voluntary, member-based organizations with democratic decision-making structures, and embedded in local communities. Despite these common principles, there are major differences among countries and sectors within Europe, partly due to the characteristics of products and markets, partly due to national or regional differences in regulating cooperatives, and partially due to cultural factors.

Almost 20 years ago, Van Bekkum et al. (1997) published a comprehensive overview of agricultural cooperatives in the EU, including figures on market shares, number of cooperatives and number of members for the main sectors in each country. While rich in data, this publication was mainly descriptive, lacking further analysis. In 2010, Cogeca, the interest organization of agricultural cooperatives in Europe, published a report with data on the number of cooperatives, members and employees in each member state (Cogeca, 2010). As the data was collected from Cogeca member organizations, and each of these national associations of agricultural cooperatives has its own system of collecting and presenting data, it remained difficult to compare the trends among cooperatives in different countries.

The articles presented in this special issue are based on a large EU-wide study on the status and development of agricultural cooperatives in the European Union. This project, named 'Support for Farmers' Cooperatives (SFC)' was funded by the European Parliament and administered by the European Commission, DG Agriculture and Rural Development (Bijman et al. 2012). By collecting data on agricultural cooperatives in all 27 Member States, this project was a unique enterprise that made comparisons among countries, sectors and, in several case studies, individual cooperatives feasible. Cooperative experts from all 27 Member States of the EU collaborated in this project, which resulted in 27 country reports, 8 sector reports, 6 EU-wide synthesis reports, and 34 case studies.¹

The SFC project investigated with many of the internal and external challenges that agricultural cooperatives face nowadays. How cooperatives address challenges in the internal organization as well as competitive pressures from the market strongly affects their short-time success and their long-term viability. Key issues in the internal organization of the cooperative are enhancing member commitment and reducing free riding (Iliopoulos, 2009), as well as developing an internal governance structure that combines member interests with manager entrepreneurship (Bijman et al., 2013). Other organisational issues that have been dealt with in the SFC project are changing financial structures and the rise of hybrid ownership structures, as well as the future of federated cooperative structures.

The articles in this special issue particularly deal with trends in the internal organization of agricultural cooperatives, the institutional environment, and the strategies that cooperatives have developed in supply chains and markets. Some articles analyse issues across countries and sectors, others are case studies of particular countries, regions or even individual cooperatives. While many types of agricultural cooperatives exist in Europe, including rural credit and input supply cooperatives, the focus in this special issue is on marketing cooperatives.

This introductory article presents some of the main findings of the SFC project and positions the individual contributions in the larger academic discourse on strengths and weaknesses of agricultural cooperatives. The structure of the article is as follows. The next section provides a brief overview of the performance of European agricultural cooperatives in terms of market share commanded by cooperatives in each Member State. Subsequently, three sections are devoted to the three main themes of this volume,

1 All reports can be downloaded from: <http://www.wageningenur.nl/en/Expertise-Services/Research-Institutes/lei/show/Support-for-Farmers-Cooperatives.htm>

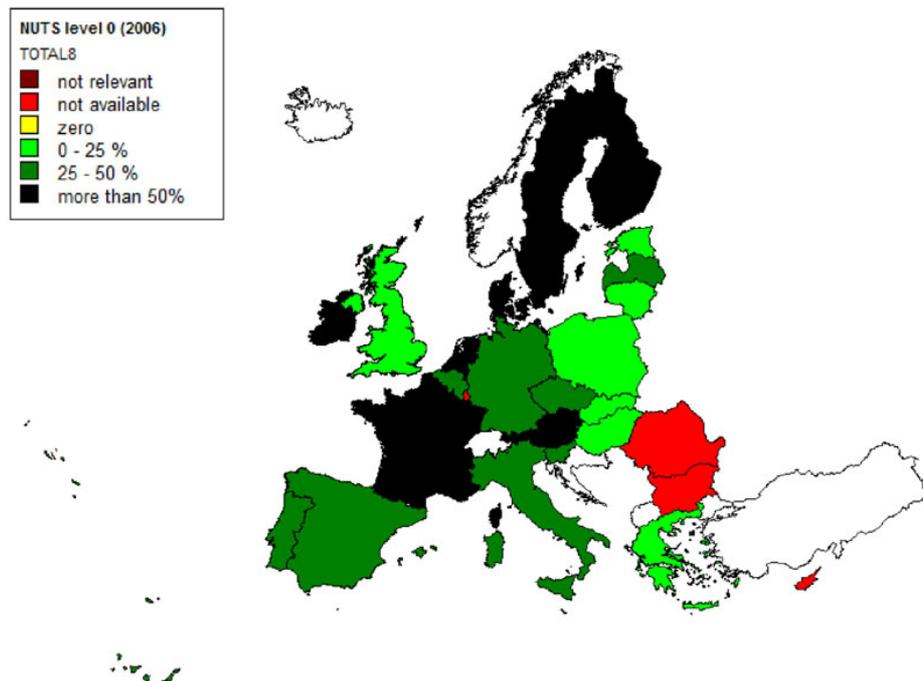


Figure 1 – Share (%) of agricultural products marketed through cooperatives, 2010.

Source: Bijman et al., 2012.

namely, policies targeting agricultural cooperatives, the strategies adopted by these organizations, and the changes observed in the organization of cooperatives during recent decades. The last section concludes the paper and suggests fruitful avenues for future research on agricultural cooperatives.

2 Market shares of agricultural cooperatives

The market share of cooperatives in selling farm products differs substantially among countries and sectors. Figure 1 shows the relative importance of cooperatives in most Member States, based on the ‘SFC Cooperative Index’, which is the estimated market share of all cooperatives at farm gate sales level, weighted for eight sectors (dairy, sugar, cereals, pig meat, sheep meat, wine, olives and olive oil, and fruit & vegetables). Cooperatives have a high market share in the Scandinavian countries (Denmark, Finland, Sweden), Ireland, The Netherlands, France and Austria (all with a market share of more than 50%). In Spain, Belgium and Germany, the market share of cooperatives is between 40 and 50%. In other countries it is much lower, while for Romania, Bulgaria, Luxembourg and Cyprus no reliable data were available.

The average market share of all agricultural cooperatives in the EU is 40%. Figure 2 shows the differences among sectors. An explanation for these differences can be found in the characteristics of the product and the production process. For instance, in the dairy and Fruit & Vegetables (F&V) sectors cooperatives have a large market share because the perishability of the product leads to high transaction costs related to trading this product. A similar argument can be put forward for wine, while also economies of scale are important for processing of grapes, olive oil and milk. In the meat sectors, like mutton and pork, the animals are often sold under contracts to traders or non-cooperative slaughterhouses. However, in several Nordic countries, notably

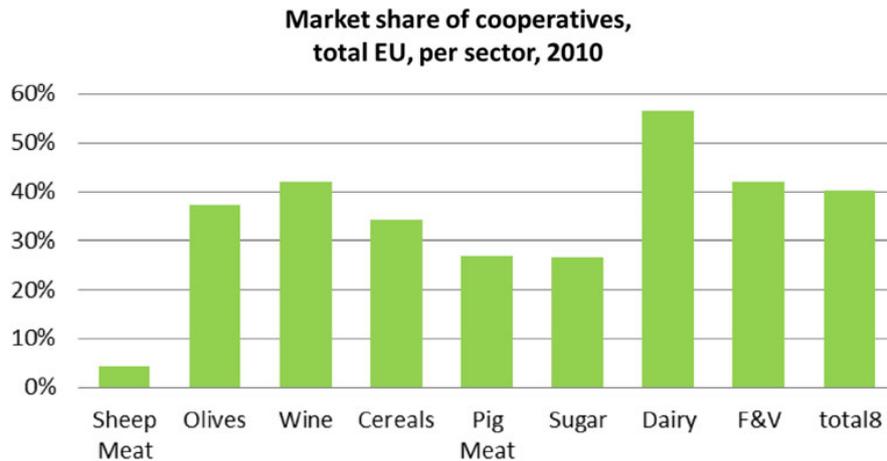


Figure 2 – Market share of cooperatives per sector, for EU as a whole.

Source: Bijman et al., 2012.

Denmark and Finland, cooperatives have a long tradition in slaughtering and continue to have substantial market shares.

Market share is a useful indicator of cooperatives' success. A higher market share shows that cooperatives are able to successfully compete with investor-owned companies. As cooperatives are meant to provide farmers with economic benefits that they would not obtain without being collective action, a key question is whether strong cooperatives are able to generate higher prices for farmers (next to other economic benefits). This question can be answered affirmatively, at least for the dairy sector. Hanisch et al. (2013) found that in countries where dairy cooperatives have a large market share the average milk price (thus, the average of prices members and non-members receive) is higher than in countries where dairy cooperatives have a lower market share. This result confirms the competitive yardstick theory (Nourse, 1922), which claims that cooperatives improve competition and thereby generate significant benefits for both members and non-members.

Differences in market shares and membership rates among countries and sectors cannot be explained by reference to the type of product alone. Gijssels and Bussels (2014, this issue) explore the social and historical determinants of membership in agricultural cooperative across Europe. The authors use the cultural dimensions developed by Hofstede et al. (2010) and correlate them with cooperative membership. In addition, they explored the impact of social capital indicators, and found that these significantly affect membership. Also historical experiences, such as those in the Central and Eastern European countries, are determining factors (see also the article by Hagedorn, 2014, this issue). Gijssels and Bussels (2014) show that trust is a crucial factor for cooperatives to thrive, but they also indicate that many contingent factors determine the attractiveness of cooperatives to farmers.

3 Policies

While culture and historical experiences are relevant for the development of cooperatives, another element of the institutional environment may be even more important. This element is the impact of the state in its role as regulator and supporter of

cooperatives. But how important is this role? There is no easy answer to this question (Iliopoulos, 2013). In most EU Member States, special legislation exists for registering, regulating or even promoting cooperatives. As cooperatives are a legal business organization, they are also subject to laws and regulations that apply to other types of companies. In addition, in many countries cooperatives are treated as social economy organizations providing wider social benefits than just economic gains for their members, which justifies special public support.

Legal treatment of cooperatives in the EU ranges from no special cooperative legislation in Denmark and the UK to explicit reference to cooperatives in the Constitution of Italy, Spain, Portugal, Greece, and Hungary. This constitutional umbrella is related to the social or mutual functions that are ascribed to the cooperative.

Brusselaers et al. (2014, this issue) show that countries differ substantially in the type and number of policies directly targeting cooperatives. In presenting and discussing the policies for cooperatives, the authors differentiate among mandates, inducements, capacity building and system transformation. They also distinguish three types of policy objectives: correcting market failure, correcting state failure, and improving the social and equity position of particular groups in society. Finally, they explore the relationship between the number and type of policies with the strength of cooperatives in the domestic markets.

While it is not unambiguously clear what policies work best in supporting cooperatives, the EU policies on promoting Producer Organizations (POs) in the Fruit and Vegetables (F&V) sector has been quite effective in strengthening collective marketing. As POs usually take the legal form of a cooperative, it has been shown that a larger share of F&V is now sold through cooperatives than before the legislation was introduced (Bijman, 2012). This positive result in the F&V sector has been one of the reasons behind the EU's decision to extend PO legislation to other sectors; first to the dairy sector in 2012 and since 2014 also to other sectors, although without the financial support available for POs in the F&V sector.

From a different perspective, Hagedorn (2014, this issue) also deals with the impact of regulation and policies on cooperative development. The geographical focus in his article is on Central and Eastern Europe (CEE), where cooperatives have rather different experiences compared to the other parts of Europe. In fact, cooperative development in the CEE countries is determined by recent regulatory initiatives and the experiences of the pre-communist and communist eras. Those historical experiences determine different outcomes in each of the CEE countries. Still, Hagedorn finds commonalities in cooperative development among several CEE countries. While in the other parts of the EU many cooperatives grow and prosper without much support from governments, in the CEE countries public policies on rural development still make a difference.

4 Strategies

What should be the key functions of a cooperative, particularly a marketing cooperative? Should the cooperative be a bargaining organization that represents a form of horizontal integration or is it better to adopt vertical integration strategies (i.e., collecting and primary processing of farm products that are then sold to the non-cooperative food industry)? Or should cooperatives become producers of final consumer goods and

sellers of branded food products? Reorientation in European agricultural policies and concentration processes in food retail have forced agricultural cooperatives, over the last 20 years, to reconsider their main strategies and adjust their structures (Nilsson and Van Dijk, 1997; Nilsson and Ollila, 2009).

In strategic management studies, the famous motto of the American business historian Alfred Chandler (1972), 'structure follows strategy', is still dominant and seems also applicable to cooperatives. Strategic choices as to growth and internationalisation as well as product development and marketing have often led to specific demands on the structure of the organization. Both the internal governance structure (i.e., the allocation of decision rights to various internal stakeholders) and the ownership structure may have to be adjusted in order to strengthen the competitiveness of the cooperative.

Höhler and Kühl (2014, this issue) present data on the strategic choices of European cooperatives and discuss the motives behind these choices. The authors adopt a combined strategic management and supply chain management approach and show that the major functions of the cooperative depend on the strategic choice as to the preferred position of the cooperative in the supply chain. While most cooperatives, over the years, have added functions more downstream in the supply chain, such as secondary processing and wholesaling (in order to become preferred suppliers of supermarkets), a substantial share of cooperatives still remains mainly bargaining organizations.

When a cooperative has chosen a strategy of selling final consumer products, it is more likely to seek expansion. Growth has always been an important part of cooperatives' strategy, primarily intended to reduce costs when new handling and processing technologies became available. Nowadays growth is needed for two additional reasons. One is the need to have bargaining power when negotiating with large retail companies. As supermarkets in Europe procure their products through only 15 purchasing desks, their market power is substantial (Clarke et al., 2002). The second reason for growth are the high investments needed in innovation, product development and marketing of consumer products.

Van der Krogt et al. (2007) have shown that Chandler is only partly right, as the strategy of the cooperative also 'follows' its structure, particularly its feature of being a member-based organization. Being a cooperative influences the type of growth strategy a company in the food industry follows. While IOFs often expand through acquisitions and participations, cooperatives favour mergers, collaborative arrangements and joint ventures. The authors explain this cooperative preference on the basis of risk aversion and equity capital constraints, which are both higher for cooperatives compared to IOFs. Structure also influences the product portfolio. Hendrikse and Van Oijen (2004) showed that cooperatives are experiencing a single-origin constraint, which means that they are more likely to focus on one type of raw material than IOFs in the same industry. In other words, due to their member orientation and therefore their dedication to the members' products, cooperatives are less diversified compared to IOFs in the same industry.

While being member-oriented, cooperatives often also have a local or regional function. As many cooperatives have originally been established as community-based enterprises, and in many countries continue to perform functions for the community, there is a strong linkage between a cooperative and its geographical base. In France, this linkage of the business to a specific territory is even part of cooperative legislation, which allows cooperatives to operate within specific geographical boundaries. Filippi

(2014, this issue) discusses the advantages and disadvantages of localization. On the basis of a number of case studies she shows that French cooperatives have been able to turn a strategic constraint into a competitive advantage, by enhancing the value of local resources, creating more mutuality among members and thereby strengthening member commitment, and building supply chains that directly link consumers to producers.

Another case study on regional embeddedness is from Spain (Giagnacavo et al., 2014, this issue). In presenting and discussing the development of cooperatives in two important Spanish regions for the production of F&V, they show that cooperatives can successfully apply different structures of inter-cooperative collaboration. Both in Valencia and Almería, cooperatives have functioned as local innovators and have been central to harness, guide and leverage the strengths and capacity of their local economies in response to various endogenous and exogenous challenges. However, in Valencia the local citrus cooperatives built a strong federated cooperative (Anecoop) for processing and marketing, while the local cooperatives in Almeria themselves invested in packaging facilities, either individually or with one two other cooperatives.

5 Organization

As Dunn (1988) has argued, the relationship between members and the cooperative consists of three elements: a benefit, an ownership and a control element. Over the last decades, changes have been taking place in all three elements of the member-cooperative relationship. As these elements are parts of a system, in other words as there are complementarities, changes in one element have implication for changes in the other elements.

Recent research on the organisational structure of agricultural cooperatives has focussed on the ownership relationship between members and the cooperative. Nilsson (1999) and Chaddad and Cook (2004) have shown that cooperatives develop new ownership relations with their members or even with outside investors. These hybrid ownership structures have become more and more popular, particularly for cooperatives following internationalization strategies. However, not all countries allow such new financial structures for cooperatives. Within Europe, several countries are experimenting with hybrid ownership structures for agricultural cooperatives (Van der Sangen, 2012). In seven Member States (Belgium, Bulgaria, Cyprus, Estonia, Portugal, Romania and Slovakia) outside investors are not allowed to participate in the equity capital of the cooperative. In all other EU countries outsiders could provide equity capital, but in most countries they are not likely to do so because they are not allowed to have voting rights (such as in Finland, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia, Sweden and the UK). There are, however, different ways of getting around this ban on voting rights in the cooperative. Most common is the introduction of a legal separation between association and enterprise, which allows outside investors with minority shares in the enterprise while the association maintains the majority share.

Besides changing the allocation of residual claims, cooperatives are also changing the allocation of decision rights (Bijman et al., 2013; Chaddad and Iliopoulos, 2013). This re-allocation of decision rights is related to the reorganisation of the ownership structure, but there are other reasons why cooperatives make these changes. Agricultural cooperatives have introduced innovative internal governance models in response

to changes in the competitive environment and sometimes to changes in legal environment, particularly related to liability. In order to develop appropriate strategic and tactic responses to market liberalization, globalization, changing consumer preferences, and enhanced vertical and horizontal competition, cooperatives strengthen the autonomy of the management, reduce member influence on operational decisions, find new sources of equity capital, and professionalize the supervisory bodies. In other words, strategic re-orientation towards more customer focus, diversification and innovation has led to changes in the decision-making structure and process (Bijman, 2010).

Bijman et al. (2014, this issue) describe and explain the changes in internal governance in agricultural cooperatives in the EU. They find and discuss a number of innovations in internal governance, which can be found in most but not all EU Member States. As the title of their contribution suggests, the authors argue that these innovations may entail a shift in control from members to managers. At the level of the organization, such changes are a rather gradual process, and it is difficult to pinpoint at one particular moment in time where this shift in control takes place. Only when shifts coincide with changes in legislation (such as in The Netherlands and Italy), clear choices between different board models can be distinguished.

One of the largest intra-organisational challenges for any collective action organization is to keep members committed, and more specifically to prevent free riding behaviour (Iliopoulos, 2009). Ostrom (1990) has developed a number of organisational design principles that can reduce opportunistic behaviour. However, in a situation where these principles cannot easily be met, (temporary) state intervention may be justified in order to obtain the benefits of collective action. The article by Iliopoulos and Theodorakopoulou (2014, this issue) shows that the statutory obligation of all wine growers in a particular region or on a particular island of Greece to become member of a cooperative and deliver the majority of their grapes to the cooperative has been beneficial to the growth of those cooperatives. Thanks to this mandatory status cooperatives have been able to build up solid market positions. However, the European Commission has challenged the Greek law on mandatory cooperatives. The article by Iliopoulos and Theodorakopoulou presents the case of Santo Wines, which shows that abolition of mandatory membership may not pose serious problems because the combination of current success and applying Ostrom's organisational principles fosters continued member commitment.

6 Future research

The articles in this special issue cover most of the current academic debates on cooperatives, such as the role of public policies in supporting cooperatives, the interaction between strategy and structure, the opportunities and threats local and regional embeddedness pose for growth of the cooperatives, and the changes in internal governance structures, including professionalization of the management and supervisory bodies. Future research on the conditions for and characteristics of agricultural cooperatives to perform well could focus on the following topics.

First, cooperatives are not the only type of collective action organization. Farmers in several EU Member States (and also outside the EU) are experimenting with other types of farmer-owned businesses. The SFC project found that farmers, particularly in

CEE countries, often prefer to use different legal business forms for jointly selling their products. Due to diverging definitions, there is no good overview of the number and types of other farmer-owned businesses.

Second, in all EU Member States we find cooperatives experimenting with new governance structures and ownership models. These changes in internal governance seem to reflect the evolution of the cooperative firm towards a more independent organization. Thus, a key question is how and to what extent the control and ownership relationship between members and cooperative can be adjusted to allow for a more entrepreneurial cooperative firm without losing the member-orientation.

Third, member commitment continues to be a crucial element for cooperatives to thrive. The challenge is not just to reduce free rider behaviour, but to induce a willingness to invest, to participate in decision-making and to maintain loyalty in the transaction relationship. Recent research in organisational behaviour has shown that member commitment has multiple attributes, some of which are determined by culture, but others are within the sphere of influence of directors and managers (Klein et al., 2009).

Fourth, the combination of social, political and economic functions in one cooperative organization, which has always been the tradition in Southern European countries, becomes more challenging when competitive conditions press the cooperative to become larger, diversify and/or go international. Can cooperatives continue to combine social with economic objectives, or is there a threshold beyond which the organization has to make a choice? What does the choice between single purpose and multipurpose organization imply for local and regional legitimacy, competitive position, member commitment, and growth opportunities?

Fifth, a research topic that has received increasing attention from policy makers and therefore deserves scholarly investigation is the role of agricultural cooperatives and other forms of agricultural collective entrepreneurship in supporting small family farms. While several theoretical approaches seem to agree on the crucial role agricultural cooperatives play in this respect, little empirical work has explored this issue.

Finally, cooperatives may hold different positions in the supply chain, ranging from only bargaining to producing final food products. Depending on the type of product (e.g. fresh or processed) these options are further apart or can easily be combined. The question of what is best for its members is also one of strategic management: in what market does the cooperative have a competitive advantage and how can it further develop and benefit from its core resources? Here, strategy also links to public policy, as the new EU policy on the Common Market Organization supports the establishment of producer organizations as bargaining organizations.

REFERENCES

- BIJMAN J., 2010, Agricultural cooperatives and market orientation: a challenging combination? in A. Lindgreen, M. Hingley, D. Harness, and P. Custance, eds, *Market Orientation: Transforming Food and Agribusiness Around the Customer*, Gower Publishing: Aldershot, pp. 119–136.

- BIJMAN J., 2012, *Support for Farmers' Cooperatives: Sector Report Fruit and Vegetables*, Wageningen UR: Wageningen.
- BIJMAN J. and ILIOPOULOS C., 2014, 'Farmers' cooperatives in the EU: policies, strategies, and organization', *Annals of Public and Cooperative Economics*, 85(4), 497–508.
- BIJMAN J., HANISCH M. and VAN DER SANGEN G., 2014, 'Shifting control? The changes of internal governance in agricultural cooperatives in the EU', *Annals of Public and Cooperative Economics*, 85(4), 641–661.
- BIJMAN J., HENDRIKSE G. and VAN OIJEN A., 2013, 'Accommodating two worlds in one organisation: changing board models in agricultural cooperatives', *Managerial and Decision Economics*, 34(3–5), 204–217.
- BIJMAN J., ILIOPOULOS C., POPPE K. J., GIJSELINCKX C., HAGEDORN K., HANISCH M., HENDRIKSE G. W. J., KÜHL R., OLLILA P., PYYKKÖNEN P. and SANGEN G. V. D., 2012, *Support for Farmers' Cooperatives: final report*. Wageningen UR: Wageningen, The Netherlands, p. 127.
- BRUSSELAERS J., POPPE K. and GARCIA-AZCARATE T., 2014, 'Do policy measures impact the position and performance of farmers' cooperatives in the EU?' *Annals of Public and Cooperative Economics*, 85(4), 531–553.
- CHADDAD F. and ILIOPOULOS C., 2013, 'Control rights, governance, and the costs of ownership in agricultural cooperatives', *Agribusiness*, 29(1), 3–22.
- CHADDAD F. R. and COOK M. L., 2004, 'Understanding new cooperative models: an ownership-control rights typology', *Review of Agricultural Economics*, 26(3), 348–360.
- CHANDLER A. D., 1972, *Strategy and Structure : Chapters in the History of the Industrial Enterprise*, MIT Press: Cambridge, MA.
- CLARKE R., DAVIES S., DOBSON P. and WATERSON M., 2002, *Buyer Power and Competition in European Food Retailing*, Edward Elgar: Cheltenham.
- COGECA, 2010, *Agricultural Cooperatives in Europe. Main issues and trends*. Brussels.
- DUNN J. R., 1988, 'Basic cooperative principles and their relationship to selected practices', *Journal of Agricultural Cooperation*, 3, 83–93.
- FILIPPI M., 2014, 'Using the regional advantage: French agricultural cooperatives' economic and governance tool', *Annals of Public and Cooperative Economics*, 85(4), 597–615.
- GIAGNOCAVO C., GEREZ S. and CAMPOS I CLIMENT V., 2014, 'Paths to cooperative survival: structure, strategy and regeneration of fruit and vegetables cooperatives in Almería and Valencia, Spain', *Annals of Public and Cooperative Economics*, 85(4), 617–639.
- GIJSELINCKX C. and BUSSELS M., 2014, 'Farmers' cooperatives in Europe: social and historical determinants of cooperative membership in agriculture', *Annals of Public and Cooperative Economics*, 85(4), 509–530.
- HAGEDORN K., 2014, 'Post-socialist farmers' cooperatives in Central and Eastern Europe', *Annals of Public and Cooperative Economics*, 85(4), 555–577.

- HANISCH M., ROMMEL J. and MÜLLER M., 2013, The cooperative yardstick revisited: panel evidence from the European dairy sectors. *Journal of Agricultural & Food Industrial Organization*. p. 151.
- HENDRIKSE G. W. J. and OIJEN A. A. C. J. V., 2004, 'Diversification and corporate governance', in G. W. J. Hendrikse, ed., *Restructuring Agricultural Cooperatives* Erasmus University Rotterdam: Rotterdam School of Management: Rotterdam, pp. 51–64.
- HOFSTEDE G., HOFSTEDE G. J. and MINKOV M., 2010, *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and its Importance for Survival*, McGraw-Hill: New York, N.Y.
- HÖHLER J. and KÜHL R., 2014, 'Position and performance of farmer cooperatives in the food supply chain of the EU-27', *Annals of Public and Cooperative Economics*, 85(4), 579–595.
- ILIOPOULOS C., 2013, 'Public policy support for agricultural cooperatives: an organizational economics approach', *Annals of Public and Cooperative Economics*, 84(3), 241–252.
- ILIOPOULOS C., 2009, 'The evolution of solutions to the free rider problem in US agricultural bargaining cooperatives', in A. N. Rezitis, ed., *Research Topics in Agricultural and Applied Economics*, pp. 77–94. Bentham Science Publishers.
- ILIOPOULOS C. and THEODORAKOPOULOU I., 2014, 'Mandatory cooperatives and the free rider problem: the case of Santo wines in Santorini, Greece', *Annals of Public and Cooperative Economics*, 85(4), 663–681.
- KLEIN H. J., BECKER T. E. and MEYER J. P., eds, 2009, *Commitment in Organizations: Accumulated Wisdom and New Directions*, New York, N.Y., [etc.], Routledge.
- KROGT D. V. D., NILSSON J. and HØST V., 2007, 'The impact of cooperatives' risk aversion and equity capital constraints on their inter-firm consolidation and collaboration strategies - with an empirical study of the European dairy industry', *Agribusiness*, 23(4), 453–472.
- NILSSON J., 1999, 'Co-operative organisational models as reflections of the business environments', *Finnish Journal of Business Economics*, 4, 449–470.
- NILSSON J. and DIJK G. V. eds., 1997, *Strategies and Structure in the Agro-Food Industries*, Assen, Van Gorcum.
- NILSSON J. and OLLILA P., 2009, 'Strategies and structures in the European dairy co-operative industry', *Journal of Co-operative Studies*, 42(2), 14–23.
- NOURSE E. G., 1922, 'The economic philosophy of co-operation', *The American Economic Review*, 12(4), 577–597.
- OSTROM E., 1990, *Governing the Commons: the Evolution of Institutions for Collective Action*, Cambridge University Press: Cambridge.
- VAN BEKKUM O. F., VAN DIJK G. and VAN BOEKEL P., 1997, *Agricultural Cooperatives in the European Union: Trends and Issues on the Eve of the 21st Century*, Van Gorcum: Assen.
- VAN DER SANGEN G., 2012, Support for Farmers' Cooperatives: EU synthesis and comparative analysis report legal aspects, Wageningen UR: Wageningen.