Adaptation strategies for the Greek agricultural cooperatives during the economic crisis

ACHILLEAS KONTOGEORGOS¹, Fotios CHATZITHEODORIDIS², Efstratios LOIZOU²

¹Department of Business Administration of Food and Agricultural Enterprises, University of Patras, Agrinio, Greece

²Department of Agricultural Technology, Division of Agricultural Economics, Technological Education Institute of Western Macedonia, Florina, Greece

Abstract: Because of the Greek economic crisis, almost all businesses are facing difficult times with severe consequences for employment and the whole economy. Responding to the economic crisis, the companies cut off investments, wages and reduced personnel. However, the companies have to adapt their business strategies to cope with the crisis. This paper conducts a strategic assessment of the Greek agricultural cooperatives during the first half of 2013 using in-depth interviews with cooperative executives in order to illustrate how they have responded to the crisis and also to investigate their strategic options for the upcoming period. The results of the analysis show that agricultural cooperatives have chosen the retrenchment and cost-cutting strategies by restraining their activities while they appear eager to export their production. In addition, the cash shortage forced them to count exclusively on their members to finance any new economic activity. According to the cooperatives' executives, their adaption strategies exclude abandoning the activities and selling the equipment and their real estate properties, while they involve exports, the experienced personnel and marketing investments. These results could provide helpful directions not only for the agricultural cooperatives' management boards but also for the food industry businesses operating under a severe economic situation such as the present Greek economic crisis.

Keywords: investments, liquidity, resilience, strategic management

The Greek economic crisis continues to be a severe shock to most enterprises. The initial economic downturn has affected almost all sectors of the economy. The recent data report that the deficit of Greece is 10.8% of the GNP and the public debt 367.3% billion. The recession at 2011 had to do with the decrease of investments about 20% and the unemployment decrease in the first semester of 2012 has been about 22.6%. Even more, all the sectors of the economy have been affected by the economic crisis (Bourletidis 2013). One severe consequence for the enterprises is the cash shortage in the market. Responding to this situation, the companies cut off their investments, wages and reduced the personnel. On the other hand, the high rate of unemployment reduced the workers' income resulting in a dramatic reduction of consumption. The whole situation simply feeds a recession cycle that cannot break without a radical economic reform for the whole country and its economic activities. Nevertheless, the businesses have to adapt their strategies in response to the economic crisis in order firstly to cope with

the crisis and secondly to lead the whole economy to the post – crisis era.

According to Sternad (2012), major economic crises and changing environments can pose constraints as well as create opportunities for the organizations. Economic crises are environments which are both uncertain and complex, and in which the individuals' limited cognitive abilities and processing capacities make a full understanding of all involved factors and the relationship between them virtually impossible (Frishammar 2006). Miller et al. (1996), claims that crisis situations such as a sudden decline in demand, the subsequent cash shortages, and falling short of the targeted performance levels lead to a need to broaden the strategic repertoire of managers as the success recipes of the past may no longer lead to the desired outcomes.

Thus, a strategic adaptation is necessary to create and maintain value in an organization in the face of the changing environmental conditions. Strategic adaptation is the process by which the management actively aligns the organization to

the changing environment through setting actions which involve high resource commitments and affect the organization's overall scope and direction (Sternad 2011). However, the strategic options that a company can pursue in order to adapt to a changing environment are restricted (a) by the material capacity of a firm – i.e. the resources it owns or is able to acquire as well as the number of different uses of these resources, (b) by the latitude of experimentation, which in turn is influenced by a constant pressure on the short-term performance, leaving less managerial capacity for strategic thinking, and (c) by the extent of the financial risk the managers are allowed to take (Chakravarthy 1982).

Sternad (2011) summarizes basic tendencies emerging from the studies on strategic responses to economic crises and recession. In general, firms are using a range of (sometimes contradicting) strategic actions in response to an economic crisis, and he concludes that a balanced approach covering both the short-term (cost-) efficiency improvements and the selective market-oriented investments tends to have a higher chance of success, both during as well as after the crisis. In addition, the strategic flexibility, the ability to respond quickly to the changing competitive conditions has a positive influence on business performance after a crisis (Hitt et al. 1998).

It is strongly believed that structure follows strategy (Chandler 1962) and accordingly the guiding principle in the organizational architecture. Correspondingly, the structure of a firm is built as an adaption to the selected strategy. A strategy, in turn, is chosen as the best response to the conditions a firm is faced with, and therefore, a function of the environmental conditions. So, it is assumed that there is a causal relationship leading from the business environment over the strategy to the organizational structure (Beckmann and Armbruster 2010).

Agricultural cooperatives are conditioned not only by the external environment in which they operate but also by a set of internal forces that affect the behaviour of the members and the management of the cooperative. Thus, as the internal and external pressures come to the forefront, cooperatives will have to modify their strategy and/or their structure in order to alleviate the pressures created by the instability and the economic crisis. If cooperatives do not adapt, they risk the loss of the member commitment, a failing market share, an inability to access capital and a decline in the services they can provide (Fulton and Gibbings 2000).

Nevertheless, Toia (2012) claims that cooperatives have proved themselves to be even more resilient in the times of crisis than many conventional enterprises and notes that there is a considerable evidence of this resilience, particularly in relation to the cooperative banks and industrial and service cooperatives (worker cooperatives, social cooperatives and cooperatives formed by the SMEs). Moreover, Roelants et al. (2012) suggest that, although cooperative enterprises have not been spared by the crisis, they have been able to limit the enterprise closures and job losses better than the average business, in some cases even to recover their status of the net job creators, and that they also tend to delay the impact of the crisis. Toia (2012) also expresses the view that this greater resilience is in a large part due to the cooperative model of governance, which is based on the joint ownership and democratic control by their member-stakeholders.

This paper conducts an assessment of the Greek agricultural cooperatives during the first half of 2013 using in-depth interviews with the cooperative executives in order to illustrate their response to the economic crisis and also to investigate their strategic options for the upcoming period. The rest of the paper is divided into four sections. The second section presents briefly some facts on the agricultural cooperatives in Greece. The third section presents the rationale of the methodology, the composition of the questionnaire used and the characteristics of the cooperatives and their executives participating in the study. The fourth section presents the research results, and the fifth discusses the research findings of the strategic assessment and the identification of the strategic actions for the Greek agricultural cooperatives and briefly concludes this study.

AGRICULTURAL COOPERATIVES IN GREECE

In Greece, there are more than 6000 agricultural cooperatives with more than 700 000 members – almost all farmers in Greece are members of at least one cooperative organization. Agricultural cooperatives command significant market shares in the olive oil, table olives, wine, and dairy sectors (Iliopoulos 2012). However, in total, they have only a small contribution to the food sector (almost 8% of the total enterprises). Food sector in Greece stands for approximately 17% of the total number of enterprises, contributes 22% to the total employment and 21% to

the annual turnover of the manufacturing industry (IOBE 2010). The agricultural cooperatives' role is crucial in improving the socio-economic status for their members and the local communities. In addition, Greek agricultural cooperatives have increased the negotiating power of farmers and constitute an important rural development operator as they contribute to the economic viability of rural areas, especially in the less favoured regions of Greece (Theodosiou et al. 2010; Chatzitheodoridis et al. 2013).

However, Sergaki and Semos (2006) report that the average net profit of secondary cooperatives was 420 000 €, while the same figure for the investor-owned firms (IOFs) was 435 000 €. An indicator of their low performance is that many secondary agricultural cooperatives have negative net positions and a low working capital, while their equity capital is either insufficient or not efficiently utilized (Sergaki and Semos 2006; Baourakis et al. 2013). Thus, Greek agricultural cooperatives produce, in total, a limited value for their farmer-members (Iliopoulos 2012). This could be explained by the number of "operationally inactive" agricultural cooperatives.

In fact, many existing cooperatives do not serve any real business purpose, but their existence is justified only on a political basis. In the recent decades, several cooperative leaders have used their position as a first step for a political career in either the national or the EU parliaments (Demakis 2004). In addition, the political intervention toward cooperatives is constant through time. Since the early 1930s, the governments used agricultural cooperatives as a public policy tool to provide the rural credit, to organize agricultural markets, and to politically influence their members (Patronis 2002). The main governmental tool to intervene into agricultural cooperatives affairs was through the cooperative legislation (Karafolas 2005). The experimentation with different legal frameworks and the extensive intervention into the internal organization and business decisions of agricultural cooperatives led these organizations into enormous troubles and debt during the 1980's and 1990's.

The aforementioned political interventions had a negative impact on the cooperatives' positioning and their competitiveness in the market. Even so, agricultural cooperatives have to compete with the private companies (investor-owned firms) that apply sophisticated management strategies and marketing techniques. Only recently (after the mid 1990s) cooperatives in Greece have started systematic efforts to reengineer their organizational structure and

business strategies. Consecutively, many agricultural cooperatives have been involved in the process of food products, and created their own brands. However, their marketing approaches are in general weak, with the products being far less differentiated than those of the large private food firms (Sergaki and Semos 2006; Salavou and Sergaki 2013). In addition, the lack of strategic focus along with a preference for the production-oriented strategies (Kyriakopoulos et al. 2004) made Greek agricultural cooperatives extremely vulnerable (Benos et al. 2007) and incapable to respond to the rapid changes of the markets (Novkovic and Power 2005). This strategic shortage, compared to private firms, is more crucial during the era of the economic crisis.

Thus, it is necessary to carry out a strategic assessment of the agricultural cooperatives in order to determine their reactions to the economic crisis and also to identify their strategic actions for the coming years. Nevertheless, the limited availability of data for the cooperatives' financial profiles and sales makes it crucial to rely on the expert assessments as the only way to obtain an accurate picture of the Greek cooperatives. Hence, an analytical study was accomplished during the first half of 2013 by using the in-depth interviews with cooperative executives.

MATERIALS AND METHODS

The strategic analysis of the Greek agricultural cooperatives during the Greek economic crisis is a subject with no statistical data and previous experience, making a qualitative analysis inevitable. This study by illustrating the current situation aims to identify the alternative strategies that could provide solutions and management directions for the agricultural cooperatives' managers. The analysis is based on the perceptions of the cooperatives' executives and the cooperative management boards' reactions to the economic crisis. An external event can be perceived differently by different managers, and according to the upper echelons theory, the executives' cognitions and perceptions can have an influence on their strategic decision-making tendencies (Hambrick and Mason 1984). Thus, it becomes crucial to take into account the managerial perceptions when investigating how the organizations strategically adapt to economic crises. It is our belief, that such a preliminary research could be useful in reaching conclusions on the adaption strategies for this sector. Formulating alternative

Table 1. The characteristics of the cooperatives' executives

Respondent	Number Position experience (years)		Working experience (years)	Education (1 = basic 9 years, 4 = post-graduate 18 years)	
Members' Board President	6	9.6	18.2	2.8	
General Manager	8	12.3	21.2	3.5	
Production Manager	4	10.3	13.0	3.3	
Economics/Accounting Manager	6	6.3	14.2	2.8	

Source: Research results (2013)

management strategies is a completely subjective issue that requires the analysis of qualitative variables and the subsequent predictions employing an analytical method. Analytical qualitative methods can be used for two main purposes: for the predictive purposes, i.e. extracting information for the future scenarios and for seeking views on a particular topic on which no prior information is available.

In this paper, the in-depth interviews were conducted with the cooperatives executives (general managers, members' board presidents and department directors) in order to depict both the problems faced by the agricultural cooperatives in Greece and the possible strategic adaption. Interviewing is a method of qualitative research in which the researcher asks open-ended questions orally and records the respondents' answers. Interviewing is typically done face-to-face, but this one has been done via telephone. An invitation was send to the cooperatives' executives, firstly through email and afterwards via telephone, in order to participate in this survey. The topics of the interview were announced to the participants two to three weeks before the interview.

The interview was divided into three parts. In the first part, there are the demographic data of the respondents and their cooperative identity. In the second part, there are 2 multi-item questions, one

Table 2. The main activity of agricultural cooperatives whose executives are participating in the survey

Agricultural cooperatives' main activity			
Cereals/Supplies	30		
Fresh Fruit	20		
Olives/Olive oil	15		
Wines	15		
Traditional/Local products/Women cooperatives	15		
Cans (Processed fruits mainly peaches)			

Source: Research results (2013)

concerning the management techniques used by the cooperatives and the second one (a close question using a 7-point Likert scale) dealing with the funding sources of the cooperatives. Both questions are referring to two distinct periods; the first period before 2009 (before crisis) and the second period after 2009 till the spring of 2013. The third part of the interview contained a question about the future strategies and tactics that the cooperatives have to follow to overcome the economic crisis. Moreover, in this part the participants were asked to rank the proposed strategies as the first priority or not. To conclude, there are two main topics that have to be investigated: how the economic crisis has affected agricultural cooperatives, and secondly, which management strategy could help them to overcome the crisis. To sum up, the analysis conducted in this paper is an appropriate qualitative technique to study the current status and to make future proposals for the agricultural cooperatives within the framework of the economic crisis in Greece.

Twenty four people employed in different agricultural cooperatives took part in this study. Their position in the cooperatives' organization is presented in Table 1. It is worth mentioning that general managers of the cooperatives have a greater working experience and the higher education. Moreover, all executives have an important total working experience (more than 13 years) and a considerable experience in their current positions (more than 6 years).

The second characteristic that describes our sample is the cooperatives' main activity. The majority of the agricultural cooperatives in Greece is characterized as multipurpose, that means that they deal with more than one product and activity. Table 2 presents the respondents' answers to the question: "Which is the main activity of your cooperative?" The majority of the respondents are occupied in cooperatives the main activity of which has to do with trading cereals and supplies (without excluding other activities).

The other products are fresh fruit, olives and olive oil, wines, traditional or local products, running mainly by women on the local level and, last but not least, cooperatives from the canning industry. Finally, the vast majority (85%) of the respondents claimed that their agricultural cooperative processes food products.

RESULTS

After examining the characteristics of the participants, the remaining analysis is divided into two parts. In the first part, there is an examination of the selective indicators of the pre-crisis period and during the crisis time, such as: the total turnover, exports, occupation, and occupation types, the number of activities and the investigation about funding opportunities and their accessibility. In the second part, there is an attempt to elicit the executives intentions to confront the crisis period and the most important ones of the after- crisis period. It must be noted that the participants are divided into groups based on the agricultural cooperatives' main activity.

Table 3 presents the trends, as they were observed by the cooperative experts, for a number of selective indicators in comparison between the examined two time-periods. It must be noted that for almost all cooperative activities, there is an increase in their total turnover. At the same time, the cooperatives' executives claim that there is also an increase in their exports. In our opinion, this phenomenon is probably explained by the decrease of the domestic consumption that forced them to seek new markets abroad. Nevertheless, the cooperatives on the one hand are seeking new markets abroad, on the other hand, the cooperatives' executives mention a decrease in starting new activities, buying new assets and seeking for new funds. At the same time, there is a trend to decrease the labour cost as both the full time and seasonal personnel is reduced. This situation indicates that the cooperatives are turning to the markets abroad just only to deliver their excess production, without making all the necessary investments in order to efficiently claim a lasting market share.

On the other hand, the cooperatives dealing with the traditional and local products, as well as in the canning industry face a completely different situation. The canning industry was always export-oriented with the vast majority of their produce being exported. Moreover, their characteristics are completely different than that of the other cooperatives i.e. a higher turnover, a higher manpower, working seasonal with the intense seasonal operational cost. In addition, the cooperatives dealing with traditional and local products are mostly women cooperatives running on the local level with their primary goal to provide an additional income and occupation in rural families. Without any intention to neglect their importance in the social and cultural life and in the general rural development,

Table 3. Indicators of change from the pre-crisis period to the crisis period

	Cereals/Supplies	Olives/Olive oil	Wines	Traditional Products	Cans	Fresh Fruit
Total Turn over	++	++	+	_	++	+
Exports	++	++	++	=	++	++
Full time personnel	_	=	_	_	++	-
Seasonal personnel	_	++	_	_	_	++
Part time occupation	_	N/A	=	_	++	N/A
Non salary benefits	=	N/A	=	N/A	=	=
Early retirement schemes	=	N/A	_	N/A	N/A	=
Activities cut off	=	=	=	=	=	=
Starting new activities	+	_	_	_	_	+
Selling Assets	=	N/A	+	=	N/A	_
Assets Replacement	=	_	_	_	_	=
Buying New Assets	_	=	=	_	=	=
New Loans	_	=	_	-	=	_

⁺⁺ Significant Increase, + Increase, - Decreased, = No change, N/A not applied

Source: Research results (2013)

Table 4. Accessibility to alternative funding sources, comparing the per-crisis and the crisis period

	Funding accessibility		Funding from members		Funding from private banks		Funding from state/ EU funds	
Period	2006-09	2009-12	2006-09	2009-12	2006-09	2009-12	2006-09	2009-12
Cereals/Supplies	6.75	4.75	2.00	3.67	4.67	2.67	1.75	2.33
Olives/Olive oil	5.00	1.00	7.00	7.00	N/A	N/A	N/A	N/A
Wines	4.50	1.00	2.50	3.00	3.50	1.00	4.00	1.50
Traditional Products	5.33	1.00	4.33	3.67	2.67	1.00	5.33	1.00
Cans	7.00	4.00	5.00	5.00	7.00	7.00	6.00	5.00
Fresh Fruit	5.50	3.25	3.25	3.25	4.00	1.50	4.33	4.33

2006-2009 refers to pre-crisis period and 2009-2012 refers to crisis period, 1 = min, 7 = max

Source: Research results (2013)

their operation is mostly based on different criteria providing rural women with the means of achieving the social integration, the personal empowerment, and secondly with an additional income source. The research evidence indicated that their members' lack of professional skills and their unwillingness to undertake the enterprise risk have turned them toward an enterprise model that lacks the modern business methods in the use of the quality control, production systems, in the use of new organizing and managing technologies, in advertising and promoting products and in the administrative renewal and capital raising (Gidarakou et al. 2000; Lassithiotaki 2011).

Having in mind the extent of the cash shortage in the Greek market (Manifava 2013), even recently, the next issue examined was the funding accessibility and funding opportunities for the different type of cooperatives (Table 4). Cooperatives' executives reported that it is more difficult to access funds, especially from the private banks and the European Structural Funds. Their constant funding source is

their members, however, there is not a clear trend if it is easier during the crisis to access funding from this source. This observation could trigger a two-fold quantitative research in this field: what would make the Greek farmers to invest more in their cooperatives and how the cooperatives could motivate their members to participate in their investment projects. A recent study on the region of Thessaly for the decade of 2000 showed that agriculture received only 9.5% of the public funded investments in the region, against 64.5% for the industry and 26% for tourism (Karafolas 2013).

The third part of the analysis focuses on the future plans of the cooperatives management. In this part, the participants were asked to rank their future management activities (Table 5). For almost all the different types of cooperatives, a first priority is to expand their exports, to invest in marketing and to create branded products. The wine cooperatives place high among their priorities, so as to differentiate their products, to attract experienced managers and

Table 5. Future management strategy

	Cereals/Supplies	Olives/Olive oil	Wines	Traditional products	Cans	Fresh fruit	
Pirst Bu		Make exports	Non salary motives	Marketing Investments & Cooperative Brand			
	Exploit Buildings &	Marketing Investments & Cooperative Brands	Differentiate	Malaramanta	New export markets	Cooperative	
	Other Assets		Efficient/Experienced Managers	Make exports	Exploit internal Markets	networks	
Driority	SELL buildings machinery &	Abandon Activities	Abandon Activities	Merge with other similar coops	Abandon Activities	Abandon Activities	
	other assets		SELL buildings machinery & other assets				

Source: Research results (2013)

also to motivate their staff with non- salary benefits and motives.

Additionally, the fresh fruit cooperatives set as their priority to establish the cooperative networks. Cooperative networks, strategic alliances, even mergers could permit the concentration of the agricultural offer, making possible to offer agricultural products at the competitive costs. Taking into account the strong downward prices pressure exerted by the distribution channels and hypermarkets, this strategy could be compatible with the cost reduction strategy via the concentration of agricultural supply. This observation also needs a further quantitative research to examine which alternative strategy (alliances, networks or mergers) could be more feasible

DISCUSSION AND CONCLUSION

The analysis conducted in the previous section is useful to illustrate the reaction of the Greek agriculture cooperatives to the economic crisis but also to provide information to build strategies for improving their competitiveness. The results of the analysis could provide helpful directions not only for the Greek agricultural cooperatives' management boards but also for agricultural cooperatives operating under a severe economic situation such as the Greek economic crisis.

The first point that must be mentioned in relation to the first part (the reaction to the crisis) is that the Greek agricultural cooperatives have increased their exports. This has been reported by all participants and it is considered as a main point of their future strategy plans. In addition, most of the cooperatives (except those dealing with canned fruits) try to reduce their personnel and consequently their labour costs. However, agricultural cooperatives seem unwilling to start new activities and consequently they are not interested in buying new assets (i.e. machinery and equipment) and thus they are not seeking any additional funding sources. Nevertheless, Rhodes and Stelter (2009) have proposed simultaneously defensive and offensive strategies in the economic downturn, including protecting of the existing business, cost reduction and divesting non-core businesses on the one hand, and investment into people and product development, and pursuing opportunities in markets on the other hand.

The second point that should be mentioned concerns the available funding sources for the Greek

cooperatives. According to the participants, it is easier to seek funding among members than from the credit institutions and the public sector. The whole Mediterranean agriculture and cooperative farming suffer from a marked lack of financing (Campos-Climent et al. 2012). Greek agricultural cooperatives should search for new sources of funding different than the public funds (grants and subsidies) and the traditional credit institutions (see for example Kontogeorgos et al. 2014). Thus, it is necessary for cooperatives to develop functional funding strategies to ensure appropriate funding sources to improve and promote their products and services and consequently, their viability and growth.

The cooperative executives who took part in this study revealed their intentions for their future strategies. Management strategies with the highest priority could be characterized as "have to" while the management strategies with the lowest priority could be characterized as "avoid". It is interesting that all different types of cooperatives gave a low priority to the management strategies dealing with abandoning activities, selling equipment, machinery and real estate. Greek cooperatives are in general multipurpose cooperatives dealing with many products and activities. Even if it is a common management option to abandon activities that are not beneficial, this is not an option for Greek agricultural cooperatives. Fulton and Gibbings (2000) support that the historical ability of cooperatives to supply a wide range of goods and services is breaking down and as a consequence, cooperatives might well concentrate on their traditional core activities.

Many times before, there were efforts to force agricultural cooperatives to merge their activities in a single cooperative organization without any result. For example, while the producer prices of extra virgin olive oil have been dramatically decreased, eight federated olive oil cooperatives compete against each other in the in a small prefecture (Chania) on the island of Crete prefecture (Oustapassidis et al. 2000). In sum, the number of primary and secondary cooperatives remains very high relative to the needs of the farmers and the market demand (Illiopoulos 2012). A first explanation to this unwillingness of agricultural cooperatives to merge into larger business units may be explained by the reference to their leaders' reluctance to abandon the sometimes powerful governance roles, as a result of the decline in the available board positions after the merger (Iliopoulos and Valentinov 2012).

To conclude, the very first results show that the Greek agricultural cooperatives during the economic crisis have "frozen" their activities while they were seeking to export their excess production. Diversifying into new markets could improve the competitive situation of a company (Enderwick 2009). Secondly, there is a liquidity shortage for the cooperatives that drive them to rely on their members to finance any new economic activity. Their adaption strategies to the economic crisis, according to the executives participating in this survey, excludes abandoning activities and selling equipment and property, promotes exports and marketing investments (cooperative brands) and seeking for experienced personnel.

Finally, it must be mentioned that such a qualitative research is necessary, not only to depict the reaction of the Greek agricultural cooperatives to the economic crisis, but also to help them to adopt strategies to improve their competitiveness and finally to overcome this difficult economic situation.

REFERENCES

- Baourakis G., Kalogeras N., van Dijk G., Chatzitheodoridis F.C. (2003): Assessing the financial performance of marketing cooperatives and investor owned firms: a multicriteria methodology. In: Conference Vertical Markets and Cooperative Hierarchies: The Role of Cooperatives in the International Agri-Food Industry, Bad Herrenalb, June 12–16, 2003.
- Beckmann M., Armbruster K. (2010): Business environment, managerial strategies, and the allocation of decision-making authorities in Swiss Firms. WWZ Discussion Paper 2010/06 (D126).
- Benos T., Kalogeras N., Verhees F. (2007): Greek co-ops' re-engineering: exploring the influences among organizational attributes, strategic attributes and performance. In: Conference EMNet 2007 (Franchising, Cooperatives, Strategic Allicances, Joint Ventures and Venture Capital Relations), Rotterdam, June 20–30, 2007: 1–25.
- Bourletidis K. (2013): The strategic management of market information to SMEs during economic crisis. In: Procedia Social and Behavioral Sciences, The 2nd International Conference on Integrated Information, 73: 598–606.
- Campos-Climent V., Apetrei A., Chaves-Ávila R. (2012):
 Delphi method applied to horticultural cooperatives.
 Management Decision, 50: 1266–1284, doi 10.1108/00251741211247003

- Chakravarthy B.S. (1982): Adaptation: A promising metaphor for strategic management. Academy of Management Review, 7: 35–44.
- Chandler A.D. (1962): Strategy and Structure Chapters in the History of the Industrial Enterprise. MIT Press, Cambridge, MA.
- Chatzitheodoridis F., Michailidis A., Theodosiou G., Loizou E. (2013): Local cooperation: A dynamic force for endogenous rural development. In: Karassavoglou A., Polychronidou P. (eds): Balkan and Eastern European Countries in the Midst of Global Economic Crisis. Contributions to Economics, Part 3, Springer-Verlag, Germany: 121–132.
- Demakis J. (2004): Co-operative rules and entrepreneurship. In: Papageorgiou C. (ed.): Co-operative Ideas and Entrepreneurship within the Framework of the EU (in Greek). Stamoulis Publishing, Athens: 59–70.
- Enderwick P. (2009): Responding to global crisis: the contribution of emerging markets to strategic adaptation. International Journal of Emerging Markets, 4: 358–372.
- Frishammar J. (2006): Organizational environment revisited. International Studies of Management & Organization, 36: 22–49.
- Fulton M., Gibbings J. (2000): Response and Adaptation: Canadian Agricultural Co-operatives in the 21st Century. Centre for the Study of Co-operatives, University of Saskatchewan.
- Gidarakou I., Xenou A., Theopfiliou K. (2000): Farm women's new vocational activities: prospects and problems of women's cooperatives and small-on farm businesses in Greece. Journal of Rural Cooperation, 28: 19–37.
- Hambrick D.C., Mason P.A. (1984): Upper echelons: the organization as a reflection of its top managers. Academy of Management Review, 9: 193–206.
- Hitt M.A., Dacin M.T., Tyler B.B., Park D. (1997): Understanding the differences in Korean an US executives' strategic orientations. Strategic Management Journal, 18: 159–167.
- Iliopoulos C. (2012): Support for Farmers' Cooperatives; Country Report Greece. Wageningen UR, Wageningen.
- Iliopoulos C., Valentinov V. (2012): Opportunism in agricultural co-operatives: the case of Greece. Outlook on Agriculture, 41: 15–19.
- IOBE (2010): The Food and Beverages Industry in Greece. Annual Report 2009 (in Greek). Foundation for Economic and Industrial Research.
- Karafolas S. (2005): Development and prospects of the Greek cooperative credit system. Journal of Rural Cooperation, 33: 3–20.
- Karafolas S. (2013): Public financial support to investments in rural areas: the case of the region of Thessaly

- in Greece. International Journal of Economic Sciences and Applied Research, 6 (2). Available at http://ssrn.com/abstract=2348578 (accessed November 2014).
- Kontogeorgos A., Chatzitheodoridis F., Theodossiou G. (2014): Willingness to invest in agricultural cooperatives: evidence from Greece. Journal of Rural Cooperation, 42: 121–137.
- Kyriakopoulos K., Meulenberg M.T.G., Nilsson J. (2004): The impact of cooperative structure and firm culture on market orientation and performance. Agribusiness: An International Journal, 20: 379–396.
- Lassithiotaki A. (2011): Rural women and entrepreneurship: a case study in Heraklion Crete Prefecture, Greece. Journal of Developmental Entrepreneurship, 16: 269–284.
- Manifava D. (2013): Delays in invoice payment show extent of cash shortage in market. Kathimnerini newspaper: ekathimerini.com, June 10, 2013. Available at http://www.ekathimerini.com/4dcgi/_w_articles_wsite2_1_10/06/2013_503740 (accessed at January 2014).
- Miller D., Korn H.J., Lant T.K., Milliken F.J. (1996): The evolution of strategic simplicity: Exploring two models of organizational adaptation. Journal of Management, 22: 863–887.
- Novkovic S., Power N. (2005): Agricultural and rural cooperative viability: a management strategy based on cooperative principles and values. Journal of Rural Cooperation, 3: 67–78.
- Oustapassidis K., Baourakis G., Sergaki P., Kontogeorgos A. (2000): Strategies for Restructuring and Increasing the Competitiveness of Agricultural Co-operatives of Crete. Mediterranean Agronomic Institute of Chania, Chania (in Greek).

- Patronis V. (2002): Between state and market forces: Greek agricultural co-operative organizations in transition period. In: 13th Congress of the International Economic History Association, Buenos Aires, July 22–26, 2002.
- Rhodes D., Stelter D. (2009): Seize advantage in a downturn. Harvard Business Review, 87: 50–58.
- Roelants B., Dovgan D., Eum H., Terrasi E. (2012): The resilience of the cooperative model: How worker cooperatives, social cooperatives and other worker-owned enterprises respond to the crisis and its consequences. CECOP-CICOPA Europe. Available at http://www.cecop.coop/IMG/pdf/report_cecop_2012_en_web.pdf (accessed January 2014).
- Salavou H.E., Sergaki P. (2013): Generic business strategies in Greece: Private food firms versus agricultural cooperatives. Journal of Rural Co-operation, 41: 44–59.
- Sergaki P., Semos, A., (2006): The Greek unions of agricultural cooperatives as efficient enterprises. Agricultural Economics Review, 7: 15–27.
- Sternad D. (2011): Strategic Adaptation: Cross-Cultural Differences in Company Responses to an Economic Crisis. Springer, Vienna.
- Sternad D. (2012): Adaptive strategies in response to the economic crisis: a cross-cultural study in Austria and Slovenia. Managing Global Transitions, 10: 257–282.
- Theodosiou G., Michailidis A., Loizou E., Chatzitheodoridis F., Sergaki P. (2010): Endogenous rural development: evidence from a typical Greek region. Economics and Rural Development, 6: 17–23.
- Toia P. (2012): Draft Report on the Contribution of Cooperatives to Overcoming the Crisis. Committee on Industry, Research and Energy, 2012/2321 (INI).

Received: 18th January 2015 Accepted: 27th July 2015

Contact address:

Achilleas Kontogeorgos, University of Patras, Department of Business Administration of Food and Agricultural Enterprises, G. Seferi 2, PO 30100 Agrinio, Greece e-mail: akontoge@upatras.gr