



# Factors influencing cooperator satisfaction: A study applied to wine cooperatives in Portugal

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## ABSTRACT

Based on a set of universally accepted cooperative principles, cooperatives stand out as promoting equality, community development and their members' well-being. Therefore, this study aims to understand which factors influence cooperators' satisfaction. The research adopted a quantitative methodology with the data-collecting instrument being based on a questionnaire applied to 194 cooperators belonging to wine cooperatives in the Dão region of Portugal. The results indicate that the economic factors used to measure members' satisfaction do not predict this. Rather, the factors most related to cooperative members' satisfaction concern compatibility among members, partner selection, human resources, power and control, as well as the development of the organisations, communities and their members. Cooperative development is influenced by factors of a social and human order and the implementation of policies that may be directed towards a more economic and business-like aspect may itself affect satisfaction within these organisations. Implications for theory and practice are also suggested.

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## 1. Introduction

In many European countries and elsewhere in the world there is major renewed interest in cooperatives, as this type of business organisation seems to more resilient (Birchall and Ketilson, 2009) and can achieve better performance than capitalist firms, principally at times of prolonged economic crisis (Delbono and Reggiani, 2013), such as the one experienced recently. This growing interest justifies studying this type of organisation, particularly to understand the relationships that are formed between cooperators and cooperatives, which factors influence creation and cooperative processes, similarly to what has already been done for cooperation between firms (Lui and Ngo, 2005; Franco, 2011).

Some authors (e.g., Chaddad and Cook, 2004; Oczkowski et al., 2013; Bijman and Iliopoulos, 2014), have understand the functioning and organisation of cooperatives in the economic and social domain can help the emergence and strengthening of economic models which, although are not subject to the capitalist market

tacking account that operate in the market laws, using them only as a way to fulfil their social and economic mission to create well-being for their members and the communities.

The subject of the organisation, management and performance of cooperatives has been dealt with by a great number of researchers, analysing the cooperative as a business alternative for development (Ribeiro and Alves, 2010; Mojo et al., 2017), strategic alliances in the cooperative sector and forms of control (Filippi and Triboulet, 2011); economic and social sustainability of cooperatives; internationalization (Ritossa et al., 2009; Mariani et al., 2012); management and commercial strategies (Couderc and Marchini, 2011), performance (Chiffolleau et al., 2007), governance and organisation (Bijman and Iliopoulos, 2014), networks and innovation (Chiffolleau et al., 2007) and cooperators' satisfaction (Hernández-Espallardo et al., 2013). Nevertheless, this study will consider only research related to the basis of cooperative sustainability, which may depend on their members' satisfaction (Hernández-Espallardo et al., 2013). The aim is also to understand and explain whether structural and process factors can influence members' satisfaction with the cooperatives they belong to, even when there are better offers in the market for commercialization of their products (Hernández-Espallardo et al., 2013).

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The study carried out by [Hernández-Espallardo et al. \(2013\)](#) should be highlighted, suggesting that cooperatives are only successful and last over time as long as they serve members' interests better than other forms of organisation or market entry. The cooperative formula depends therefore on its ability to compete in satisfying its members' needs. This raises questions about the cooperative model itself and the principles sustaining it, leading authors such as [Oczkowski et al. \(2013\)](#) to draw attention to the fact of internal and external pressure being able to lead to «degeneration» and a loss of cooperative identity, and also highlight the shortage of empirical studies about the relevance of cooperative principles in current contexts.

In Portugal, studies demonstrate the importance of cooperatives ([CASES, 2012](#)), but research carried out indicates that most of these studies are focused on juridical aspects ([Meira and Ramos, 2014](#)), statutory responsibility or on analysing their economic importance for some sectors of activity ([Lopes, 2010](#)). This means there are few studies related to the influence of factors of structure, processes and results on members' satisfaction. Therefore, this study sets out from two general questions: *Q1: How is cooperators' satisfaction affected by structural and process factors in the cooperative?* and *Q2: Are there other factors, namely linked to results, that influence members' satisfaction?*

This study aims to determine which process, structural and results-related factors influence cooperators' satisfaction in the wine-producing sector in Portugal. *Structure* is understood here as everything at the origin and formation of a cooperative; *processes* cover everything that happens during the cooperation process between the various stakeholders; and *results* are what promotes organisations' development in the short, medium and long term.

The research is therefore of fundamental importance for advancing knowledge about cooperatives, their administration and management, since it gives an understanding of how cooperators feel and what they think about the cooperatives they currently belong to, and in this way it is possible to define strategies for development of the cooperative sector and sustainability of these organisational forms. In addition, this study is highly relevant for those interested in the management and governance of cooperatives and the maintenance of the cooperative ethos/integrity within these types of organisations.

The subsequent sections of the paper are structured as follows. First we provide a literature review about cooperatives and cooperators' satisfaction, which is followed by the development of our hypotheses. Second, we describe the methodology of the study. Third, we present and discuss the results of our analysis. Fourth, our paper ends with the implications, limitations and suggestions for further research drawn from our study.

## 2. Literature review and hypotheses development

### 2.1. Wine-producing cooperatives and the study context

Cooperatives are presented as a business model of the commercial sub-sector of Social Economy, which by placing people at the centre of decision-making contributes to a new approach in today's economic world. Cooperatives are structured through a form of democratic and collective governance ([Filippi and Triboulet, 2011](#)), which gives rise to better, more intelligent and responsible forms of production ([Mills and Davies, 2013](#)), through common efforts that «will contribute to cooperative members' well-being, from both the social and economic point of view» ([Ribeiro and Alves, 2010](#)).

Cooperativism is based on human values, standing out as a humanitarian movement whose origin and purpose lies in Man

([Couvaneiro, 2004](#)). Since its origins, the cooperative movement and cooperative creation are seen to be strengthened at times of crisis, as a way to combat exclusion and poverty among disadvantaged classes, such as manual workers ([Couvaneiro, 2004](#)). Today as before, cooperativism and cooperatives, in the current crisis, find a new breathing space and are a viable alternative to the traditional capitalist business model, becoming important drivers of innovation and development.

The [European Commission \(2013\)](#) considers that through social innovation it is possible to find ways, when working together, to reach solutions to economic and social problems, and this should serve as a guideline for public administration in implementing actions through collaborative work, experimentation and prototyping, including the local population in that process. Similarly, in a period marked by a shortage of financial resources ([Amador, 2013](#)), Social Economy organisations, among them cooperatives, are forced to seek business efficiency, only achieved with the collaborative participation of various groups with whom they form relationships, such as local authorities, specialists, residents (e.g., [Chiffolleau et al., 2007a, b](#); [Mills and Davies, 2013](#)), creating a platform to exploit more flexible and effective forms of business.

In Portugal, the importance of cooperatives for Social Economy is considerable. Confirming this is the data presented by the António Sérgio Cooperative for Social Economy ([CASES, 2013](#)), showing the strength of the cooperative sector. In 2010 there were 2260 cooperatives, distributed throughout the whole country, accounting for 31,783 direct jobs. In 2009, cooperatives involved a total of 1,353,107 cooperators, corresponding in economic terms to 4.8% of GDP, 1.3% of employment in Portugal and involving 12.7% of the total population. Also according to [CASES \(2013\)](#), regarding figures for 2009, the cooperative sector accounted for 5.47% of the total number of entities operating in the social economy.

Further agreement with the idea that cooperatives can be solutions for local development, cooperation instruments [operating as networks] between citizens, organisations and local, regional, national and European representatives, through business organisations and practices ([Matei and Matei, 2012](#); [Steinerowski, 2012](#)), is shown in the statistical data presented by [CASES \(2013\)](#) showing that in Portugal, 36% of olive oil, 41% of wine and 62% of milk was produced by cooperatives, which demonstrates their strategic importance for the primary sector and the rural world.

Given this evidence, agricultural cooperatives show considerable importance. In truth, in most cases cooperatives are created by small farmers who need better market position and to negotiate better prices, particularly in sectors where both upstream and downstream certain actors predominate ([Couderc and Marchini, 2011](#)).

Furthermore, agricultural cooperatives are a fundamental factor in the global food and agricultural industry. They play an important role in the efficiency of collective entrepreneurial actions carried out by organisations operating in supply chains, and contribute to food safety and quality ([Iliopoulos, 2015](#)). These types of cooperatives are also a sign of an advanced food-producing and agricultural system, in which cooperatives have an important role (quoted by [Iliopoulos, 2015](#)) in stimulating rural and disadvantaged regions, given their contribution to job creation, stabilizing population, increasing social well-being and also conservation of the countryside and natural resources ([Couderc and Marchini, 2011](#)).

In these circumstances, it is appropriate to mention, for example, that wine cooperatives function as a way for small farmers to gain scale, access to resources and capacities, achieve a better market position to sell their grapes and to some extent cope with market turbulence, managing to avoid the closure of their operations or the need to negotiate with large economic groups on

more unfavourable terms (Hernández-Espallardo et al., 2009; Montegut et al., 2011).

## 2.2. Factors of cooperator satisfaction

For Hansmann (1996) and later reinforced by Hernández-Espallardo et al. (2013), cooperators' satisfaction will depend on the cooperative's capacity, through effective control of its transaction costs, to offer a better return to its members for belonging to and participating in cooperative ownership than if they had to negotiate with suppliers and clients in isolation. Therefore, satisfaction exists when the results are equal to or greater than expectations and is fundamental to increase morale, trust, cooperation and commitment between the parties. In addition, this favours a reduction in disputes and the end the relationship.

In this context, various studies have gathered and adapted a set of factors/indicators used to measure the satisfaction of partners involved in strategic alliances between firms (Franco, 2011; Street and Cameron, 2007). Other studies (e.g., Mazzarol et al., 2011; Hernández-Espallardo et al., 2013) have focused on analysing the cooperative situation in sectors as diverse as fruit and vegetable growing and milk production.

As with all business organisations that regularly use inter-organisational cooperation relationships, cooperatives have a set of factors that are present from their creation and affect their sustainability, performance and success over time. Those factors are related, on one hand, to structural questions, i.e., the initial factors that partners [cooperators] bring to the cooperation, which Franco (2011) identifies as being essentially three.

- (I) *Compatibility*. This dimension is understood by the various authors studied (Street and Cameron, 2007; Pesämaa et al., 2013) as a fundamental element in integration and in forming deep relationships between the elements of a cooperative, creating and strengthening trust and commitment among members, which originates more lasting and sustainable relationships. Indeed, relational compatibility and congruence in objectives ensure that small firms can benefit from the alliance (Street and Cameron, 2007).
- (II) *Partner Selection*. The particularity of cooperatives, with their “open door” principle, can bring limitations to the cooperative, in that it becomes more difficult to choose cooperators who, due to their antecedents in cooperatives or their individual characteristics, identify more with the organisation and share the same objectives and principles. Therefore, for the success of cooperatives, at all times there must be a strategy correctly communicated to cooperators, so that they feel involved. There is a need to manage relationships so as to ensure members' loyalty and trust (Mazzarol et al., 2013). But this partner selection is also dependent on other factors, such as the characteristics of the cooperatives themselves, namely the way of accessing and using resources and the perception that their members can trust the network. Mazzarol et al. (2013) understand that also market conditions, such as greater or lesser uncertainty and levels of competition, can influence the process of selecting and entering a cooperative.
- (III) *Government Policies*. Government policies and support for the creation and development of cooperatives are essential, not only for their sustainability but even for the decision to create them. Therefore, as mentioned by Mazzarol et al. (2013), one of the structural factors that can contribute most to joining a cooperative concerns the possibility of access to tax benefits and financial resources originating in policies formed by governments as regulating bodies with

greater or lesser awareness of cooperatives and their social function (Bijman and Iliopoulos, 2014). As mentioned above, even today's European policies, regarding access to EU funding, prioritize applications made by cooperatives or producer organisations (Bijman and Iliopoulos, 2014), due to the perception that in this way cooperators have access to a set of resources that stimulate competitiveness and development of the business itself (Mazzarol et al., 2013), making a difference, especially in terms of rural development. This leads to formulating the first research hypothesis:

**H1.1.** Structural factors have a positive impact on levels of cooperator satisfaction.

In addition, there are process factors, i.e., how a cooperative is implemented and how the cooperative process can affect the cooperative's results. Franco (2011) identifies four process variables that can affect the cooperation's success:

- (I) *Trust and Commitment*. If at a first stage, cooperators' main concern is to optimize the functions that were at the origin of cooperatives, such as joint selling, reputation-building and marketing, when these are ensured it becomes necessary, in the view of Pesämaa et al. (2013), to invest in activities and resources that promote the sharing and development of common interests and encourage strengthened commitment among members.

There must be a permanent effort to build inter-personal and inter-organisational relationships, strengthening trust, reciprocity and commitment, all the more so because cooperative members are usually very dependent on those organisations to obtain resources they would not obtain otherwise (Pesämaa et al., 2013; Montegut et al., 2011). Besides, trust and commitment are important factors for reducing uncertainty in a cooperation relationship and for reducing the possibility of opportunism by members (Franco, 2011). Mazzarol et al. (2013), in turn, consider that trust and commitment promote social well-being in communities and cooperators, as through satisfying their needs they build social capital and develop the feeling of purpose and pride in belonging to the cooperative movement.

- (II) *Human Resources*. In the particular case of cooperatives, where members represent distinct roles (e.g., clients, owners and patrons), members must be totally committed to the cooperative's development and achieving collective goals. That commitment, as seen above, is based on the mutual trust and reciprocity that must exist among members and on which the cooperative's internal cohesion and performance depends (Ruben and Heras, 2012).

Mazzarol et al. (2013) call this dimension “characteristics of the relationship” and “relationship management”. Firstly, it must be borne in mind that cooperatives have democratic governance, where horizontal networks represent members in terms of the cooperative, and problems may arise, namely a clash of generations and interests, as the diversity of members increases as the cooperative grows.

Secondly, relationships between the members' diversity must be managed correctly, to be able to align members' interests with those of the cooperative, to create and strengthen the loyalty and commitment of members, who act as members of the community. In addition, the communication between cooperatives and their members is obviously less formal, since the administration board

members and executives are more easily accessible.

**H2.1.** Process factors have a positive impact on levels of cooperator satisfaction.

- (III) *Control and Power*: In cooperatives, the principle of “one member, one vote” implies democratic governance (Namorado, 2013), where there is a horizontal network with member representation in relation to the cooperative (Mazzarol et al., 2013), in which members' control and power are not dependent on their capital or the volume of relationships they establish with the cooperative. According to Iliopoulos (2015), this leads to the possibility of cooperative members adopting opportunist behaviour, only prevented if there is trust and the certainty that some will not exploit the vulnerabilities of others. Care must also be taken to ensure the cooperative's true function is not lost as it grows. The greater the diversity of members, the more diverse the interests of each one, which may originate problems of parasitism; horizon; portfolio; control; and costs of influence.
- (IV) *Inter-organisational Culture*. Inter-organisational culture is a characteristic of the cooperative movement (Mills and Davies, 2013) in which at least three of the seven principles proposed and adopted by the International Cooperative Alliance (ICA). In addition, the principle of education, training and information is rooted in cooperative culture, the aim being not only to educate their members but also to mobilize communities towards cooperative culture. This leads to the second research hypothesis:

The studies by Street and Cameron (2007) and Mazzarol et al. (2013) revealed that, besides process and structural factors, other factors could influence partners' satisfaction in business cooperation relationships, or that of members in the particular case of cooperatives. These authors called those factors “results”, understanding them as the consequence of firms' involvement in alliances, from which business develops through access to resources, services, knowledge and social capital. Moreover, this form of cooperation also results in competitive advantages for members, due to reduced costs and steady or increased market quotas, and also increased negotiating power. The studies by Hernández-Espallardo et al. (2013) reach similar conclusions, stating that members only remain in cooperatives as long as the latter satisfy their needs better than alternative ways of entering and remaining in the market.

When speaking about results, it is necessary to consider three dimensions: (I) Organisational Development; (II) Competition and competitive advantages; and (III) Performance/Success.

**H3.1.** Result factors have a positive impact on levels of cooperator satisfaction.

- (I) *Organisational Development*: when engaging in cooperation relationships, organisations try to increase their access to resources, whether material, intangible, social, information, financial and non-financial, and knowledge with the aim of stimulating the future growth of the organisations themselves and individual business (Street and Cameron, 2007; Marcos-Matás et al., 2013).
- (II) *Competition and competitive advantages*: allows small organisations to remain small but to operate on a large scale, i.e., by being involved in cooperatives, they can achieve a scale, a size, that they could not obtain alone, which gives them the capacity to compete and gain competitive advantages in

markets. SMEs are able to obtain the benefits of large firms and organisations without losing their identity and independence, obtaining benefits in various aspects of the business, such as marketing, scale economies and reduced dependence (Mazzarol et al., 2013; Ruben and Heras, 2012).

- (III) *Performance/Success*: this dimension is more related to objective measures, such as the results obtained from sales, profitability, growth, financial performance, value added, exports, reduced costs and fulfilling objectives set, and subjective measures such as shared success, maintaining the cooperative through effective management of relations, trust and commitment for its survival and prosperity (Ertimur and Venkatesh, 2010; Sakarya et al., 2012). This set of variables leads to formulation of the last research hypothesis:

### 3. Methods

#### 3.1. Sample

Given the dispersion of cooperators and their location in Portugal, generally rural, it was decided to select the sample according to the criteria of cooperative membership and representativeness. The study was conducted in a Central region of Portugal (Region of Dão) which is a geographical area known for its wine sector. The region of Dão wine-growing area encompasses 16 municipalities, totaling around 20,214ha of vineyards, i.e., 5% of the territory of Dão, where there are 61,010 farms, with an average area of 0.33ha (Borges, 2012).

In red wines, the largest bet has been on vineyards that produce “Dão Nobre”, with Jaen occupying 22.7% (2484ha), Touriga Nacional with 12.9% (1221ha), Tinta Roriz with 9.4% (926ha) and the Alfrocheiro with 4.4% (421ha). Of the total number of wines proposed for certification, the Wine Commission of the Dão Region (CVRD, 2018) certifies 85.3% of red wine and 14.4% of white wines (Borges, 2012). The Dão Region was responsible, in 2017, for the production of 35,000,000 L of wine, of which, on average, only 40% received the Denomination of Origin DOP Dão and GI - Geographical Indication (CVRD, 2018). These values are divided into approximate parts by Cooperative Wineries, Vinification Centers, Producers-Bottlers and Producers-Vinifiers (Clube de Vinhos Portugueses, 2018).

In a first phase, the Cooperative Union representing this region in the wine-producing sector was identified. That Union was UDACA (Union of Wine Cooperatives of the Dão), which is also a member of CONFAGRI (National Confederation of Agricultural Cooperatives and Agricultural Credit in Portugal). UDACA is also part of FENADEGAS (National Federation of Wine Cooperatives) which represents practically all regions in the country. FENADEGAS includes three cooperative unions, whose wine-producing regions in 2012 accounted for 71% of all wine with Appellation d'Origine Contrôlée (AOC) produced in Portugal (IVV, 2013). It was decided to limit the sample to cooperatives associated with UDACA (Dão Lafões). Within UDACA, three active and more representative cooperatives associated with this union were identified: (1) Silgueiros Cooperative; (2) Mangualde Cooperative; and (3) Penalva do Castelo Cooperative. This gave a random sample made up of 564 cooperators. To identify this initial sample, data were collected from random lists supplied by the cooperatives selected and extracted from their databases of active members.

Regarding characterisation of the cooperators in the sample ( $n = 194$ ), in terms of age, the average is found to be high (60 years), with a standard deviation of 12.26 years, although a few cooperative farmers are aged under 35 years old (3.1%). The existence of elderly cooperators confirms one of the problems stated in the literature review (Hernández-Espallardo et al., 2013), where one of



the challenges currently faced by cooperatives lies precisely in attracting younger members, in order to promote these institutions' sustainability. 60.8% of the co-operators surveyed are over 55, showing the aging nature of the sector which younger people have difficulty in joining.

Gender distribution is also disproportional. Only 14.4% of those surveyed are female, as opposed to 85.6% of males, showing the dominance of men in this sector of activity. Another aspect to consider is that although the average age is high, the number of years as a cooperator is around 16. This result indicates that cooperatives may have undergone some restrictions and various transformations in recent decades, changes which will have led to the entry of new cooperators.

The wine-producing sector is marked by a low level of education. 47.4% of those surveyed have primary education, added to 30.9% who have basic education. These two items added together mean that more than 78% of co-operators have no more than compulsory schooling. A small number of cooperators have completed secondary education (12.4%) or completed a cycle of higher education (8.3%).

### 3.2. Data collection and measurement of variables

Data collection was through a questionnaire survey administered from July 2016 to January 2017 to the selected sample of co-operators, and was collected on-site. This on-site data collection strategy was rather labour and cost-intensive, but it provided us with the advantages of ensuring the respondents' commitment, standardized the data collection procedure, and gave the researcher an opportunity to assist the respondent in understanding our questions. A total of 194 valid questionnaires were obtained from the 564 distributed (initial sample), corresponding to a response rate of 34.4%.

In order to examine non-response bias, we set the characteristics of the initial against the final sample. In doing so, the attributes of the 198 responses did not diverge in any systematic way from non-participants (cf. also Blumberg et al., 2005). This holds true in particular for characteristics of the cooperators such as age or education, so that a non-response bias did not occur in the study. Additionally, we performed a *t*-test (Armstrong and Overton, 1977) to compare the first and last waves of responses for each of the research variables, and this analysis also revealed no significant differences ( $p < 0.01$ ).

To measure the independent variables (structural, process and results factors) and as none of the research structures or respective indicators of satisfaction had been used in cooperatives in Portugal, let alone in the wine-producing sector, most of the variables used consisted of adapting concepts and indicators used in other countries and contexts. In addition, to come closer to the true Portuguese situation, these indicators were interlinked with previous studies on strategic alliances in Portuguese firms carried out by Franco (2011), which sought to determine the structural and process aspects influencing co-operator satisfaction. Regarding the results dimension, the scale by Mazzarol et al. (2013) was used, applied to the cooperative context.

The degree of cooperator satisfaction (dependent variable) was measured by diverse variables which not being directly observable should be associated with a set of indicators, obtained directly through the questions asked to each cooperator in the questionnaire administered for the purpose (Marôco, 2010). More precisely, this satisfaction variable was obtained through the mean of the average on a scale of 1 (=“of no importance”) to 5 (=“of major importance”), of 3 indicators (see appendix), already used by Hernández-Espallardo et al. (2013). In this study the Cronbach

alpha value was 0.925, i.e., the scale used is suitable, even in the context of Portuguese cooperatives. Good internal consistency should be above an alpha of 0.80, but values above 0.60 are acceptable, despite Marôco (2011) stating that alpha values above 0.5 are considered acceptable in social sciences.

In all the other scales used here and associated with factors influencing satisfaction, cooperators were asked to answer all questions and to respond according to their level of agreement, choosing the most appropriate number for each situation: “Completely disagree” = 1; “Partially disagree” = 2; “Sometimes” = 3; “Partially agree” = 4 and “Completely agree” = 5.

As the scales (structural, process and result factors) were not yet validated in Portugal, for the study of cooperatives and their relationships with cooperators, some of their metric properties were assessed through validity and reliability studies. These two tests are essential to ensure the informative quality of an instrument's data (Coutinho, 2014).

In theory, reliability values can be anywhere between 0 and 1. Although there are no very rigid rules, ideally the coefficient will be as high as possible. From 0.9, internal consistency is considered “very good” (Marôco, 2011).

For the scales selected, confirmatory factor analysis (CFA) was also used. The scales are formed of 52 items (see appendix) intending to assess the probability of a cooperator feeling more satisfied in their cooperative relationship, bearing in mind the level of agreement with each of the items used in the sub-scales/dimensions.

The results obtained from CFA for each sub-scale used to assess structural, process and results factors appear in Table 1.

It is of note that the dimension of “Government policies”, in the structural factors, was excluded from this study. With only two items, it was not possible to carry out CFA or validity or reliability studies, as the informative quality of this instrument's data could not be guaranteed.

From confirmatory factor analysis (CFA), the final models with best adjustment to description of the facts were obtained, as observed in Table 1. No problems of multicollinearity or influential univariate and multivariate extreme cases were observed. The CFA indices are seen to present very good adjustment for the ratio between the index and degrees of freedom and GFI. As referred by Hair et al. (2010), CFA intends to show whether the scale presents a good adjustment to the sample data. The Cronbach Alpha values obtained, for each sub-scales used, were also above 0.70 (Nunnally, 1978), revealing good internal consistency.

### 3.3. Data analysis

Data analysis was performed using SPSS Statistics (v.24, IBM SPSS, Chicago, IL) software and AMOS 22 (Analysis of Moment Structures) software. The statistical techniques of descriptive analysis, confirmatory analysis and regression analysis were used. So as to answer the research hypotheses initially defined, the results were analysed in more detail, through inferential analysis. Here, the multiple regression method was used, as it is more commonly used when aiming to make multivariate analyses, namely when intending to test the predictive value of the various independent variables (structural, process and results indicators) simultaneously, in relation to a dependent variable (co-operator satisfaction). Multiple linear regression (MRLM) allows assessment of the quality of adjustment of the model used. Through the adjusted  $R^2$  it is possible to find out what proportion of variance of the dependent variable is explained by the independent variables. The F test serves to validate or reject the null hypothesis (Hair et al., 2010).

**Table 1**  
Confirmatory factor analysis.

N° of items	Structural Factors	Alpha	$\chi^2/df$	GFI	CFI	RMSEA	RMR	SRMR	FC	VEM
6	Compatibility	0.848	1.723	0.983	0.991	0.061	0.030	0.036	0.833	0.514
11	Partner Selection	0.902	2.828	0.924	0.953	0.097	0.043	0.048	0.897	0.495
2	Government Policies	–	–	–	–	–	–	–	–	–
<b>N° of items</b>	<b>Process Factors</b>	<b>Alpha</b>	<b><math>\chi^2/df</math></b>	<b>GFI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>RMR</b>	<b>SRMR</b>	<b>FC</b>	<b>VEM</b>
4	Trust and Commitment	0.803	2.710	0.993	0.993	0.094	0.015	0.018	0.771	0.481
6	Human Resources	0.873	3.076	0.965	0.966	0.104	0.035	0.038	0.854	0.500
4	Power and Control	0.768	3.999	0.964	0.946	0.125	0.045	0.044	0.796	0.445
3	Culture between Firms	0.789	4.219	0.980	0.972	0.129	0.037	0.034	0.796	0.500
<b>N° of items</b>	<b>Results Factors</b>	<b>Alpha</b>	<b><math>\chi^2/df</math></b>	<b>GFI</b>	<b>CFI</b>	<b>RMSEA</b>	<b>RMR</b>	<b>SRMR</b>	<b>FC</b>	<b>VEM</b>
4	Organisational Development	0.789	1.791	0.989	0.992	0.064	0.023	0.023	0.800	0.449
3	Competition and Competitive Advantages	0.844	3.883	0.990	0.992	0.122	0.017	0.016	0.837	0.571
5	Performance and Success	0.903	4.866	0.918	0.935	0.142	0.041	0.047	0.899	0.564

## 4. Results and discussion

### 4.1. Factors influencing cooperator satisfaction

In their studies on cooperator satisfaction, [Hérmendez-Espallardo et al. \(2013\)](#) and [Mazzarol et al. \(2013\)](#) recognize that cooperatives are only viable ways to enter the market as long as they satisfy their members' needs better than the competition. They also recognize that the intention to stay in a cooperative organisation is heavily dependent on satisfaction. Of the various dimensions of the factors influencing cooperator satisfaction, all of them obtained averages slightly above or slightly below 4, with no tendency towards neutral or negative answers. [Table 2](#) presents the descriptive statistics (mean values and standard deviation) for each of the factors identified.

The two dimensions used to measure structural factors present high levels of agreement, i.e., compatibility with a mean of 3.859 and partner selection with a mean of 4.085. These results corroborate those found in the literature revealing that trust, commitment, professionalism, honesty and responsibility are determinant in a cooperative.

As for the four dimensions used to measure process factors, they also present high levels of agreement, with power and control obtaining the highest mean (4.014) and culture between firms showing the lowest (3.814), which agrees with the findings of various authors (e.g., [Namorado, 2013](#); [Mills and Davies, 2013](#)), who argue that power and control are shared equally among all members, since cooperatives are organised democratically, controlled by members, where decision-making is shared and the fundamental principle of “one member, one vote” is observed, each one's power not being related to the volume of capital or volume of relations formed with the cooperative.

All four dimensions of the results factors obtained high levels of agreement, with no towards neutral answers, and slightly above or below 4. The dimension of competition and competitive advantages had the highest mean (4.054), and culture between firms the lowest (3.814). Such results reveal that when cooperatives maintain or increase their ways of competing in the market, whether through cost reduction or access to more resources, namely by forming partnerships, in this case cooperatives, this can lead to organisational development and the success of the individual organisations themselves ([Street and Cameron, 2007](#); [Mazzarol et al., 2013](#)).

To summarize, cooperatives' satisfaction depends on a set of variables, aggregated in three fundamental factors: Structural, Process and Results.

### 4.2. Hypotheses validation

To validate the research hypotheses, it was decided to test the predictive value of the “structural” (*Partner Selection; Compatibility*), “process” (*Trust and Commitment; Human Resources; Power and Control; Culture between Firms*) and “results” (*Organisational Development; Competition and Competitive Advantages; Performance/success*) independent variables, in relation to the dependent variable of satisfaction. The step-wise estimation method was used, which creates as many models as are revealed to be necessary, until being able to determine which variables predict the dependent variables ([Marôco, 2011](#)).

For this purpose, we performed tests to assess potential multicollinearity among the various dimensions of structural, process and results factors, as well as satisfaction. This represents a problem in adjusting the model which can influence parameter estimates. So VIF (Variance Inflation Factor) and Tolerance Values (T) were used

**Table 2**  
Descriptive statistics of the factors influencing satisfaction.

Factors:	Mean	Standard Deviation	Minimum	Maximum
<b>Structural</b>				
Compatibility	3.859	1.180	1	5
Partner Selection	4.085	0.717	1	5
<b>Process</b>				
Trust and Commitment	4.010	0.722	1	5
Human Resources	3.941	0.727	1	5
Power and Control	4.014	0.692	1	5
Culture between Firms	3.814	0.871	1	5
<b>Results</b>				
Organisational Development	3.897	0.737	1	5
Competition and Competitive Advantages	4.054	0.744	1	5
Performance and Success	4.027	1.126	1	5



variable explains 30% ( $R^2 = 0.300$ ) of the variation in satisfaction. The power and control variable entering the final regression model led to an overall explanatory weight of 32.1% ( $R^2 = 0.321$ ). The independent variables of trust and commitment ( $Sig = 0.701$ ) and culture among firms ( $Sig = 0.295$ ) were excluded from the model.

The multiple linear regression led to identification of the variables of human resources ( $\beta = 0.335$ ;  $p < 0.005$ ) and power and control ( $\beta = -0.257$ ;  $p < 0.05$ ) as significant predictors of satisfaction. This model is highly significant and has an adjusted R squared of 0.314, i.e., explaining 31.4% of the variance of the dependent variable. Therefore, the predictive variables form a direct relationship, and so it can be said that the greater the indices found in human resources and power and control, the greater cooperators' satisfaction.

This confirms what was stated by Ruben and Heras (2012), that human resources should be completely committed to developing the cooperative and attaining its objectives, as only in this way can the necessary mutual trust and reciprocity on which internal cohesion and performance depend be attained. The evidence also points towards satisfaction depending on how human resources are related, on the capacity to create lasting bonds and on the frequency and intensity of the contacts established (Franco, 2011). All the more so since given the specificities of cooperatives, human resources can adopt various roles within the organisation as employees, suppliers, clients and owners.

The evidence found points towards confirmation, albeit partial, of the hypothesis "H2.1. Process factors have a positive impact on levels of cooperator satisfaction", in that there is a correlation between the variables present in the model, but only the variables of human resources and power and control are seen to be significantly related with cooperator satisfaction. The relationship between the variables of trust and commitment and culture between firms and satisfaction is not confirmed.

4.2.3. Analysis of results factors

The factors linked to "results" that can influence cooperator satisfaction considered in the model were organisational development, competition and competitive advantages and performance/success. Table 5 shows that the correlation between the variables and satisfaction is positive and reasonable ( $R = 0.545$ ) and analysis of the Beta standardized coefficients allows the conclusion that the results variable contributing to explaining the behaviour of the satisfaction variable is organisational development.

Only one regression model was developed with the organisational development variable, because as seen in Table 5, it is the one presenting a higher absolute correctional value. This variable explains 29.7% ( $R^2 = 0.297$ ) of the variance in satisfaction. As they were not significant, the process variables of competition and competitive advantages ( $Sig. = 0.125$ ) and performance/success ( $Sig. = 0.690$ ) were excluded from the model.

It is noted that through the multiple linear regression analysis

method, only the organisational development variable ( $\beta = 0.545$ ;  $p < 0.000$ ) was found to be a significant predictor of satisfaction. The adjusted final model is therefore formed by the organisational development variable. This model is highly significant and has an adjusted R squared of 0.293, i.e., explaining 29.3% of the variance of the dependent variable. The predictive variable, in this case presents a direct relationship, and so it can be confirmed that the higher the indices of organisational development, the greater co-operators' satisfaction.

These results also agree with what is indicated in the literature (Street and Cameron, 2007; Mazzarol et al., 2013) when stating that participation in strategic alliances leads to organisational development, namely through access to resources, services and knowledge complementing those of the organisation. For example, alliances make it possible to obtain financial resources and infrastructure and are more able to carry out research. Acting in a network, cooperators through their cooperatives benefit from investment and the increased negotiating power of each entity involved, something they could not access individually.

These results also confirm, albeit only partially, hypothesis "H3.1. Results factors have a positive impact on cooperator satisfaction", in that there is a correlation between the variables present in the model, but only the variable of organisational development was found to be significantly related to cooperator satisfaction. The relationship between the competition and competitive advantages and performance/success variables and satisfaction is not confirmed.

5. Conclusions and implications

5.1. General conclusions

The first conclusion is in relation to the socio-demographic situation of the cooperative sector. The results portray a sector with aging members, the average age being 60, mostly male and with few academic qualifications. From the outset, this situation presents a challenge for current cooperatives which must attract younger members in order to promote these institutions' sustainability.

The results reveal that cooperatives present diverse behaviour concerning the factors that can influence members' satisfaction. These differences are precisely what define the cooperative nature of these organisations, respecting a set of principles that go far beyond objective criteria such as commercial performance. This leads to analysing cooperative principles as able to influence levels of cooperator satisfaction.

The exclusion from the final regression models of variables such as performance/success or competition and competitive advantages demonstrates that members are more interested in sharing decision-making power and management of the cooperative itself, allied to promoting the well-being of their communities, than in

Table 5  
Final regression model. Results factors vs satisfaction.

Dependent variable: Satisfaction	Non-standardized coefficients		Standardized coefficients Beta	t	Sig.	Collinearity statistics	
	B	Stand. Error				T	VIF
R = 0.545	(Constant)	8.292	7.237		1.146	0.253	
R <sup>2</sup> = 0.297	Organisational Development	0.872	0.097	0.545	9.007	0.000	1.000 1.000
R <sup>2</sup> Adjusted = 0.293							
Standard Error of the estimate = 24.791							
Increase of R <sup>2</sup> = 0.297							
F = 81.133							
Sig. = 0.000							



merely economic aspects and in maximizing profits. Therefore, this empirical evidence contrast with neoclassic economics and previous literature (e.g., Cook, 1995; Hernández-Espallardo et al., 2013).

The evidence reveals that for cooperators, more important than economic goals are aspects related to social and human development (see Fig. 1), such as members' training, which also promotes transformation of the productive sector by introducing innovation and new procedures and cultivation techniques. In addition, as these organisations are mainly located in rural areas, they end up contributing towards population retention and the integration of people who would have great difficulty in finding employment in other activities.

What emerges is that, for cooperators, compatibility and partner selection are the structural factors influencing their satisfaction most. That is, for a long-term alliance, such as a cooperative, to be successful, there must be a high degree of commitment and compatibility among its members, and this only happens if there is trust. These are crucial aspects for correct integration of the organisation's orientations, capacities and activities, and the deeper the relationships formed, the greater the compatibility among members and the greater their commitment, which results in more trust. Compatibility in relationships, associated with coherence in objectives, ensures that members can benefit from the cooperative relationship.

Partner selection is another structural factor predicting satisfaction, in that these must be committed to developing the cooperative and share the group objectives. As found, it is therefore fundamental to respect cooperative principles, namely in relation to democratic control by members, members' economic participation and concern for the community.

In fact, the cooperative model places some restrictions on the possibility of choosing the organisation's partners/members, inasmuch as they follow and apply an "open door" policy. In truth, the free entry as well as the free exit of members can be at the origin of problems such as opportunism, where members enter when conditions are better and leave when they find better opportunities outside, or mistrust among members, leading even to disinvestment in the cooperative relationship and in productive assets.

To avoid this, there must be investment in creating bonds so as to develop the cooperative's relational capital, triply important as members play a triple role: suppliers, clients and owners. There is the need for members to be totally committed to developing the cooperative and achieving its collective objectives. That

commitment implies mutual trust and reciprocity among members, on which depends internal cohesion and the cooperative's performance. For this reason, human resources are another of the factors, process this time, that influence satisfaction.

It must also be highlighted that one of the greatest challenges for today's cooperatives lies in human resources, since members' average age is around 60. The younger generations seem not to be attracted or motivated to belong to this type of organisation.

Another aspect to consider, when assessing satisfaction, is the cooperative's power and control. This form of organisation, as seen, is specific and follows a set of particular rules, namely the form of power and control within the organisation. For cooperators, it is important to know that power and control are shared by all members equally, the result of their democratic organisation, controlled by members, where decision-making is shared, the power of each one being not being related to the volume of capital or the volume of relationships established with the cooperative.

A final factor significantly related to satisfaction is organisational development. The respondents recognize that participation in cooperatives leads to organisational development, through access to resources, services and knowledge complementary to their own. Cooperatives make it possible to obtain financial resources, infrastructure or even research and development, which would be unobtainable if they acted alone. Furthermore, cooperatives stimulate not only development of the alliance but also the development of individual business.

## 5.2. Implications for theory and practice

Concerning the implications for theory, this study fills a gap in the national and international literature on cooperatives. Until now, little or no research has been done to assess the factors related to cooperator satisfaction. In addition, this study is also relevant to the sustainability of agricultural co-operatives, which in turn has implications for the sustainability of livelihoods and society in rural areas.

In practical terms, at a time of economic crisis, cooperatives appear as a viable option for many small and medium-sized farmers, which increase the relevance of the study. Indeed, if this is a viable option, it must be understood how it works to satisfy those who engage in it, to define strategies and develop policies which, by promoting cooperator satisfaction, also promote the sustainability, creation and development of this type of organisation.

This study can indicate paths and define strategies for the cooperative sector, which is of growing importance, not only in developing and underdeveloped countries, but also in countries with high development indices. Portugal is no exception, at a time when legislative initiatives have reviewed the Cooperative Code, attempting to bring those organisations even closer to the traditional business sector than to the cooperative and social sector.

The conclusions drawn from this research should be heeded by leaders, cooperators and legislators, as they demonstrate that it is not merely a firm, in the traditional understanding of the term, that cooperative members seek, but rather a very specific organisation where economic results and performance are not their central concerns.

In trying to understand what factors have greatest influence on satisfaction and the intention to remain in the cooperative, this study also contributes to the perception of what really matters to co-operators, which in the end means understanding how to maintain and capture value added for cooperators and their communities. Analysis of this level of satisfaction also allows determination and comparison of different economic, geographical and political situations, thereby allowing the gathering of best practices



Fig. 1. Variables predicting members' satisfaction.

and definition of sector policies.

Also in practical terms, it was demonstrated that cooperatives are attractive entities for small farmers and their families, who are guaranteed an outlet for their produce, and where all share a high feeling of belonging. Cooperatives are based on social and cultural foundations, and therefore reveal some resistance to change and are not so permeable to matters such as performance and success.

Finally, this study lets managers, cooperators and other bodies with responsibilities in the sector understand which factors most influence cooperatives' success, forming a management tool allowing on one hand, assessment of the current state of the cooperative, identifying the factors considered crucial by the interviewees performing management functions for the success of this type of organisation, and on the other, helping those in the processes of creating cooperatives to understand what is necessary to increase this type of organisation's chances of viability.

### 5.3. Limitations and suggestions for future research

One of the greatest difficulties felt throughout this study had to do with obtaining answers to the questionnaire. In fact, due to the sector and the advanced age of its members, it was necessary to adopt a wide range of approaches to obtain a number considered satisfactory, to be able to determine indicators corresponding as much as possible to the situation portrayed. Another limitation was the fact that the respondents did not depend entirely on the commercial relations established with their cooperatives. This could bias cooperators' opinions, given the other situations they are also associated with. Indeed, it should be remembered that this study was only made in the Dão wine-producing region and only with cooperators belonging to wine-producing cooperatives. In future research, it would therefore be pertinent to apply this study to other sectors of cooperative activity, such as milk production or pharmaceuticals, to find out if the results are similar to those found here.

Application of a longitudinal study is also relevant, so as to understand if times of crisis, or times of growth/stagnation, have implications for cooperators' satisfaction and their intention to remain. Another approach could be to find out the general population's image of the cooperative movement and cooperatives, and whether there are different perceptions according to age, region of the country or level of education. Thorough study of the associative and business components of cooperatives is also recommended, so as confirm whether they can indeed be considered as hybrid management models.

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### Appendix

#### Structural Factors.

##### Compatibility

- |   |  |
|---|--|
| 1 | Mutual objectives.   |
| 2 | The existence of common strategies among cooperators.  |
| 3 | The existence of better management practices than those existing for individual business at the time of forming the cooperative. |
| 4 | Equitable contributions from all cooperators.  |
| 5 | Policies to reward and distribute the cooperative's surplus.   |
| 6 | The cooperative's organisational structure.  |

(continued)

#### Partner Selection

- |    |  |
|----|--|
| 7  | Cooperators' common location (if they are close to one another). |
| 8  | The feeling of belonging to a group or tribe – Ethnicity.        |
| 9  | Sharing collective values.                                       |
| 10 | Cooperative members' strong involvement.                         |
| 11 | The feeling of self-interest/self-help.                          |
| 12 | The existence of more resources than for individual business.    |
| 13 | Complementarity of cooperators' resources.                       |
| 14 | Cooperators' previous experience in alliances.                   |
| 15 | Collaborators' trust in the cooperative.                         |
| 16 | Professionalism, honesty and responsibility among cooperators.   |
| 17 | Knowledge of market conditions.                                  |

#### Government Policies

- |    |                                    |
|----|------------------------------------|
| 18 | Government incentives and support. |
| 19 | European Union action.             |

#### Process Factors.

N° of item	Item
------------	------

##### Trust and commitment

- |    |  |
|----|--|
| 20 | Trust among cooperators  |
| 21 | The existence of advice, technical support and technological knowledge |
| 22 | Members' loyalty and commitment  |
| 23 | The fact of belonging to a cooperative community                       |

##### Human Resources

- |    |   |
|----|---|
| 24 | The supply/demand relationship between cooperative and cooperators                                      |
| 25 | The existence of horizontal networks with members' representation regarding the cooperative's structure |
| 26 | Increasing the number and diversity of members as the cooperative grows                                 |
| 27 | The fact that administration board members and executives are easily accessible                         |
| 28 | Allows each member to remain small, but can act/benefit on a large scale.                               |
| 29 | Good personal relationships   |

##### Power and control

- |    |  |
|----|--|
| 30 | The existence of democratic governance (one member, one vote) – Balance of power |
| 31 | The fact that members can act as members of the community                        |
| 32 | Identical control by cooperators   |
| 33 | Balance of strength among partners   |

##### Culture among firms

- |    |  |
|----|--|
| 34 | Cooperatives are an alliance between firms and/or people to obtain information               |
| 35 | Cooperatives are efficient and effective forms of doing business                             |
| 36 | Communication between cooperatives and their members, which is less formal and more frequent |

#### Results Factors.

N° of item	Item
------------	------

##### Organisational development

- |    |   |
|----|---|
| 37 | The existence of infrastructure necessary to the business         |
| 38 | Access to services not provided by private industry or government |
| 39 | Investment in local communities and creation of social capital    |
| 40 | Educational benefits  |

##### Competition and competitive advantages

- |    |   |
|----|---|
| 41 | The existence of negotiating power to obtain competitive advantages and market position   |
| 42 | Obtaining direct (dividends or rewards for support) and indirect (lower transaction costs) financial benefits for members' businesses, through the cooperative's central operations and/or diversified investment |
| 43 | Diverse and marketing benefits (commercialization).   |

##### Performance and success

- |    |   |
|----|---|
| 44 | Support in sales and increased profitability                                      |
| 45 | Adding value to products and services   |
| 46 | Lower transaction costs and lower environmental risks, managed by the cooperative |
| 47 | The fact of belonging to the cooperative community                                |
| 48 | Creating value for future generations   |
| 49 | Feeling of fulfilment and pride   |

**Satisfaction.**

Satisfaction	
50	The cooperative is a good firm to do business with.
51	Generally satisfied with belonging to the cooperative.
52	Satisfied with how the cooperative works.

**References**

- Amador, C., 2013. Sustentabilidade Financeira das Organizações da Economia Social: novas Soluções socialmente inovadoras em época de crise. In: IV Colóquio Internacional de Doutorandos/as do CES. FEUC. Coimbra, Portugal.
- Armstrong, S.J., Overton, T.S., 1977. Estimating nonresponse bias in mail surveys. *J. Market. Res.* 14 (3), 396–402.
- Bijman, J., Iliopoulos, C., 2014. Farmer's cooperatives in the EU: policies, strategies, and organization. *Ann. Public Coop. Econ.* 85 (4), 497–508.
- Birchall, J., Ketilson, L.H., 2009. Resilience of the Cooperative Business Model in Times of Crisis. International Labour Organization.
- Blumberg, B., Cooper, D.R., Schindler, P.S., 2005. *Business Research Methods*. McGraw-Hill, Berkshire.
- Borges, P.M., 2012. Estudo Comparativo das Castas Tintas Nobre do Dão: Touriga Nacional, Jaen, Tinta Roriz e Alfrocheiro, dissertação de mestrado em Qualidade e Tecnologia Alimentar, Instituto Politécnico de Viseu – Escola Superior Agrária de Viseu., Portugal.
- CASES, 2012. Os Números Do Cooperativismo Em Portugal. Available at: <http://www.cases.pt>. on 23/01/2013 22:00.
- CASES, 2013. Os Números Do Cooperativismo Em Portugal. Available at: <http://www.cases.pt>.
- Chaddad, F.R., Cook, M.L., 2004. Understanding new cooperative models: an ownership-control rights typology. *Rev. Agric. Econ.* 26 (3), 348–360.
- Chiffolleau, Y., et al., 2007a. Networks, innovation and performance. Chapter 3. In: Karantininis, K., Nilsson, J. (Eds.), *Vertical Markets and Cooperative Hierarchies*. Springer, pp. 35–59.
- Chiffolleau, Y., Dreyfus, F., Stofer, R., Touzard, J.-M., 2007b. Networks, innovation and performance, chapter 3. In: Karantininis, K., Nilsson, J. (Eds.), *Vertical Markets and Cooperative Hierarchies*. Springer, pp. 35–59.
- Clube de Vinhos Portugueses, 2018. Caracterização da Região do Dão. Disponível em: <https://www.clubevinhosportugueses.pt/turismo/caraterizacao-da-regiao-do-dao-2/>.
- Cook, M.L., 1995. The Future of U.S. Agricultural Cooperatives: a neo-institutional approach. *Am. J. Agric. Econ.* 77, 1153–1159.
- Couderc, J.-P., Marchini, A., 2011. Governance, commercial strategies and performances of wine cooperatives: an analysis of Italian and French wine producing regions. *Int. J. Wine Bus. Res.* 23 (3), 235–257.
- Coutinho, C.P., 2014. *Metodologia de investigação em Ciências Sociais e Humanas: Teoria e Prática*, 2.ª Ed., Coimbra: Edições Almedina S.A.
- Couvaneiro, C.S., 2004. *Práticas Cooperativas: Personalização e Socialização*. Instituto Piaget, Lisboa.
- CVRD – Comissão Vitivinícola da Região do Dão, 2018. *A Região Do Dão*. Viseu. CVRD.
- Delbono, F., Reggiani, C., 2013. Cooperative firms and the crisis: evidence from some Italian mixed oligopolies. *Ann. Public Coop. Econ.* 84 (4), 383–397.
- Ertimur, B., Venkatesh, A., 2010. Opportunism in co-production: implications for value co-creation. *Australas. Market J.* 18, 256–263.
- European Commission, 2013. *Guide to Social Innovation*. DG Regional and Urban Policy, Luxemburg.
- Filippi, M., Triboulet, P., 2011. Alliances stratégiques et formes de contrôle dans les coopératives agricoles. *Rev. d'Écon. Ind.* 133, 57–78.
- Franco, M., 2011. Performance in strategic alliances: an analysis of objective and subjective measures. *Int. J. Entrepreneurial Ventur.* 3 (1), 84–100.
- Hair, J., Black, B., Babin, B., Anderson, R., Tatham, R., 2010. *Multivariate Data Analysis*, Upper Saddle River. Pearson Prentice Hall, New Jersey, EUA.
- Hansmann, H., 1996. *The Ownership of Enterprise*. Harvard University Press, Boston.
- Hernández-Espallardo, M., Arcas-Lario, N., Tantiús, P., 2013. Farmer's satisfaction and intention to continue as members of agricultural marketing Co-operatives: neoclassical versus transaction costs considerations. *Eur. Rev. Agric. Econ.* 40 (2), 239–260.
- Iliopoulos, C., 2015. *Ownership and Governance in Agricultural Cooperatives: an Update*. AGRERI Working Paper Series, 2015-1.
- Instituto da Vinha e do Vinho, I.P., 2013. *Evolução da Produção nacional de Vinho por Região Vitivinícola*. Estatísticas. Available at: <http://www.ivi.min-agricultura.pt/np4/36>. accessed on 15/02/2014\_15:46.
- Lopes, P., 2010. *A Importância económica e social do Cooperativismo: Adegas Cooperativas de Torres Vedras*. Edições Colibri/Câmara Municipal de Torres Vedras, Lisboa.
- Lui, S., Ngo, H., 2005. The influence of structural and process factors on partnership satisfaction in interfirm cooperation. *Group Organ. Manag.* 30 (4), 378–397.
- Marcos-Matás, G., Hernández-Espallardo, M., Arcas-Lario, N., 2013. Transaction costs in agricultural marketing cooperatives: effects on market performance. *Outlook Agric.* 42 (2), 117–124.
- Mariani, A., Pomarici, E., Boatto, V., 2012. The international wine trade: recent trends and critical issues. *Wine Economics and Policy* 1 (1), 24–40.
- Marôco, J., 2010. *Análise de Equações Estruturais: Fundamentos teóricos, Software e Aplicações*. Pero Pinheiro: Report Number.
- Marôco, J., 2011. *Análise Estatística Com O SPSS Statistics*, 5.ª Ed. (Pero Pinheiro: Report Number).
- Matei, L., Matei, A., 2012. The social enterprise and the social entrepreneurship – instruments of local development. A comparative study for Romania. *Procedia – Social and Behavioral Sciences* 62, 1066–1071.
- Mazzarol, T., Limnios, E., Reboud, S., 2013. Co-operatives as a strategic network of small firms: case studies from Australian and French co-operatives. *Journal of Co-operative Organization and Management* 1 (2), 27–40.
- Mazzarol, T., Limnios, E.M., Reboud, S., 2011. Co-operative enterprise: a unique business model? Future of Work and Organisations. In: 25th Annual ANZAM Conference, vols. 7–9, pp. 1–22. December 2011.
- Meira, D.A., Ramos, M.E., 2014. *Governança e Regime Económico das Cooperativas: Estado da arte e linhas de reforma*. Vida Económica, Porto.
- Mills, C., Davies, W., 2013. *Blueprint for a Co-Operative Decade*. International Co-operative Alliance. Available at: <http://ica.coop/> accessed on 01052013.
- Mojo, D., Fischer, C., Degefa, T., 2017. The determinants and economic impacts of membership in coffee farmer cooperatives: recente evidence from rural Ethiopia. *J. Rural Stud.* 50, 84–94.
- Montegut, Y., Cristóbal, E., Marimon, F., 2011. The singularity of agrarian co-operatives management: cooperatives positioning in the olive oil sector in Spain. *Int. J. Bus. Manag.* 6 (6), 16–31.
- Namorado, R., 2013. *O Essencial sobre Cooperativas*. Imprensa Nacional Casa da Moeda, Lisboa.
- Nunnally, J., 1978. *Psychometric Theory*. McGraw-Hill, New York, EUA.
- Oczkowski, E., Krivokapic-Skoko, B., Plummer, K., 2013. The meaning, importance and practice of the co-operative principles: qualitative evidence from the Australian co-operative sector. *Journal of Co-operative Organization and Management* 1, 54–63.
- Pesãmaa, O., Pieper, T., Vinhas da Silva, R., Black, W.C., Hair, J.F., 2013. Trust and reciprocity in building inter-personal and inter-organizational commitment in small business co-operatives. *Journal of Co-operative Organization and Management* 1, 81–92.
- Ribeiro, M., Alves, G., 2010. Empreendedorismo e Inovação: a Cooperativa como alternativa empresarial para o desenvolvimento. *Sci. Iuris* 14, 181–191.
- Ritossa, C., Ferreira, J., Predebon, E., 2009. *Estratégias e Indutores da Internacionalização das Cooperativas Agropecuárias: O Caso Paranaense*. *Rev. Eletrônica Ciência Adm.* 9 (2), 198–212.
- Ruben, R., Heras, J., 2012. Social capital, governance and performance of Ethiopian coffee cooperatives. *Ann. Public Coop. Econ.* 83 (4), 463–484.
- Sakarya, S., Bodur, M., Yildirim-Öktem, Ö., Selekler-Göksen, N., 2012. Social alliances: business and social enterprise collaboration for social transformation. *J. Bus. Res.* 65, 1710–1720.
- Steinerowski, A., 2012. Can social enterprise contribute to creating sustainable rural communities? - Using the lens of structuration theory to analyse the emergence of rural social enterprise. *Local Econ.* 27 (2), 167–182.
- Street, C.T., Cameron, A., 2007. External relationships and the small business: a review of small business alliances and network research. *J. Small Bus. Manag.* 45 (2), 239–266.

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