



Universidade do Minho
Escola de Economia e Gestão

Maria de Fátima Arruda Souza

An organizational capacity model for Portuguese wine cooperatives

Doctoral Thesis
Ph.D. in Business Administration

Supervisor
Professor Ana Carvalho, Ph.D.

September 2017

STATEMENT

Name: Maria de Fatima Arruda Souza

Email: mfarrudasouza@gmail.com Telephone number: (351) 926-783-424

Identification card number: 284146820

Title of the thesis:

An organizational capacity model for Portuguese wine cooperatives

Adviser: Professor Ana Carvalho, Ph.D Year of completion: 2017

Field of the Doctorate: Ph.D in Business Administration

THE FULL REPRODUCTION OF THIS THESIS/WORK IS ONLY AUTHORISED
FOR RESEARCH PURPOSES THROUGH WRITTEN STATEMENT BY THE
INTERESTED PARTY.

University of Minho, 15/09/2017

Signature: mfarrudasouza

STATEMENT OF INTEGRITY

I hereby declare having conducted my thesis with integrity. I confirm that I have not used plagiarism or any form of falsification of results in the process of the thesis elaboration.

I further declare that I have fully acknowledged the Code of Ethical Conduct of the University of Minho.

University of Minho, 15/09/2017

Full name: Maria de Fátima Arruda Souza

Signature: mfatouza

ACKNOWLEDGMENTS

Writing this acknowledgment is the last step of my thesis. It has been a period of intense learning for me, not only in the scientific arena but also on a personal level. I would like to reflect on the people who have supported and helped me throughout this last three years.

I would first like to thank my supervisor Professor Ana Carvalho for her support and encouragement throughout my studies. It is rare to find a supervisor who is always available for listening in the course of performing research. Her technical and editorial advice was essential to the completion of this thesis.

I must express my very profound gratitude to all the interviewees, members and managers of the wine cooperatives for their patience, time and honesty. This accomplishment would not have been possible without them.

I am indebted to my colleagues and friends Cidália and Artur for becoming my “family” in Portugal.

Also, I am deeply grateful to my friend Moacir for our enjoyable and long-lasting chats about life, dreams, doubts, and sometimes, research.

Finally, I would like to thank my son Diego and my daughter-in-law Thalita for their love and support and my grandson just for being my greatest joy.

AN ORGANIZATIONAL CAPACITY MODEL FOR PORTUGUESE WINE COOPERATIVES

ABSTRACT

The purpose of this research is to develop a model of organizational capacity that can potentially lead wine cooperatives to achieve success, exploring the factors in the environment that affect their performance and present preliminary criteria to evaluate organizational capacity based on the model. Cooperatives are organizations with particular characteristics. Apart from having sharing cooperative principles and values, there is a dual nature to their purpose that has been noted in the literature. Cooperatives have both an economic and a social dimension: they are simultaneously a business and non-profit driven organizations owned by their members and controlled by them democratically. The aim of cooperatives is to maximise members' service and satisfaction. Financial indicators alone are not suitable to assess cooperatives' performance since they are not for-profit organization. So, the construct of organizational capacity, developed to assess the potential of non-profit organizations (NPO) to achieve their goals, was adapted to wine cooperatives in Portugal. Although there are models of organizational capacity for NPO, they do not fit the reality of cooperatives mainly because of their economic role. Cooperatives are also economically oriented businesses. A grounded theory approach was adopted for this research, which is a qualitative methodology that intends to systematically obtain and analyse data in social research to generate theory. Cooperatives were selected through theoretical sampling, aiming to reach cooperatives that could represent the diversity of the universe of 67 wine cooperatives in Portugal in 2015. Twenty-three people (members and managers) were interviewed in 19 wine cooperatives and unions in different regions of the country. The model of organizational capacity in the environment of wine cooperatives was developed taking into account the categories that emerged from data. The model provides a systemic view of the wine cooperative environment and has three sets of categories: members, environmental factors and the cooperative itself. The two categories that compose this last set are cooperative identity and organizational capacity. The core category in the model of organizational capacity in wine cooperatives is management because it is the required ability of managers that allows them to coordinate the environmental factors and other capacities of the cooperative.

Keywords: organizational capacity, cooperatives, Portuguese wine cooperatives, environmental factors

UM MODELO DE CAPACIDADE ORGANIZACIONAL PARA ADEGAS COOPERATIVAS PORTUGUESAS

RESUMO

O objetivo desta pesquisa é desenvolver um modelo de capacidade organizacional capaz de gerar o potencial de conduzir as adegas cooperativas ao sucesso, identificando os fatores ambientais que afectam o seu desempenho e propor critérios para avaliar a capacidade organizacional das adegas cooperativas a partir do modelo. As cooperativas são organizações com características muito próprias. Para além de partilharem os princípios e valores cooperativos, uma dualidade de propósito tem sido identificada na literatura. As cooperativas têm tanto uma dimensão económica como uma dimensão social: são simultaneamente um negócio e organizações sem fins lucrativas que pertencem e são controladas pelos seus associados, democraticamente. A finalidade das cooperativas é maximizar os serviços e a satisfação dos associados. Indicadores financeiros não são adequados para avaliar o desempenho das cooperativas, pois estas não são organizações que visam lucro. Assim, o constructo capacidade organizacional, desenvolvido para avaliar o potencial das organizações sem fins lucrativos (OSFL) de atingir seus objetivos, foi adaptado para as adegas cooperativas Portuguesas. Embora existam modelos de capacidade organizacional para OSFL, eles não se adequam à realidade das cooperativas dado o seu papel económico. As cooperativas são também negócios com orientação económica. A abordagem de pesquisa foi a teoria fundamentada, uma metodologia qualitativa que pretende obter e analisar dados sistematicamente em pesquisa social para gerar teoria. As cooperativas foram selecionadas através da amostragem teórica, buscando incluir cooperativas que pudessem representar a diversidade do universo de 67 adegas cooperativas existentes em Portugal em 2015. Vinte e três pessoas (associados e gestores) foram entrevistados em 19 adegas cooperativas e uniões, em diferentes regiões do país. O modelo de capacidade organizacional no ambiente das adegas cooperativas foi desenvolvido levando em consideração as categorias que surgiram nas entrevistas. O modelo proporciona uma visão sistêmica do ambiente das adegas cooperativa e apresenta três conjuntos de categorias: associados, factores ambientais e a cooperativa. As duas categorias que compõem este último grupo são a identidade cooperativa e a capacidade organizacional. A categoria central do modelo de capacidade organizacional em adegas cooperativas é gestão pois é a habilidade necessária aos gestores que lhes permite coordenar os factores ambientais e as outras capacidades da cooperativa.

Palavras-chave: capacidade organizacional, cooperativas, adegas cooperativas portuguesas, factores ambientais

INDEX

ACKNOWLEDGEMENTS	v
ABSTRACT	vii
RESUMO	ix
INDEX	xi
LIST OF ABBREVIATIONS	xiii
LIST OF FIGURES	xiv
LIST OF TABLES	xv
1. INTRODUCTION	01
2. LITERATURE REVIEW AND BACKGROUND INFORMATION	07
2.1. COOPERATIVES	07
2.1.1. Values and Principles	12
2.1.2. Challenges in Cooperatives	16
2.1.3. Performance in Cooperatives	19
2.2. ORGANIZATIONAL CAPACITY	21
3. METHODOLOGY	27
3.1. WHAT IS GROUNDED THEORY?	29
3.2. WHY GROUNDED THEORY?	33
3.3. DATA GATHERING	34
3.4. SAMPLING	35
3.5. THE INTERVIEWS AND THE INTERVIEWEES	36
3.6. DATA ANALYSIS	37
3.7. QUALITY OF THE RESEARCH	40
4. THE WINE BUSINESS AND WINE COOPERATIVES	43
5. A MODEL OF ORGANIZATIONAL CAPACITY IN WINE COOPERATIVES	55
5.1. COOPERATIVE IDENTITY	58
5.2. WINE	65
5.3. PERFORMANCE	69
5.4. MEMBERS AS SUPPLIERS	73
5.5. TRUST	77

5.6. COMMITMENT	81
5.7. HISTORICAL FACTORS AND CULTURAL FACTORS	86
5.8. IMAGE	90
5.9. COMPETITION	93
5.10. DEMOGRAPHICS AND AGRARIAN STRUCTURE	94
5.11. CONSUMERS AND MARKET	103
5.12. ORGANIZATIONAL CAPACITY	108
5.12.1. Financial Capacity	108
5.12.2. Infrastructure Capacity	110
5.12.3. Human Resources Capacity	112
5.12.4. Marketing Capacity	114
5.12.5. Relationship with Members	117
5.12.6. Strategic Planning Capacity	121
5.12.7. Management Capacity	128
5.13. PRELIMINARY ATTEMPT TO EVALUATE ORGANIZATIONAL CAPACITY IN WINE COOPERATIVES	133
6. CONCLUSION	139
REFERENCES	147
APPENDIX A – Criteria for evaluating the quality of research	161
APPENDIX B – Interview guide	165
APPENDIX C – Cooperatives and Unions contacted for interviews	166

LIST OF ABBREVIATIONS

CVR – Regional Wine Commission

FENADEGAS – Federation of Portuguese Wine Cooperatives

ICA – International Cooperative Alliance

INE – National Institute of Statistics

IOF – Investor-owned firms

IVV – Portuguese Institute of Vine and Vineyard

NPO – Non-profit organization

OIV – International Organisation of Vine and Wine

UNDP – United Nations Development Programme

LIST OF FIGURES

Figure 1: Conceptual model of organizational capacity	24
Figure 2: Paradigms of organization theory	28
Figure 3: Most frequent words in interviews	39
Figure 4: Most frequent words in the categories: success factors, threats, and problems	39
Figure 5: Wine regions in Portugal	50
Figure 6: Organizational capacity and environment of wine cooperatives in Portugal	56
Figure 7: Perception of members' role of wine cooperatives: members as suppliers	76
Figure 8: Perception of members' role of wine cooperatives: members as suppliers and owners	84

LIST OF TABLES AND CHARTS

Table 1: Differences between cooperatives, IOF and NPO	11
Table 2: Relationship of principles to the underlying values of cooperation	16
Table 3: Property rights problems of agricultural cooperatives	17
Table 4: Factors or elements of organizational capacity	23
Table 5: Evolution of the categories of analysis	38
Table 6: Evolution of global wine production.....	45
Table 7: Area of vineyard in Portugal	51
Table 8: Average price of grapes: cooperatives x companies	70
Table 9: Percentage of the payments to the members (grapes + surplus)	71
Table 10: Sales of still wine in Continental Portugal – 2016	105
Table 11: Portuguese exportation by country in 2016	106
Table 12: Elements of managerial competence in cooperatives	132
Table 13: Preliminary criteria to evaluate organizational capacity in wine cooperatives	135
Chart 1: Percentage of wine production by country	46
Chart 2: Wine consumers (2015) – mhl	47
Chart 3: International wine trade in volume and value	47
Chart 4: Volume of wine exported in 2015 by country	48
Chart 5: Values of wine exports by countries in 2015	48
Chart 6: Average price per litre in wine exportations	49
Chart 7: Percentage of wine production by cooperatives	52

1. INTRODUCTION

The wine business is a highly competitive global industry. In Portugal, the business is important to the economy and wine is part of the culture of the country. In fact, there is wine production in all regions of Portugal.

Compared to other wine producers in the European Union, Portugal is the fifth producer of wine in volume, just behind Italy, France, Spain, and Germany. In 2015 Portugal produced 6.3 million hectolitres¹ of wine and consumed 4.1 million hectolitres in the same period. The total wine exported in 2016 was 727 million euros. In the same year, Portugal imported 110 million euros with a positive balance of 616 million euros. Cooperatives were responsible for 39% of wine production in the country in 2015 (IVV, 2017).

Despite competing in the same market and seeking positive results as well, cooperatives are organizations that differ from corporations in many aspects. According to ICA - International Cooperative Alliance (2015a)², cooperatives are owned by their members and controlled by them democratically. Any surplus revenues earned by the cooperative are reinvested in the business or returned to members based on how much business they conducted with the cooperative that year. The purpose of cooperatives is to maximize members' service and satisfaction and to promote and assist community development. Corporations, on the other hand, are owned by investors, controlled by shareholders, profits return to shareholders based on ownership share, and their purpose is to maximize shareholder returns.

Cooperatives are also different from non-profit organizations (NPO). Although profit is not the purpose in either of them, cooperatives are business organizations that act in the market as any other investor-owned firm (IOF). The economic dimension is the mean by which the cooperative will reach its social dimension, satisfying the members. On the other hand, NPO's aim is to serve a public interest by delivering a service or product to the community. These organizations depend on donations, philanthropy and voluntarism to operate, in general, attending needs in assistance areas such as health, education, housing, and so on (ICA, 2015b).

¹ 1 hectolitre = 100 litres

² The International Cooperative Alliance is an independent, non-governmental organisation established to unite, represent and serve co-operatives worldwide (ICA, 2015c).

In an exploratory interview conducted in 2015 with two managers in a wine cooperative in the region of Minho, northern Portugal, it was possible to identify some issues that specifically concern the management of wine cooperatives. For instance, a threat to the business is an increasingly competitive environment brought on, among others, by the decrease of wine consumption due to changing consumer habits, road legislation, and higher prices compared to other beverages, and by the entrance of new wine producing countries in the market.

According to the interviewees, many wine cooperatives are technologically obsolete, producing wine with the same infrastructure since their creation, more than 50 years ago in some cases. These cooperatives need to invest to compete on equal terms with companies. Moreover, some cooperatives face financial problems, nowadays. It seems that the ones that have invested in infrastructure, product quality and hired professional managers were more capable to deal with the changes in the business.

The professionalization of management has brought to the cooperatives a market orientation and the concern about the long-term sustainability of the organization. Although this approach may have guaranteed the maintenance of wine cooperatives in the business, cooperatives are not IOF that seek maximization of profits and focusing only on the business may conflict with cooperatives' purpose of serving the members and also disregard cooperative values and principles.

There are two components in cooperatives that define its identity, known as the dual nature of cooperatives. The first is the economic component characterized by being a business enterprise. The second is the primeval social component that is linked to serving the social group of members.

This duality in cooperatives, added to the challenges of facing a fiercely competitive business, sheds light on the necessity to provide wine cooperatives with the capacity to survive and achieve its social purpose towards the members.

Although there is no "recipe" that guarantees high performance, some resources and abilities allow cooperatives to become potentially able to reach their goals and become successful. In general, success in cooperatives is associated with reaching the main purpose of the organization that is satisfying the members while remaining sustainable. As Rebelo, Caldas, & Matulich (2010) declare, agricultural cooperatives are successful if they provide higher economic benefit to the members than they can achieve outside of the cooperative.

So, what are the capacities that can potentially drive wine cooperatives to achieve their goals?

The construct of organizational capacity has been used to enable NPO to improve their performance. This concept, originally developed to be applied in national development programs, may help to identify the factors that lead a cooperative to success. The purpose of organizational capacity is to identify the main abilities required for the organization to meet its objectives. The abilities or capacities may differ and the challenge is to find the set of capacities that best fit the organization in study. Once the organization knows the main capacities, it is possible to develop them to improve performance.

As Eisinger (2002) says, organizational capacity influences effectiveness. To him, the definition of organizational capacity is “a set of attributes that help or enable an organization to fulfil its missions” (p.117).

Therefore, the thesis will discuss wine cooperatives in Portugal, studying the organizational capacity of these organizations, proposing a model of organizational capacity in the wine cooperative environment and presenting preliminary criteria to evaluate organizational capacity based on the model. The research questions to be answered in this study are: What are the factors in the environment that affect the performance of wine cooperatives? What are the dimensions of organizational capacity that will potentially lead cooperatives to achieve success?

Costanza & Ruth (2001) present three criteria to classify models: realism, the degree the model reflects the observed behaviour; precision, the degree the model reflects the behaviour in quantitative and repeatable way; and generality, the degree the model represents a broad range of systems. In this study, the designed model of organizational capacity in wine cooperatives can be classified as a general conceptual model, since it describes (qualitatively) the relationships between the most important dimensions of the system. Although the model is a simplification of the relationships in the environment of wine cooperatives in Portugal, it presents the dimensions in a higher level of abstraction, “thereby gaining generality of the expense of realism and/or precision” (Costanza & Ruth, 2001, p. 23). The authors continue saying that these models can contribute to improve the business decision-making process of managers.

The research will follow a grounded theory approach as proposed by Corbin & Strass (2008) in the book *Basics of Qualitative Research*. As Locke (2001) claims,

one of the reasons why grounded theory is appropriate to management research is its linkage to practice, since theory generated in this approach is grounded on data. According to her, the resulting theory of grounded theory is helpful in “providing employees, and managers a way to identify and institute changes that might improve their situations.” (p. 96).

Thus, the model of organizational capacity can provide managers, members, and employees of wine cooperatives in Portugal with a systemic view of the environment surrounding them, as well as the relationships among external factors, the cooperative identity, and components of organizational capacity that impact cooperatives' performance. Besides, the guide to evaluate organizational capacity provides a practical tool to managers and members. The understanding of the dimensions of organizational capacity in wine cooperatives can strengthen cooperatives and consequently might improve the lives of producers and ensure rural development. As Bhuyan & Leistriz (2001) argue, knowing the factors that lead some cooperatives to succeed may help other cooperatives to enhance their ability to succeed too.

Although cooperatives have particular characteristics, a solid contribution in the economy and a prominent position in the history of organisations, few studies have been published about how they are or should be managed. Wine cooperatives are even less considered. Indeed, most of the publications found in scientific journals relate to other areas different from management, or other types of cooperatives, which have different characteristics when compared to wine cooperatives.

Some authors denounce the lack of publications on management in cooperatives. There is very little research in management of cooperatives, say Puusa, Mönkkönen, & Varis (2013) in their article on the dual nature of cooperatives. In their theoretical article, also about the dual nature of cooperatives, Puusa, Hokkila, & Varis (2016) say that cooperatives have been neglected by economic and management theory and have attracted little attention in management science.

In their study on the competencies of managers in cooperatives, Jussila & Tuominen (2010) identify four studies on the management of cooperatives from the 1990's, all of them are theoretical. The themes addressed in those studies are: the identity of cooperatives and management, cooperative governance and its structure, and human resources management in cooperatives. Despite the relevant participation of cooperatives in the value chains of many agricultural products,

including wine, there are few studies about the cooperative sector, in particular, about agricultural cooperatives, declares Rebelo & Caldas (2015) in their article about the impact of wine aging in Port wine price.

Puusa et al. (2016) claim that more research is required to better understand the unique characteristics of cooperatives, since they have a considerable economic, social and cultural impact, mainly in rural areas.

Besides, there is a gap in the literature regarding the application of organizational capacity to cooperatives, which is where this study aims to contribute.

This thesis is organized as follows: the first part is the literature review and background information about cooperatives and organizational capacity. In the section on cooperatives, after the definitions, this work presents the values and principles of cooperative, the challenges cooperatives face, and how the literature addresses performance in cooperatives. In the next section, the definitions and the dimensions of organizational capacity defined by different authors are described, with an emphasis on Hall et al. (2003)'s model of organizational capacity for NPO.

The second part presents the methodology of the study. It starts with a description of grounded theory and an explanation of the choice of grounded theory. Then, there is a section about how data was gathered and another one about the process of sampling, followed by a brief description of the interviews and the interviewees, and how data was analysed according to grounded theory. This part ends with considerations on the quality of the research.

The third part is a description of the wine business worldwide and wine cooperatives in Portugal. It begins with some considerations about wine, and continues with statistics from Portuguese governmental institutions. The focus is on the numbers of wine business in the world, in Portugal and the participation of Portuguese wine cooperatives in both.

The fourth part of this thesis presents a model of organizational capacity in wine cooperatives that resulted from the research. The model shows three sets of categories: members, environmental factors and internal factors, where organizational capacity in wine cooperatives is included. The next section in this part is a preliminary guide to evaluate organizational capacity in wine cooperatives.

Finally, the main conclusions, the contributions of the study, limitations of the research and suggestions for future studies are identified.

2 LITERATURE REVIEW AND BACKGROUND INFORMATION

This chapter has two sections: cooperatives and organizational capacity. The literature review of the first section presents definitions, values and principles, challenges and performance of cooperatives. The second presents definitions and dimensions of organizational capacity found in literature.

2.1 COOPERATIVES

There are over 2.6 million cooperatives in the world with about 1 billion members. Cooperatives contribute to sustainable economic growth, employing 250 million people. Within the G20 countries, cooperative employment makes up almost 12% of the total employed population (ICA, 2015b).

As claimed by Goel (2013), cooperatives are an economical and social force in the world. He continues saying that cooperative organizations provide more jobs than all multinational corporations together.

According to Borzaga, Depedri, & Tortia (2011), there is enough evidence showing that cooperatives represent a significant and sometimes growing economic and social role in many sectors and countries, but mainly, they often achieve economic and social outcomes that are better than those achieved by other organizations.

The International Cooperative Alliance (ICA) defines a cooperative as an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically controlled enterprise. Cooperatives are businesses owned and run by and for their members. Whether the members are the customers, employees or residents, they have an equal say in what the business does and equal share in the profits (ICA, 2015c). Borzaga et al. (2011) echo this, saying cooperatives are mutual-benefit organizations that are usually controlled on an equal voting rights basis, not by investors, but by different types of patrons, for instance, producers, consumers or workers (Borzaga et al., 2011). Other authors define a cooperative as user-owned, user-controlled and user-benefited

business organization (Courderc & Marchini, 2011; Nilsson, 1996; Saïssset, Courderc, & Saba, 2011).

Nilsson (1996) explains that: the user-owner principle means that the same people who own and finance the cooperative are those that use it; the user-control principle denotes that those who control the cooperative are those who use the cooperative; and the user-benefits principle implies that the benefits of the cooperative are distributed to its users according to their use.

Hanf & Schweickert (2014) declare that the main principle of the cooperative organization is the patronage of its members, i.e., the aim of a cooperative is to support the members' businesses (Hanf & Schweickert, 2014). Vitaliano (1983) defines cooperative as an economic organization whose residual claims are restricted to the members that supply patronage and elect the board of directors (Vitaliano, 1983).

A cooperative is therefore a member group, described as a people-centred organization. Identified by a cooperative concept, it promotes the principles of self-help, self-dependence, and self-government (Puusa, Hokkila, & Varis, 2016). Members are patrons (buying/selling/working), owners (financing), controllers (leading the business) and beneficiaries (receiving the surplus) at the same time (Nilsson, 1996). Cooperatives can be seen as a form of partial vertical integration where each member contributes in running the business that serves their functional interests (Nilsson, 1996). Gupta (2014) says that cooperatives exist as experiments of democracy because they allow members to be part of something big without losing the sense of ownership and participation (Gupta, 2014).

According to Puusa et al. (2013), the aim of cooperatives is to promote the economic security and enhance its members' standard of living (Puusa et al., 2013). The purpose of cooperatives is not only to provide benefits to the members but also to generate a sufficient amount of surplus in order to maintain the long-term survival of the cooperative (Puusa et al., 2016).

This worldwide phenomenon known as cooperatives can have many variations, such as agricultural cooperatives, credit unions, work cooperatives, consumers cooperative, and more (Van Oorschot, de Hoog, van der Steen, & van Twist, 2013). One of the most expressive forms of cooperative is the agricultural, where the farmers cooperate to sell their production together.

Nilsson (1996) says that a farmer cooperative is a business where the farmers are the major users of the organization's services. Moreover, the benefits received by the farmers from committing capital to a cooperative are associated with patronage, and the formal governance of the business is democratically structured (Nilsson, 1996).

Cooperative organizations have social and economic dimensions, the social dimension being characterized by the relationships between the members, and the economic dimension associated with the relationships between members and the business. The two dimension, also known as the dual nature of cooperatives, are equally important since the cooperative society owns a business, and the cooperative business is owned by a society (Nilsson, 1996).

The concept of dual nature was first introduced by Draheim in 1952. To him, the dual nature means that cooperatives have to be two things in one: (1) a business enterprise and (2) a social group of members (Puusa et al., 2013). According to Levi & Davis (2008), as an organization based on two components, an economic and a social one, cooperatives are too economically oriented to be included in the non-profit sector and too socially oriented to be considered as a for-profit economic organization.

Because of this dual nature, cooperatives have been described as complex organizations with a variety of goals, some of which may be in conflict with one another (Puusa et al., 2013). Internally, cooperatives face conflicting objectives due to a specific double role of the members, as suppliers and owners, since members may wish to immediately obtain prices higher than the market price for their productions instead of making long-term investments with a residual surplus (Saïssset et al., 2011).

As Soboh, Lansink, Giesen, & van Dijk (2009) state “cooperatives are firms with a dual purpose or two-layer entrepreneurship that have to cope with both the competitive market environment and have to fulfill the objectives of the member firms” (p. 466).

Based on this duality, Ashforth & Reingen (2014) propose a dichotomy of cooperative members according to their perspectives, calling each extreme side of this conflict the "idealists" and the "pragmatists". The former focusing mainly

on the values and principles of the cooperative and the pragmatists more concerned with results and the market.

Cooperative can also be seen as hybrid organizations, since they incorporate elements from different institutional logics. Growing research on hybrid organizational indicates that organizations often contain and pursue conflicting goals, values, beliefs, practices, and so on, which creates an environment of contradictions. (Hanf & Schweickert, 2014; Pache & Santos, 2013)

Cooperatives are unique organizations due to their basic organizing principles, means-and-ends rationality, and their inherent diversity of interests that make them different from IOF and NPO (Mooney & Gray, 2002). For instance, IOF distribute dividends to the shareholders while cooperatives use patronage refunds to share the net surplus with their members (Zeuli & Deller, 2007). When compared to non-profit organizations (NPOs), the main difference is that cooperatives are economic organizations while NPOs exist to serve the public interest.

Table 1 presents the main differences of cooperatives, IOF and NPO concerning their purpose, ownership, control mechanisms, composition of the BoD, and the source and destination of the earnings.

Cooperatives are strong business organizations in many sectors, like in agriculture, where farmers' cooperatives often account for 30–70% of the market. (Nilsson, 1999, 2001). In the wine business, cooperatives were responsible for 39% of the market share in Portugal in 2015. (IVV, 2017b)

According to Zeuli & Deller (2007), “one of the most compelling arguments for cooperatives as agents of local economic development is their willingness (their incentives) to remain in a local community longer than investor-owned firms.” (Zeuli & Deller, 2007, p. 12).

Most family farmers operate below their potential, experiencing low productivity and high-cost transactions. The role of agricultural cooperatives is to create the conditions to help family farms to cope with these limitations and become competitive in the market (Herbel, Rocchigiani, & Ferrier, 2015).

Table 1 – Differences between cooperatives, IOF and NPO

	Cooperatives	IOF	NPO
Purpose	Maximize members service and satisfaction	Maximize shareholder returns	Serve in the public interests
Ownership	Member-owned	Investor-owned	Generally not “owned” by a person or member
Control	Democratically controlled - one member, one vote	Controlled by shareholder according to their investment shares	Controlled by a BoD elected by members
BoD	Group of members elected by members	Independent directors, managers, CEOs	Made up of volunteers who do not receive the services, usually chosen for philanthropic or political reasons
Earnings	Surplus (profit) are reinvested in the business or return to members based on how much business they conduct with the cooperative that year	Profits return to shareholders based on ownership share. Timing and dividend payment are determined by the BoD	Surplus is reinvested in the public benefit purpose and their own operations
Source of funds or Generation of money	Through the equity of members	Through capital markets	By donation

Adapted from ICA (2014) and Nilsson (2001).

According to some authors (Birchall, 2004; Herbel et al., 2015; ICA, n.d.), there are many social and economic contributions of cooperatives to their members and to their communities, as follows:

- Cooperatives allow people to help themselves by creating their own economic opportunities.
- Agriculture cooperatives help their smallholder producer-members access inputs, infrastructure, markets, better prices, training, and technologies.
- With open and voluntary membership as one of their founding principles, cooperatives help women access resources and opportunities by expanding their participation in local and national economies.

- Being focused on human needs, cooperatives have proven to be resilient and even recorded growth in times of crisis.
- They are also a source of decent employment for many people around the world.
- Collective action, particularly through cooperatives, offers an efficient way for family farmers to overcome the diverse barriers they face to their development: access to economic assets and knowledge, achieving gains from economy of scale and improved market power with reduced risk and uncertainty.
- Cooperatives can allow family farms to access markets, turning them into viable and competitive units of production (Birchall, 2004; ICA, n.d.; Herbel et al., 2015).

In the case of monopsony and oligopsony markets, as is frequent in the agricultural markets, cooperative entry serves to increase the price paid for output of its members. This effect increases the income of non-members as well, as investor-owned competitors are forced to pay higher prices to compete (Novkovic, 2008). In other words, the presence of cooperatives in some markets creates a fairer trade environment when raising the prices and transferring power to the weakest chain link in agriculture, the small farmers.

Agricultural cooperatives are created to enable family farms to act as IOFs in agricultural markets while avoiding transaction costs and ensuring independent production to them (Tortia, Valentinov, & Iliopoulos, 2013).

2.1.1 Values and Principles

The cooperative ideal was developed in 1844 when a group of weavers and visionaries in Rochdale, England decided to establish a mutual self-help organization, to advance their cause and achieve social objectives through economic activities (Fairbairn, 1994). As a consequence of the Rochdale principles, the ICA developed and refined a statement on the cooperative identity (Oczkowski, Krivokapic-Skoko, & Plummer, 2013).

Maybe the oldest and biggest non-governmental organization (NGO) in the world, the ICA was founded in 1895 through its member organizations,

mainly secondary and tertiary cooperatives. The Alliance represents one billion members of primary cooperatives of all types and sizes in all sectors around the world (Henrÿ, 2013).

The definition of cooperatives, the cooperative values and principles enshrined in the ICA Statement have built the identity of cooperatives since ICA's foundation (Henrÿ, 2013). ICA (2015c) states that "as businesses driven by values, not just profit, cooperatives share internationally agreed principles." (ICA, 2015c).

Since the experience of Rochdale, principles have been modified over time by ICA to reflect what is believed to be necessary for the success and sustainability of cooperatives (Altman, 2014). The cooperative principles have had adjustments in 1937, 1966 and 1995 (Hoyt, 1996). In 1995, the ICA defined the characteristics and values of cooperative organizations (Oczkowski et al., 2013). It is noteworthy to mention that these changes were preceded by extensive consultations with cooperatives, representative bodies of the cooperative sector and researchers around the world, taking many years of study before proposals were brought forward (Schneider, 1999).

According to Nilsson (1996), to define which cooperative principles are to be established, members must have certain common cooperative values. While the cooperative values provide the basis for the cooperative principles, the principles are operationalisations of the values (Nilsson, 1996). Goel (2013) says that the principles elucidate how to put values into practice.

Cooperative values are more abstract and require active application by cooperative members and managers in their personal behavior and organizational operations. Cooperative principles are a more concrete statement, as standards of conduct in cooperatives (Goel, 2013).

Cooperatives are based on the values of democracy, equality, equity, self-help, self-responsibility, and solidarity. In the tradition of their founders, cooperative members believe in the ethical values of honesty, openness, social responsibility and caring for others (ICA, 2015c).

These values are related to the members. They comprise a set of values and norms that reduce the uncertainty of members in relation to each other and to the market (Nilsson, 1996).

The cooperative principles are attributes of the cooperative organization and aim to reduce the transaction costs of the members in their relationships with the cooperative organization (Nilsson, 1996). Cooperative principles give guidance to members and the cooperative organization about the relationship between them (Nilsson, 1996).

According to ICA (2015a) the latest version of the seven cooperative principles are:

1. Voluntary and Open Membership: Cooperatives are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination,
2. Democratic Member Control: Cooperatives are democratic organizations controlled by their members, who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership. In primary cooperatives, members have equal voting rights (one member, one vote) and co-operatives at other levels are also organized in a democratic manner,
3. Member Economic Participation: Members contribute equitably to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. Members usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: developing their co-operative, possibly by setting up reserves, part of which at least would be indivisible; benefiting members in proportion to their transactions with the co-operative; and supporting other activities approved by the membership,
4. Autonomy and Independence: Cooperatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organizations, including

governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their cooperative autonomy,

5. Education, Training, and Information: Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the development of their cooperatives. They inform the general public - particularly young people and opinion leaders - about the nature and benefits of cooperation,
6. Cooperation among Cooperatives: Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional and international structures, and
7. Concern for Community: Cooperatives work for the sustainable development of their communities through policies approved by their members (ICA, 2015a).

Oczkowski et al. (2013) believe that the first three principles of openness, democratic control, and autonomy are fundamental ones and have remained constant as cooperative principles. Concern for community, on the other hand, has been added to ICA principles relatively recently (Oczkowski et al., 2013). Gupta (2014) declares that the success of a cooperative organization can also be understood by the extent to which benefits are distributed beyond the members to the wider community where the cooperative is located, reflecting the ideal of the seventh principle concern for community (Gupta, 2014).

To Birchall (2011), the first four principles are the fundamental ones, while the latter three are secondary to defining the identity of a cooperative. Oczkowski et al. (2013) say that traditional cooperatives tend to apply the principles with more rigor since the interests of members are the central focus of the organization (Oczkowski et al., 2013).

Nilsson (1996) presented a Table 2 that shows the relationship of principles and the values of cooperation.

Table 2—Relationship of principles to the underlying values of cooperation

Principles	Values sets of cooperation
Voluntary and open membership Democratic member control Autonomy and independence	Equality, human rights, and freedom
Members' economic participation	Economic justice
Education, training, and information Cooperation between cooperatives Concern for the community	Mutual assistance

Source: (Nilsson, 1996)

To him, the first three principles can be clustered into the values of equality, human rights, and freedom. The principle of economic participation brings economic justice and fairness to the members and from the three last principles emerges the concept of mutual assistance.

Oczkowski et al. (2013) argue that the application of the ideas of cooperation in cooperatives varies. Both internal and external pressures influence how the core principles are followed in practice. They affirm that recent research found that cooperative values and principles are applied in different ways and different contexts (Oczkowski et al., 2013).

2.1.2 Challenges in Cooperatives

Although these principles and values form cooperatives' identity and guide their existence, they also pose a number of challenges. Mooney and Grey (2002), citing George Fauquet, say that there are two elements in a cooperative: a democratic association of persons and an economic organization. The coordination of these two principles creates the basic problem of cooperatives: cooperatives may pursue conflicting goals, in which case, they may not reach either one completely (Mooney & Gray, 2002).

One of the main differences between a cooperative and an IOF is that the various stakeholders – such as the owners, suppliers, and investors – are the same persons, with contradictory goals depending on the role they are playing (Alsemgeest & Smit, 2012).

According to Zamagni & Zamagni (2010), the reason why the cooperative organization might be considered difficult to explain and challenging to manage is the dichotomy of the business role and the member role. Couderc & Marchini

(2011) alert that members and managers need to balance short-term individual member interest with long-term collective equity value building.

Zamagni & Zamagni (2010) say that the governance of a cooperative is difficult due to two features that shape cooperatives' identity, the market code and the social code. If the market code becomes dominant, it is difficult to distinguish cooperatives from for profit companies. On the other hand, when the social code is more evident, cooperatives face economic decline. In sum, the cooperative loses its identity whenever either the social or the economic aspect is sacrificed.

Table 3 - Property rights problems of agricultural cooperatives

Problem	Description
Free Rider Problem	Whenever one person cannot be excluded from the benefits that others provide, each person is motivated not to contribute to the joint effort, but to free-ride on the effort of others. (Ostrom, 1990). This situation is typical for open membership cooperatives.
Horizon Problem	A situation where a member's residual claim on the net income generated by an asset is shorter than the productive life of that asset. The horizon problem creates an investment environment in which there is a disincentive for members to contribute to growth opportunities. This problem is particularly severe with respect to investment in research and development, advertisement and other intangible assets. (Cook, 1995)
Portfolio Problem	A situation where cooperative members, due to the lack of transferability, liquidity, and appreciation mechanisms for the exchange of residual claims, are not able to adjust their cooperative asset portfolio to match their personal risk preferences. In cooperatives, the investment decision is "tied" to the patronage decision and thus, from an investment point of view, members hold suboptimal portfolios. As a result, members attempt to encourage cooperative decision-makers to rearrange the cooperative's investment portfolio even if the reduced risk means lower expected returns.
Control Problem	A situation of divergence of interests between the membership and their representative BoD and management. Since the information provided and external pressures exerted by publicly traded equity instruments (stock market) is not present in cooperatives, and the members serving on the BoD may have little or no experience in effectively exercising control, governance bodies operate with a handicap.
Influence Costs Problem	A situation where members attempt to influence collective decision-making to their own advantage. As shares in most cooperatives are neither transferable nor tradable, members that cannot exit the cooperative are left with only the voice option. Especially if the cooperative is engaged in a wide range of activities, influence activities complicate collective decision-making and lead to wrong decisions or no decisions at all.

Adapted from Tortia, Valentinov, & Iliopoulos (2013, p. 30)

Cook (1995) presents some of the problems generated by cooperatives' own identity and characteristics. Table 3 shows the free rider problem, the horizon problem, the portfolio problem, the control problem, and the influence costs problem known as the property rights problems that stand by agricultural cooperatives.

Ostrom (1990) alerts that all effort to organize collective action must address a common set of problems, as coping with free-riding, for instance. The free rider problem refers to the situation where a non-member receives benefits associated to the cooperative (e.g., higher commodity prices), but avoids becoming a member, and thus, does not contribute to the costs incurred by members alone. A similar problem occurs when members stop patronizing the cooperative temporarily due to their best and only interest (Iliopoulos & Theodorakopoulou, 2014). Most cooperatives allow members to join without paying an entrance fee. This situation of new members as free-riders may reduce the members' motivation to become involved and to invest, thus creating a vicious circle (Nilsson, 2001).

The horizon problem is "caused by restrictions on transferability of residual claimant rights and the restricted liquidity through a secondary market for the transfer of such rights." (Cook, 1995, p. 1157).

According to Tortia et al. (2013), the portfolio problem appears due to the impossibility of having different investments when dealing with common or socialized assets.

The control problem is caused by the lack of information and external pressure in agricultural cooperatives that lead to divergences between members and the governance bodies and it becomes more evident as the size and complexity of a cooperative increases (Cook, 1995).

Influence activities that constitute the influence cost appears in cooperatives when organizational decisions affect the distribution of the surplus among members and when in pursuit of their selfish interests, the affected individuals or groups attempt to influence the decision to their benefit (Cook, 1995, p. 1157). Transaction costs are generated by a set of vaguely defined property rights originated by the nature of traditional cooperatives and may lead to conflicts over residual claims (Rebelo, Caldas, & Matulich, 2008).

2.1.3 Performance in Cooperatives

Whereas economic performance in IOF can be assessed using financial indicators like earnings and profits, NPO and cooperatives demand other indicators to assess their performance (Saïssset et al., 2011; Couderc & Marchini, 2011).

Frequently associated with pure financial logic, performance assessment is usually based on indicators like profitability, return on equity or cash flow (Saïssset et al., 2011). Focusing only on financial factors to evaluate the performance of cooperatives is, however, meaningless since it has “to take into account the objectives of the owners/members, as well as the marketing and processing of the cooperative’s product in the supply chain” (Soboh et al., 2009, p. 466).

Members’ returns and the continuity of the business should be viewed as the core of the objectives of the cooperative. Therefore, a meaningful empirical evaluation of the cooperative’s performance should address the dual objective nature of the organization (Soboh et al., 2009).

According to Saïssset et al. (2011), the average remuneration per hectare of members is one of the key criteria of performance levels found in the literature for wine cooperatives. The authors add some other indicators that are also cited like sales development, average sales price, rate of added value and average remuneration of members (per hectolitre and per hectare).

Couderc & Marchini (2011), on the other hand, defined the following as acceptable variables of performance in wine cooperatives: sales, total sales per hectolitres of wine sold (average price), impact of the sales of wine with origin/total commercialized, external costs/sales, remuneration for the grapes delivered per hectolitre equivalent and remuneration for the grapes delivered per hectare cultivated.

In their research, Saïssset et al. (2011) used a tool created to design and implement economic and financial decisions, specific to cooperative firms. The financial indicators presented in this tool are: turnover, salaries and fringe benefits, amortization costs, members’ remuneration for grapes delivered, cash flow, capital expenditure rate, global indebtedness, middle and long term indebtedness rate and working capital.

Kyriakopoulos, Meulenbergh, & Nilsson (2004) utilize the following market indicators to measure firm performance: market share and relative market growth and financial indicators measured at both market and cost level, profit margin, departing from accounting measures used in previous studies.

All of these indicators proposed by Saïssset et al. (2011), Couderc & Marchini (2011) and Kyriakopoulos et al. (2004) focus on different aspects of the financial performance of the cooperative and may not be easily understood as those based on profit when assessing for-profit organizations. The search for the best indicator seems to be far from an end, but a simple and accepted way among members to measure performance in wine cooperatives is the total earning of the member, that means, the price of the grapes delivered and the surplus. As Mayo (2011) says, the first and most important thing to do is to ask the members to know what high performance is.

To Saïssset et al. (2011), performance is frequently associated with efficiency which is seen as the capacity to make a profit with the least use of resources possible. Sellers-Rubio, Alampi Sottini, & Menghini (2016) declare that some authors estimate the efficiency of wine producers, comparing the performance of different wineries or vineyards, others have estimated efficiency comparing it among wine producers at a country level or even comparing the efficiency at a DOC level.

But organizations may be assessed “by more than the efficiency of the production and understood as more than a mission statement. Organizations are part of society and must be considered from the standpoint of their overall relationship to society as much as maintaining a relatively narrow concentration on specific organizational purpose and goal attainment.” (Jurie, 2000 p. 265).

Accounting performance measures, like return on investment or solvency, are also not suitable to assess cooperatives, due to tension created by the contradictory purposes of paying their members the best price for the products received or charging the lowest price for the products supplied (Kyriakopoulos et al., 2004).

To Rebelo, Caldas, & Matulich (2010), agricultural cooperatives are successful if they provide higher economic benefit to the members than they can achieve outside of the cooperative. The cooperative is a business and as so, must have continuity and be sustainable, however, the ultimate purpose is

to increase the revenues of the farmer, the social element of cooperatives. Thus, that is where resides the best parameter to evaluate cooperatives' success.

As in cooperatives, the performance of NPO is difficult to assess since profit is not the object. In an attempt to develop measurements of evaluation for NPO, the concept of organizational effectiveness and organizational capacity, presented in the next section, is used.

2.2 ORGANIZATIONAL CAPACITY

According to Eisinger (2002), organizational effectiveness is the ability to use the resources to sustain the organization's own survival and functioning. Although Balser & McClusky (2005) alert that there are many approaches to assessing NPO effectiveness but little agreement about which goals should be measured, Eisinger's (2002) definition associates organizational effectiveness with the ability of the organization to be sustainable which seems to be a good fit for cooperatives.

Eisinger (2002) associates organizational effectiveness to capacity. In general, capacity can be defined as "the ability of individuals, institutions, and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner." (UNDP, 2007). Sometimes used as capability, Jurie (2000) defines capacity as "the inherent endowment possessed by individuals or organizations to achieve their fullest potential." (p. 271).

In this study, we are mainly concerned with *organizational capacity*, as our analysis is located at the organizational level. Eisinger (2002) claims that organizational capacity is associated with the ability of an organization to accomplish its mission effectively. Hall et al. (2003) claim that organizational capacity refers to "the ability to perform or produce and is often used in reference to potential" (p. 3).

According to Eisinger (2002), organizational capacity or effectiveness is a concept that can be defined and measured in different ways. He defines capacity as "a set of attributes that help or enable an organization to fulfil its missions. The attributes that any particular organization possesses constitute

the organization's capacity profile. These attributes are latent until they are mobilized." (Eisinger, 2002, p.117). Which means that, although organizational capacity is a component of high performance, they are not synonymous. An organization with organizational capacity has the potential to achieve high performance, but that does not mean it will.

Some authors have defined organizational capacity for a specific group of NPO, as did Germann & Wilson (2004) to health care organizations. To them, organizational capacity is "the potential ability of a health organization to develop an empowering and democratic partnership with a community, through which the community's capacity to identify and address its priority health concerns is enhanced" (p. 290).

Many authors have tried to identify which are the indicators to be used in assessing organizational capacity in NPO. Table 4 presents the many factors of organizational capacity found in the literature.

Performance assessment uses mainly financial indicators as assets, profits, and sales, and it depicts a static moment of the organization: the end of the fiscal year, for instance. On the other hand, organizational capacity assessment delivers a systemic view of the organization since it has a multidimensional approach using intangible and broader indicators as well. What is clear is that organizational capacities can be divided and categorized in a number of different ways (Cornforth & Mordaunt, 2011).

However, despite the diversity observed in Table 4, there is mostly convergence in the way organizational capacity is conceptualized. It seems that the core elements of organizational capacity of NPOs are inserted in the four following categories: 1) leadership, the capacity of the manager to attract volunteers and employees to the mission and the cause; 2) the capacity of raising funds and manage financial resources; 3) the relationship with the community; and 4) the operational capacity to deliver the service.

Hall et al. (2003) developed a conceptual model of non-profit and voluntary organizational capacity that is derived from the literature on intellectual capital and has three broad dimensions: financial capital, human capital and structural capital.

Table 4 – Factors or elements of organizational capacity

Authors	Factors, elements or categories of organizational capacity (OC)	Referred as:
Hall et al. (2003)	1) Financial capacity, 2) Human resources capacity, 3) Relationships and network capacity, 4) Infrastructure and process capacity, and 5) Planning and development capacity	Five capacities of OC
UNDP (2007)	1) leadership; 2) policy and legal framework; 3) mutual accountability mechanisms; 4) public engagement; 5) human resources; 6) financial resources; 7) physical resources; and 8) environmental resources	The core issues to be assessed in OC
Fredericksen & London (2000)	1) Leadership and Vision; 2) Management and Planning; 3) Fiscal Planning and Practice, and 4) Operational Support	Four elements of OC
Austin, Regan, Samples, Schwartz, & Carnochan (2011)	1) capacity to generate financial, human and informational resources, 2) capacity to manage and change organizational culture, 3) capacity to identify, support and demonstrate organizational leadership, and 4) capacity to create/support attitudes toward change.	The main inputs to OC building
McKinsey & Company (n.d.)	1) Aspirations (mission, vision, and goals); 2) Strategy; 3) Organizational skills (performance, planning, fund-raising, external relationships, and other); 4) Human resources; 5) Systems and infrastructure; 6) Organizational structure (governance, organizational design, coordination, and job design); and 7) Culture (values and practices)	The seven elements of the Capacity Assessment Grid
Eisinger (2002)	1) resources, 2) effective leadership, 3) skilled and sufficient staff, 4) a certain level of institutionalization, and 5) links to the larger community	Critical capacity elements
Bolton & Abdy (2007) cited by Cornforth & Mordaunt (2011)	1) leadership capacity, 2) management capacity, 3) adaptive capacity and 4) technical capacity	Four types of OC
Connolly & York (2003)	1) Adaptive capacity; 2) Leadership capacity; 3) Management capacity; and 4) Technical capacity.	Four core elements of organizational effectiveness
White, Fisher, Hadfield, Saunders, & Williams (2005)	1) program/services, technical resources, 2) human resources, and 3) finances	Elements of capacity categories
Vita, Fleming, & Twombly (2001)	1) vision and mission, 2) leadership, 3) resources, 4) outreach, and 5) products and services	Five components of OC
Blumenthal (2003) cited by Austin et al. (2011)	1) capacity to generate financial, human and informational resources, 2) capacity to manage and change organizational culture, 3) capacity to identify, support and demonstrate organizational leadership, and 4) capacity to create and support attitudes toward change	Four performance domains of capacity building

The model is presented in Figure 1. Hall et al. (2003) say that “an organization’s overall capacity to fulfill its mission depends on a variety of specific capacities” (p. 3).

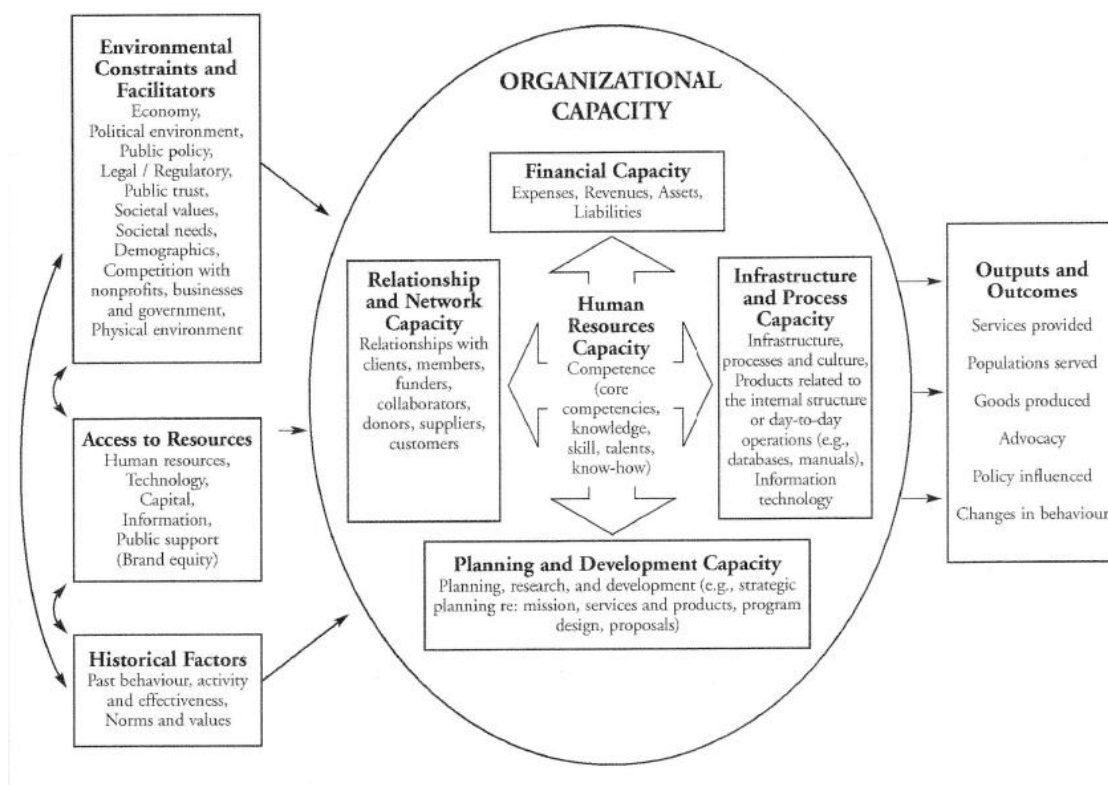
The conceptual model presented by Hall et al. (2003) is one of the most complete presented in the literature. It assumes that environmental constraints and facilitators, plus access to resources, and historical factors as past behavior, activity, and effectiveness, will interfere in organizational capacity.

The organizational capacity will lead NPO to its outputs and outcomes, such as, services provided, populations served, goods produced and so on.

Organizational capacity in Hall et al. (2003)'s model has human resources as the core dimension on which all the other dimensions depend. Thus, financial capacity, relationship and network capacity, planning and development capacity and infrastructure and process capacity are related to competencies, knowledge, skills, talents, and know-how.

Generally, models and instruments tend to be effective when used by organizations in a particular sector for which they were designed and may not be applicable to other organizations (Bourgeois, Whynot, & Thériault, 2015).

Figure 1 – Conceptual Model of Organizational Capacity



Source: Hall et al. (2003)

Although Hall et al. (2003)'s model fits NPO, some specificities should be considered to adapt the model to cooperatives. The identity of the cooperative, attached to its values and principles, affects the way cooperatives work and must be inserted in any model design to this type of organizations. Besides,

members are crucial to the survival of cooperatives and also deserve a prominent place in a model of organizational capacity for cooperatives.

Unlike NPOs, cooperatives are business organizations. While, the performance indicators of IOF only consider financial results, none of the frameworks designed to assess organizational capacity in NPO take into account the economic dimension of cooperatives. Thus, they seem not to be suitable for this type of organizations. In section 5. *A Model of Organizational Capacity in Wine Cooperatives* these peculiarities will be discussed.

3. METHODOLOGY

Before presenting the methodology of the research, I would like to clarify why, sometimes, I choose to use the personal pronoun in the text. I tried to write this thesis using a formal and impersonal discourse, mainly when I am presenting literature review or pre-established concepts or methods. This traditional way of writing academic texts seems more appropriated because it focuses on the concepts, the content, and the research, instead of on the researcher. To me, an overuse of personal pronouns, I or we, transmits an idea of egocentrism and an attempt to value the researcher more than the results *per se*. The message hidden in the text may appear arrogant and pretentious. Monippally & Pawar (2010) argue that the excessive use of the first person may make it seem like the author is only presenting personal views or opinions and not objective considerations, even in contexts where it is accepted.

However, I decided to write in the first person when elucidating a personal choice. In this situation, the attempt to write in an impersonal manner could conduct me to a less precise, a less objective and a less readable text. So, to explain my path in this research, I opted for positioning myself, for instance, when explaining my decision to engage in a grounded theory methodology.

Most of the researchers agree that there are three general positions towards research. The first epistemological approach is positivism. This kind of research seeks an objective view of reality and states that knowledge is acquired through empirical study. For those favoring this approach, to consider a study as a scientific work, it has to be verifiable and generalized to other similar situations (Gephart, 2004).

According to critics of the positivist approach, the subject matter of the social sciences – people and their institutions – is fundamentally different from that of the natural sciences. Thus, the study of social phenomena requires a different logic of research procedures that can reflect the idiosyncrasies of humans. The second epistemological approach, interpretivism, recognizes these differences between natural and social sciences. For Bryman & Bell

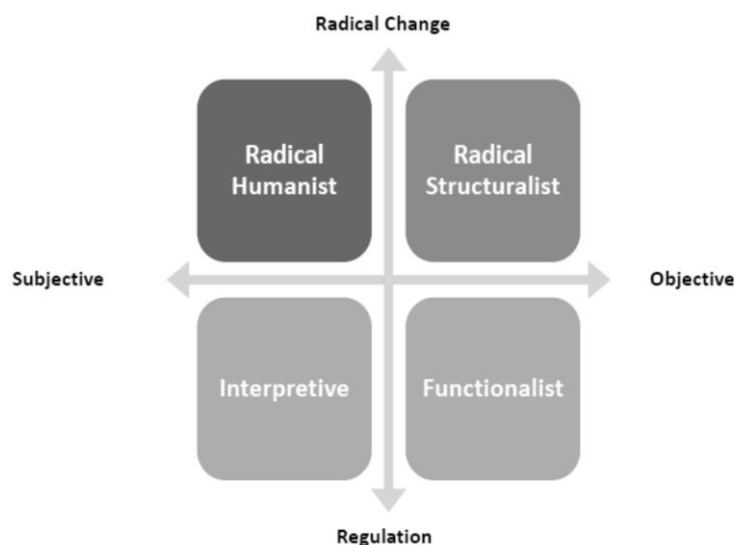
(2011) interpretivism “is taken to denote an alternative to the positivist orthodoxy that has held sway for decades.” (p.17).

Researchers who accept interpretivism as a more suitable approach to social science studies attempt to understand phenomena through the meaning that people assign to them. They aim to understand how the issue studied influences and is influenced by the context. There are no predefined variables in this research, but it focuses on the full complexity of human sense-making as the situation emerges (Suddaby, 2006).

The third epistemological approach is critical research. This kind of study assumes that reality is historically constructed and it focuses on the oppositions, conflicts, and contradictions in society. Critical research aims to reveal the deep and hidden structures at work and to change society for the better (Fisher, 2007). It seeks to be emancipatory, since it should help to eliminate causes of alienation and domination and, according to Deetz (1996), “through showing how social constructions of the reality can favour certain interests and alternative constructions can be obscured or misrecognised.” (p. 202)

Burrell & Morgan (1979) presented a grid as a device to distinguish different approaches to the study of organizations. The two sets of assumptions, or dimensions, define not three, but four basic paradigms that reflect divergent views of social reality, as seen in Figure 2.

Figure 2 – Paradigms of Organization Theory



Adapted from Burrell and Morgan (1979)

Concerning the nature of science, or the subjectivism/objectivism dimension, the research presented here could be classified as subjective, once, as presented by Burrell & Morgan (1979):

- It admits the world as a convention created by the meaning we give to it,
- It has an anti-positivistic epistemological approach as they advocate the use of an alternative method instead of experimental quantitative method, and
- it assumes that human nature is the result of the meaning we give to it and it is connected to people's will rather than a deterministic event.

The other dimension, the nature of social life, deals with the aim of the research according to the *status quo*. In this matter, this research seeks for stability, integration, functionality, and consensus, being classified as having an interest in regulation.

So, putting the results of a subjective approach and a search for regulation in the grid of the four paradigms of organizational theory, we can recognize the assumptions in this research as interpretive.

To be coherent with the interpretive paradigm, this is a qualitative study. The methodology used was grounded theory as presented by Corbin & Strauss (2008).

3.1 WHAT IS GROUNDED THEORY?

Grounded theory is a qualitative research methodology developed by Glaser & Strauss (1967) that intends to systematically obtain and analyze data in social research to discover theory. The book *The Discovery of Grounded Theory* is "a beginning venture in the development of improved methods for discovering grounded theory." (p. 1). They claim that concepts and theories are constructed by the researchers from the related experiences of the participants of the study.

According to Charmaz (2006), the purpose of Glaser and Strauss was to take qualitative research "beyond descriptive studies into the realm of

explanatory theoretical frameworks.” (p. 6). To pursue this goal, they proposed procedures and strategies for grounded theory research.

Since the publication of the classic *The Discovery of Grounded Theory*, Glaser and Strauss took different paths. Glaser remained loyal to their original statement while Strauss started a partnership with Corbin and proposed a more detailed range of procedures to grounded theory methodology. Since its first edition in 1990, the book of Corbin & Strauss (2008) became a powerful source of the methods (Charmaz, 2006).

Although there is some controversy concerning grounded theory, some features are widely accepted. Bryman & Bell (2011) present *theoretical sampling, coding, theoretical saturation, and constant comparison* as the main tools of grounded theory.

According to Bryman & Bell (2011), theoretical sampling is a form of purposive sampling, and Pratt (2009) says that it is “often used when building grounded theory” (p. 859). The purpose of theoretical sampling is to enhance the quality of data, concepts, and categories through the variety of respondents and cases. The choice of subjects is not a matter of quantitative or statistical representativeness, but rather of diversity to better explain the emergent categories. The sources of data are the same as in other qualitative approaches – interviews, observations, focus groups, and so on.

Corbin & Strauss (2008) define coding in grounded theory as the act of elevating raw data to a conceptual level. As Miles, Huberman, & Saldaña (2014) say, “coding is analysis.” (p. 72).

Corbin & Strauss (1990) present three basic types of coding: open coding, axial coding, and selective coding. In open coding, the researcher must compare events, actions, and interactions for similarities and differences and group them together to form categories. A further development of categories takes place in axial coding when “categories are related to their sub-categories, and the relationships tested against data.” (p.13). Selective coding is the later phase of coding when categories and sub-categories are fully described to achieve conceptual density. This process reveals the “core” category that represents the central aspect of the study. The central category identified in the model of organizational capacity in the environment of wine cooperatives in

Portugal is *management capacity*. The explanation of this choice will appear later in the description of the category.

Theoretical saturation is the stage when no new insights arise, and the properties and dimensions of the categories are completed (Corbin & Strauss, 2008). Bazeley (2013) explains that “saturation generally means that no new information is being added to coding categories (data saturation), or to the emerging theory (theoretical saturation), through adding further cases to the analysis” (p. 50).

Constant comparative analysis is the process by which the researcher compares incident to incident, incident to codes, codes to codes, codes to categories, and categories to categories. The purpose of comparative analysis is to generate theory grounded in data.

Glaser & Strauss (1967) present two types of theory, substantive and formal theory. Substantive theory is developed for a certain empirical instance or a substantive area of research. Formal theory is “at a higher level of abstraction and has a wider range of applicability to several substantive areas.” (Bryman & Bell, 2011, p. 580).

Charmaz (2006) alerts that the judges of the *usefulness* of the methods should be the audiences, the readers. They will evaluate it by the quality of the research and adds that “a grounded theory that conceptualizes and conveys what is meaningful about a substantive area can make a valuable contribution.” (p. 183).

Even knowing that the perception of quality may be different from person to person, she proposes four criteria for evaluating grounded theory studies that are *credibility, originality, resonance, and usefulness*.

Corbin & Strauss (2008) declare that “making judgments about the quality of qualitative research is difficult because so much depends on who is doing the research, its purpose, and the method that is used” (p.305). Even so, they present a list of criteria to evaluate the quality of research findings. The criteria are *fit, applicability, concepts, contextualization of concepts, logic, depth, variation, creativity, sensitivity, and evidence of memos*. In Appendix A there is a list of questions proposed by the authors to evaluate the quality of qualitative research based on those criteria.

In an attempt to help new researchers to understand grounded theory, Suddaby (2006) presents the following common misconceptions about the methodology:

- grounded theory is not an excuse to ignore the literature – Ignoring the idea that it is impossible to overlook one’s prior knowledge or experience, may lead the researcher to an unstructured manuscript because research cannot be conducted without a clear research question and theory;
- grounded theory is not a presentation of raw data – the purpose of constant analysis in grounded theory is to reach a higher level of abstraction, raising data to a conceptual level;
- grounded theory is not theory testing, content analysis, or word counts – grounded theory is an interpretive process and researchers seek to discover theory from data;
- grounded theory is not simply routine application of formulaic techniques to data – actually, a rigid application of the techniques does not guarantee decent results, unless there is a creative interplay between the researcher and data;
- grounded theory is not perfect;
- grounded theory is not easy – it requires theoretical sensitivity to perceive meanings and transform raw data into abstract concepts; and
- grounded theory is not an excuse for the absence of a methodology – although the methodology accepts a dose of flexibility in the procedures, most methods are essential. It is unacceptable the idea of grounded theory research without theoretical sampling, coding, and constant comparative analysis.

According to Locke (2001), grounded theory is a useful methodology for analyzing processes in management and organizational studies. One of the reasons, she says, is that grounded theory research can capture complexities that may be hidden in a substantive issue of the organizational context.

3.2 WHY GROUNDED THEORY?

Before designing my research, the intention was to study the Organizational Capacity in wine cooperatives. The main model that I used as a reference to write my research proposal was Hall et al. (2003)'s Conceptual Model of Organizational Capacity.

At the same time, I conducted two exploratory interviews to help the construction of the proposal and to have a first contact with the wine business and wine cooperatives in Portugal. The first interview was with two managers and the second one with members of the Board of Directors (BoD), in the same cooperative.

After these interviews, I have already had a glimpse that the original idea of studying organizational capacity in wine cooperatives based on Hall et al. (2003)'s model was not going to work well. At this point, I started to realize that the model developed for NPO was not suitable for wine cooperatives. These interviews highlighted the idea that cooperatives have different issues from other organizations that managers have to administer.

Even so, the research proposal was built assuming that the model could be adapted or modified to become feasible. So, the subjects on the first guide to the semi-structured interviews still remitted to the factors presented in Hall et al. (2003)'s model.

Some months later, after the approval of the research proposal, I started interviewing. At this point, my assumptions became more evident: I could not apply the existing models of organizational capacity to wine cooperatives. At the same time, some new themes and concepts were emerging in the interviews, and I finally realized that the context was propitious to the use of grounded theory methodology which would allow me to develop a substantive theory of organizational capacity in the environment of wine cooperatives. So, I took the challenge.

3.3 DATA GATHERING

Although there are several data sources in this research, the main source is the interview. In this case, data was gathered by intensive semi-structured interviews. Charmaz (2006) declares that the in-depth nature of an intensive interview seeks to stimulate the interviewee to tell his or her interpretation of a phenomenon and adds that “the structure of an intensive interview may range from a loosely guided exploration of topics to semi-structured focused questions.” (p. 26)

The main themes addressed in the interviews were:

- the evolution of the wine business and the history of the cooperative,
- the organization and the processes of the cooperative,
- mistakes and successes of cooperatives,
- the environment of wine cooperatives in Portugal,
- the role of cooperative legislation in Portugal and its contribution to the failure or success of cooperatives,
- how cooperatives deal with cooperative values and principles, and
- the success factors of a wine cooperative.

To Bryman & Bell (2011), the interview is probably the most widely employed method in qualitative research. They highlight that in semi-structured interviews the interviewer has a series of fairly specific topics to be covered, an interview guide, and the process of interviewing is very flexible. The interview guide of this study is in Appendix B.

In addition to the interviews, the following sources also compose the data set:

- Field notes with the first impressions of each interview,
- Field notes with observations collected during the visits to the facilities of each cooperative,
- Documents of some cooperatives like statutes, balance sheets, promotional materials, and others,
- Memos containing descriptions of insights and incipient data analysis,
- Diagrams representing the relationships among the concepts, and,

- Statistics about the wine business and wine cooperatives available in official websites as IVV – Institute of Vine and Vineyard of Portugal, INE – National Institute of Statistics, and OIV – International Organisation of Vine and Wine.

3.4 SAMPLING

To select the cooperatives that would provide the best portrayal of the wine cooperatives environment in Portugal, the manager of the Federation of Portuguese Wine Cooperatives (FENADEGAS) helped. There were 67 active wine cooperatives³ in Portugal in 2015. The best option seemed to be purposive/theoretical sampling. In theoretical sampling, the researcher is looking for concepts and how these concepts vary under different conditions (Corbin & Strauss, 2008). Therefore, the aim was to select cooperatives that could represent the diversity of wine cooperatives in Portugal and add different interpretations of the same phenomenon. Thus, thirty cooperatives were chosen as the most representative of such variety and from all the regions that produce wine in the continental part of the country. The selected cooperatives have several sizes, produce different wines and are in areas with different agrarian structures.

After the selection of the cooperatives, an email was sent to each of them explaining the purpose of the research and asking for an interview with members and managers. The president of one of the cooperatives answered the email right away, and it was possible to schedule the first interview. After that, the cooperatives were contacted by phone and the appointments for the interviews scheduled.

In sum, there were three phases of interviews. The first phase was in April and June of 2015 when the two exploratory interviews were conducted. The second phase took place in October of 2015 when I interviewed the manager of FENADEGAS. The last phase of interviews happened between January and April of 2016.

³ This information was given by the manager of FENADEGAS during the interview.

3.5 THE INTERVIEWS AND THE INTERVIEWEES

Nineteen cooperatives and unions answered and accepted to give at least one interview (Appendix C). Of those, one was a federation, FENADEGAS, two were unions, and 16 were first degree cooperatives. Those cooperatives and unions were placed in 12 different regions of wine production in continental Portugal. Algarve and Trás-os-Montes are the only regions not present in the study.

There was considerable diversity in the sample; not only cooperatives from different regions but cooperatives with other features revealing significant ranges, as follows:

- The cooperative with the lowest number of active members had 98, and the cooperative with the highest had 1720 active members,
- The oldest cooperative in the sample was created in 1939 and the newest in 1963,
- The foundation date of the unions was between 1957 and 1981,
- Among the cooperatives studied was the biggest wine cooperative in Portugal with a production of 23 million liters of wine per year while others do not produce more than 400.000 liters,
- The total price paid by the cooperative to the farmer member varies according to the region and type of the grape, but it fluctuates from 0,34 euros to 1,05 euros per kilo (before redistribution of the surplus), and
- The vineyards of the members have an average size from 0,8 ha until 11,0 ha.

Twenty-three people were interviewed: 15 members of the cooperatives (13 of those were presidents or directors of the BoD) and eight managers. Of the 23, 19 were men. All four women interviewed were managers.

In most of the cooperatives, it was possible to interview only one person, except in two where there were two or three interviews with people in different functions, i.e. member of the BoD, member or manager. The interviews were conducted at the offices of the cooperatives or unions, and after the interviews, the cooperatives' premises were visited. Interviews continued until theoretical saturation was achieved.

The interviews were recorded (except the first and the second one) leading to a total of more than 19 hours of audio recordings, and notes were taken during and after the visits. All the recorded interviews were fully transcribed. One of the advantages of recording and transcribing interviews is that anyone, not only the researcher, can repeatedly analyze the interviews, opening up data to public scrutiny (Bryman & Bell, 2011).

As the language spoken in all the interviews was Portuguese, I translated to English and used these translations when presenting a quotation.

3.6 DATA ANALYSIS




Quantitative data, found mainly in the statistics about the wine business and wine cooperatives were analyzed as secondary data, that according to Bryman & Bell (2011) is the analysis of data collected by other organizations.

Qualitative data were analyzed using the software NVivo which can help the researcher to organize all sources of qualitative data in predetermined categories and to identify new possibilities of categorization through coding. As shown in Table 5, seventeen categories emerged from this phase.

The codes resulting from the focused coding are more directed, selective and conceptual than the codes from the previous phase. At this point, the researcher compares data with data and data with codes. The processes of focused coding in this research generated new categories that resulted not only from the former ones but also from assembling data and categories in codes with a higher level of abstraction.

Trust, for instance, is the result of the analysis of many categories of the initial coding as *rules of wine cooperatives*, *professionalization of management*, *what to do*, and others.

Table 5 – Evolution of the categories of analysis

Initial Coding	Final Coding	
(1) Values and Principles (2) Rules of wine cooperatives (3) Professionalization of management (4) What to do (5) Problems (6) Coops – what is good (7) Coops – what is not good (8) The importance of wine cooperatives (9) Success factors (10) Prices (11) Characteristics of rural properties (12) How farmers see the coop (13) Wine business today (14) VITIS (15) History (16) Opportunities (17) Threats	 Internal Factors	Cooperative Identity (1, 2, 5) ⁴ <hr/> Organizational Capacity (2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15,16,17) <hr/> Management Capacity Strategic Planning Capacity Financial Capacity Human Resources Capacity Infrastructure Capacity Marketing Capacity Relationship with Members
	 Members	Members as Suppliers (2, 5, 6, 7, 8, 9, 10, 11, 12, 13,14) Trust (2, 4, 5, 6, 7, 8, 9, 10, 12, 15) Commitment - Members as Owners (2, 4, 5, 6, 7, 8, 9, 10, 12, 15)
	 Environmental Factors	Historical Factors (1, 5, 6, 7, 8, 10, 11, 12, 15) Cultural Factors (1, 2, 5, 6, 7, 11, 12, 15) Image (2, 4, 5, 6, 7, 12, 13, 16, 17) Competition (2, 3, 4, 5, 6, 7, 10, 13, 16, 17) Demographics (5, 8, 11 ,12, 16, 17) Consumers and Market (3, 4, 5, 10,13, 16, 17) Agrarian Structure (11) Wine (2, 3, 4, 5, 9, 10, 11, 14, 16, 17) Performance (4, 5, 6, 7, 8, 9, 13, 16, 17) Others (Economy, Society, Regulation, Technology, Capital, ...)

⁴ These are the numbers associated to the initial categories listed in column that contributed to the creation of these final concepts of the model

To confirm the concepts that emerged from the focused coding, I generated two Word Clouds to find the most frequently occurring words or concepts in NVivo.

The first one represents the twenty words that appear the most in all interviews, as in Figure 3. The second shows the 30 more frequent words in three categories of the initial coding: *success factors*, *threats*, and *problems*, as in Figure 4.

Figure 3 – Most frequent words in categories



The results confirmed and supported the new categories revealed in the focused coding.

Figure 4 – Most frequent words in the categories: *success factors*, *threats*, and *problems*



Theoretical codes “specify possible relationships between categories you have developed in your focused coding.” (Charmaz, 2006, p. 63). The analysis at this stage is between data and data, data and codes, and codes and codes and intends to reveal how the codes relate to each other. The model of this study is the result of this phase.

3.7 QUALITY OF THE RESEARCH

To pursue data credibility, the two techniques suggested by Bryman & Bell (2011) were applied: triangulation and respondent validation. The aim of triangulation is to validate data using more than one strategy, method or source of data. According to Gray (2004), there are two types of triangulation: by using multiple data gathering tools or gathering information from multiple sources. In other words, one is to select two different methods to collect data, and the other is to select people with different roles in the organization, actors with different functions and different point of views. This latter option was the strategy of triangulation used in this research by interviewing managers, directors of the BoD, and members of the cooperatives. To enhance the data collection and to enable the identification of critical issues in the management of wine cooperatives, one of the interviewees was also a member of an inactive cooperative.

A theory represents an interpretation of raw data, so it is important to clarify if the theory, which is an abstraction, fits well with the data and if the theoretical scheme lacks any significant concept or relationship (Corbin & Strauss, 2008).

After designing the model, I sent it to six of the interviewees in the study that I consider experts in Portuguese wine cooperatives for their comments and seeking to validate the model. These are some of the feedback comments I received:

“The model is impeccable and includes all the factors related to the environment and internal management.”
(03BoD),

“Your model correctly addresses the main organizational aspects of wine cooperatives and how it should be.” (07BoD),

“I think your model has everything that concerns the organization of wine cooperatives.” (08BoD),

"CONGRATULATIONS for the work done." (06Mng),

"I think that it (the model) sums up the essentials." (00Mng), and

"It seems to us that the 'model' reflects the cooperative organization globally." (08Mng).

Despite knowing that quality in qualitative research has many facets, I decided to answer the questions posed by Corbin & Strauss (2008) and Charmaz (2006) regarding each criterion for evaluating grounded theory studies (Appendix A).

4 THE WINE BUSINESS AND WINE COOPERATIVES

The origin of the species more accepted to produce quality wine, *Vitis vinifera*, is Europe. This grape is cultivated by the main wine grape growers in the world producing diverse wines according to the *terroir*⁵ and the variety of the grape. Some of these grape varieties can be found outside Europe like Chardonnay, Cabernet Sauvignon, Merlot, Riesling, Shiraz and Tempranillo, cultivated in USA, Australia, New Zealand, Argentina, and Chile (Infovini, 2009).

There are many different types of wines, as follows (Infovini, 2017):

- Still wine – most wines are still wines, which do not contain gas (carbon dioxide). As examples of these wines are all regional wines and those from Douro (except Porto wine), Alentejo, Vinho Verde, and, other production regions,
- Sparkling wine – can be distinguished by the presence of carbon dioxide bubbles, resulting from a secondary fermentation. Portugal has many regions producing sparkling wine like Cantanhede, Távora-Varosa, Lisboa, and others,
- Fortified wine – in these wines, the fermentation (transformation of sugar into alcohol) is suspended by the addition of pure alcohol or brandy. The wine becomes sweeter and more alcoholic. Porto wine, Madeira, and Moscatel are examples of fortified wine

As for color, wines can be red, white and *rosé*. In general, red wine is produced by the fermentation of red grapes, white wine from the fermentation of skinned grapes of any colour and *rosé* is wine from red grapes. In this latter case, the grape skins are removed from the grape juice after some hours, just after the wine acquires the desired *rosé* colour (Infovini, 2017).

Portugal joined the European Community (EU - European Union today) in 1986 and had to adapt its wine legislation and quality criteria to those of the other European countries. For that, the wine industry adopted the same designations used to define the wine from the regions: IG and DOC (Wines of Portugal, 2015b).

⁵ *Terroir* is the combination of factors including soil, climate, and sunlight that gives wine grapes their distinctive character (<https://www.merriam-webster.com/dictionary/terroir>).

If a wine has an IG - *Geographical Indication* (Indicação Geográfica in Portuguese) or IGP – *Protected Geographical Indication*, this means that this wine was produced in that geographical area and at least 85% of the grapes came exclusively from that same area. Also, it has some attributes and quality related to that specific area. The wine with an IG is known in Portugal as "regional wine".

DOC – *Designation of Controlled Origin* (Denominação de Origem Controlada) and DOP – *Protected Designation of Origin*, refers to wines that are associated with an IG region and have superior quality and unique characteristics.

To regulate and certify IG and DOC wine production, each wine region in Portugal has its Regional Wine Commission (CVR – Comissão Vitivinífera Regional). Both IG and DOC are therefore "certified" wines.

If the wine does not have the required characteristics of a Regional or a DOC, it is called "table wine" or just "wine". If the table wine has a mixture of wines from different countries in EU, it can be labelled "wine of EU".

To sum up, the classification of the wine according to its quality is:

- Table wine: the wine produced with no designation of origin,
- Regional wine or IG wine: the wine produced with grapes of a specific region and with the characteristics defined by the CVR,
- DOC wine: the top-quality wines of the entire range. They are certified by the CVR of the region and have to attend a roll of quality criteria to own the classification of a DOC.

Global wine consumption experienced extensive changes in the second half of the twentieth century. Old World countries, like France, Italy, Spain and Portugal, traditionally big producers and consumers, witnessed a decline. On the other hand, the New World countries as the United States, Chile, Argentina, Australia, New Zealand and South Africa had an increase in the demand since the 1980s. The same happened in Northern European and Asian countries later (Martínez-Carrión & Medina-Albaladejo, 2010).

In the 2000s, new wine producing countries conquered the traditional markets of European wine producers. The New World countries were not only expressive consumers but became established producers as well. In some of

these countries, vineyards and wine making have only been present for a few decades (József & Péter, 2014).

Despite the emergence of new wine producing countries, the world's total vineyard surface area has been decreasing since 2000, mainly due to the reduction of European vineyards. In Portugal, the area under vineyard reduced around 30% from 1999 to 2016, with 17,5% just between 2012 and 2016 (OIV, 2017).

The global (wine) grape production decreased slightly from 36,9 million tons in 2000 to 36,6 million tons in 2015. The reduction of the area under vineyard did not affect the production of grapes considerably, because of significant increases in the productivity of the vineyards.

The world wine production has decreased since 2000 from 280 mhl⁶ to 274 mhl in 2015, as seen in Table 6. The peak of global wine production was in 2004 with 296 mhl.

Table 6 – Evolution of global wine production (mhl)

Country	2000	...	2004	...	2010	...	2014	2015	Δ 2015-2014	Δ 2015-2000
Italy	51.6	...	49.9	...	48.5	...	44.2	50.0	13.0%	-3.1%
France	57.5	...	57.4	...	44.4	...	46.5	47.4	1.9%	-17.7%
Spain	41.7	...	43.0	...	35.4	...	39.5	37.3	-5.6%	-10.5%
USA	21.5	...	20.1	...	20.9	...	23.7	22.1	-6.6%	3.0%
Argentina	12.5	...	15.5	...	16.2	...	15.2	13.4	-12.1%	6.5%
Chile	6.7	...	6.3	...	8.8	...	10.5	12.9	22.6%	92.8%
Australia	8.1	...	14.7	...	11.4	...	11.9	11.9	0.0%	47.6%
South Africa	6.9	...	9.3	...	9.3	...	11.5	11.2	-2.6%	61.2%
China	10.5	...	11.7	...	13.0	...	11.1	11.5	3.6%	9.5%
Germany	9.9	...	10.0	...	6.9	...	9.2	8.8	-4.5%	-10.8%
Portugal	6.7	...	7.5	...	7.1	...	6.2	7.0	13.8%	5.0%
Romania	5.5	...	6.2	...	3.3	...	3.7	3.5	-5.4%	-35.9%
Brazil	3.6	...	3.9	...	2.5	...	2.7	2.8	2.5%	-23.0%
Greece	3.6	...	4.2	...	2.9	...	2.8	2.5	-10.7%	-29.7%
Others	33.7	...	36.3	...	33.5	...	32.2	31.7	-1.6%	-5.9%
Total	280.0	...	296.0	...	264.1	...	271.0	274.0	1.1%	-2.1%

Source: IVV

Most of the European producers presented a fall in wine production since 2000, with Romania, Greece, and France leading, with drops of 35,9%, 29,7%,

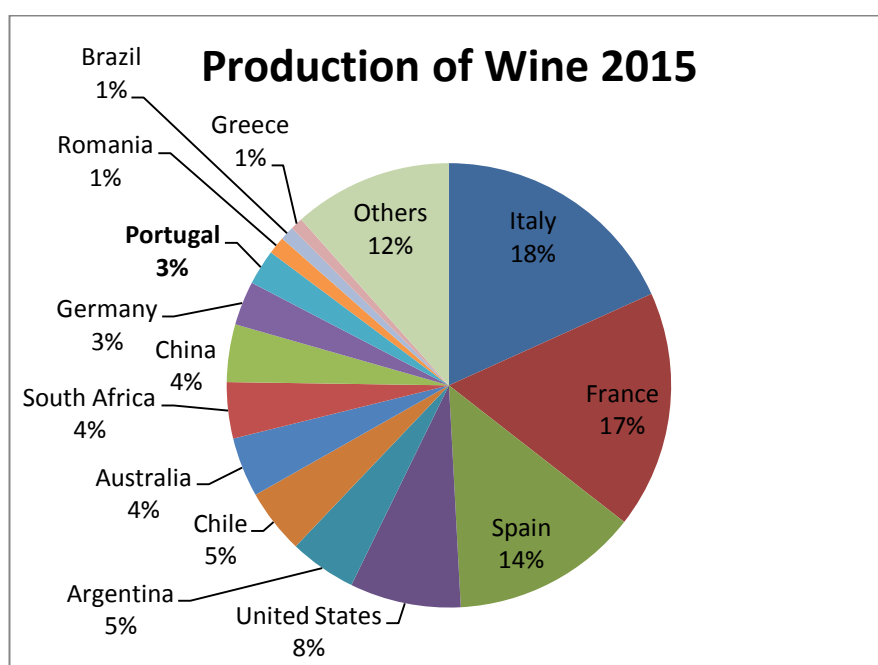
⁶ hl – 100 litre, mhl – million hectolitre

and 17,7%, respectively. The exception is Portugal with an increase of 5,0% in wine production in the country since 2000. Chile (92,8%), South Africa (61,2%), and Australia (47,6%) have increased substantially their wine production in the same period.

Italy, France, and Spain are the biggest producers of wine in volume in the world with 50,0 mhl, 47,4 mhl and 37,3 mhl, representing 18%, 17% and 14% of the global production.

The three countries together produce around 50% of the total of wine produced in the world, as shown in Chart 1. Portugal is the 5th producer in EU and the 11th in the world with a total of 7,0 mhl in 2015.

Chart 1 – Percentage of wine production by country



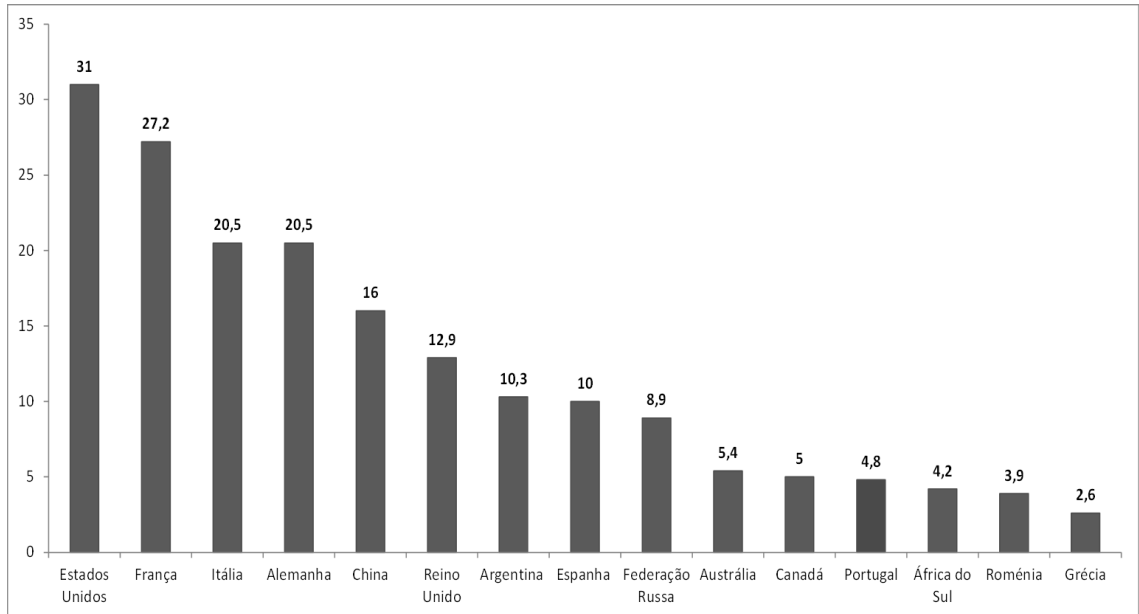
Source: OIV (2017)

Among the main producers in EU, Portugal, Italy, and France had an increase of 13,8%, 13,0% and 1,9% of wine production between 2014 and 2015 while Spain and Germany had a decrease of 5,6% and 4,5% (OIV, 2017).

World consumption of wine has increased from 226 mhl in 2000 to 240 mhl in 2015. Consumption has been relatively stable since 2009 with a variation of around 1%. The United States is the biggest wine consuming country (31,0 mhl), followed by France (27,2 mhl), Italy (21,4 mhl), Germany (19,6 mhl), China (16,2 mhl), and the United Kingdom (12,7 mhl) in 2015, as shown in

Chart 2. According to IVV (2017), five countries (USA, France, Italy, Germany, and China) consume almost half of the wine in the world.

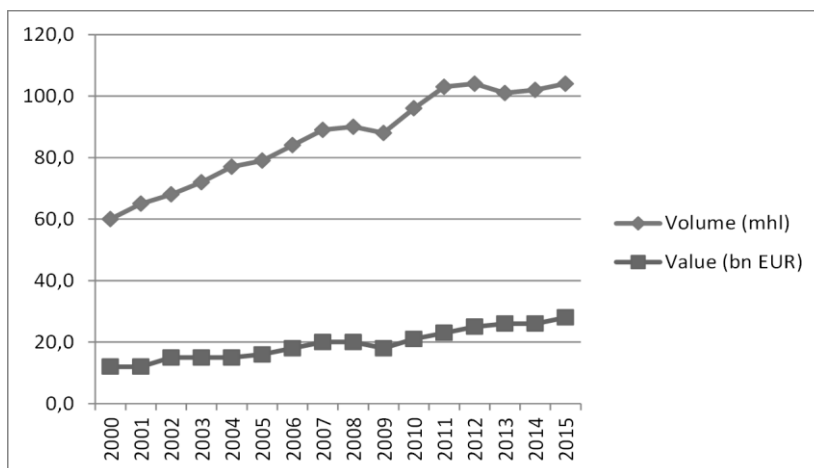
Chart 2 - Wine consumers (2015) - mhl



Source: OIV (2017)

In 2015, the total volume of wine exported around the world was 104 mhl, and the total value of exports was 28 billion euros. As seen in Chart 3, it seems that there is a tendency to the stabilization, both in the volume exported and the values since 2012.

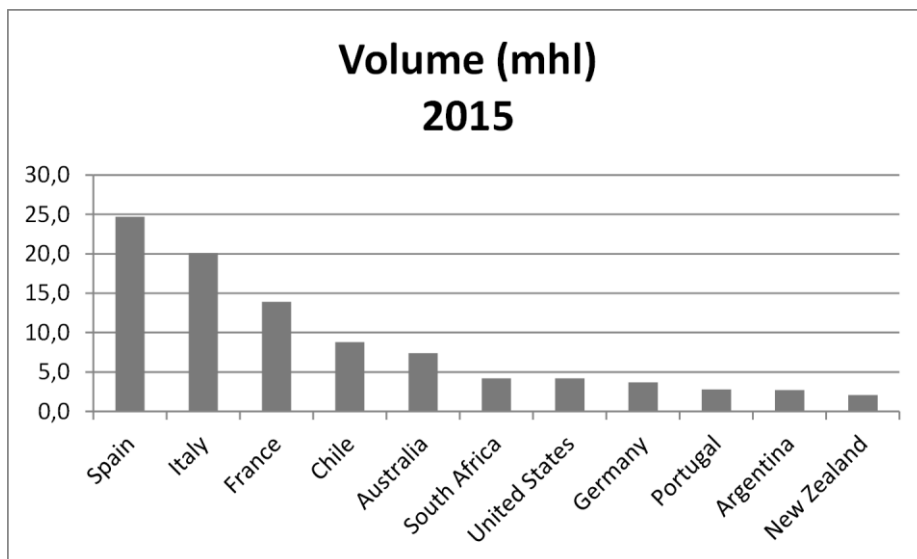
Chart 3 –International wine trade in volume and value



Source: OIV (2017)

Spain remains the biggest exporter in volume with 24 mhl, while France is the biggest world exporter in value, reaching the total of 8,3 billion euros in 2015, as seen in Charts 4 and 5.

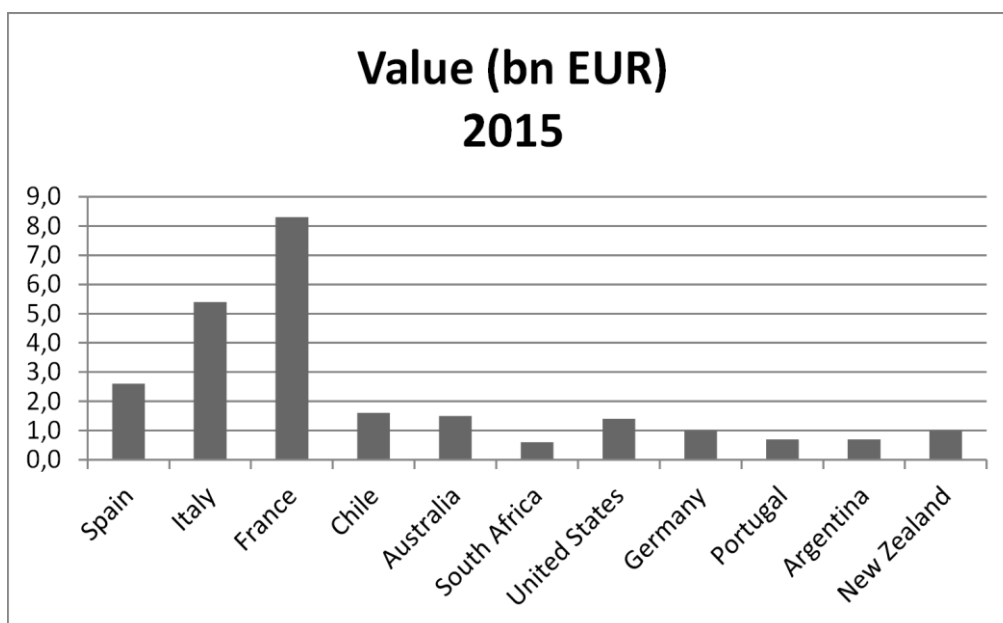
Chart 4 – Volume of wine exported in 2015 by country



Source: OIV (2017)

Although Spain is the first exporter in volume, it is only the third in value.

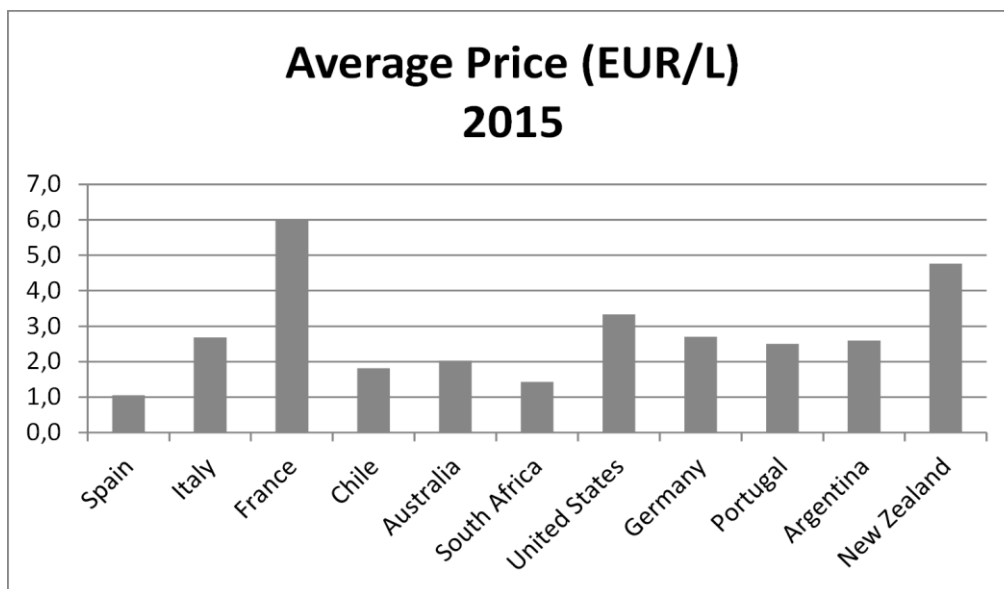
Chart 5 – Values of wine exports by countries in 2015



Source: OIV, 2017

While Italy and France export 25% and 16% of their wine in bulk, the share of Spain's exportation in bulk wine is around 60% (IVV, 2017). The result is that the average price of the liter exported in Spain is 1,1 €/l and in France it is 6,0 €/l (Chart 6).

Chart 6 – Average price per liter in wine exportations



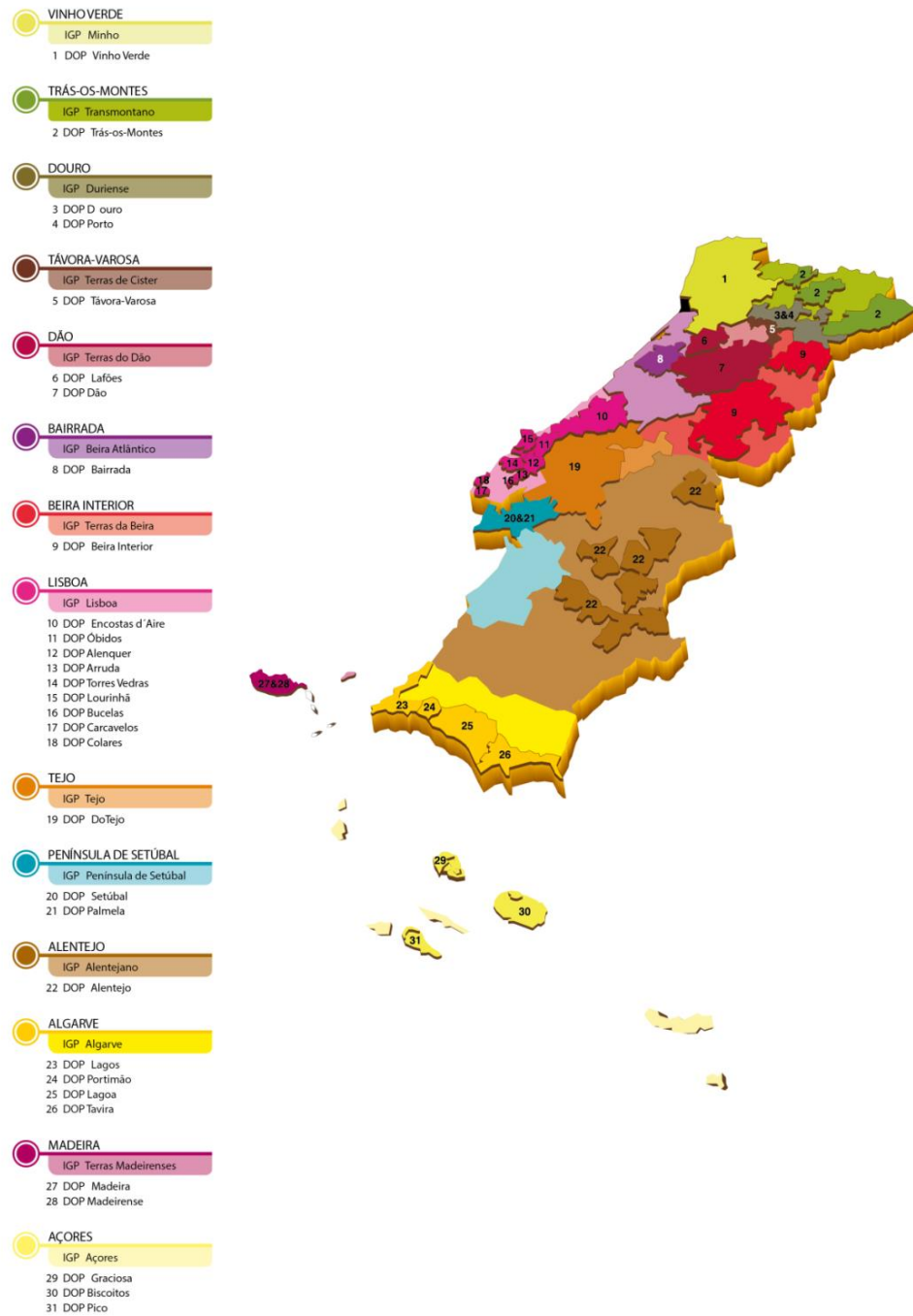
Source: OIV, 2017

Portugal produces wine in all the regions of the country (Wines of Portugal, 2015a). Each one has different characteristics influenced by the soil, geography, and climate of the vineyard, the variety of the grape, and the production process. According to this member of the BoD:

“Until recently, there was only one county in Portugal, the Freguesia de Gouveia, that was not considered a wine production county, all others...” (08BoD)

There are 14 regions officially recognized, 12 in the continental part of the country, 1 in Madeira and 1 in the Azores, as shown in Figure 5. Some of the regions can be divided in sub-regions that produce their own certified wine.

Figure 5 – Wine regions in Portugal



Source: <http://www.ivv.min-agricultura.pt/np4/regioes/>

The Alto Douro Wine Region was included in the list of World Heritage Sites as an evolving and living cultural landscape, based on the following criteria presented by UNESCO (2001): the Alto Douro Region has been producing wine for nearly two thousand years and its landscape has been moulded by human activities; the components of the Alto Douro landscape are

representative of the full range of activities associated with winemaking; the cultural landscape of the Alto Douro is an outstanding example of a traditional European wine-producing region, reflecting the evolution of this human activity over time (UNESCO, 2001).

Also, in 2013, the Mediterranean Diet was inscribed by UNESCO as an Intangible Cultural Heritage of Humanity (UNESCO, 2017). Portugal, along with Cyprus, Croatia, Greece, Morocco, Italy, and Spain share this heritage. Bread, olive oil, and *wine* are called the “sacred trilogy” of the Mediterranean food culture, but there are others. The ingredients of the Mediterranean Diet are “olive oil, cereals, fresh or dried fruit and vegetables, a moderate portion of meat, fish and dairy products, abundant spices and the consumption of which around the table is accompanied with *wine* or infusions, always respecting the beliefs of each community.” (“Dieta Mediterrânica,” n.d.).

As said before, Portugal has seen a decrease in vineyard area, particularly over the last years. Table 7 shows the regions that most contributed to this phenomenon.

Table 7 – Area of vineyard in Portugal

Wine Region	1989	01/09/2000	31/07/2016	Δ 2016/1989	Δ 2016/2000
Minho	38 349	34 035	21 020	-45.2%	-38.2%
Trás-os-Montes / Douro e Porto	76 695	67 638	57 147	-25.5%	-15.5%
<i>Trás-os Montes</i>	---	---	14 381		
<i>Douro e Porto</i>	---	---	42 766		
Beiras	56 637	57 200	47 940	-15.4%	-16.2%
Terras de Cister	---	---	2 250		
Beira Atlântico	---	---	15 086		
Terras da Beira	---	---	15 687		
Terras do Dão	---	---	14 647		
Tejo	28 124	29 765	12 874	-54.2%	-56.7%
Lisboa	46 046	21 875	19 186	-58.3%	-12.3%
Península de Setúbal	11 396	9 283	7 203	-36.8%	-22.4%
Alentejo	11 510	16 123	23 375	103.1%	45.0%
Algarve	2 750	2 154	1 722	-37.4%	-20.0%
Total	271 507	238 073	190 467	-29.8%	-20.0%

Source: <http://www.ivv.min-agricultura.pt/np4/36/>

From 2000 to 2016, the regions that present a substantial decline are Tejo (56,7%), Minho (38,2%), and Península de Setúbal (22,4%). It is possible to recognize the considerable loss of vineyard areas in Portugal comparing data in 2016 and 1989. Alentejo was the only region that increased its area of vineyard by more than double that existing in 1987. One of the reasons why Alentejo flows in a different direction than the other regions is because farmers substituted the grain plantations, mainly wheat, by vineyards when Portugal became a UE member and the old cereal crops were no longer profitable.

Historically, viticulture is a national economic activity, and wine is historically one of the most important export-oriented products in the Portuguese agricultural economy (Panzone & Simões, 2009).

In 2016, Portugal exported 727,06 million euros in wine and imported 110,50 million euros, resulting in a positive balance of 616,56 million euros. The exportation to the UE was 434,02 million euros, and the importation was 109,74 million euros, with a positive balance of 314,82 million euros (IVV, 2017b).

Wine cooperatives contributed with 39% of the production of wine in Portugal in 2015, as seen in Chart 7. Until 2004 the percentage of the production of wine was equal or superior in the cooperatives compared to non-cooperative wine producers. Since then, the participation of the cooperatives on the production of wine has been dropping.

Chart 7 – Percentage of wine production by cooperatives



Source: (IVV, 2017)

The percentage varies according to the type of wine. In the production year of 2015/2016, cooperatives produced 34% of the Portuguese DOC wine, 41% of the IG wine and 49% of wine without certification (bulk and table wine).

According to IVV, there are 74 active cooperatives in Continental Portugal in 2017. (information obtained by e-mail).

5. A MODEL OF ORGANIZATIONAL CAPACITY IN THE ENVIRONMENT OF WINE COOPERATIVES

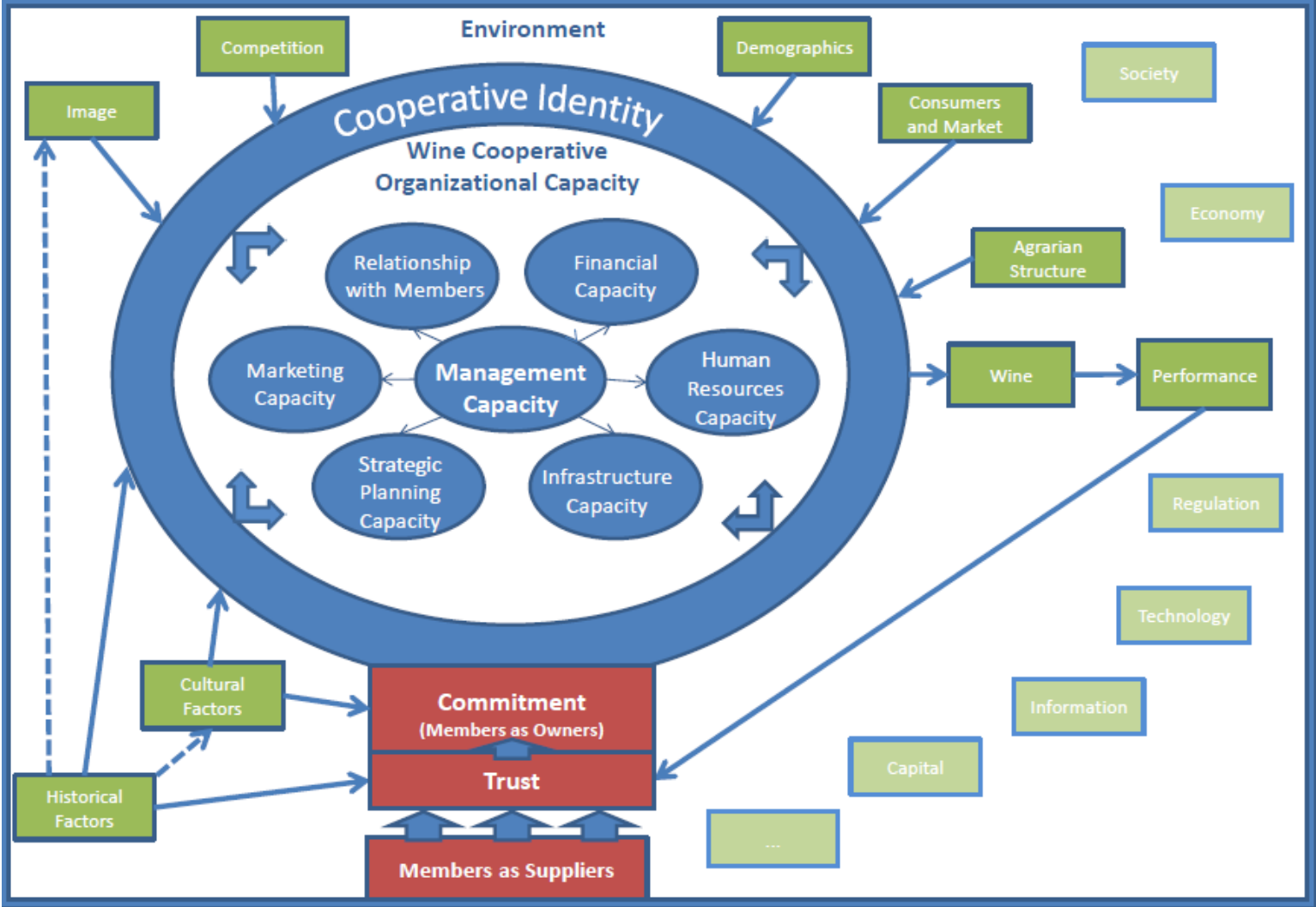
According to Costanza, Low, Ostrom, & Wilson (2001), while models are simplifications of the real world and a reduction of complex problems, they can contain important information about the problem under analysis. However, the authors alert that models are as accurate as the data used to build them. So, models are useful tools, can clarify problems, highlight hidden assumptions but are not infallible guides of the truth. The authors continue saying that “when problems are complex, however, and especially when quantitative relationships, nonlinearities, and time and space lags are important, our mental models may need to be supplemented” (Costanza et al., 2001, p. 22).

Corbin & Strauss (2008) explain that, although diagrams are an abstraction, they are a visual representation of data and the relationships among categories. The authors add that constructing diagrams “is helpful because it enables analysts to gain distance from the data, forcing them to work with concepts at the category level rather than the details contained in the many memos.” (p. 107). Costanza & Ruth (2001) declare that the purpose of developing a model of social systems is to provide a general understanding of system behaviour, and add that “modelling is increasingly being used to help avoid judgmental biases and systematic errors in business management decision-making” (p. 27).

Therefore, the diagram of the model of the organizational capacity of wine cooperatives in Portugal presented in Figure 6 is a tool to enhance the understanding of the environment wine cooperatives are part of and the factors that interfere with their performance. In this case, the model provides a systemic view of the studied phenomenon.

There are three sets of categories in the model. The first set is *members* that includes the categories of *members as suppliers*, *trust*, and *commitment – members as owners*. A cooperative is a membership organization. Since it exists to satisfy their members and because the members are suppliers and owners, it is imperative that they play these roles for the sustainability of the cooperative.

Figure 6: Organizational capacity and the environment of wine cooperatives in Portugal



There is no cooperative without members, so these categories are the foundation of the cooperative and are depicted in the model (in red) at the basis, supporting the cooperative.

The second set of categories, *internal factors*, represents (in blue) the wine cooperative itself and is composed of *cooperative identity* and *organizational capacity*. This last category is divided into *management capacity*, *strategic planning capacity*, *financial capacity*, *human resources capacity*, *infrastructure capacity*, *marketing capacity* and *relationship with members*.

Environmental factors is the third set and includes (in green) historical factors, cultural factors, image, competition, demographics, agrarian structure, consumers and market, wine, performance and other secondary factors (faded).

These secondary factors are those common to all organizations, cooperatives or otherwise, and, although they affect organizations, they do not have a distinct effect on wine cooperatives. Therefore, they are not the focus of this study.

Wine cooperatives are unique organizations and have different issues from other NPO. It is necessary to understand their environment and the factors that affect them to understand what determines the organizational capacity of those cooperatives. Also, members' attitudes and behaviors and the cooperative identity are particular aspects to be studied because they contribute to understanding the character of the cooperative.

The competence of the wine cooperative to manage all those factors described above – internal and environmental – greatly influences its potential ability to achieve success.

One of the most embracing conceptual models of organizational capacity for NPO is Hall et al. (2003)'s model. It also has a systemic approach to show organizational capacity as the model presented here. However, there are a number of aspects that are idiosyncratic to cooperatives that are absent from their model. First, little emphasis is given to environmental factors, which are presented more as a static context than a live and dynamic set of elements interconnected and that interact among each other and with the organization.

In addition, the particular identity of cooperatives, discussed above, cannot be ignored. So, cooperative identity is present in the organizational capacity model for wine cooperatives. As a singular type of organization, a

cooperative is different from an IOF or a NPO. In the model, cooperative identity is depicted as a category that involves the organization since its identity affects the components of organizational capacity and impacts the way cooperatives interact with the environment.

Also, in contrast with NPO, members are suppliers and owners of the wine cooperative and their role is determinant to the success of the cooperative. So, while Hall et al. (2003)'s model includes clients, funders, and others, in the model presented in this work there is a set of categories that represent members and depict the exclusive kind of relationship they have with organizational capacity.

Furthermore, although in Hall et al. (2003)'s model some of the capacities that compose organizational capacity have similar labels to those of the model of organizational capacity in wine cooperatives presented here, the descriptions and contents are different. In NPO, *financial capacity*, for instance, focuses on the access to revenues that, in general, come from donations, government and other sources. For wine cooperatives, *financial capacity* is more complex than fundraising and is part of achieving economic viability for the members and ensuring sustainability for the cooperative. In this case, cooperatives are similar to for-profit organizations with regard to *financial capacity*.

Finally, the core capacity in Hall et al. (2003)'s NPO's model is *human resources capacity*, differing from the model of wine cooperative organizational capacity that proposes as core capacity the *management capacity*.

Each category will now be explained in detail, starting with *cooperative identity* and the outputs of wine cooperatives, *wine* and *performance*. Following the directions of the arrows, the next set to be presented is *members*, then, other environmental factors, and finally, the *organizational capacity* of wine cooperatives.

5.1 COOPERATIVE IDENTITY

Organizational identity "is assumed to be a collective, commonly-shared understanding of the organization's distinctive values and characteristics"

(Hatch & Schultz, 1997, p.357). It is linked to the perceptions, feelings and thoughts of the members about their organization, and thus grounded in organizational culture.

In cooperatives, organizational identity is revealed by cooperative values and principles. They define what kind of organization a cooperative is and the goals of the cooperative organization.

To translate the values and principles into a legal framework and to regulate the functioning of cooperatives, each country has its own laws that legislate on the matter of cooperatives. In Portugal, cooperatives are recognised as a form of organization and the right to create a cooperative is enshrined in the Portuguese Constitution in its 61st article (*Lei Constitucional n.º 1/2005*, 2005). The law that specifically rules the cooperatives in the country is the *Código Cooperativo* (Portugal, 2015). This law begins by defining what a cooperative is and presenting the cooperative principles. It continues describing the creation of cooperatives, presents the rights and duties of the members, the functions of the boards of the cooperative, and so on.

The *Código Cooperativo* (Portugal, 2015) defines a cooperative as a non-profit organization that aims to satisfy the economic, social and cultural needs and aspirations of the members.

According to the law, there are two types of cooperatives. First degree or primary cooperatives are those cooperatives in which the members are legal persons. Superior degree cooperatives, also called second degree or secondary cooperatives and third degree or tertiary cooperatives, are those where the members are other cooperatives, like unions and federations (Portugal, 2015).

As said before, there were 16 primary cooperatives, two secondary cooperatives (unions) and one tertiary cooperative (federation) participating in this research.

To become a member of a wine cooperative, the grape grower must purchase a quota of production. Each quota is associated with the amount of kilograms of grapes that the member will deliver to the cooperative, so the member can acquire more than one quota if he wishes and have more area to produce. Traditionally, even when members have more than one quota, which means delivering more grapes to the cooperative, they will continue to have

only one vote. The distribution of the surplus, on the other hand, will be made proportionally to the weight of grapes delivered at the cooperative in the production year.

In cooperatives, the difference between the total revenue and the total costs is called surplus because, as a non-profit organization, using the word profit may lead to a misunderstanding of the goals of the cooperative. To IOF, profit is the main goal of the organization, so it has a positive meaning. If the concept is applied in cooperatives, the purpose of serving the members may be lost. On the other hand, surplus has a neutral denotation and it is more suitable to the identity of cooperatives.

When a member leaves a cooperative voluntarily, one has the right to receive the capital subscribed.

Puusa et al. (2013) alerts that the capitalist idea of what an enterprise is has overshadowed cooperative values and principles and they are becoming more and more similar to for-profit organizations.

Cook & Chaddad (2004) say that different models of cooperatives are emerging as traditional cooperative principles are relaxed. They describe a range of possible models that starts with the traditional cooperative, the one that follows all the cooperative values and principles, to a so-called "new-generation cooperative", characterized by accepting members investors with power in the decision-making process (Cook & Chaddad, 2004). According to Bijman, Hendrikse, & Aswin van Oijen (2012), this corporate governance model for cooperatives has emerged because of the increasing competition in the business. It gives more autonomy to management, reducing members' influence on operational decisions, and creates mechanisms to find new sources of equity capital in an attempt to give the cooperative conditions to strategically and tactically respond to the competitive market (Bijman et al., 2012).

In 2015, the *Código Cooperativo* was revised and amended to meet the modernization of cooperatives in the country. Some of the changes have a significant impact on wine cooperatives and generated conflicting opinions about them.

Portuguese cooperatives were organized according to the traditional cooperative structure with open membership, democratic control, restricted

residual claims, and benefits to members proportional to patronage (Rebelo, Caldas, & Matulich, 2008), until the approval of the new *Código Cooperativo*.

The most controversial change is related to the democratic principle of one person, one vote. It was approved that members can have more than one vote proportional to their transactions with the cooperative, limited to three votes if the cooperative has up to 50 members and to five votes if the cooperative has more than 50 members (Portugal, 2015).

Kyriakopoulos, Meulenberg, & Nilsson (2004) present the argument that the traditional form of governance in cooperatives, that includes the democratic principle of one-member/one-vote and exclusive member voting rights, will reduce cooperatives' market-orientation and performance. According to the authors, the impact of large farmers on decision-making is disproportional to their patronage and financial contribution, so having the same power in the voting process is not appealing. Also, because of small farmer members, there will be a tendency to avoid exposure to risky innovation or a tendency to avoid expansion in the cooperative.

Among our interviewees, some members of the BoD and managers agree that a member who delivers more grapes should have more votes, as shown below:

“I am in favor of members having a different number of votes.” (12BoD),

“One person, one vote is not fair because it may prevent the approval of important matters to the cooperative. After all, someone who has 0,5 ha doesn't live off viticulture, but someone who has 10 ha, for instance, lives off this work.” (09Mng)

Others believe that the democratic feature of cooperatives is lost when members have a different number of votes, as declared by this member of the BoD:

“I have always defended that the ideal in a cooperative is one person, one vote.” (13BoD),

Although the Portuguese law allows the cooperatives to have more than one vote per member, they are not obliged to change their statutes if they do not agree with it. That is what happened in this cooperative:

“We updated our statute, but we kept the situation of one person, one vote. Otherwise, we would lose the cooperative principle...” (03BoD).

Another important change is that the new *Código Cooperativo* created a new role in the cooperative: the member-investor. While the member owns the cooperative, delivers the grapes, and receives the surplus, member-investors can invest capital in the cooperative as a business and wait for the return of the investment. The income from the investors is limited to 30% of the social capital of the members.

There is no consensus in this matters among the interviewees. Some believe that this rule was created for other types of cooperative, since wine cooperatives will never be attractive to external investors. So, this new rule would not affect wine cooperatives. Others expect that members-investors may provide an alternative to capitalization of wine cooperatives. However, none of the cooperatives studied had used this new figure yet.

Another alteration in the law is mandatory. It limits the number of terms of the BoD to three mandates. Most of the interviewees agreed with this clause that intends to guarantee a democratic management by the alternation of power.

Each cooperative has its own statute. Most of the statutes are very similar, not only because they must meet the requirements of the cooperative law in Portugal, but also because most were developed with the support of FENADEGAS and other organizations attached to the cooperative movement, who advise a statutes template.

The statute regulates the activities of the cooperative, the creation and dissolution of the cooperative, the relationship with members, and the surplus distribution.

About the members, the statute⁷ defines that, to be a member of the wine cooperative, the person has to produce grapes in the geographical area of the cooperative and has to pay the minimum social capital required.

In general, the rights of the members are:

- Participate in the economic activity of the cooperative,
- Attend the Assembly, proposing, discussing and voting the matters,
- Elect or be elected to the boards of the cooperative,
- Ask for information about the situation of the cooperative and about the accounting results,
- Submit their resignation.

The duties of the members are:

- Follow the cooperative principles and respect the law and the statute,
- Be part of the Assembly,
- Delivery at the cooperative all the grapes produced, except those for own consumption, and
- Not to sell wine.

The main point of the rights of the member is the participation in the economic activity, which means that the cooperative has to accept the grapes from the members. Regarding the duties, it is important to stress that the member has to deliver all the grapes to the cooperative. These two clauses are the most sensitive aspects of the relationship between the cooperative and the members and will be discussed later.

On the one hand, the cooperative has the supply of grapes guaranteed. This situation can be positive to the cooperative, mainly in times of low

⁷ All the information concerning the statutes is based on the statutes of two cooperatives participants of the research, which are typical of all wine cooperatives.

production because the cooperative does not need to search for grapes in the market if the members follow the rule.

On the other hand, the cooperative has to pay for any grape, regardless of its quality or variety. In this case, low quality grapes or less desirable varieties may overload the reception of the grapes, the production, and storage of the wine. Besides, low-quality wine has the same cost of production and takes the same time to be produced as high-quality wine, but will be sold at a much lower price.

Cooperatives are important to the agricultural sector in the world. They allow independent farmers to resist and survive the market power of big retailers (Tortia et al., 2013). In general, small farmers are more susceptible to the effects of crises because they do not have the resources needed to make necessary improvements (Alonso & Liu, 2012). The role of the wine cooperative is mainly to support the small farmer, as declared by these members of the BoD and members:

“Wine cooperatives were created to protect the small farmer, not the big one. The big farmer is and will always be protected.” (15BoD),

“The aim of a wine cooperative is to value the raw material [grapes] from the members.” (05BoD),

“[In the region] the most profitable culture is viticulture, provided the grapes are delivered at the cooperative.” (11Mbr)

“Alone, I have nothing.” (11Mbr), and

“The small farmers will always need the cooperative because they don’t have a place to sell their grapes. Big wine producers don’t want their grapes.” (07BoD).

In the spirit of the 6th cooperative principle, some cooperatives declared that, when they need to do business with other organisations, they prefer to work together with other cooperatives rather than with other wine producers, as follows:

“We buy wine from the cooperative ‘X.’” (01BoD), and

“We buy wine from other cooperatives when we don’t have enough wine.” (03BoD)

Most of the cooperatives have a substantial impact on the regions where they act. This influence goes beyond the relationship with members and can be framed by the 7th cooperative principle: concern for community, as pointed by these managers:

“We have a huge social responsibility in the county because we have 700 active members, plus 41 employees at least, and most of them live in the county. It is difficult to find a family that doesn’t have a relationship, direct or indirect, with the cooperative.” (06Mng)

“The cooperative is one of the biggest employers of the county.” (01Mng).

Cooperative identity, mainly due to its dual nature, creates a challenge to the wine cooperative management that has to undertake the contradictory forces generated from the economic element and the social element of cooperatives.

5.2 WINE

The performance of the wine cooperative will depend on the total of sales, the price, the quality, the costs of production, access to the market ... of the **wine**.

It starts to be produced at the farms, in the vineyards. Vineyards are planted with the grapes that best fit the conditions of the soil and the climate of the place (Infovini, 2009). Therefore, depending on the region, it is possible to find different grape varieties that will create different wines. For example, the grape Alvarinho, planted in the region of Monção and Melgaço or the grape Loureiro from the valley of the Lima, are varieties of grapes adapted to those micro-regions that produce *Vinho Verde*.

Portugal is a country that has many autochthon grape varieties, i.e., native grape varieties that allows the country to produce diverse quality wines with unique characteristics (Infovini, 2009). Some of these grape varieties have a high value in the market and have differentiated prices, such as Alvarinho, Touriga Nacional or Moscatel de Setúbal. Some others produce unique wines as the variety Baga, planted mainly in the region of Cantanhede.

In between harvests, called *vindima* in Portugal, the member has to treat the vineyard pruning, guiding the grapevine growth, preventing diseases, and irrigating, if necessary (Infovini, 2009).

The harvest occurs in late September, beginning of October, when the grapes reach the highest level of sugar. The higher the degree of sugar, the higher is the level of alcoholic fermentation. After the *vindima*, the farmer member takes the grapes to the wine cooperative for the transformation process of producing wine. It is obtained by the alcoholic fermentation of the sugar in the juice of grapes, and the final product has to have more than 8,5% of alcohol in it (Infovini, 2009).

The quality of the wine depends on the quality of the grapes. One can produce a bad wine with good grapes, but no one can produce a good wine with bad grapes. As a manager and a member of the BoD said:

“What makes the wine are the grapes.” (06Mng),

“You can make good wine only with good grapes; there is no miracle. Trying to make classy wines with bad grapes will lead you nowhere.” (02BoD).

Most of the managers and members of the BoD recognized that reducing costs is crucial to the survival of the cooperative, but investing in the quality of the wine is also important. As these members of the BoD say:

"Our struggle is for quality, to differentiate ourselves by quality. There already are too many [players] in the price war " (07BoD)

"We have to distinguish ourselves by quality, image, and (...) [relationship with the] consumer. These are the main rules of the market." (03BoD)

Most of the old vineyard must be renovated with more productive plants, with varieties more adapted to the *terroir*, or more valued in the market, to enhance the quality of the grapes.

"[We] penalize non-quality to encourage the transformation of vineyards. We pay extremely well for *Touriga Nacional* and not so good for the others [varieties] which are not noble types of grapes." (03BoD).

There is a program called VITIS, created by the Portuguese Government that gives financial resources to farmers to renovate their vineyards.

"We have a technician who, for almost five years, is practically giving exclusive support to these projects [VITIS]." (01BoD).

"We take advantage of all the opportunities that VITIS has given us to make the reconversion of the vineyards and to get what we think are the grape varieties more adapted to the region and that best produce here in the region. [We do not want to] produce in quantity, but produce with quality." (02BoD)

This manager alerts that, although quality is needed, the price has to be consistent with it, especially in a very competitive business:

"Quality is important, but the price-quality ratio is fundamental." (10Mng)

As Sellers-Rubio et al. (2016) say, "in the wine sector, not only the quantity of wine produced is important but also the quality of the wine and the ability of the winery to market it at a viable price." (p. 60).

The two regions with the biggest production of bulk or table wine in Portugal in 2015 were Tejo (349 064 hl) and Lisboa (386 847 hl). While the production of white bulk wine in Tejo was 181 714 hl, in Lisboa, the higher production (311 970 hl) was of red and *rosé* bulk wine (INE, 2015).

Douro is the region with the higher production of wine, including fortified wine, reaching a total of 1 446 078 hl. However, the higher producer in total of white wine is the region of Minho (690 740 hl). Actually, the region is also the main producer of DOC white wine (666 252 hl), most likely because of the *Vinho Verde*. (INE, 2015). As declared by a manager:

"White wine is in fashion, *Vinho Verde*, mainly." (01Mng1)

The higher production of DOC red and *rosé* wine are in Douro (479 898 hl) and Alentejo (477 621 hl) while Regional wine or IG wine have as biggest producers the region of Lisboa (755 957 hl), mainly in white wine (622 462 hl) and Alentejo (516 965 hl) with 415 867 hl in red and *rosé* wine (INE, 2015).

Wine consumption in the country recorded a 15.2% increase in 2014/2015 compared with the previous year, standing at 47.6 litres per inhabitant (41.1 litres in 2013/2014). In this period, the imports increased 12.9% (INE, 2015).

5.3 PERFORMANCE

Success or high performance, in general, is linked to attaining the goal of the organization. If the goal is reached, the organization is successful. It seems simple, almost obvious, but that is what makes this approach feasible and practical. The purpose of an IOF is to maximize profit. The more profit, the more successful the organization is. NPO and cooperatives have different goals. To (Helmig, Ingerfurth, & Pinz, 2014), the best indicator of NPO success is the achievement of its mission objectives. Cooperatives are similar. They exist to satisfy their members, and, as long as the satisfaction can be measured or at least detected, success can be identified.

Although success can have different forms, e.g. survival, profit, sales growth, happiness, reputation, and so on, people generally have a similar idea of what kind of organization is successful (Chittithaworn, Islam, Keawchana, & Yusuf, 2011). In wine cooperatives, and based on the interviews in this study, the satisfaction of the members towards the cooperative seems to be attached to the earnings received, which is translated into payment of the grapes and surplus. If the farmer is not content with her situation as a member, she will sell the grapes to another producer (and leave the cooperative), or stop producing grapes.

The cooperative, on the other hand, has to be sustainable, which means, the financial results must not be negative to guarantee the longevity of the organization. As long as the cooperative is able to balance its assets and liabilities, in a stable financial situation, it will survive. Thus, if the members are receiving more for the grapes than other producers would pay, it means the cooperative is successful; it is sustainable and satisfies the members. In this case, the perception of success is only valid for each particular case and reflects a static situation, but remains nevertheless valid.

In sum, although there are different approaches for assessing performance in cooperatives, the price and the payment terms are the parameters most easily perceived by the members as synonymous with success or failure. Moreover, the fact that the cooperative is unable to pay the grapes is an indication that sustainability is also threatened. So, price and

payment term seem to be the best indicators to understand the performance of wine cooperatives.

The first performance indicator for wine cooperatives is the price paid for the grapes. Table 8 depicts the prices of the grapes paid to members compared to the average market price paid by for-profit organizations.

Table 8 – Average price of grapes: cooperatives x companies

Coop	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Price	=	↑	↑↑	=↓	?	=↑	=	↑↑	=	↑↑	=	↑↑	=	=	=	↑↑

The price paid by the cooperative can be:

- ↑↑ Above the price paid by the market (6 cooperatives),
- =↑ Slightly above (1 cooperative),
- = Equal (7 cooperatives),
- =↓ Slightly below (1 cooperative).

The other indicator of the performance of cooperatives is payment term. In general, cooperatives cannot compete with for-profit wine producers in this matter, who pay for the grapes within 1 to 3 months after the purchase. Cooperatives, in turn, pay their members within 18 months⁸, including the surplus. This is a sensitive issue for the cooperatives that can be compensated with better prices or the security of the reception of the grapes from members.

Table 9 presents the month and the terms of the payments received by the members of some cooperatives. Five cooperatives did not provide this information.

Three patterns emerge when joining the two tables: cooperatives that pay a higher price for the grapes than the market, cooperatives that pay the grapes after the appraisal of results, and cooperatives that pay the same or slightly more than other companies.

⁸ After the reception of the grapes, the cooperative starts the production of the wine. In January, the sales of the wine begins. The appraisal of the results will be ready around March, 18 months after the delivery of the grapes, and will take into account the sales of the fiscal year (from January until December).

Table 9 – Percentage of the payments to the members (grapes + surplus)

Cooperative																
Month	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Aug	?	?							?	30%				?	?	
Sep	<i>Vindima</i>															
Oct																
Nov																
Dec			30%								25%	50%				95%
Jan						50%				40%						
Feb							20%						30%			
Mar												45%				
Apr																
May											25%		30%			
Jun						45%										
Jul			30%				30%									
Aug								35%			25%		30%			
Sep								Next <i>Vindima</i>								
Oct																
Nov							30%									
Dec								35%								
Jan																
Feb																
Mar	?	?	40%	100%	100%	5%	20%	30%	?	10%	25%	5%	10%	?	?	5%

There are five cooperatives in the first set that pay a higher price for the grapes than other producers. They can be divided into two subsets:

- Cooperatives that pay in the short term:
 - One of the cooperatives pays the grapes until December of the same year of the harvest, remaining only the surplus to be distributed after the appraisal of the results (usually, no more than 5%)
 - Another anticipates 30% (before the *Vindima*) and pays the remaining until January, remaining only the surplus to be distributed after the appraisal of the results, and
 - A third pays in two times until March, remaining only the surplus to be distributed after the appraisal of the results.
- Cooperatives that pay in a middle term are:
 - One cooperative pays in 3 times distributed throughout the 18 months, and
 - Another pays in 3 times, starting after 9 months of the *Vindima*.

All those five cooperatives are successful and are located in different regions of wine production in Portugal, which means that the agrarian structure

affect the wine cooperative but is not a requirement for high performance. Success in wine cooperatives is not limited by the region.

The second set is composed by cooperatives that only pay for the grapes and the surplus after the appraisal of the results. These two cooperatives pay only the same or slightly under the market price for the grapes; both in the same wine production region. One of them is experiencing financial difficulties.

The third set of cooperatives is those that pay the same or slightly higher than other wine producers, as follows:

- One of them pays in 2 times, 8 months after the delivery of the grapes, remaining the surplus to be paid after the appraisal of the results. This cooperative is the biggest producer of its region and exerts a considerable power over members,
- Another one pays in 3 times, 10 months after the delivery of the grapes. This cooperative is struggling to survive,
- Two cooperatives pay for the grapes in 3 or 4 times, distributed until the appraisal of the results. One of those has just recovered from a difficult time and has resumed investments. The other is still recovering from stagnation and financial problems led by a new BoD.

It seems that all the cooperatives that pay higher prices for the grapes than the other producers in their regions are successful, confirming that the price of the grape can be a good parameter to identify performance in wine cooperatives.

Although payment term seems to be another acceptable parameter of performance, there is an exception among the successful cooperatives: one of them does not have a short payment term as the others. This cooperative is a reference not only in the region but in the whole country, so it seems that it has the power to decide whatever payment term is more convenient to the sustainability of the cooperative.

To illustrate the advantage of being a member of the cooperative, one manager presented the following example based on grape prices payed in the region in the previous year. Assuming the costs of producing the wine were the same in both organizations, and that the average price paid for the grapes by the for-profit wine producers is 25 cents/kg and by the cooperative is 38 cents/kg (with surplus), it is possible to conclude that:

- Members received 13 cents more than the market price because they are associated to the cooperative, otherwise they would receive 25 cents/kg,
- 38 cents/kg is the total value (price + surplus) payed for grapes that made the cooperative reach its break-even point, which means, the income and the expenses of the organization are the same.

So, the difference of 13 cents/kg x 10.000.000 kg = 1.300.000 euros is the surplus of the cooperative and would be the profit of the company.

The way members perceive the performance will impact their trust towards the cooperative. If the cooperative does not pay according to what was previously agreed, either in value or payment term, trust will be destroyed.

5.4 MEMBERS AS SUPPLIERS

Members of agricultural cooperatives have the dual-role of suppliers and owners of the cooperative. In wine cooperatives, the main raw material is the grape, and all the grapes come from the members (grape growers), except in extreme and rare situations when the production of the members is not enough for the cooperative. In such cases, the cooperative may buy grapes from non-member farmers.

Cooperatives exist because members believe they would fail if they had to act alone in the market. Being part of a cooperative allows them to fulfil their goals (Nilsson, 1996). According to Van Oorschot, de Hoog, van der Steen, & van Twist (2013), members need a viable economic business model to organize themselves.

Moreover, farmers have lower ability to combat the opportunistic behaviour of IOF and they face the danger of monopolistic pricing by other firms (Tortia et al., 2013). Small farmers can achieve economies of scale and scope like IOF through cooperation (Altman, 2014).

The alternative to deal with these threats is becoming a member of a cooperative, as declared by this member of the BoD:

“[The cooperative] is a company that was formed to create scale, not only in the costs of winemaking, but also scale for the commercialization.” (11BoD).

Cooperatives, as well as a pool of cooperatives, can generate higher rates of growth even in competitive environments (Altman, 2014). A member declared that, because of the volume he produces - not very significant in the region - he needs the cooperative to deliver his grapes:

“As a farmer ... if I did not have a structure [the cooperative] capable of receiving my grapes, I would have some difficulty negotiating them.” (02BoD).

Cooperatives represent an alternative to maintain the independence of small farms while providing the means for these farms to remain or become competitive through the achievement of adequate scale economies and market survival potential (Altman, 2014; Tortia et al., 2013).

Although wine cooperatives were created to receive the grapes, what happens in practice is that cooperatives “buy” the grapes from the members. There is a difference between receiving the grapes and buying the grapes. The original concept of a wine cooperative is that the members own it and the surplus will be distributed (or retained to investments in the cooperative) according to the weight of grapes each member delivers to the cooperative.

When “buying” the grapes, the cooperative pays for the grapes according to a set price before knowing the financial results of the fiscal year. The grapes are the raw material for the wine that will be produced and sold during the next year. Paying in advance constitutes, in effect, buying the grapes, not distributing the surplus to members.

Members are more concerned about receiving the payment of the grapes than with any surplus they may accrue, which disturbs some members of the BoD, who declared:

“What cooperatives should do is receive the grapes, not buy them. The concept of buying the grapes is for regular

enterprises. Receive the grapes, transform the grapes, produce wine and sell it at the best price possible, and only then remunerate, distribute among the members [the net surplus], reserving something for investments.” (03BoD), and,

“The cooperative must receive the grapes, transform them, and try to sell the wine. Moreover, what if the cooperative doesn’t sell the wine? Has it to pay the grapes? No, it hasn’t. This is part of the cooperative principles.” (01BoD).

It seems that there are many reasons for this ideal scenario not to occur, but it is possible to list the most evident. The feeling that appears in most of the members is that they are not owners of the cooperative but, at most, business partners of the cooperative, as shown below:

“I consider myself as a partner of the cooperative. (...) My share is so small..., so, I am a partner of the cooperative.” (08Mbr),

“I was talking to a member, and I said: ‘You are my boss,’ and he kept staring at me, and it seems that it was a surprise because they [the members] often don’t have this notion, that they are the owners.” (06Mng).

These are also comments from members of the BoD about how members behave towards the cooperative that illustrate this point well. These are just two of several examples:

“What members want, pure and simple, is just to deliver their grapes at the wine cooperative and get the money as they [would] do to any other producer.” (07BoD),

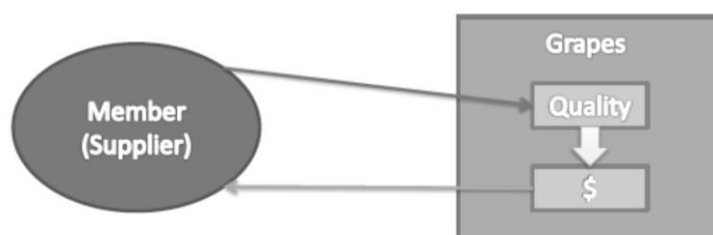
“People look at the cooperative just as a place where they will deliver their products, expecting to get something. (...) It seems that, mostly, the owners of the cooperative, which are the members, don’t care about their cooperatives.” (08BoD),

“Members see the cooperative as they see any other wine producer, they don’t see themselves as being part of the cooperative” (07BoD),

“[This is how members feel about the wine cooperative]: ‘I will go there, deliver my grapes and they will pay me.’ They don’t see this as a business; as being theirs.” (11BoD).

This position of members seeing themselves primarily as suppliers of the cooperative, as shown in Figure 7, is a frequent complaint of members of BoD and managers, most of whom recognize members as owners and would prefer them to behave as such.

Figure 7 – Perception of members’ role in a wine cooperative: members as suppliers



However, a few managers and members of the BoD disagree and share members' perception that they are only suppliers and not owners of the cooperative. In the cooperative with the lowest number of members of the sample, where members actively participate in the decisions of the cooperative, the manager commented that:

“Members are **as if** they were owners of this [the cooperative].” (10Mng).

It seems that this manager believes that members act as if they were the owners of the cooperative, but for him, they are not.

A member of the BoD of another cooperative has the same belief, that members are not “real” owners, and justifies his position citing the destination of the permanent assets of the cooperative in case of dissolution. He says:

“This is a wrong idea, that the cooperative is theirs. The cooperative is not theirs, (...) they have [just] the capital here. When they leave, they only take the capital; they do not take anything else. If the cooperative closes the doors, (...) the land, the cooperative, the infrastructure are not theirs. The infrastructure belongs to the cooperative sector and, in this situation, [the assets] are transferred to a similar cooperative. Most people do not know that.” (01BoD).

Under this generalized (if misguided) view, the member, a grape grower, sells the grapes to the cooperative and is remunerated, in general, according to the quality of the grapes. In these cases, the relationship between the member and the cooperative is consigned to the trade of the grapes, and members do not accept their role as owners of the cooperative. Hence, the sustainability of the cooperative is not an issue to these members, and their focus is on price and payment term only.

When members see themselves only as suppliers, they do not commit to the cooperative ideal.

5.5 TRUST

Mayer, Davis, & Schoorman (1995) say that people depend on others to achieve their personal or organizational goals. The trade among members and

the cooperative is characterized by trust (Puusa et al., 2016). Trust has been construed in social science predominantly in terms of one's belief about the motives or intent of another party. Thus, trust exists when one believes others to be benevolent and honest (Andaleeb, 1995).

According to Colquitt & Rodell (2011), some authors define trust as risky but positive expectations regarding the conduct, motives, and intentions of the trustee. Mayer et al. (1995) say that trust “is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (p. 712). By choosing to trust, the person becomes vulnerable (Andaleeb, 1995) and vulnerability accepts some risk. Although trust is not taking risks, it entails a willingness to take risks (Mayer et al., 1995).

In the model, trust is one of the three supporting pillars of the cooperative and its organizational capacity. Trust depends, mainly, on the performance perceived by the members, but also on historical factors, and it will impact the commitment of the members towards the cooperative.

Without trust, managers and the BoD have no legitimacy and this may lead to an unbearable situation. The importance of trust between members and the cooperative is declared by these members of the BoD and a manager:

“[It is necessary] that the members trust the cooperative.”
(15BoD),

“It we don´t have trust, the management fails.” (14BoD).

“If the cooperative is here today it's because the members didn't lose faith in us, even in bad moments.” (08Mng).

As Nilsson (2001) points out, it is known that social aspects are important to cooperative organizations. For a cooperative to function, there must be at least some trust between the members and the organization. Every time a group of members is elected for the BoD, a bond of trust is created, according to this member of the BoD:

“Members trust the people they vote for the BoD.”
(02BoD).

On the other hand, this member of the BoD declares that:

“Trust is built in the long-term.” (12BoD).

Besides being satisfied with the supplier role, members have to feel that they can also trust on the social group on which they depend (Puusa et al., 2013).

Andaleeb (1995) says that a trusted organization will have more flexibility to pursue competitive strategies involving its partners because there will be fewer controls towards the organization. Thus, the cooperative will act free to take initiatives to enhance performance.

As presented before, the price and payment term of the grapes are the factors that members most frequently associate with the success or failure of the cooperative. Most of the interviewees were emphatic when saying that trust in cooperatives boils down to the payment of the grapes, as follows:

“[To have] the trust of the members, we just have to pay on time.” (15BoD),

“We can only have the trust of the members by paying for the grapes.” (05BoD),

“The trust of members is conditional on payment. If the members receive on time, they trust the cooperative.”
(09Mng),

“If we don't pay the members, they don't trust us anymore.” (02BoD), and

“We can have the best ideas in the world but if we don’t have the check with the money the members believe they deserve, we are the worse in the world. Only money matters.” (07BoD).

The more satisfied the members are with the cooperative as a trading partner and as a member organization, the more they trust the board of directors and the management. Also, the less satisfied, the less they trust the cooperative (Nilsson, Kihlén, & Norell, 2009).

This member of the BoD tells what happened when the cooperative was not paying on time:

“When the cooperative was not well, members sold their grapes to other producers.” (14BoD).

Trust can be destroyed if conflicting objectives between management and the members are not settled. As a result, members become less involved in the cooperative, management takes control, members become increasingly dissatisfied, and the BoD and management lose legitimacy among members (Oczkowski et al., 2013).

In practical terms, when trust is destroyed, when members do not believe that they will receive payment for the grapes, they will try other alternatives and the first option is, in general, to sell the grapes to other wine producers, breaking the contract they have with the cooperative. This means that the cooperative cannot count on the supply of the grapes anymore. If this situation turns into a snow ball, with members selling the grapes to other producers, the cooperative will collapse without raw material to produce wine.

Without members’ trust there is no commitment. Trust joins members and the organization, leading to participation, commitment and the acceptance of ownership.

5.6 COMMITMENT (MEMBERS AS OWNERS)

Commitment is the third factor, after members as suppliers and trust, to support the organizational capacity of the cooperative.

Organizational commitment is defined as “the strength of an individual's identification with and involvement in a particular organization. Such commitment can generally be characterized by at least three factors: (a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) a definite desire to maintain organizational membership.” (Porter, Steers, Mowday, & Boulian, 1974, p. 604)

To Wiener (1982), “the stronger the commitment, the stronger is the person's predisposition to be guided in his actions by such internalized standards rather than by a consideration of the consequences of these actions.” (p. 421). Thus, committed individuals may exhibit certain behaviours not to their personal benefit, but because it seems the “right” and moral thing to do. Moreover, commitment does not fit in an instrumental-utilitarian approach, but rather as a normative motivational process of work behaviour (Wiener, 1982).

According to Porter et al. (1974), it seems that “individuals highly committed to an organization's goals and willing to devote a great deal of energy toward those ends would be inclined to remain with the organization in an effort to assist in the realization of such highly valued objectives.” (p. 604).

Commitment can be evaluated by the level of participation of the members in all aspects of the cooperative. Commitment will depend on the perception and acceptance of the members that they own the cooperative and that they are also responsible for its performance.

As such, members are not only mere suppliers. As owners, they should not only guarantee the quality of the grapes they delivery to the cooperative but also participate actively in the decision-making and monitoring process of the cooperative.

However, it is common among wine cooperatives to have no candidates other than the previously elected group at the elections for the board and committees. According to these members of the BoD, most of the members do not want the responsibility of being an elected representative.

“90% of the elections to the wine cooperative boards have only a single list.” (04BoD), and

“The same people are in the BoD of the cooperatives for so long mainly because nobody else wants to be part of the BoD.” (07BoD).

Nilsson et al. (2009) argue that, in large and complex cooperatives, members can feel that they have no control and this can lead to dissatisfaction, low involvement, and mistrust in the cooperative leadership. In most of the cooperatives researched here, the participation in the assemblies is low:

“[Participation in the assemblies] 10, 15 people.” (13BoD).

The lack of engagement of members with some cooperatives illustrates their desire not to exert any democratic control. An inability of some cooperatives to get quorums at meetings and sufficient voting numbers reflects the apathy of many members. In some situations not even an active education or marketing campaign for members would improve engagement (Oczkowski et al., 2013).

But this is not the case in all cooperatives. This member of the BoD seems optimistic when saying that the number of members in Assemblies is increasing.

“From 215 active members, the participation at the Assembly is 60, 70, 80 members. This is good because 6 years ago there were 20, 30, always the same members.” (11BoD).

In these cooperatives, members of the BoD declare that members participate in the assemblies:

“It is good, there are 250, 300 at the assembly.” (15BoD),

“Sometimes, 300 members, which is really good.”
(12BoD),

“The participation at the Assembly is high, around 40%.”
(08BoD), and

“Participation is high, around 400 members.” (03BoD).

The matters to be discussed at the assembly seem to have great influence on members' willingness to participate, as evidenced by these members of the BoD:

“At the planning and budgeting assembly we have 150 members participating. At the one for presenting results, 250. And at the assembly to organize the *vindima* we have 400 members. When we talk about prices and terms of payment almost everybody goes...” (14BoD),

“To organize the *vindimas*, there are a lot of people.”
(02Mng), and

“I usually say that the culprits of the absence of the members at the assemblies are those who make the agenda.” (08BoD).

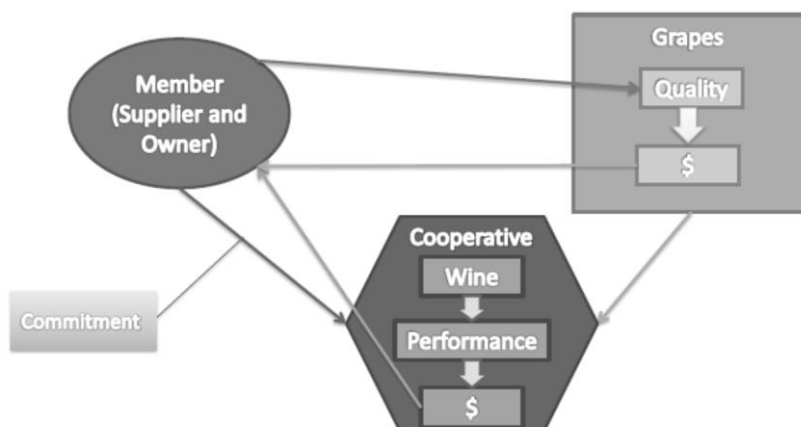
If the matters up for discussion affect the members directly and personally (like prices or the organization of the *vindima*), they will be more inclined to come than if the matters relate solely to the running of the cooperative, which reinforces the notion that most members have a utilitarian relationship with the cooperative and find it hard to accept their role as owners.

Figure 8 shows how members can relate to the cooperative as suppliers and owners. The most important thing to the member is the price of the grapes when the perception of the member is restricted to the role of supplier.

Members in this situation will sell the grapes to the cooperative and, in case of better price, will be tempted to sell them to other producers. The cooperative is seen only as a buyer.

When members see themselves as owners too, they accept their dual-role in the cooperative and understand that the product they sell will become the raw material of the wine cooperative. The price of the grape will interfere in the cost of the wine produced and sold by the cooperative. If the cooperative has a surplus, the members will receive their share according to the weight of grapes each delivered in the cooperative. So, members will receive twice: the price paid for the grapes plus the surplus. The surplus will be lower if the price of the grape is higher, and vice-versa, but the total will remain roughly the same.

Figure 8 – Perception of members’ role in wine cooperative: members as suppliers and owner



Besides, if the members see the cooperative as their own, they will realize that the performance of the cooperative depends not only on the price of the grapes but also on the quality of the grapes. In this case, members would produce the grapes that are more suitable to the needs of the cooperative, according to the demands of the market.

This member of the BoD alerts that:

“[Members] have to be aware that alone they can do nothing; that is the reason they came to the cooperative in the first place. They have for work to the cooperative, they

cannot see it as any other wine producer... What we should think about is how we can make the members feel more responsible for the cooperative, since it is theirs.” (08BoD).

In an attempt to overcome the lack of participation, some cooperatives develop extra activity to bring the member to the cooperative and to enhance the commitment towards the performance of the cooperative, as declared this member of the BoD:

"What we seek to do is to develop a set of activities that enhance the relationship of the member with the cooperative, (...), that promote the relationship between the members, the members and the cooperative, the members, and the BoD. This, I think, is important so that the cooperative is not simply seen as the way out, somewhere to dump the grapes at the end of the year." (13BoD).

Satisfaction towards a cooperative begins with the profitability of the members in the farm, which leads to commitment (Alsemgeest & Smit, 2012).

Although participation seems to be the best way to evaluate commitment, they are not the same. The simple fact that a member goes to an Assembly does not guarantee that this member is committed to the ideal of the cooperative. In contrast, a member of a wine cooperative may be identified with cooperative values and principles and involved in the cooperative project but, even though, not participate in Assemblies. However, this same member produces the grapes demanded by the cooperative, is careful with the vineyard, follows all the legal requirements regarding the plantation and harvesting, and delivers all the production, high quality grapes, to the cooperative. This member also understands that the main source of resources for investments in cooperatives is the surplus, meaning that, if the earnings from the cooperative is not high this year, it is because the cooperative will retain some surplus for renovations to continue to be competitive.

Of course, this is an extreme example and most of committed members would participate in the decisions of the cooperative. However, it is worth illustrating the importance of the three factors of the category *members* in the model. When members trust, they become committed. They believe and trust that the elected BoD and managers are qualified to conduct the cooperative to achieve its goals and be successful. From the members' point of view, as suppliers they expect to get higher prices for their grapes, but as owners they desire the sustainability of the cooperative, the source of their earnings as farmers. A committed member will put the collective interest first and work for the long-term sustainability of the cooperative.

Among the cooperatives participating in this research, all the interviewees complain about the lack of commitment of the members, but it was more evident in those cooperatives with recent performance issues.

Members as suppliers, trust and commitment are the three factors of the category *members* that are part of the model, forming its base.

5.7 HISTORICAL FACTORS AND CULTURAL FACTORS

Many of the present circumstances of wine cooperative can be explained by its historical origins. Most of them were founded during the 1950s and 60s, encouraged in a top-down process and supervised by the *Estado Novo*⁹ government, in order to receive the grapes from small farmers and enhance the scale of wine processing, stocking and marketing (Rebelo & Caldas, 2015; Rebelo et al., 2010).

In other words, wine cooperatives were created in Portugal to provide a place where farmers could deliver their grapes, as declared by this member of the BoD:

“Cooperatives emerged to make the concentration of supply.” (02BoD),

⁹ The *Estado Novo* was an authoritarian regime with an integralist orientation installed in Portugal in 1933. It ended in 1974 with the Carnation Revolution. The prime-minister of the *Estado Novo* was Salazar.

Without a strong membership organization to meet their needs, farmers are reliant on intermediaries, merchants who often find it easy to exploit them (Birchall, 2004). The following statement seems to confirm that:

“The middleman was getting a lot of the value of the product, and the producers were not getting any of it, so they were getting (...) out of the loop.” (08BoD).

According to Hanf & Schweickert (2014), “originally wine cooperatives were built as collaborations of small producers who wanted to produce and market wine jointly.” (p. 33). A member of the BoD was emphatic when presenting the reason why grape growers became members of the cooperative.

“Our members, when they became members of the cooperative, they didn’t come because it was a cooperative, they came because they needed to deliver the grapes somewhere and they didn’t have a place to sell them.” (01BoD).

The creation of the cooperatives in Portugal, stimulated by the regime, influenced the perception of the member towards the cooperative, only as a place to “sell the grapes”. As declared by the same member of the BoD:

“[When farmers became members] they never bothered to know what a cooperative is.” (01BoD)

This manager believes that these members’ behaviour, disconnected from the cooperative identity, is due to the way cooperatives were created:

“It has to do with the origin of the cooperatives. It was imposed, not an initiative of the farmer.” (06Mng).

Also, the history of the cooperatives will affect the image the general public create about cooperatives. In the early years, cooperatives were only

concerned about receiving all the grapes from the members. This member of the BoD sums up this idea:

“In cooperatives, the idea was to produce quantity while quality was very low.” (11BoD)

Cultural factors also play a role in different aspects of the wine cooperative environment. According to Touzard, Chiffolleau, & Maffezzoli (2016), besides the local resources and agronomic practices, history, culture, and local knowledge are embedded in the definition of *terroir*.

Culture is the result of the way people solve their problems in a country, a region or an organization through the time. So, culture is strongly attached to historical factors. Schein (1988) postulates that culture “can be thought of as the accumulated learning that a given group has acquired during its history.” (p. 7).

Thus, culture can be understood as a pattern of basic assumptions invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore is to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 1988, p. 7).

It is known that culture influences the behaviour of people inside and outside organizations. The cooperative nature, participation, and the commitment of members are all affected by the culture of the country or region. Some cultures are more cooperative than others and the sense of community among the people is stronger. As a consequence, people participate more. According to these members of the BoD, in general the participation of the members in Portuguese wine cooperative is weak:

“The problem is identified. The problem is this lack of interest.” (08BoD), and

“This is associated with the culture of the people... they didn’t assimilate the sense that a cooperative is an

organization of voluntary and open membership that requires the participation of the members.” (14BoD).

According to a member of the BoD, people in the Mediterranean culture are more passive and they are used to paternalism:

“The original sin of cooperatives has to do with people, with this culture a little disinterested, a little fatalistic, that likes to stay in the shadow of the State, which is the Latin culture.” (08BoD),

“[People expect that] the State solves the problem.” (14BoD),

“In our Mediterranean culture, we like paternalism a lot. When there is a problem, the State will solve it. We are relaxed. So, the same is expected with the cooperatives.” (08BoD).

As seen before, wine is strongly attached to Portuguese culture. This member of the BoD illustrates this when saying:

“Almost everybody has a backyard with some grapes that makes a cask of wine.” (13BoD).

Although the wine business is affected by the culture, it impacts the culture by the way people interact with the landscape and its territories. Wine economy interferes in the configuration of the landscape and in the way its population occupied the territory. Moreover, a historical value is developed by the existence of different vineyard plantation techniques, like the older forms or *socalcos*, to more modern forms (Lourenço-Gomes, Pinto, & Rebelo, 2015).

5.8 IMAGE

According to Hatch & Schultz (1997), organizational image is “a holistic and vivid impression held by an individual or a particular group towards an organization and is a result of sense-making by the group and communication by the organization of a fabricated and projected picture of itself...” (p.359). The authors add that the image formed can be affected by the intentions and influences of the organization or many actors.

While image can be positive or negative, reputation is always positive. Lange, Lee, & Dai (2011) present three different concepts of organizational reputation: being known (generalized awareness or visibility of the firm), being known for something (perceived organizational outcomes and behaviour), and generalized favourability (perceptions or judgments of the overall organization as good, attractive, and appropriate).

Most of the interviewees are very conscious of the importance of brand image for the success of their products. But they also recognise that the image cooperatives still have among many people is negative. According to them, cooperatives are seen as producers of great volume of low quality wine. As presented by these members of the BoD:

“Wine cooperative may have a negative connotation even in international markets.” (01BoD),

This is due to the history of most of the cooperatives. The image and reputation of an organization is tightly attached to its history. As declared by Dressler (2016), reputations seems to be the result of a historically affected perception.

As said before, cooperatives were created to receive the grapes from the members and to sell bulk wine, in general. According to these members of the BoD and managers, in that time, quality was not an issue and the wine was sold mainly in the region:

“Formerly, people had the idea that wine cooperatives received everything, did not make selection of grapes...”

and they may be right because there were members that would sell the best grapes to other wine producers and deliver the worse to the cooperative.” (01BoD).

It seems that the image of wine cooperatives is still associated to low quality, as says this member of the BoD:

“There still is the image that the wine from a cooperative is not good.” (07BoD).

As a consequence:

“Sometimes we have to hide the name "cooperative". To be a cooperative is a handicap” (13BoD).

According to Dressler (2016), many authors declare that wine consumers feel limited in their capability to judge regarding product quality, so, reputation serves to complement or substitute product quality assessments. He continues saying that research supports that expert ratings affect the image of wineries, and consequently have major effects on the price of the wine. Cooperatives operating on a larger scale could gain significantly by promoting quality through their award winning high-end quality wines (Schamel, 2015). Some leaders seem aware of this:

“Image is important because many people that buy wine don't know much about it.” (07BoD)

Although reputation is linked to the organization's historical behaviour, it can be changed if new information comes to light (Lange et al., 2011). It seems that the process to create a positive image for cooperatives is arduous:

“When there is no image, it is easy to create one; but when the image is not good, one has to clean it up and the process is painful.” (11BoD).

Without reliable information, quality indicators accredited by wine awards and prizes contribute to building a reputation in the minds of consumers (Schamel, 2015). This is the main strategy pursued by Portuguese wine cooperatives to create a better image of cooperatives and their wines.

“The only way to change the image is to go to blind tasting competitions and to win a medal.” (10Mng),

“We are trying to give notoriety to our brands.” (08BoD),

“Prizes give us visibility. The farmer and the buyer like to see the medals in the bottles. It sells better.” (14BoD),

“International wine awards are tools for brand strengthening and give us notoriety.” (06Mng), and

“Unfortunately, prizes are important. The consumer feels more confident when buying a wine with one or two medals. If he has doubts, he will choose the one with the medal...” (11BoD).

Although most of the interviewees declared that the image of the wine cooperative is an issue, one member of the BoD believes the image of the cooperatives is changing:

“Today, the image of the wine cooperative is of an organization that people can trust.” (14BoD).

The image of wine cooperatives in Portugal must be faced by managers and members with responsibility and urgently. Some cooperative leaders seem aware of this and are seeking change. However, being an issue related to the whole sector, the federations, unions and the authorities should engage in

pursuing strategies, alone or collectively, to change the current image of wine cooperatives.

5.9 COMPETITION

In 1996, Nilsson alerted that competition was becoming keener and the markets were turbulent, so business efficiency was required to the survival of cooperatives (Nilsson, 1996).

Portugal has a considerable number of wine cooperatives, some of them highly successful, some finding it hard to survive in modern times. However, a significant number of new independent for-profit wine producers usually called *quintas* and small producers have emerged in the last years making the competitiveness of the market even higher (Wines of Portugal, 2015b).

In such a highly competitive sector as the wine business is in Portugal and in the world, it is a challenge for cooperatives to achieve high performance. It is increasingly difficult for wine producers to be sustainable with the globalization of the wine market and the growing competitiveness of the wine business (Sellers-Rubio et al., 2016). These managers and member of the BoD declare that:

“The competition is fierce in the wine business.” (02Mng),

“The competitors of the wine cooperative are not only wine producers but all the beverage industry.” (01Mng), and

“Our competitors are not only Portuguese wine producers, they are in the whole world. And those who do not understand that will be suffocated by the strong competition.” (07BoD).

There is a great of concern about products from other countries, especially in the EU. Spain is an example of addressing the market with low-price wines, as claimed by this manager and this member of the BoD:

“We have a strong competition from the Spanish *cavas*. They have bet in a low-low-price policy and they sell sparkling wine at a price that is lower than our cost price.” (06Mng), and

“It is possible to buy wine much cheaper [in Spain] than we can buy here.” (07BoD).

That induces Portuguese producers and wine cooperatives to pursue other strategies than low prices to be competitive, as declared by this member of the BoD:

“The competition is fierce and we are not going to enter the price war.” (07BoD).

In addition to the prices of other EU wine producers, the prices practised by big Portuguese wine producers also represent a real threat to the wine cooperatives:

“[The big wine producers] have extensive productions with very low prices, and they come to smash the margins and the prices.” (03BoD)

So, most cooperatives seek alternative strategies to stay in the market and be sustainable, as further discussed in the topic of strategic planning capacity (see section 3.13).

5.10 DEMOGRAPHICS AND AGRARIAN STRUCTURE

In 2014 INE released a research presenting the profile of the Portuguese farmer in 2013. According to INE (2014b)’s report, farmers are mostly male (68.3%), with the average age of 64 years old (63 years old in 2009), and more than 52.0% of them have 65 years old or more. Portuguese farmers are the

oldest farmers in Europe and the majority of rural producers only have basic education (70.0%), and only 5.5% have higher education (graduation degree). On average, farmers in Portugal work 22 hours a week in farming activities (INE, 2014b), which means for most it is not a full-time occupation.

One of the main threats to Portuguese wine cooperatives is the aging of the members. This is the reflex of what is happening in the country, added to the fact that young people do not want to stay in agriculture anymore. The population in Portugal is becoming older. The aging index¹⁰ of continental Portugal was 138.9 in 2013. This means that there are 38.9% more people over 65 years old than people under 14 years old in continental Portugal. Alentejo had the higher index (180.7) and the North region (125.3), the lowest (INE, 2014a). Most of the interviewee are deeply concerned about this, as seen in the following statements:

“Our members are very old and low qualified.” (02Mng),

“The problem of aging in cooperatives exists because the Portuguese population is aging... but we also have young people becoming members.” (13BoD),

“I believe our agriculture has little future because there are only old people in it. The young people don't find there means of survival in rural areas.” (15BoD),

“Many people abandoned agriculture and have other jobs. Some died and their children didn't continue with the farms.” (05BoD),

“We see several lands with nothing planted that were formerly vineyards. They plucked their vineyards and abandoned agriculture.” (07BoD).

¹⁰ Aging index = [(resident population with 65 years old and more) / (resident populations from 0 to 14 years old)] x 100

On the other hand, it seems that although aging is a concern, there are some cooperatives that do not see that as an irreversible situation. This manager says that there are young people involved as members and very committed to the cooperative.

“The member of the year was a couple, under 40 years old, that are very dedicated to the vineyard. This gives us some hope.” (06Mng)

This member of the BoD argues that, because growing grapes in his region is profitable, people will be disposed to continue with the vineyards.

“I don’t see aging as a major problem to our region. In other places, it may be, but not here because viticulture is profitable.” (12BoD)

Naturally, young people will only work in the land if agriculture becomes more profitable or if it is, at least, comparable to working in the cities. FAO (2011)'s report about youth and agricultural cooperatives describes how rural youth see agriculture. According to FAO (2011), agriculture is not a remunerative or prestigious profession to youth and they will continue to leave agriculture until they find meaningful economic opportunities and attractive environments in rural areas. This manager has the same understanding about the issue:

“Young people will only come to the cooperative if the price of the grape increases and generates more income for the farmer.” (01Mng)

Roelants, Hyungsik, & Terrasi (2014) poses the following question: “how can cooperatives attract and generate young and dynamic leaders who can innovate in the cooperative tradition in adapting it to lead their generation and the future?” (p. 96) (Roelants et al., 2014) Some cooperatives are making an effort to attract young members.

“[We have a program with technical workshops, prizes and more] to create conditions that may captivate young people to be interested in viticulture.” (06Mng)

FAO (2011)'s report alerts that migration to cities “not only contributes to the emerging phenomenon of over-urbanization and growing unemployment in urban areas but is also expected to affect global food production. Investing in young people living in rural areas is, therefore, the key to enhancing agricultural productivity and food security and boosting rural economies.” (p. 1).

In 2013, farms represented half the area of Portuguese territory and the agrarian population was 6.5% of the resident population of the country. From 2009 to 2013, there was a decrease of 15% in the number of rural properties, mainly in small farms under 20 ha. During the same period, the average size of the rural properties increased from 12.0 ha to 13.8 ha (INE, 2014b).

Another relevant factor is the agrarian structure, which in Portugal differs across wine regions. In the *Vinho Verde* region, for instance, the average size of the vineyards of wine cooperatives members is 0,5 ha while in the region of Setúbal, the average size is 11 ha.

The size of the farms in a region will interfere in the number of members of the wine cooperatives. If the average size of the vineyards is low, the cooperative will need more members to have enough volume of grapes to achieve gains of scale, as declared by this manager:

“The agrarian structure is composed by fragmented smallholdings. They are small farmers with little capacity of investment in the vineyard. So, we need many members to have a reasonable production at the cooperative.” (01Mng)

On the other hand, if the average size of the farms is bigger, a lower number of members will achieve the volume of grapes needed by the cooperative. In general, wine cooperatives with low average size of the members' vineyard intend to increase the number of members while

cooperatives with high average size of the vineyards do not search for new members.

In most of the cooperatives the size of the vineyard varies greatly. In general, in the same cooperative there are very small farmers and very big farmers. This member of the BoD shows the proportion of the production delivered in the cooperative according to the size of the vineyards:

“Out of 900, 50 [5.6%] members deliver more than 50% of the grapes. If we talk about *Tinta Roriz* (grape variety), 18 [2%] members deliver 30% of the grapes and 49 [5.4%] members deliver 50% of the grapes. Thus, there are a huge number of members whose production is very small.”
(03BoD)

The following sentences of a member of the BoD illustrates the diversity of members' profile in most of wine cooperatives in Portugal:

“I believe that the essence of a wine cooperative is the heterogeneity of the members: the big farmers and the small farmers. This represents two different economies. One is the local economy, built on family farming where all the work is done by the family, and [another economy] composed by those who have 120 ha and a hired workforce.” (04BoD)

Since family farms cannot achieve large productions, they have two disadvantages: they do not achieve economies of scale and do not develop market power (Tortia et al., 2013). According to Herbel, Rocchigiani, & Ferrier (2015), it is difficult for family farmers to acquire machinery and equipment because the cost is too high for them. So, these farmers have no access to new farming technologies that require large investments. Besides, the smallest farmers do not have the area to justify the investment in modern farm machinery. The authors continue saying that “the combination of the large investment to acquire machinery (capital and interest), its operating costs (fuel,

insurance, maintenance, and repair costs) and the need to renew the equipment for continued technological innovation exclude many family farmers from modernisation.” (p. 25).

Otherwise, mechanization is difficult and complex in some old vineyards. In these cases, the manpower requirement is high, leading to higher production costs and to a consequent increase in the price of the grapes (Lourenço-Gomes et al., 2015). In an attempt to overcome these weaknesses, the governmental program that stimulates vineyard renovation, VITIS (already cited in 3.2 Wine), allowed the farmer to implement new planting techniques that lower the production costs of the vineyard.

One of the factors that conditions the agrarian structure is topography. So, it is not only the low ability to invest in machinery, but also the topography of the place where the vineyard is located that constrains mechanization. The reason why it is difficult to dissociate the landscape from the size of the farms is because, in general, areas with mountains and hills, or even valleys, are characterized by small farms in Portugal, while plane areas have bigger farms. The fact is: tractors are made for plane land, as in Alentejo, for example. In some regions like Minho, Douro, Dão, and Beira Interior, as cited by this member of the BoD, mechanization is almost impossible. In these cases, the production costs are higher:

“The production cost of 1 ha in Alentejo or Ribatejo, where the vineyards are huge and everything is mechanized, is lower than Dão, Douro or Beira Interior, for instance.”
(03BoD).

The perception of most of the interviewees is that the tendency of agriculture in Portugal is to have more and more larger areas of vineyards, as seen below:

“More and more grape producers are becoming larger.”
(07BoD),

“The trend is new members with larger areas.” (02Mng),

This member of the BoD is emphatic about the future of small grape producers, due to the inability of the farmer to make a living out of the farm. He says that:

“Small farms and small producers are going to disappear.”
(02BoD).

He continues saying that the way to maintain agricultural production is by resizing the farms to make them profitable:

“Agriculture has a future as long as we can fix people here. And to do that we have to resize the property, show that it is worth living from agriculture.” (02BoD)

However, in one micro-region with the higher grape price in the country, it is possible to live from viticulture in a small farm, as declared by this member of the BoD:

“It is possible to support a family with 3 or 4 ha of vineyard in our region. With a yield of 8 tons/ha, the farmer can produce 24 tons of grapes that, delivered at our cooperative, can generate an earning of 30,000 euros per year. That is not bad in Portugal” (12BoD).

In some regions, most members have viticulture as a secondary activity. According to INE (2014b) only 6.2% of the producers are full-time farmers, and most of those complement their earnings with pensions and retirement income. As part-time farmers, their business aims differ widely from full-time farmers (Ashforth & Reingen, 2014; Hanf & Schweickert, 2014).

In general, only major producers can have viticulture as their main activity.

“80% of our members are not professional, that is, viticulture is an extra activity. The ideal [for the cooperative] would be that at least 50% of the members were professional farmers.” (01Mng)

“Many members have other activities, other sources of income, so the money from the grapes is a bonus.” (05BoD)

Some members depend on the income they get from the grapes to guarantee next year's production. According to a member of the BoD (12BoD), even some members who have viticulture as a secondary activity rely on that money to treat the vineyard until the next harvest. Without it, these members would probably abandon the activity altogether.

For INE (2014b)'s report, when farmers were asked about the intention of continuing their rural activity, 95.1% declared they want to continue to be farmers in the next 2 years. The main reasons for continuing with the rural activity were its affective value (48.3%), complementing earnings (31.4%) and the lack of other professional alternatives (9.9%). Economic viability was cited by only 8.6% of the farmers (INE, 2014b). It seems that rural activity is not economically attractive to farmers, reinforcing what was found in the literature review and said by the interviewees. Besides, the fact that affective value is pointed as the main reason to continue as farmers highlights the fact that agriculture is not an option for the young – maybe only in the lack of other professional alternatives. Young people may not have developed the same “affection” for the farm as old people. This information should be a warning to policy makers that want to develop rural areas and guarantee agricultural production in and for the next generations. Unless farm work become economically attractive to young people, the future of rural areas in Portugal is uncertain. Young people need to be trained and educated to enhance the productivity of the farms and the association in cooperatives should be incited.

Altman (2014) claims that small farms are crucial in agriculture. He adds that large IOF, because of their size, take advantage of economies of scale and

transaction costs. Small farms can achieve that, only through cooperative membership.

According to Roelants et al. (2014), policies should encourage youth cooperative start-ups and employment. This would not only generate youth employment in cooperatives, but also guarantee the renewal of the members and support innovation and adaptation to change in the cooperative.

If the policy objective is to enable small producers to deal with powerful large retailers and participate in the global market, it is important to stimulate the presence of strong cooperatives in the regions (Rebelo & Caldas, 2015).

Rural migration towards large metropolises and economic desertification of peripheral regions would have been more intense as a world phenomenon if cooperatives had not been active in encouraging local production and employment and had they not provided economies of scale to small farmers (Roelants et al., 2014). Apart from this, a member of the BoD declares that, in Portugal, cooperatives are responsible for the survival of wines and grape varieties that would disappear if farmers could not sell their grapes for a price that allows them to maintain the vineyards.

“The fact that Portugal has a huge area with Portuguese grape varieties today is because of the presence of wine cooperatives since the 1950s, 1960s. Otherwise, people would not continue to produce grapes without receiving at least the minimum to survive. Therefore, the maintenance of these assets was due mainly to the existence of cooperatives. I have no doubts about that.” (08BoD)

According to Roelants et al. (2014), another reason that may keep older people in farming and producing wine grapes is not only for economic reasons but also in order to participate in society. In these cases, cooperatives make it possible.

Portugal is very rich in grapevine biodiversity and there were 1482 different varieties detected in the XIX century. More recently, many of these varieties were abandoned or are at risk of extinction, and although 341 are

officially authorized for wine production, around 50 varieties are the most planted in Portuguese vineyards (Almadanim et al., 2007).

5.11 CONSUMERS AND MARKET

Despite a potentially expanding consumer market as a result of population and economic growth in some regions of the world, the wine industry is facing numerous challenges (Alonso & Liu, 2012), mainly because of the reduction of the consumption in UE and the entrance of new world producers in the market.

Nilsson (2001) comments that cooperative organizations “often have large market shares, and they are successful in maintaining as well as extending these shares.” (p. 342). Despite the significant presence of European wine cooperatives in the market, in Portugal the market share of wine cooperatives has been dropping since 2000, as seen before.

Wine cooperatives sell wine in three different ways: bottled, in bag-in-box¹¹, and in bulk. Glass bottles are the most common way to store and sell top quality wines. In general, bag-in-box are 3 or 5 litres-packages used to sell medium and low-quality wines, like Regional or table wine. The “box wine” is an alternative to the 5 liters glass bottles previously used to sell these types of wine because it preserves wine quality up to six weeks after it was opened.

Although bulk wine is the cheapest wine on the market, most of the wine cooperatives in Portugal still sell it. Buyers of bulk wine are either:

- other wine producers (cooperatives or otherwise) that need to complement their wines,
- other wine producers or merchants that sell it as table wine to restaurants, hotels, bars, and so on,
- other producers when the cooperative cannot store or sell all its wine, even if the wine has the quality to be bottled,

¹¹ The bag-in-box container is composed of a doubled-layer bag made of a plastic laminate including metallized polyester (PET) and low density polyethylene (LDPE) or ethylene vinyl acetate (EVA). This composite pouch is placed inside a rectangular paperboard container for mechanical protection purposes. The pouch is equipped with a special valve fitment for dispensing wine. Pouches are filled under vacuum and whatever headspace remains is filled with nitrogen, an inert gas. As wine is removed through the valve, the pouch collapses, thus protecting the remaining product from the effect of oxygen (Revi, Badeka, Kontakos, & Kontominas, 2014, p. 332).

- wine brandy producers, for distillation.

Bulk wine is a viable option for cooperatives only if its production cost is very low. In general, low costs depends on infrastructure, scale, and price of the grapes, in the cooperative perspective. To the farmer, low production cost is related to the agrarian structure, level of mechanization, and productivity of the vineyard.

However, in most of the wine cooperatives studied, the sale of bulk wine is not a strategy but an alternative to sell wine with low quality. As declared by this manager:

“We sell in bulk those wines that we produce and that don’t have enough quality to be bottled.” (06Mng),

Also, as this member of the BoD says:

“We have already produced a great amount [of wine]; we cannot put it all in bottles. Right now, we have to sell some [bulk] wine, so other companies will [bottle and] sell it.” (02BoD).

Since cooperatives have to receive, by regulation, all the grapes that members deliver, the quality of the wine varies according to the quality of the grapes received. In one of the wine cooperatives in this study, the percentage of the volume of bulk wine sold is expressive, as seen below:

“[The wine we produce] 50% is sold in bulk, 30% is table wine, and 20% goes to ours DOCs and regionals.” (04BoD).

The sale of wine in bulk poses a risk because of the strong price competition in this sector. Despite that, this particular cooperative is in a stable financial situation.

In the other extreme of the range, one cooperative declared not to sell or buy bulk wine anymore:

“A long time ago we used to sell bulk wine, but not lately. The surplus comes from bottling, right?” (12BoD).

Wine cooperatives sell their wine in the national and international markets. The national market is divided into off-trade (big distributors and supermarket chains) and on-trade (hotels, restaurants, cafes and others).

The total of hectolitres of still wine sold in Continental Portugal in 2016 was 2 398 667, in a total of more than 709 million euros, with an average price of 2.96 euros/litre, as seen in Table 10.

The sales of certified wine (IG and DOC) were 1 015 832, 42% of the total in hectolitres of wine. The other 58% went to table wine. The average price for off-trade was 2.09 euros while for on-trade was 5.70 euros.

Table 10 – Sales of still wine in Continental Portugal – 2016

	HL			1000 Euros			€/l
Off-trade	1 832 779		76%	385 898		54%	2.09
Certified wine	850 146	46%		271 509	70%		3.12
Table wine	982 633	54%		114 389	30%		1.17
On-trade	565 887	100%	24%	323 274	100%	46%	5.70
Certified wine	165 687	29%		147 720	46%		8.63
Table wine	400 202	71%		175 554	54%		4.40
Portugal (Continental)	2 398 667		100%	709 172		100%	2.96
Certified wine	1 015 832		42%	419 229		59%	4.04
Table wine	1 382 835		58%	289 943		41%	2.10

Adapted from IVV (2017a)

Although certified wines have lower rates of sales in off-trade and in on-trade – 46% and 29% respectively – the rates in euros are higher, achieving 70% in off-trade and 46% in on-trade channels of distribution. Therefore, there is a considerable advantage in selling on the on-trade market.

However, while off-trade market is composed of just a few and strong buyers, characterised as an oligopsony market, there is a considerable number

of hotels, restaurants, bars and so on, scattered throughout the country that, even without the same negotiating power of off-trade buyers, requires a sales and marketing force able to reach them.

The main international buyers of Portuguese wine in volume are France (382 109 hl), Germany (214 030 hl), Spain (228 705 hl), UK (202 839 hl) and the USA (187 586 hl), as seen in Table 11.

Table 11 – Portuguese exportation by country in 2016

COUNTRY		HL	%		1.000 €	%	€/l
France	1	382 109	13.8%	1	110 773	15.2%	2.90
United Kingdom	4	202 839	7.3%	2	74 985	10.3%	3.70
USA	5	187 586	6.8%	3	74 798	10.3%	3.99
Netherlands	7	147 879	5.3%	4	51 123	7.0%	3.46
Belgium	8	140 217	5.1%	5	45 986	6.3%	3.28
Germany	2	214 030	7.7%	6	44 088	6.1%	2.06
Canada	10	105 578	3.8%	7	40 657	5.6%	3.85
Angola	6	169 088	6.1%	8	32 804	4.5%	1.94
Brazil	9	116 679	4.2%	9	28 899	4.0%	2.48
Switzerland	11	96 172	3.5%	10	28 845	4.0%	3.00
Spain	3	228 705	8.3%	11	19 510	2.7%	0.85
Poland	12	94 796	3.4%	12	19 127	2.6%	2.02
Denmark	18	38 186	1.4%	13	18 420	2.5%	4.82
China	14	72 897	2.6%	14	17 567	2.4%	2.41
Sweden	15	67 309	2.4%	15	16 487	2.3%	2.45
Other countries		507 807	18.3%		103 152	14.2%	2.03
TOTAL		2 771 878	100.0%		727 222	100.0%	2.62

Source: (IVV, 2017b)

France is also the main buyer in value with a total of more than 110 million of euros, followed by the UK, the USA, the Netherlands and Belgium. The higher prices per litre are obtained in sales to Denmark (4.82 €/l), the USA (3.99 €/l), Canada (3.85€/l), Japan (3.72€/l), and the UK (3.70 €/l).

Although not the focus of this study, there are some other environmental factors common to all organizations that were mentioned by the interviewees as affecting the wine cooperatives' performance at the moment of the field research. The world economic crises and the economic and political instability of some of the traditional Portuguese wine importers, as Angola, Brazil, and Russia impacted the sales of the whole sector, not only wine cooperatives.

“We felt the crisis in 2012. The crisis in Portugal did not start in 2008. The year we had the lowest sales was 2012.” (12BoD)

“The international economic conjuncture is a mystery to everybody.” (06Mng)

“The only threat to the global economy is politics.” (09Mng)

“The crises today are no more than political crisis, as we see in Russia, Angola and Brazil.” (08BoD).

This manager alerts that the wine business in Portugal is strongly regulated. Although regulation aims to organize the sector, it seems to create rules and demands that may be arduous to follow sometimes:

“The wine sector is highly regulated.” (06Mng)

Also, a more rigorous road legislation seems to have affected the market behavior, according to this manager:

“The consumption of the wine decreased because of the road legislation.” (01Mng).

The environmental factors and the behaviour of the members as suppliers and owners will affect wine cooperatives, as said before. Cooperative managers and members of the BoD should understand the impact that those factors cause and act to seize the opportunities and avoid the threats in the market. Therefore, wine cooperatives will depend on their abilities to survive. Thus, it is imperative to recognise what are the specific elements that compose organizational capacity in wine cooperatives.

5.12 ORGANIZATIONAL CAPACITY

This model of organizational capacity for wine cooperatives proposes seven interconnected dimensions: *financial capacity*, *infrastructure capacity*, *marketing capacity*, *human resources capacity*, *relationship with members*, *strategic planning capacity*, and *management capacity*.

5.12.1 Financial Capacity

This capacity is related to the cooperative's ability to pay its expenses and generate a surplus.

There are two strategic financial issues in wine cooperatives. The first one is the payment of the grapes. As seen before, grapes are the main raw material in wine production, and the suppliers are the members. Cooperatives have to be able to provide a price equal or superior to the price paid by the market with a reasonable payment term.

Paying below average for the grapes or worse, not paying at all, compromises members' trust towards the cooperative. As declared by a member of BoD:

“If there is no financial stability [for the members], trust will disappear as a consequence.” (04BoD).

Once members no longer trust the cooperative, their commitment will be destroyed, and they will consider selling their grapes to another wine producer. In this case, the cooperative may not have enough grapes, not be able to produce enough wine, and not generate enough sales to pay for the grapes, and a vicious circle is settled.

Another strategic aspect that deserves special attention is the investment in infrastructure.

“It is necessary to have some financing capacity to be able to make big investments.” (02BoD),

“Financial availability is extremely important to be competitive.” (13BoD).

Long-term strategies, especially in relation to investment in technology and other modernisation, have to generate a return on that investment to guarantee the long-term viability of the winery (Alonso & Liu, 2012). New equipment can lower the production costs by improving gains of scale, increasing the processing capacity at the reception of grapes, production, and storage of wine. Also, to achieve the quality patterns required by legislation and the market, permanent investments in infrastructure are required.

On the other hand, some cooperatives have failed because they invested in expensive new plants without enough financial capacity for it. A member of a BoD said that many cooperatives in his region had financial problems because the managers invested in renovations of infrastructure without the corresponding ability to pay the debts. He alerts that:

“Financial capacity, for me, is fundamental, but managers have to be conscious and avoid an investment that cannot be paid later.” (03BoD).

To avoid this situation, another member of a BoD recommends:

“Expense containment, no megalomaniac investments.” (11BoD).

Nilsson (2001) alerts that the best option to an investment decision seems to be the one that attends to the preferences of the “average” member. However, due to the diversity of individuals preferences, only a small group will be fully satisfied with the investment (Nilsson, 2001). It is necessary that the BoD and managers understand that and seek the best option for members and the cooperative.

5.12.2 Infrastructure Capacity

Wine cooperatives are big plants, with big machines, requiring large areas. The infrastructure involved represents large capital investments:

“Oenological equipments are all very expensive.” (04BoD).

As seen in *financial capacity*, to lower the unit cost of wine, cooperatives must invest in equipment that allows them to achieve economies of scale and scope.

Accepting new members is another way to enhance scale. It is known that new members will benefit from the existing assets of the cooperative, but they will also contribute to an increase in the volume (Nilsson, 2001). Most of the interviewees, members of the BoD and managers, agreed that scale is a key factor in wine cooperatives.

“You must have scale. Scale is decisive. It allows us to have competitive costs. (...) To reach the market today, you have to have scale.” (08BoD),

“The greater the scale, the more competitive we are.” (10Mng).

In the reception of the grapes, for instance, cooperatives have to accept all the grapes from the members in a short period of time (harvest in Portugal lasts for around 30 days). In this case, the infrastructure has to support the total incoming grapes. Otherwise, the final product, the wine, may lose quality.

Each step of the transformation process requires expensive equipment: receiving bins, destemming, crushing and pressing machines, fermentation tanks, storage vats and bottling lines. As a manager said:

“We don’t have the capacity to bottle all the wine we receive here from our members.” (02Mng).

Besides, it is necessary to have cellar space for the storage of bottled wine and barrels, if the wine requires maturation. About that, a manager declares that:

“We have made investments to increase, not only storage capacity, but also the quality of storage.” (08Mng).

The current situation in many cooperatives, regarding machinery, is that it is obsolete. According to a manager:

“Cooperatives were designed to sell bulk wine, not bottled wine.” (01Mng1).

Moreover, some of them did not invest in the renovation of the infrastructure to meet those changes in the business, as noted by this manager:

“The cooperative has very old structures. It is necessary to make renovations.” (02Mng).

A member of the BoD declares that because of the outdated infrastructure:

"The production costs are very high." (01BoD).

As another member of the BoD alerts:

"If we don't evolve technically and technologically, we lose the opportunity, and we will be no longer competitive." (04BoD).

As said before, wine cooperatives infrastructure is extremely expensive and requires caution concerning to renovations or expansions of the plant, machinery, and equipment. However, the dynamic and competitive market of

wine demands constant investments in this matter to guarantee low costs, scale and quality.

5.12.3 Human Resources Capacity

All organizational capacity models recognize the importance of the people involved. As Vidal-Salazar et al. (2012) declare, “the factors of organizational competitiveness are, to a great extent, linked to the abilities, skills, and competencies of human resources.” (p. 2)

“A company, to function well, has to have people and therefore has to have a professional staff.” (08Mng).

Like any other organization, wine cooperatives depend on people to operate. Employees are inside the cooperative every day and must be competent and motivated to perform their activity according to the aims of the cooperative, as pointed by this manager:

“It is necessary to have a cohesive and motivated team to have things working. So, we must look at the universe of the employees of the wine cooperative.” (06Mng).

The human resources capacity represent a set of different skills and knowledge that can be associated not only with competitive factors related to the financial, technological, and product/market factors, as well as to communications, the relationships between the individuals, problem-solving, and so on (Vidal-Salazar et al., 2012).

Besides the traditional focus on technical skills and competencies, there is a trend to assess individual’s capabilities using other criteria, such as attitudes and values (Kay, Franks, & Tato, 2004). This can be valid for cooperatives as well. All the people who work in the cooperative must be qualified in their field, but they must also know and identify with the cooperative principles. According to Nilsson (1996), “if the employees of the organization

accept cooperative values much is gained since they will then probably work for the benefit of the members, and communications between members and employees will be easier.” (p. 637).

The particular nature of wine cooperatives must be understood not only by members, members of the BoD, and managers, but also by all the employees. Unless they fully accept the purpose of a cooperative, they may behave in incongruent ways and seek to maximize profits instead of attending the members’ needs, for instance.

All the relationships between the cooperative and the members (suppliers and owners) or between the cooperative and the market also depend on the employees. As this member of BoD says:

“It is the employee who is close to the members every day, not the managers.” (13BoD).

Although the need for qualified people is recognized by most of the managers and members of BoD, one of the managers alerted to the problem of workforce aging in some wine cooperatives, implying this is associated with outdated skills:

“(…) they are people who have been here for many years. It's not easy. We cannot fire and replace a person who has been here for thirty or forty years. There are people who spend a lifetime here, but there is a need to professionalize this sector.” (02Mng).

This statement reinforces the urge for professionalization in all sectors of the cooperative, which can be achieved the same way as any other organization, training and developing the employees and hiring already qualified professionals. Specifically, the expertise of the winemakers will determine the quality of the wine. They have to develop quality wines with the grapes that the cooperative receives from the members allowing for the needs of the market, and this ability requires a set of competences that are crucial to the cooperative.

According to Roelants et al. (2014), human resources management in cooperatives is “a combination of conventional standards and of cooperative

practices. In particular, the fieldwork revealed a people-centred vision in cooperative HR management and an emphasis on managing relations between workers and other stakeholders.” (p. 103).

The BoD and managers should recognize and disseminate throughout the organization the benefits of being a cooperative and following the principles (Oczkowski et al., 2013). The 5th principle of cooperatives, education, training and information, described in 2.1.1. Values and Principles, fits this recommendation recognizing the need to educate not only employees but also managers and members.

5.12.4 Marketing Capacity

It is not enough to produce quality wines; it is necessary to sell them too, as a manager said:

“[We have to] know where to sell and how to sell.”
(10Mng).

When talking about the need to have marketing capacity, these members of the BoD claimed:

“You must have a good marketing team.” (01BoD), and

"Everything depends on the capacity of the sales force."
(11BoD).

Moreover, a member of the BoD of another cooperative even ventures to say:

"Today, the commercial component is more important than the industrial park." (08BoD).

Until 1998, wine cooperatives did not have to invest in marketing because the consumers “knocked on the doors” of the cooperative to buy the wine. As this member of the BoD declares:

"Older people have never really bet on promotion or marketing. The idea was: 'Our wine is good, we don't have to go to the customers, they have to find us.'" (07BoD).

They were product-oriented, and the market for Portuguese wine was mainly national and regional. Most of the wine that was sold at that time was in bulk, although the quality could be classified as regional wine, sometimes.

After Portugal had become a member of the EU, the competition in the wine sector increased significantly: there was more offer of wine from European countries, sometimes with more quality and lower prices. Besides, Portuguese wine cooperatives had to adapt their production to the requirements of the EU if they wanted to reach those markets.

Cooperatives that did not realize the need for this alteration in the way they approach the market went bankrupt or had financial difficulties because they could not sell their wine, since the consumer did not come to them anymore. A member of the BoD was witness to this some years ago:

“The cooperative stood still in time, got used to customers coming to buy. We never went [to the market] to sell. Then, when there was more supply, purchases to the cooperative reduced. Well, those years [2002 to 2006] were difficult in financial terms.” (11BoD).

Those cooperatives that survived changed to become more market-oriented and developed marketing capacity. As presented by a manager:

"[It is necessary] to create and to adapt products to new trends. Whoever fails to do this is out of the market."
(10Mng).

That means, cooperatives started to be concerned with knowing the market and the needs of the consumers, and produce the wine the market expects.

"We have to see the market acceptance first, but we are on the way to produce what the consumer wants."
(02Mng).

Moreover, cooperatives became aware of the competitiveness in the wine business and started to look outside the organization.

"The policy of the cooperative is to strengthen what we have and look for new markets." (09Mng).

Hanf & Schweickert (2014) claim that, often, members understand member-orientation as a permission to produce whatever they want, forcing cooperatives to deal with varieties not required by the market. The authors conclude that member-orientation is an obstacle to achieving customer-orientation. They believe that customer-orientation includes attending to the wishes of the consumers and it could be achieved by developing brands that address consumer demands. This means that wine cooperatives have to invest in market research and marketing.

In an attempt to summarize how to achieve success in wine cooperatives, this member of the BoD recommends to invest in:

"Promotion, advertising, and marketing." (07BoD).

Nowadays, it seems that wine cooperatives have accepted that they need to prospect and develop new markets, to promote their wines nationally and internationally, to achieve a good price-quality ratio and to guarantee their wine reaches the consumers.

5.12.5 Relationship with Members

There is no cooperative without members. To Goel (2013), cooperatives rely on long-term and repeated exchange relationships with their members to generate a collective benefit (Goel, 2013).

According to Iliopoulos & Hendrikse (2009), the information channel between members and managers is an important competitive advantage of agricultural cooperatives compared to IOFs (Iliopoulos & Hendrikse, 2009).

In wine cooperatives, members provide all the grapes to produce the wine, so, as pointed by a manager:

“Without grapes, we don’t make wine.” (06Mng).

The relationship with members will impact the trust and the commitment of the members towards the cooperative. As the purpose of the cooperative is to serve its members, the stronger the bond between them, the closer the cooperative is to achieve its goal.

It has been said that cooperatives should invest in the training and education of cooperative employees. Besides the traditional training of HR, Roelants et al. (2014) add that the training should be considered an investment and focus on how cooperative employees can better interact with cooperative members (Roelants et al., 2014).

Cooperatives should create different mediums to stimulate the ability to dialogue with members in order to be loyal to the purpose of the organization and to maintain cooperative’s identity by reinforcing their values and principles (Puusa et al., 2013)

As seen before, members joined wine cooperatives in the first moment to have a fair price for their grapes. Members still need the cooperatives. On the other hand, cooperatives also need their members to guarantee the supply of grapes. This manager stresses the interdependent nature of this relationship:

"We cannot give what we don’t have, but also, we cannot exploit the members because we also need them and they need us." (02Mng).

In order to build good relationships with cooperative members, it is necessary to serve each member in their preferred way, being able to foresee cooperative member preferences, anticipate competitive action, and build profitable relations with cooperative members in order to deliver superior value to them. This is essential to avoid the cooperative members turnover (Cegarra-Navarro & Arcas-Lario, 2011).

In general, wine cooperatives regularly support their members in the production of the grapes. A member of the BoD and a manager of the same cooperative declare that they understand the importance of this support, mainly to older members:

"Our first big goal is to be on the side of farmers, helping them do better." (02BoD),

"Our role here is also to help people." (02Mng),

"Senior members really need support." (02Mng).

The relationship with members is seen by this member of the BoD as a capacity to be maintained:

"We have here a social component that we must maintain, and our relationship with the members must be maintained, at least, healthily." (01BoD).

This member of the BoD declares that the cooperative gives support to the members in different ways:

"We give a lot of support to the members: financial, logistical, and technical support, which allows us to have a good product, to have a product with a superior quality, with a very high price-quality ratio that the market has valued." (12BoD).

According to this member of the BoD, members perceive the support they receive from the cooperative as positive since it can lead them to obtain better prices for the grapes.

"Farmers are loyal because of the support we give them. We get them to believe that they should plant this or that variety of grape (...) and that all this combined leads us to obtain better grapes from the farmers, better wines from the cooperative, more value added in sales, and then, better return to farmers." (02BoD).

He continues explaining, based on the cooperative principle of Concern for Community, that cooperatives have a role to play in their region.

"Things are only good when they are good for everyone. If there is one part that becomes superior to the others, there is a big imbalance here, and there is no sustainability in the region. We are a territory that we want to defend and make sustainable, and as such, we have to support it. This is what our technicians and engineers do on a daily basis, advise and give their tips." (02BoD).

The relationship between the cooperative and its members is strongly linked to the production, quality, and price of the grapes. To guarantee a fair trade, most of the cooperatives created a system of payment that penalize the member with a discount on the price of the grape when the quality is below the established pattern, or, if the variety is not wanted. Conversely, when grapes have a higher standard, the member receives a bonus on the price.

"We have a set of rules of valorization or penalties according to the type of grapes, the mode of production and the quality of the grape." (11BoD),

"As they have already been very penalized, they now know that they have to bring good grapes. At the moment, we have producers [of grapes] who are very committed in this aspect; they feel proud when they arrive here with grapes of very good quality." (01BoD).

Among the research sample, the more successful the cooperative, the more rigorous is the cooperative in penalising members, not only reducing the price of the grapes but applying other sanctions fixed in the statutes. The extreme sanction would be the expulsion of the member. Some cooperatives, because they fear losing members, are more flexible about the application of the rules and accept some misbehaviour of their members.

Analysing the data, it is possible to notice that the cooperatives with higher performance are those without inactive members. The member is active or is out. In general, a member can be expelled if he or she does not deliver any grapes during three years, or if the member commits a serious misconduct as selling the grapes to another wine producer. One can conclude that members follow the rules because they know the consequences of not doing so.

Ostrom (1990) sets out eight design principles that are necessary for the effective governance of common pool resources. Iliopoulos & Theodorakopoulou (2014) declare that these principles determine the efficacy of groups formed to self-manage common pool resources.

As a list of recommendations, the principles presented by Ostrom (1990) to minimise the problems of managing common pool resources are: 1) Clearly defined boundaries, 2) Congruence between appropriation and provision rules and local conditions, 3) Collective choice arrangements – individuals affected by operational rules can participate in modifying the rules, 4) Monitoring, 5) Graduated sanctions – whoever violates operational rules is likely to be assessed graduated sanctions, 6) Conflict-resolution mechanisms, and 7) Minimal recognition of rights to organize – independence from government authorities.

To Gupta (2014), these principles can be used to explain the success or failure of cooperative businesses as well.

Ostrom's principles, applied to cooperatives, can highlight some issues related to management and the relationship with members. The first two principles recommend that individuals understand their rights, the boundaries and the rules for the relationship between them and the organization. Members should know their role in the cooperative both as suppliers (in wine cooperatives) and owners and recognize the rights and duties of each of these roles. The democratic feature, a cooperative principle, already provides members the power to create and modify the statutes.

Besides, members should actively monitor the performance of the BoD, the managers, and the cooperative. As seen before, wine cooperatives' statutes determine the expulsion of a member who sell grapes to other wine producer and it seems that those cooperatives that apply the rule with rigour are those financially stable. Moreover, different from the time when they were created, wine cooperatives in Portugal are independent from government authorities.

5.12.6 Strategic Planning Capacity

Nowadays, it is widely accepted that thinking strategically and practicing strategic management have positive effects on organizations' performance (Analoui & Samour, 2012). NPO and cooperatives are no exceptions.

Wine cooperatives must define what they want to be and where they want to be in the future, as declared by this member of the BoD:

“You have to know where you want to be in 5 or 10 years.”
(07BoD).

Planning is a process that requires knowledge to understand the context and to define the strategies available to approach it. Bad or lack of planning may lead the cooperative to critical situations. There are decisions, about investments for instance, that may impact the cooperative in all other areas: finance, quality, costs, marketing, and so on. This member of the BoD alerts that:

"The cooperative sector could be much more powerful than it is if it were not the errors in medium- and long-term planning." (03BoD).

Another member of the BoD reports what happened to his cooperative because of the lack of planning:

"Two or three years of overproduction can lead to serious problems. This is what happened to us: 2 years of overproduction with a few more [bad] investments and we ended up having a liability of 5 million euros." (01BoD).

These cooperatives have to be able to identify opportunities and threats in the environment and choose ways to achieve their goals, considering their weaknesses and strengths.

There are some strategies that wine cooperatives may pursue, according to the type of wine they produce, the markets they want to reach and the distribution channels they will use.

Some interviewees focus on traditional concerns regarding strategy. For example, this manager draws attention to the expenses of the cooperative, saying:

"There must be tighter control of expenses because I cannot change too much on sales and sales prices."
(02Mng),

And this manager has a product-oriented approach, highlighting the quality of the grapes and the wine:

"The success factors of a wine cooperative are few producers in big areas, good grapes, and renovated regions of production." (00Mng).

As shown before, cooperatives can sell bulk wine, "box" wine and bottled wine, each one associated with different levels of quality of the wine. In general

cooperatives sell low quality wine in bulk. However, some cooperatives see themselves forced to sell regional and even DOC wine in bulk, despite its association with low quality. This happens because, either those cooperatives have no buyers for all their bottled wine, or because the cooperative does not have the infrastructure to bottle and store all the superior wine produced.

One of the cooperatives in this research sells DOC wine in bulk to other wine producers of the region because they do not have storage capacity. In sum, they end up producing wine for other companies to sell and realize the greater profit. Most of the members of the BoD and the managers recognize that the markup (profit margin) is in bottle wine, not in bulk wine.

“The goal is to try to be less dependent on bulk wine (...) to sell more with our brand [bottled].” (02BoD).

One member of the BoD seems to think this strategy is an acceptable alternative, especially if the cooperative has already strong partnerships with the buyers.

"[It is necessary to] Establish a relationship of trust and partnership with the customers we have for more than 50 years, and that buy our bulk wine every year." (02BoD).

But it is important to be aware that a low price strategy in the wine market is risky because the costs of production in Portugal are higher than in other countries of the EU. Also, it is a strategy that does not promote customer loyalty. When price is the main concern, even long partnerships can be undone, as declared by this manager:

"Today we are the ideal partner and tomorrow, someone knocks on the door and charges 2 cents less than us, and we are no longer the ideal partner." (06Mng).

As said before, pursuing the strategy of selling bulk wine is acceptable only if the cooperative has low production costs, and this is possible only in a few of the wine regions of Portugal. The price of the main raw material (grapes) – resultant from the size, the topography and the level of mechanization of the vineyard, added to the infrastructure and gains of scale of the cooperative – will compose the cost of wine.

Other members of BoD and managers have different opinions about what strategies will conduct cooperatives to a sustainable future, focused either on greater production volume, a differentiated offer or market diversification.

Some cooperatives seek to increase their production, as justified by this member of the BoD:

"The dimension is critical. Today it is one of the main factors of competitiveness." (08BoD).

There are different paths for cooperatives to increase production. One interviewee proposes that cooperatives make joint productions and another one has already done that by creating a commercial company with other cooperatives:

"[An idea is] to join 2 or 3 cooperatives and make a joint production. There are projects that can be done together." (07BoD),

"With the company,¹² we have the possibility of receiving grapes from other regions." (01BoD).

Another option is to increase production by expanding the number of members. This member of the BoD intends to propose his cooperative change its statutes for that purpose:

¹² This company is a for-profit organization created by 7 cooperatives to sell their wines. This strategy allows the purchase of grapes from other counties in the region as long as the wine has a distinct brand (associated to the company). In this case, the cooperatives produce wine for the company.

“One of the changes is to extend the social scope of the wine cooperative [restricted to the county¹³] to attract new members [throughout the region] to increase production.” (07BoD),

"The productive capacity is being increased, and the cooperative seeks new members." (09Mng).

One of the reasons that cooperatives intend to increase production is to achieve new markets.

"We want to invest, modernize, enhance the production capacity so that we can launch ourselves into internationalization more seriously." (07BoD),

"Since 2008, we have advanced deeper into internationalization, into the foreign market." (01BoD).

The new wine-producing countries base their strategy on a more industrialized form of viticulture to achieve high volumes, economies of scale, and consequently, competitive prices. Besides, they strongly invest in marketing their brands to promote a perception of consistent quality in the consumer (Chambolle & Giraud-Héraud, 2003).

According to Kontogeorgos (2012), brands are an intangible asset that is difficult to imitate and can generate higher returns, consumer awareness and trade power. Brands are the opposite of a commodity, which is a product with little differentiation and solely dependent of the forces of supply and demand. Actually, differentiation seems to be a strategy sought by many wine cooperatives in Portugal. This manager says that she sees:

"Differentiation as an extremely positive factor." (06Mng),

¹³ The statutes of Portuguese cooperatives, when created, restricted the area of the members, sometimes to the limits of a county, to avoid the competition among the cooperatives in the search of members. The members could not choose which cooperative they would rather be part of since it was determined by the area where they had the vineyard.

And adds that:

"Great opportunities lie on differentiation, on grape varieties. The market is saturated with wines that end up being all the same, so [let's] bring it to the market and bet on diverse wines." (06Mng).

As illustrated, differentiation can be achieved by capitalizing on the unique grape types found in the country, as claimed by these members of the BoD:

"[We have] to value the (Portuguese) grape varieties. We produce so much quality wines here in the region and the whole country..." (15BoD),

"[We have to] invest in traditional Portuguese grape varieties." (11BoD).

Cooperatives are also aware that the needs of the market change and they must develop new products to meet the trends.

"Gradually we are introducing a new wine." (02Mng).

The ability to identify what the market wants and react with a proper wine is highly desired. However, introducing various brands in the market may have unexpected consequences, as presented by these members of the BoD:

"We don't want a lot of brands because this doesn't take us anywhere. Some brands 'eat' the others." (03BoD),

"To be recognized in the market, a company has to bet on one or two brands that people look at and immediately identify from which producer they are. You can not have

30 or 40 brands of the same company because, at some point, people get lost." (07BoD).

Also, diversifying the targeted markets is another of the strategies proposed to face unstable wine markets and tough competition. As claimed by this member of the BoD:

"We cannot focus on just one market because from one moment to the next there can be a turnaround. It is necessary to diversify markets and hence to differentiate the various products." (07BoD).

One cooperative presented two distinct strategies from most of the interviewees. First, they are willing to invest in regional wine instead of DOC wine.

"Our bet is not DOC wine. We will just keep a little, essentially for our region." (07BoD).

The region of this cooperative has a strong tradition in regional wine, not in DOC wine. Thus, it seems that the investment to insert DOC wines in the market alone would not be worthwhile, at least not until DOCs of the region become better known.

Second, they intend to develop wine tourism in the cooperative associated with the county:

"Wine tourism is going to be a very strong bet because it is not only about the producer, it's not just wine, it's not just the facilities. There is a synergy here with what the county has to offer regarding monuments, sights, gastronomy, lodging." (07BoD).

Lourenço-Gomes et al. (2015) declare that the wine and its landscape are important for tourism, therefore, it is necessary to balance the

competitiveness of the wine industry with the preservation of the attributes of the landscape, if the intention is to develop it.

There are many strategies that cooperatives can pursue, including low cost, focus market or diversification. However, the strategy must be coherent with the reality of the region and the cooperative's capacity. Besides, any strategy should be chosen as a result of medium and long-term planning.

5.12.7 Management Capacity

The most important of this set of interdependent organizational capacity dimensions in wine cooperatives is management capacity. Strongly associated with the abilities of the manager and the members of the BoD, it integrates all other capacities: *financial, human resources, infrastructure, strategic planning, relationship with members, and marketing.*

According to most of the interviewees, wine cooperatives should be managed like any other company.

"The wine cooperative has to be 'a company' like any other in the wine sector." (08Mng),

"The cooperative has to be managed like a normal company because it has to be sustainable." (07BoD),

"Wine cooperatives have to have the same management criteria as a private company." (12BoD).

A member of the BoD attributes the failure of some cooperatives to deficiencies in management capacity, which seems to be the main concern in management of wine cooperatives in Portugal.

"The problem of [some] cooperatives is a lack of management." (12BoD).

The interviewees believe that it is vital to the cooperative to have professional managers. In fact, this is what happens in the biggest cooperatives visited and seems to be a trend in those recovering from difficult times.

"To succeed the cooperative must have professional management." (09Mng),

"Management has to be professional, with people with training in the field and who really know what is needed to run a company." (07BoD),

"What is worse [in the cooperative] is the governance model that is based on a president or a BoD that, normally, are not professional [managers]." (01BoD)

"Cooperatives were not managed as companies, they were managed by members of the BoD who were farmers, and most of them, without an academic background." (14BoD)

"The problem with our cooperatives is that the members of the BoD want to be the salesman, the winemakers, everything, and often, they do not have the competence to do so." (01BoD)

However, one member of the BoD questions the generalization on the need of professional managers, claiming that it depends on the situation:

"Each case is a unique case, depends on the type of direction you have, the type of organization you have. It is up to the BoD to decide how they can better manage the institution." (04BoD),

Some cooperatives have had good results being managed by a member of the BoD. But in general, these members have a degree in management or a similar area that classifies them as professionals. In addition, there is a risk in having a member of the BoD accumulate the function of manager, which is to lose the manager if the BoD is not re-elected.

There are two aspects to consider regarding the professionalization of management in wine cooperatives. First is the complexity of the organization. Small wine cooperatives that produce and sell only one or two products (bulk and regional wine, for instance) to the national market are less complex than those also operating internationally with many distribution channels, and may not be so dependable of professional managers. In small cooperatives, the BoD are also the operational management (Bijman et al., 2012).

Second, the cost of a professional manager is higher than the cost of a member of the BoD acting as a manager, and depending on the size of the cooperative, it may not afford to pay for that.

However, as the cooperative grows, the tendency is to hire professional managers, so the BoD takes care of decision control, while decision management is the responsibility of managers (Bijman et al., 2012). It seems that the perception of the majority of the interviewees is that the BoD must define the strategies of the cooperative and control the actions of a professional manager.

"The objective of the BoD is to define the great directions, the great objectives, but to accept, in the day to day basis, a management able to control everything." (02BoD).

Another manager claims that the professionalization of the management will bring agility to the cooperative:

"With professional management, decision-making is more and more a responsibility of managers rather than BoD, increasing agility and leading to business-focused decisions." (01Mng).

The aim of cooperatives is to be sustainable while satisfying its members, and here lies the main responsibility of cooperative managers. As declared by this manager:

"The challenge of wine cooperatives is to achieve the balance between being a cooperative and a company to have competitiveness." (01Mng).

Jena & Sahoo (2014) claim that the organization, to efficiently perform, needs managers who possess "keen business knowledge, spirit of competitiveness for managerial growth and survival, as well as need to focus on certain crucial dimensions of leadership" (p. 148).

According to Boyatzis & Ratti (2009), the desired competencies for managers are: 1) Cognitive intelligence competencies (systems thinking, pattern recognition); 2) Emotional intelligence competencies (emotional self-awareness); 3) Self-management competencies (emotional self-control, adaptability, achievement orientation, positive outlook); 4) Social intelligence competencies. 5) Social awareness competencies (empathy, organizational awareness); and 6) Relationship management competencies (inspirational leadership, influence, coaching and mentor, conflict management, teamwork) (p. 824-825).

Although the issues faced by wine cooperatives when dealing with the market are the same as IOF, the cooperative identity must be recognized. Managers of cooperatives need the same competencies as managers in other types of organization, but they cannot be limited to those competencies if they want to lead the cooperative to achieve its goals. The additional competencies required to manage a cooperative are linked to the ability of the manager to reach the balance between the antagonistic forces inside the cooperative due to its dual-nature: economical satisfaction of the members and the sustainability of the cooperative.

Jussila & Tuominen (2010) propose a set of elements of managerial competence in cooperatives (Table 12). According to the authors, there are three types of competences, each one with different elements in it. The first competence is knowledge, the second is attitude and the third is skill. Most of

the elements associated to the managerial competencies focus on the cooperative values and identity.

Table 12. Elements of managerial competence in cooperatives.

Type of competence	Specific elements
Knowledge	Information and understanding of <ul style="list-style-type: none"> Cooperative value based management Customer interface management Multi-business management Community development
Attitude	Identification with cooperative values Readiness to speak out
Skill	Cooperative value-based management skills Customer interface management skills Community development skills Visionary leadership skills

Source: (Jussila & Tuominen, 2010)

According to Nilsson (2001), members have different ideas about investments and yields, and to decide how to weigh members' opinion may be a difficult task for managers. Jussila & Tuominen (2010) argue that the cooperative way of doing business may not only make management different but also more demanding.

It is important that managers incorporate cooperative values as their own and act according to them. If managers are not identified with cooperative values, the cooperative is likely to fail (Jussila & Tuominen, 2010), since the tendency is to focus on profit maximization instead of satisfying members' needs.

Davis (2001) states that "the integrity of the purpose of cooperatives will only be protected if we develop a market for cooperative management that is based on a professionalism rooted in cooperative values and undertaken by men and women who have a vocation to follow the profession of cooperative management." (p. 35) (Davis, 2001)

As the core element of organizational capacity in this model, management capacity is the ability that wine cooperatives must have to survive and satisfy members' economic needs. Personalized in the figure of the manager, it assumes that the person in this position will be able to understand the peculiarities of wine cooperatives and their environment.

5.13 PRELIMINARY ATTEMPT TO EVALUATE ORGANIZATIONAL CAPACITY IN WINE COOPERATIVES

Each element of the *organizational capacity* of wine cooperatives in Portugal affects and is affected by the other elements, by members and by environmental factors. Any *financial* decision, for instance, will impact the relationship with members, because it will interfere in the earnings of the member. The option to reinvest the surplus in the cooperative means a reduction on the payment of the members. On the other hand, while investing these resources in renovation of infrastructure reduces the short-term earnings of the members, it can guarantee the long-term sustainability of the cooperative.

The *infrastructure capacity* is the ability to recognize the need for investments in machinery and equipments in wine cooperatives to enhance the production and storage capacity, to increase the quality of the wine, to reduce production costs and to reach gains of scale. However, it is not worthwhile to have scale and quality if the organization is not able to sell the wine. Thus, *marketing capacity* is crucial to wine cooperatives because it is this ability that will guarantee the revenues from sales. Besides, the cooperative has to deal with the low quality image of wine cooperatives and search for strategies to overcome this constraint.

Knowing the needs and desires of the consumers and the market will demand adaptations in the cooperative and also in members' vineyards regarding grape varieties, modes of production and quality of the grapes.

People are responsible for the expertise in each of the capacities in any organization, so, *human resource capacity* is required in all the elements of organizational capacity.

Strategic planning capacity depends on *marketing capacity* to understand the market opportunities and challenges, on human resource capacity to predict the future, on the *relationship with members* to guarantee the supply of grapes, on *infrastructure capacity* to produce the wine, and on *financial capacity* to support the selected strategy.

Thus, the elements in the model of *organizational capacity* in wine cooperatives in Portugal are strongly interconnected and, sometimes, it is difficult to realize the boundaries between them.

Management capacity is the main capacity in the model because it has to recognise and coordinate the relationships between all the other capacities, bridge the environmental and internal factors that affect the organization, incorporate the *cooperative identity*, and involve the *members as suppliers* and *owners* to achieve the purposes of the wine cooperative.

To evaluate the *organizational capacity*, the manager and members could start by identifying the forces in the environment and their effect in the wine cooperative. Then, the categories that represent the wine cooperative should be assessed individually to provide a picture of the cooperative's potential to be successful. Table 13 provides a list of questions which may help with this task.

The first category set to assess is *members*. The evaluation of this set will allow the cooperative to understand the way members perceive the cooperative and their willingness to be an active part of the organization. The main issues in the category *members as suppliers* are grape quality and the grape varieties that members can deliver to the cooperative, and the price and payment term of the grapes ensured by the cooperative. Grape quality and varieties are indicators of the engagement of members in their role as suppliers. If they produce and deliver to the cooperative high quality grapes and the varieties required by the cooperative, they show their desire to continue being a member of the cooperative. As members perceive performance through the price of the grapes and the payment terms, the cooperative should consider paying prices equal or higher than the market on regular terms.

Trust is strongly linked to the payment of the grapes. If cooperatives delay or do not pay for the grapes, trust will be weakened.

Table 13 – Preliminary criteria to evaluate organizational capacity in wine cooperatives

	Categories	Main issues	Assessment questions	
Members	Members as suppliers	grapes (quality and varieties), payment of the grapes	Are members producing high quality grapes? Are they producing the varieties required by the cooperative/market? Are the prices paid for the grapes equal or superior to the prices paid by other wine producers? Are members satisfied with grape prices and payment terms?	
	Trust	members' income (grapes + surplus), payment term, history of performance	Is the cooperative paying the grapes on time? Is there any delay in payments of the grapes and surplus? Does the cooperative have debts with members? Is there a history of "bad" performance of the cooperative? Do members seem to trust the cooperative and the BoD? Is there any evidence that they are selling their grapes to other producers? Are there inactive members? Are there members leaving the cooperative?	
	Commitment – members as owners	Participation (elections, Assemblies and boards), price of the grapes x sustainability of the cooperative, acceptance of ownership	Do members vote for boards elections? Do they participate in Assemblies? Are they willing to run for the cooperative's boards? Do they understand that surplus is a source for investments in the cooperative? Do they feel as owners of the cooperative? Do they accept the ownership role?	
Wine Cooperative	Cooperative identity	cooperative values, cooperative principles, dual nature of the cooperative	Do members, employees and managers internalize and act according to the cooperative values? Does the cooperative follow the cooperative principles? Is the dual nature of the cooperative accepted by members, employees and managers?	
	Organizational Capacity	• Financial capacity	assets x liabilities, payment capacity (cash flow), investments in infrastructure, sales, costs	Is there a balance between assets and liabilities in the cooperative? Is the cooperative able to pay for its debts? Are sales revenue enough to cover operating costs and investments in infrastructure, machinery and equipment?
		• Infrastructure capacity	economies of scale and scope, wine quality, reception, production, storage capacity	Is infrastructure obsolete? Is it adequate for the expected quality? Are there economies of scale? Is reception, production and storage capacity enough for the expected weight of grapes received and the volume of wine produced in the cooperative?
		• Human resources capacity	technical skills and competencies, motivation, identification with cooperative values and principles	Do employees have technical skills and the desired competencies to work in their fields? Are they motivated? Are they identified with cooperative values and principles? Is the 5 th cooperative principle – education, training and information - being applied in the cooperative?
		• Marketing capacity	market-orientation, sales force, competitive prices, quality x price	Is the cooperative market-oriented? Does the cooperative know what the market and consumers want? Is the price consistent with the quality of the wine? Is the price of wine competitive? Is there enough promotion and marketing of the wines? Are the distribution channels reaching the right consumers?
		• Relationship with members	dialogue with members, financial, logistical and technical support, penalty x bonus system according to the quality of the grapes	Are there communication channels that facilitate and stimulate the dialogue between members and the cooperative leadership? Does the cooperative know the needs and expectations of its members? Does the cooperative give financial, logistical and technical support to members on a regular basis? Is there a well defined penalty and award system for the payment of grapes according to their quality?
		• Strategic planning capacity	Planning (medium and long-term), identification of opportunities, threats, strengths and weaknesses, consistency among wine (DOC, regional, table – bottled or bulk), market, distribution channels, and elected strategies (low cost, diversification, market focus)	Does the cooperative have a medium and long-term strategic plan? Is the cooperative able to identify opportunities and threats in the market? Can the cooperative identify its strengths and weaknesses? Does the cooperative have a strategy to address the market coherent to each type of wine (DOC, regional, table)? Is the cooperative exploring the peculiarities of grape varieties of its region? Is the cooperative able to identify the risks involved in choosing to sell bottled versus bulk wine? Is the cooperative able to compete on equal terms with other producers? Is the selected strategy clear to everybody?
		• Management capacity	Professionalization (management skills and competence), sustainability x members' satisfaction, identification with cooperative values and principles,	Is there a professional manager running the cooperative? Is the manager qualified to run the cooperative? Is the manager identified with cooperative values and principles? Are manager and BoD able to deal with the dual nature of the cooperative? Is the manager able to identify the antagonistic purposes of being sustainable and satisfying members? Can the manager integrate all the other capacities and transform them into actions to enhance performance?

Besides, if the cooperative has a history of weak performance, members will react to the situation faster. There are some indicators of lack of *trust* towards the cooperative, for instance, when members start to sell their grapes to other producers, or the number of inactive member increases or is already high, and if members are voluntarily leaving the cooperative.

The acceptance of the ownership role is the highest level of member *commitment* to the cooperative. It depends on how much members *trust* the cooperative and their understanding of their role as owners – to be engaged in the decision-making and monitoring process of the cooperative. One indicator for *commitment* is members' participation in the matters of the cooperative, whether in Assemblies, voting or running for the boards. Besides, they have to understand that the cooperative must be sustainable, which means that part of the surplus may be reinvested in the cooperative instead of distributed to the members.

The cooperative must follow the values and principles that characterise the *cooperative identity*. Also, members, employees and managers should understand and accept its dual nature.

To assess the *organizational capacity* of wine cooperatives, each capacity should first be assessed individually. *Financial capacity* is a reflex of the way the cooperative balances assets and liabilities. If the cooperative does not have enough sales revenue to cover operating costs and investments, its financial situation is in danger.

Wine quality, economies of scale, and reception, production and storage capacity depend on *infrastructure capacity*. The cooperative must evaluate the situation taking into account these aspects to identify the need for renovations.

Besides the technical skills and competences to do their jobs, employees must be motivated. In cooperatives, there is another requirement to *human resources capacity* which is the identification with cooperative values and principles. To achieve that, cooperatives should follow the 5th principle – education, training and information.

Cooperatives should be market-oriented. They should know what the market wants and provide wine with a competitive price consistent with its quality. Moreover, the cooperative must promote and market its brands and find

distribution channels that reach the desired markets to enhance *marketing capacity*.

To achieve success satisfying the members, cooperatives must know their needs and expectation. To reach that, it is imperative to have communication channels that facilitate and stimulate the dialogue between the cooperative leadership and the members. Besides, the *relationship with members* is improved when cooperatives provide financial, logistical and technical support to the members. It is recommended that the cooperative provides a payment system that penalises low quality and add a bonus when the quality of the grapes is superior to encourage members to produce better grapes.

To assess the *strategic planning capacity* one should first verify if the cooperative knows how to plan and the existence of a medium and long-term strategic plan is an indicator for that. The cooperative must have strategies to address the market coherent to each type of wine, be it a DOC, regional or table wine. Besides, managers must be aware of the risks involved in choosing to sell bulk wine, for instance. It is important that, whatever strategies are chosen, they are clear to members and employers. This will help members, in particular, to understand the requirements on grape quality. In addition, one point to investigate is if the cooperative is exploring the peculiarities of grape varieties of its region, concerning Portuguese wine cooperatives.

Management capacity is the ability that managers must have to integrate all other capacities in the model and transform them into actions to enhance performance. It is increasingly necessary to have a professional qualified manager to run the cooperative. Moreover, the manager must be identified with cooperative values and principles and be able to deal with the dual nature of the cooperative. Assessing this key capacity should also allow for a more integrated view of the cooperative's capacity, where the way the different dimensions of organizational capacity affect each other is taken into account and an integrated, consistent plan of action for improvement may be devised.

6. CONCLUSION

It is known that cooperatives represent a significant role in the world, promoting economic and social outcomes in many countries (Borzaga et al., 2011; Goel, 2013; ICA, 2015b). According to ICA (2015c) a cooperative is an association of persons united voluntarily to meet their common needs and aspirations through a democratically controlled enterprise. Cooperatives are businesses owned and run by and for their members.

Cooperatives are organizations based on two components, a social and an economic one, which means, they are business enterprises and a social group of members. Because of this dual nature, cooperative are organizations with two purposes that have to deal with the competition in the market and fulfil the objectives of the members (Hanf & Schweickert, 2014; Levi & Davis, 2008; Pache & Santos, 2013; Puusa et al., 2013; Soboh et al., 2009). Although cooperatives are non-profit driven, they are different from NPO because of the economic dimension. On the other hand, a cooperative differs from a IOF since its purpose is to satisfy their members' needs, not to maximize profit.

There are different types of cooperatives, such as agricultural cooperatives, credit unions, work cooperatives, consumers' cooperatives, and more, each one with its own specificities. In agricultural cooperatives, for instance, members are simultaneously owners and suppliers. The dichotomy of the business and the social roles, known as the dual nature of cooperatives, creates a challenge to the management of these organizations.

Cooperatives share values and principles that define their identity. The cooperative values and principles are beacons to the organization and members' behaviour.

As non-profit driven organizations, cooperatives demand indicators to assess performance that are not anchored in profit. The evaluation of cooperative performance should address its dual nature focusing on members' return and the continuity of the business.

Organizational capacity was developed to evaluate NPO and is generally defined as the ability that enable an organization to fulfil its mission. This ability depends on a variety of capacities that may differ according to the context in

which the organizations are inserted and the characteristics of the organizations under study.

Hall et al. (2003) developed a conceptual model of organizational capacity for NPO. The model presents the capacities and the environmental factors that affect the NPO. Although Hall et al. (2003)'s model is thorough, it was designed for NPO, so it is not suitable for a cooperative organization that, despite being nonprofit is, after all, a business.

The wine business has undergone some changes in recent decades. Global wine consumption decreased in Europe and increased in New World countries. Also, the New World countries became expressive wine producers and reached the global market. In the same period, Europe faced a reduction in its vineyard area. As a consequence, most European countries presented a fall in wine production, except Portugal with an increase of 5% since 2000.

Global exportations have been stable in value and in volume since 2012. Spain remains the biggest exporter in volume and France is the biggest exporter in value. While France exports 16% of the wine in bulk, the Spanish exports of bulk wine represents 60% of the total. That explains why Spain falls for the third place concerning the value of global exportation of wine.

Portugal produces wine in all the regions of the country, although it has seen a decrease in vineyard area. Wine is one of the most important export products of the Portuguese agricultural economy. Although the contribution of cooperatives in the wine production in Portugal has dropped to 39% in 2015, it is still significant.

The model of organizational capacity in the environment of Portuguese wine cooperatives presented here was developed from data gathering. Thus, a grounded theory approach seemed proper in providing the tools to identify and analyse the categories that emerged from the field.

As a simplification of the reality, the model provides a systemic view of the wine business and the interaction with wine cooperatives in Portugal. In addition to identifying the main elements that compose the wine cooperative organizational capacity model, the features that seem to promote cooperative performance are outlined. There are three sets of categories in the model. The first set is *members*. Since the cooperative is a membership organization and its purpose is to attend to members' economic needs, this set represents the

foundation of the cooperative. There are three categories that compose this set: *members as suppliers, trust, and commitment – members as owners.*

Members of agricultural cooperatives have both the roles of suppliers and owners. The main reason why farmers (grape growers) become members of a wine cooperative is to achieve economies of scale and scope to face the competitive wine business. As suppliers, the members' main focus is the price and the payment term of the grapes, which are perceived as indicators of *performance* of the cooperative. If the wine cooperative delays the payments or does not pay, members will lose confidence in the organization. This situation can be intensified if there is a history of "bad" performance. The lack of *trust* will lead members to pursue other alternatives to sell their grapes, which will inevitably reduce grapes supply in the cooperative and worsen its performance.

Besides suppliers, members are also owners. Although, members must *trust* the cooperative to accept this role, other factors also interfere in the level of members' *commitment* towards the cooperative. The findings of this research suggest that the members' cultural background may facilitate or hinder commitment. The "Mediterranean culture", adapted to paternalism, seems to contribute to diminish members' participation in the matters of the cooperative. Besides, the creation of cooperatives was historically conducted by the government in a top-down initiative which reinforced the dependent and passive behaviour of members.

Environmental factors is the second set of categories. In addition to *historical and cultural factors, image, competition, consumers and market, demographics and agrarian structure*, and the outputs *wine and performance* compose the set.

Portuguese wine cooperatives produce certified and table wine to sell to the national and international markets. In a highly competitive business, *image* has an important role. Cooperatives' image is strongly attached to its *history* of producing quantity instead of quality wine. Although the quality of cooperatives' wine has greatly improved and is already recognised among experts, the final consumer still associates cooperatives with inferior wine, forcing these organizations to look for strategies to minimize the impact of a bad image. One alternative is to participate in blind taste contests, for instance.

Most of the members in cooperatives are small farmers, male, with an average age of 64 years old and have basic education. One of the main threats to Portuguese wine cooperatives is the aging of members. Besides, young people do not feel attracted to farm work. The only way to lure the youth to farms is to make the activity more profitable. This is a great challenge to policy-makers if they wish to guarantee agricultural production.

The average size of vineyards varies depending on the wine region, mainly because of the topography. Plane areas have bigger farms with a high level of mechanization. Regions with hills and mountains are characterised by small farms. The bigger the vineyard, the lower the production cost of the grapes.

The third set represents the cooperative itself. It contains the categories *cooperative identity* and *organizational capacity*. Cooperative values and principles define the organizational identity of cooperatives. In Portugal, the legal framework that regulates the cooperative sector is *Código Cooperativo*. Although some articles of the law changed in 2015, wine cooperatives remain organized according to the traditional structure of open membership, democratic control and benefits to members proportional to patronage.

Wine cooperatives have to receive all the grapes from the members and members must deliver their grapes to the cooperative. The guarantee of grape supply can be an advantage of wine cooperatives only if members are committed with the quality of the grapes. Otherwise, the cooperative will have low quality grapes that will be reflected on wine quality as well.

One of the characteristics of *cooperative identity* that most challenges managers and the BoD is the dual nature generated by the social and economic elements of cooperatives.

The other category in this set is *organizational capacity*. The results pointed to seven capacities that are impacted by cooperative identity, members' profile and behaviour, and the environmental factors of wine cooperatives. *Financial capacity* is the ability to balance assets and liabilities to guarantee the survival of the cooperative. *Infrastructure capacity* allows the cooperative to identify the need of new machinery and equipment to increase gains of scale, enhance quality and increase storage capacity. Of course, this will be possible only if the cooperative has financial resources to spend in renovations. *Human*

resources are behind each other capacity and their expertise is crucial to the success of any organization, not only wine cooperatives. *Marketing capacity* is the ability to recognise the market demands and guarantee that the wine reaches the consumer. *Wine* depends on the grapes and its production process that are attached to the cooperative infrastructure.

Cooperatives need their members as owners and suppliers. Besides, the purpose of the cooperative is to satisfy them. Our findings suggest that *relationship with members* significantly impacts cooperative results and to enhance the quality of this relationship cooperatives must invest in education and support to members, and a payment system containing rewards and penalties according to grape quality.

The core capacity of the model is *management*. This is the ability that managers need to acquire to lead the cooperative to achieve its goals. It enables them to coordinate all other capacities by recognising the cooperative identity, understanding the relationships between all the environmental factors and the cooperative.

The main issues that affect each capacity dimension are explored to arrive at a guide to evaluate the organizational capacity of wine cooperatives. Although not complete, the guide presents some preliminary criteria that may help managers and members assess the organizational capacity of their cooperative, adding practical usefulness to the model.

The main contribution of this research is to provide a better understanding of the particular environment of wine cooperatives and to offer an alternative view to management by identifying the success factors through a model of organizational capacity tailored to the specificities of those organizations and suggesting a guide to evaluate each capacity of the model. The concepts of organizational capacity, is therefore applied to cooperatives in such a way that both the social and the economic dimensions are considered. To our knowledge, this is the first study to develop a model of organizational capacity to wine cooperatives.

Although there are isolated studies that focus on some of the factors and categories of the model, this research adds to previous publications by proposing an integrated, systemic model that encompasses all internal and environmental factors of wine cooperatives and depicting their relationships.

Also, some important implications for management in wine cooperatives emerged from the findings. The model shows the main environmental factors that affect wine cooperatives and their relationship with members. Managers can identify each of these factors in their own cooperative and define strategies to address them. Besides, awareness of the peculiar features of the cooperative identity can help managers to accept that cooperatives require a specific managerial approach, different from IOF or NPO. Moreover, the model and the preliminary criteria proposed facilitate the assessment of organizational capacity in wine cooperatives, which will provide information about which capacity, competences and abilities the cooperative should develop to increase the potential to succeed.

However, the study presents some limitations, as follows:

- Although a model is a visual resource to explain complex problems it is a simplification of reality and it will never depict the whole universe under study. Besides, the model was developed to explain organizational capacity in the environment of Portuguese wine cooperatives, thus, it cannot be generalized until it is tested in other contexts.
- The study could not go as far as presenting an application of the model in one or more cooperatives, as case studies, which could have better illustrated the practical use of the tool.

This study highlighted the importance of cooperatives, mainly, agricultural cooperatives to small farmers and to the continuity of rural production. So, these field merit further investigation. Besides the application of the model in some wine cooperatives, as mentioned before, other suggestions for future research include:

- The full operationalization of the wine cooperative organizational capacity model, by defining indicators that would allow each dimension of organizational capacity to be measured,
- The validation of the wine cooperative organizational capacity model in other countries and in other agricultural cooperatives where members are also suppliers and, as an extension, to cooperatives where the product is not a commodity,

- The further examination of the influence of the agrarian structure, farmers' profile, and the role of wine cooperatives in rural development, all of which emerged in the present study as relevant, but were not explored in detail,
- A more in-depth exploration of the impact of the Mediterranean culture in the commitment of members towards the cooperative, which was another problem that appeared in the research and deserves a deeper understanding.

Authors have mentioned the lack of research on management of cooperatives (Jussila & Tuominen, 2010; Puusa et al., 2016, 2013; Rebelo & Caldas, 2015), so any study on this sector, specially on agricultural cooperative, is welcome.

REFERENCES

- Almadanim, M., Baleiras-Couto, M., Pereira, H., Carneiro, L., Fevereiro, P., Eiras-Dias, J., ... Veloso, M. (2007). Genetic diversity of the grapevine (*Vitis vinifera* L.) cultivars most utilized for wine production in Portugal. *Vitis*, *46*(3), 116. Retrieved from <http://www.vitis-vea.de/admin/volltext/w1071085.pdf>
- Alonso, A. D., & Liu, Y. (2012). Coping with changes in a sector in crisis: the case of small Spanish wineries. *Journal of Wine Research*, *23*(1), 81–95. <http://doi.org/10.1080/09571264.2011.646252>
- Alsemgeest, L., & Smit, A. v A. (2012). Wearing Two Hats – the Conflict Between Being an Agricultural Business Customer and Shareholder. *Journal of Co-Operative Studies*, *45*(3), 5–16.
- Altman, M. (2014). *Cooperative organizations as an engine of equitable rural economic development*.
- Analoui, F., & Samour, A. (2012). Strategic management: the case of NGOs in Palestine. *Management Research Review*, *35*(6), 473–489. <http://doi.org/10.1108/01409171211238253>
- Andaleeb, S. S. (1995). Dependence relations and the moderating role of trust: implications for behavioral intentions in marketing channels. *International Journal of Research in Marketing*, *12*(2), 157–172. [http://doi.org/10.1016/0167-8116\(94\)00020-O](http://doi.org/10.1016/0167-8116(94)00020-O)
- Ashforth, B. E., & Reingen, P. H. (2014). Functions of dysfunction: managing the dynamics of an organizational duality in a natural food cooperative. *Administrative Science Quarterly*, *59*(3), 474–516. <http://doi.org/10.1177/0001839214537811>
- Austin, M. J., Regan, K., Samples, M. W., Schwartz, S. L., & Carnochan, S. (2011). Building Managerial and Organizational Capacity in Nonprofit Human Service Organizations Through a Leadership Development Program. *Administration in Social Work*, *35*(3), 258–281. <http://doi.org/10.1080/03643107.2011.575339>

- Balser, D., & McClusky, J. (2005). Managing stakeholder relationships and nonprofit organization effectiveness. *Nonprofit Management and Leadership*, 15(3), 295–315. <http://doi.org/10.1002/nml.70>
- Bazeley, P. (2013). *Qualitative data analysis: practical strategies*. London: Sage Publications Ltd.
- Bhuyan, S., & Leistritz, F. L. (2001). An examination of characteristics and determinants of success of cooperatives in the non-agricultural sectors. *Journal of Cooperatives*, 16, 45–62.
- Bijman, J., Hendrikse, G., & Aswin van Oijen. (2012). *Accommodating Two Worlds in One Organization: Changing Board Models in Agricultural Cooperatives*. Rotterdam.
- Birchall, J. (2004). *Cooperatives and the Millennium Development Goals*.
- Borzaga, C., Depedri, S., & Tortia, E. (2011). Organisational variety in market economies and the role of co-operative and social enterprises: a plea for economic pluralism. *Journal of Co-Operative ...*, 44(1), 19–30.
- Bourgeois, I., Whynot, J., & Thériault, É. (2015). Application of an organizational evaluation capacity self-assessment instrument to different organizations: Similarities and lessons learned. *Evaluation and Program Planning*, 50, 47–55. <http://doi.org/10.1016/j.evalprogplan.2015.01.004>
- Boyatzis, R. E., & Ratti, F. (2009). Emotional, social and cognitive intelligence competencies distinguishing effective Italian managers and leaders in a private company and cooperatives. *Journal of Management Development*, 28(9), 821–838. <http://doi.org/10.1108/02621710910987674>
- Bryman, A., & Bell, E. (2011). *Business research methods* (3rd ed.). New York: Oxford University Press.
- Burrell, G., & Morgan, G. (1979). *Sociological Paradigms and Organisational Analysis*. Hants, England: Heinemann Educational Books.
- Cegarra-Navarro, J. G., & Arcas-Lario, N. (2011). Building co-operative knowledge through an unlearning context. *Management Research Review*, 34(5), 609–623. <http://doi.org/10.1108/01409171111128751>

- Chambolle, C., & Giraud-Héraud, É. (2003). Certification de la qualité par une AOC: un modèle d'analyse. *Economie et Prévision*, 159(3), 83–91.
- Charmaz, K. (2006). *Constructing grounded theory: a practical guide through qualitative analysis* (Vol. 10). London: Sage Publications Ltd.
- Chittithaworn, C., Islam, A., Keawchana, T., & Yusuf, D. H. M. (2011). Factors affecting business success of small & medium enterprises (SMEs) in Thailand. *Asian Social Science*, 7(5), 180–190. <http://doi.org/10.5539/ass.v7n5p180>
- Colquitt, J. A., & Rodell, J. B. (2011). Justice , Trust , and Trustworthiness : a Longitudinal Analysis Integrating Three Theoretical Perspectives, 54(6), 1183–1206. <http://doi.org/10.5465/amj.2007.0572>
- Cook, M. L. (1995). The future of U.S. agricultural cooperatives: a neo-institutional approach. *American Journal of Agricultural Economics*, 77(5), 1153–1159.
- Cook, M. L., & Chaddad, F. R. (2004). Redesigning Cooperative Boundaries: the emergence of new models. *American Journal of Agricultural Economics*, 86(5), 1249–1253.
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13(1), 3–21. <http://doi.org/10.1007/BF00988593>
- Corbin, J. M., & Strauss, A. (2008). *Basics of qualitative research: techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, California: Sage Publications Ltd.
- Cornforth, C., & Mordaunt, J. (2011). Organisational Capacity Building: Understanding the Dilemmas for Foundations of Intervening in Small- and Medium-Size Charities. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 22(3), 428–449. <http://doi.org/10.1007/s11266-010-9175-z>
- Costanza, R., Low, B. S., Ostrom, E., & Wilson, J. (2001). Ecosystems: a framework for exploring the linkages. In R. Costanza, B. S. Low, E. Ostrom, & J. Wilson (Eds.), *Institutions, ecosystems, and sustainability* (pp. 4–20).

- Boca Raton: Lewis Publishers.
- Costanza, R., & Ruth, M. (2001). Dynamic systems modeling. In R. Costanza, B. S. Low, E. Ostrom, & J. Wilson (Eds.), *Institutions, ecosystems, and sustainability* (pp. 21–29). Boca Raton: Lewis Publishers.
- Couderc, J., & Marchini, A. (2011). Governance, commercial strategies and performances of wine cooperatives. *International Journal of Wine Business Research*, 23(3), 235–257. <http://doi.org/10.1108/17511061111163069>
- Couderc, J. P., & Marchini, A. (2011). Governance, commercial strategies and performances of wine cooperatives: an analysis of Italian and French wine producing regions. *International Journal of Wine Business Research*, 23(3), 235–257.
- Davis, P. (2001). The Governance of Co-operatives under Competitive Conditions: Issues, Processes and Culture. *Corporate Governance: The International Journal of Business and Society*, 1(4), 28–39. <http://doi.org/10.1108/EUM0000000005975>
- Deetz, S. (1996). Describing Differences in Approaches to Organization Science: Rethinking Burrell and Morgan and Their Legacy. *Organization Science*, 7(2), 191–207.
- Dieta Mediterrânica. (n.d.). Retrieved from <http://dietamediterranea.net/?q=en/node/230>
- Dressler, M. (2016). Strategic winery reputation management – exploring German wine guides, (1), 4–21. <http://doi.org/http://dx.doi.org/10.1108/MRR-09-2015-0216>
- Eisinger, P. (2002). Organizational Capacity and Organizational Effectiveness among Street-Level Food Assistance Programs. *Nonprofit and Voluntary Sector Quarterly*, 31(1), 115–130. <http://doi.org/10.1177/0899764002311005>
- FAO. (2011). Youth: the future of agricultural cooperatives. FAO - Food and Agriculture Organization of the United Nations. Retrieved from www.fao-ilo.org/fao-ilo-youth/fao-ilo-jffls/en/
- Fisher, C. (2007). *Researching and writing a dissertation: a guidebook for*

- business students*. (Pearson Education Limited, Ed.) (2nd ed.). Harlow: Financial Times Prentice Hall.
- Fredericksen, P., & London, R. (2000). Disconnect in the Hollow State: The Pivotal Role of Organizational Capacity in Community-Based Development Organizations. *Public Administration Review*, 60(3), 230–239. <http://doi.org/10.1111/0033-3352.00083>
- Gephart, R. P. (2004). Qualitative Research and the Academy of Management Journal. *Academy of Management Journal*, 47(4), 454–462.
- Germann, K., & Wilson, D. (2004). Organizational capacity for community development in regional health authorities: A conceptual model. *Health Promotion International*, 19(3), 289–298. <http://doi.org/10.1093/heapro/dah303>
- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: strategies for qualitative research* (Vol. 1). New Brunswick: Aldine Transaction. <http://doi.org/10.2307/2575405>
- Goel, S. (2013). Relevance and potential of co-operative values and principles for family business research and practice. *Journal of Co-Operative Organization and Management*, 1(1), 41–46. <http://doi.org/10.1016/j.jcom.2012.11.002>
- Gray, D. E. (2004). *Doing research in the real world*. London: Sage Publications.
- Gupta, C. (2014). The co-operative model as a “living experiment in democracy.” *Journal of Co-Operative Organization and Management*, 2(2), 98–107. <http://doi.org/10.1016/j.jcom.2014.09.002>
- Hall, M., Andrukow, A., Barr, C., Brock, K., Wit, M. de, Embuldeniya, D., ... Vaillancourt, Y. (2003). *The Capacity to Serve*. (C. C. for Philanthropy, Ed.).
- Hanf, J. H., & Schweickert, E. (2014). Cooperatives in the balance between retail and member interests: the challenges of the German cooperative sector. *Journal of Wine Research*, 25(1), 32–44. <http://doi.org/10.1080/09571264.2014.871122>

- Hatch, M. J., & Schultz, M. (1997). Relations between organizational culture, identity and image. *European Journal of Marketing*, 31(5,6), 356–365. <http://doi.org/10.1108/eb060636>
- Helmig, B., Ingerfurth, S., & Pinz, A. (2014). Success and Failure of Nonprofit Organizations: Theoretical Foundations, Empirical Evidence, and Future Research. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 25(6), 1509–1538. <http://doi.org/10.1007/s11266-013-9402-5>
- Henry, H. (2013). New opportunities for co-operatives: New opportunities for people. *Journal of Co-Operative Organization and Management*, 1(1), 47–48. <http://doi.org/10.1016/j.jcom.2013.06.001>
- Herbel, D., Rocchigiani, M., & Ferrier, C. (2015). The role of the social and organisational capital in agricultural co-operatives' development. *Journal of Co-Operative Organization and Management*, 3(1), 24–31. <http://doi.org/10.1016/j.jcom.2015.02.003>
- ICA. (n.d.). Agricultural cooperatives: paving the way for food security and rural development. ICA - International Cooperative Alliance.
- ICA. (2014). Differences between Co-operatives, Corporations and Non-Profit Organisations. Retrieved from <http://ica.coop/>
- ICA. (2015a). Definition, values and principles. Retrieved May 10, 2015, from <http://ica.coop/en/whats-co-op/co-operative-identity-values-principles>
- ICA. (2015b). Facts and Figures. Retrieved May 10, 2015, from <http://ica.coop/en/facts-and-figures>
- ICA. (2015c). What is a Cooperative? Retrieved July 31, 2017, from <http://ica.coop/en/what-co-operative>
- Iliopoulos, C., & Hendrikse, G. (2009). Influence Costs in Agribusiness Cooperatives. *International Studies of Management and Organization*, 39(4), 60–80. <http://doi.org/10.2753/IMO0020-8825390404>
- Iliopoulos, C., & Theodorakopoulou, I. (2014). Mandatory cooperatives and the free rider problem: The case of Santo Wines in Santorini, Greece. *Annals of Public and Cooperative Economics*, 85(4), 663–681.

- <http://doi.org/10.1111/apce.12056>
- INE. (2014a). Índice Envelhecimento Ativo. Retrieved August 2, 2017, from <http://www.ine.pt>
- INE. (2014b). *Inquérito à Estrutura das Explorações Agrícolas 2013*.
- INE. (2015). *Estatísticas agrícolas 2005 a 2014*.
- Infovini. (2009). How wine is made. Retrieved January 23, 2017, from <http://www.infovini.com/pagina.php?codNode=18016>
- Infovini. (2017). Types of wine. Retrieved June 7, 2017, from www.infovini.com
- IVV. (2017a). Mercado Nacional de Vinhos Tranquilos. Retrieved June 18, 2017, from <http://www.ivv.min-agricultura.pt/np4/606/?newsId=8741>
- IVV. (2017b). Statistics. Retrieved July 31, 2017, from <http://www.ivv.min-agricultura.pt/np4/>
- Jena, S., & Sahoo, C. K. (2014). Improving managerial performance: a study on entrepreneurial and leadership competencies. *Industrial and Commercial Training, 46*(3), 143–149. <http://doi.org/10.1108/ICT-10-2013-0066>
- József, T., & Péter, G. (2014). Is the New Wine World more efficient? Factors influencing technical efficiency of wine production. *Studies in Agricultural Economics, 116*, 95–99.
- Jurie, J. D. (2000). Building capacity: organizational competence and critical theory. *Journal of Organizational Change Management, 13*(3), 264–274. <http://doi.org/10.1108/09534810010330913>
- Jussila, I., & Tuominen, P. (2010). An individual psychological perspective on ownership. *International Journal of Co-Operative ...*, *5*(1), 23–33. <http://doi.org/10.1055/s-0031-1273735>
- Kay, M., Franks, T., & Tato, S. (2004). Capacity needs assessment methodology, (Horton 2002), 4–43.
- Kontogeorgos, A. (2012). Brands, quality badges and agricultural cooperatives: how can they co-exist? *The TQM Journal, 24*(1), 72–82. <http://doi.org/10.1108/17542731211191230>
- Kyriakopoulos, K., Meulenbergh, M., & Nilsson, J. (2004). The impact of

- cooperative structure and firm culture on market orientation and performance. *Agribusiness*, 20(4), 379–396. <http://doi.org/10.1002/agr.20021>
- Lange, D., Lee, P. M., & Dai, Y. (2011). Organizational Reputation: A Review, 37(1), 153–184. <http://doi.org/10.1177/0149206310390963>
- Lei Constitucional n.º 1/2005, Pub. L. No. Diário da República: I Série-A N.º 155 (2005). Portugal. Retrieved from www.dre.pt
- Levi, Y., & Davis, P. (2008). Cooperatives as the “enfants terribles” of economics: Some implications for the social economy. *The Journal of Socio-Economics*, 37(6), 2178–2188. <http://doi.org/10.1016/j.socec.2008.06.003>
- Locke, K. D. (2001). *Grounded Theory in Management Research*. London: Sage Publications Ltd. Retrieved from http://books.google.com.au/books?id=OcDWB-rWvWUC&printsec=frontcover&dq=grounded+theory&hl=∓cd=7&source=gbs_api
- Lourenço-Gomes, L., Pinto, L. M. C., & Rebelo, J. (2015). Wine and cultural heritage. the experience of the Alto Douro Wine Region. *Wine Economics and Policy*, 4(2), 78–87. <http://doi.org/10.1016/j.wep.2015.09.001>
- Martínez-Carrión, J. M., & Medina-Albaladejo, F. J. (2010). Change and Development in the Spanish Wine Sector, 1950–2009. *Journal of Wine Research*, 21(March), 77–95. <http://doi.org/10.1080/09571264.2010.495856>
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. *Academy of Management Review*, 20(3), 709–734. <http://doi.org/10.5465/AMR.1995.9508080335>
- Mayo, E. (2011). Co-operative performance. *Sustainability Accounting, Management and Policy Journal*, 2(1), 158–164. <http://doi.org/10.1108/20408021111162182>
- McKinsey & Company. (n.d.). Capacity Assessment Grid. New York: Venture Philanthropy Partners.

- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative Data Analysis* (3rd ed.). Thousand Oaks, California: Sage Publications.
- Monippally, M. M., & Pawar, B. S. (2010). *Academic Writing: A Guide for Management Students and Researchers*. <http://doi.org/http://dx.doi.org/10.1016/j.jeap.2013.03.003>
- Mooney, P., & Gray, T. W. (2002). *Cooperative Conversion and Restructuring in Theory and Practice*. Washington, DC.
- Nilsson, J. (1996). The nature of cooperative values and principles: Transaction cost theoretical explanations. *Annals of Public and Cooperative Economics*, 67(4), 633–653. <http://doi.org/10.1111/j.1467-8292.1996.tb01411.x>
- Nilsson, J. (1999). Co-operative organisational models as reflections of the business environments. *LTA*, 4(99), 449–470.
- Nilsson, J. (2001). Organisational principles for co-operative firms. *Scandinavian Journal of Management*, 17(3), 329–356. [http://doi.org/10.1016/S0956-5221\(01\)00010-0](http://doi.org/10.1016/S0956-5221(01)00010-0)
- Nilsson, J., Kihlén, A., & Norell, L. (2009). Are traditional cooperatives an endangered species? About shrinking satisfaction, involvement and trust. *International Food and Agribusiness Management Review*, 12(4), 101–122.
- Novkovic, S. (2008). Defining the co-operative difference. *Journal of Socio-Economics*, 37(6), 2168–2177. <http://doi.org/10.1016/j.socec.2008.02.009>
- 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(2), 54–63. <http://doi.org/10.1016/j.jcom.2013.10.006>
- OIV. (2017). *State of the Vitiviniculture World Market*. Retrieved from <http://www.oiv.int/en/technical-standards-and-documents/statistical-analysis/state-of-vitiviniculture>
- Ostrom, E. (1990). *Governing the Commons: The evolution of institutions for collective action*. New York: Cambridge University Press.

- Pache, A.-C., & Santos, F. (2013). Inside the Hybrid Organization: Selective Coupling as a Response to Competing Institutional Logics. *Academy of Management Journal*, 56(4), 972–1001. <http://doi.org/10.5465/amj.2011.0405>
- Panzone, L. a., & Simões, O. M. (2009). The Importance of Regional and Local Origin in the Choice of Wine: Hedonic Models of Portuguese Wines in Portugal. *Journal of Wine Research*, 20(1), 27–44. <http://doi.org/10.1080/09571260902978527>
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603–609. <http://doi.org/10.1037/h0037335>
- Portugal. Código Cooperativo (2015). Portugal: Diário da República, 1ª série - N° 169 - 31 de agosto de 2015.
- Pratt, M. G. (2009). For the Lack of a Boilerplate: Tips on Writing Up (and reviewing) Qualitative Research. *Academy of Management Journal*, 52(5), 856–862. <http://doi.org/10.5465/AMJ.2009.44632557>
- Puusa, A., Hokkila, K., & Varis, A. (2016). Individuality vs. communality - A new dual role of co-operatives? *Journal of Co-Operative Organization and Management*, 4(1), 22–30. <http://doi.org/10.1016/j.jcom.2016.02.002>
- Puusa, A., Mönkkönen, K., & Varis, A. (2013). Mission lost? Dilemmatic dual nature of co-operatives. *Journal of Co-Operative Organization and Management*, 1(1), 6–14. <http://doi.org/10.1016/j.jcom.2013.06.002>
- Rebelo, J., & Caldas, J. (2015). The Economic Role of the Portuguese Agricultural Cooperatives. *Revista de Economia E Sociologia Rural*, 53(1), 91–102. <http://doi.org/10.1590/1234-56781806-94790053s01007>
- Rebelo, J., Caldas, J., & Matulich, S. (2008). Manager Power, Member Behavior and Capital Structure: Portuguese Douro Wine Cooperatives. *Agricultural Economics Review*, 9(2), 5–16. Retrieved from http://www.vdqs.net/Working_Papers/Text/WP_2003/Rebelo_Caldas_Matulich.pdf

- Rebelo, J., Caldas, J., & Matulich, S. C. (2010). Performance of Traditional Cooperatives: the Portuguese Douro Wine Cooperatives. *Economia Agraria Y Recursos Naturales*, 10(2), 143–158.
- Revi, M., Badeka, A., Kontakos, S., & Kontominas, M. G. (2014). Effect of packaging material on enological parameters and volatile compounds of dry white wine. *Food Chemistry*, 152, 331–339. <http://doi.org/10.1016/j.foodchem.2013.11.136>
- Roelants, B., Hyungsik, E., & Terrasi, E. (2014). *Cooperatives and Employment: a Global Report*.
- Saïssset, L.-A., Courderc, J.-P., & Saba, M. B. (2011). Cooperative Performance Measurement Proposal: a test with the cooperfic © tool for wine cooperatives in Languedoc – Roussillon. *6th AWBR International Conference*.
- Schamel, G. H. (2015). Can German wine cooperatives compete on quality? *BIO Web of Conferences*, 5, 6. <http://doi.org/10.1051/bioconf/20150503003>
- Schein, E. H. (1988). Organizational culture. *American Psychological Association*, 45(2), 1–50.
- Schneider, J. O. (1999). *Democracia, participação e autonomia cooperativa* (2nd ed.). São Leopoldo: Unisinos.
- Sellers-Rubio, R., Alampi Sottini, V., & Menghini, S. (2016). Productivity growth in the winery sector: evidence from Italy and Spain. *International Journal of Wine Business Research*, 28(1), 59–75. <http://doi.org/10.1108/IJWBR-05-2015-0019>
- Soboh, R. a M. E., Lansink, A. O., Giesen, G., & van Dijk, G. (2009). Performance measurement of the agricultural marketing cooperatives: The gap between theory and practice. *Review of Agricultural Economics*, 31(3), 446–469. <http://doi.org/10.1111/j.1467-9353.2009.01448.x>
- Suddaby, R. (2006). What Grounded Theory is not. *Academy of Management Journal*, 49(4), 633–642.
- Tortia, E. C., Valentinov, V. L., & Iliopoulos, C. (2013). Agricultural Cooperatives. *Journal of Entrepreneurial and Organizational Diversity*, 2(1),

- 23–36. Retrieved from <http://papers.ssrn.com/abstract=2273527>
- Touzard, J. M., Chiffolleau, Y., & Maffezzoli, C. (2016). What is local or global about wine? An attempt to objectivize a social construction. *Sustainability (Switzerland)*, 8(5). <http://doi.org/10.3390/su8050417>
- UNDP. (2007). Capacity Assessment Methodology User's Guide. United Nations Development Programme.
- UNESCO. (2001). Alto Douro Wine Region. Retrieved July 10, 2017, from <http://whc.unesco.org/en/list/1046>
- UNESCO. (2017). Mediterranean Diet. Retrieved July 24, 2017, from <https://ich.unesco.org/en/RL/mediterranean-diet-00884#diaporama>
- Van Oorschot, K., de Hoog, J., van der Steen, M., & van Twist, M. (2013). The three pillars of the co-operative. *Journal of Co-Operative Organization and Management*, 1(2), 64–69. <http://doi.org/10.1016/j.jcom.2013.10.002>
- Vidal-Salazar, M. D., Hurtado-Torres, N. E., & Matías-Reche, F. (2012). Training as a generator of employee capabilities. *The International Journal of Human Resource Management*, 23(13), 2680–2697. <http://doi.org/10.1080/09585192.2011.610971>
- Vita, C. J. de, Fleming, C., & Twombly, E. C. (2001). Building Nonprofit Capacity: A framework for addressing the problem. In C. J. de Vita & C. Fleming (Eds.), *Building Capacity in Nonprofit Organizations* (pp. 5–30). Retrieved from http://www.urban.org/UploadedPDF/building_capacity.PDF
- Vitaliano, P. (1983). Cooperative enterprise: an alternative conceptual basis for analyzing a complex institution. *American Journal of Agricultural Economics*, (December), 1078–1083.
- White, M. D., Fisher, C., Hadfield, K., Saunders, J., & Williams, L. (2005). Measuring organizational capacity among agencies serving the poor: implications for achieving organizational effectiveness. *Justice Policy Journal*, 2(2). Retrieved from http://www.cjcj.org/uploads/cjcj/documents/measuring_organizational.pdf
- Wiener, Y. (1982). Commitment in organizations: A normative view. *Academy of Management Review*, 7(3), 418–428.

<http://doi.org/10.5465/AMR.1982.4285349>

Wines of Portugal. (2015a). Denominação de Origem. Retrieved May 10, 2015, from <http://www.ivv.min-agricultura.pt/np4/30>

Wines of Portugal. (2015b). History of wine. Retrieved May 11, 2015, from http://www.winesofportugal.info/pagina.php?codNode=18094&market=2#tab_6

Zamagni, S., & Zamagni, V. (2010). *Cooperative enterprise: facing the challenge of globalization*. Cheltenham, UK: Edward Elgar Publishing.

Zeuli, K., & Deller, S. (2007). Measuring the local economic impact of cooperatives. *Journal of Rural Cooperation*, 35(1), 1–17.

APPENDIX A - Criteria for evaluating the quality of research

Charmaz (2006, p. 182)

Credibility

- Has your research achieved intimate familiarity with the setting or topic?
- R. Yes.
- Are the data sufficient to merit your claims?
- R. Yes.
- Have you made systematic comparisons between observations and between categories?
- R. Yes.
- Do the categories cover a wide range of empirical observations?
- R. Yes.
- Are there strong logical links between the gathered data and your argument and analysis?
- R. Yes.
- Has your research provided enough evidence for your claims to allow the reader to form an independent assessment and agree with your claims?
- R. Yes.

Originality

- Are your categories fresh? Do they offer new insights?
- R. Yes.
- Does your analysis provide a new conceptual rendering of the data?
- R. Yes.
- What is the social and theoretical significance of this work?
- The work allows us to better understand the realm of wine cooperatives, from the environment where they are inserted to the capacities they need to fulfil their goals. Cooperatives are extremely important to small farmers and having a model that may help the sustainability of these organizations may guarantee the maintenance of the agrarian structure of Portugal.
- How does your grounded theory challenge, extend, or refine current ideas, concepts, and practices?
- With grounded theory I was able to develop a model of organizational capacity to wine cooperatives totally grounded in data, what is new in the field of organizational capacity.

Resonance

- Do the categories portray the fullness of the studied experience?

- R. Yes.
- Have you revealed both liminal and unstable taken-for-granted meanings?
- R. Yes.
- Have you drawn links between larger collectivities or institutions and individual lives, when the data so indicate?
- R. Yes.
- Does your grounded theory make sense to your participants or people who share their circumstances? Does your analysis offer them deeper insights about their lives and worlds?
- R. Yes. I validated the model, as described at the Methodology.

Usefulness

- Does your analysis offer interpretations that people can use in their everyday worlds?
- R. Yes. The model has a practical approach since it shows the main factors and their relationship that affect the cooperative management. Anyone related to wine business and wine cooperatives can fully understand and use it.
- Do your analytic categories suggest any generic processes?
- R. Yes.
- If so, have you examined these generic processes for tacit implications?
- R. Yes.
- Can the analysis spark further research in other substantive areas?
- R. Yes. The model can be tested in other cooperative where the members are suppliers and other models can be develop to other organizations.
- How does your work contribute to knowledge? How does it contribute to making a better world?
- R. Cooperatives are a source of income to small farmers and contribute to the maintenance of the agriculture in some regions. Any study that has the goal to enhance the capacity of cooperatives to succeed contributes to the sustainability of these organizations that have an undeniable social role in the communities where they operate.

Corbin & Strauss (2008, p. 305)

Fit

- Do the findings resonate/fit with the experience of both the professionals for whom the research was intended and the participants who took part in the study?
- Can participants see themselves in the story even if not every detail applies to them?
- Does it ring “true” to them?
- Do they react emotionally as well as professionally to the findings?

Applicability

- Do the findings offer new explanations or insights?
- Can they be used to develop policy, change practice, and add to the knowledge base of a profession?

Concepts

- Are the findings organized around concepts/themes?
- Do the findings have substance?
- Are the concepts developed in terms of their properties and dimensions?
- Do the concepts have density and variation?

Contextualization of concepts

- Are the findings inserted in the context?

Logic

- Is there a logic flow of ideas?
- Do the findings “make sense”?
- Are methodological decisions made clear so that the reader can judge their appropriateness for gathering data and doing analysis?

Depth

- Are the concepts described in details?
- Is there depth of substance in the description of the findings?

Variation

- Has variation been built into the findings?
- Are there examples of cases that don't fit the pattern or that show differences in certain dimensions or properties?

Creativity

- Are the findings presented in a creative and innovative manner?
- Does the research say something new, or put old ideas together in new ways?

Sensitivity

- Did the researcher demonstrate sensitivity to the participants and the data?
- Did the analysis drive the research or was the research driven by some preconceived ideas or assumptions that were imposed on the data?

Evidence of memos

- Is there evidence of memos?

Additional Criteria for Evaluating the Quality of Research (Corbin & Strauss, 2008, p. 307)

- 1: How was the original sample selected? On what grounds (selective sampling)?
- 2: What major categories emerged?
- 3: What were some of the events, incidents, actions, and so on that indicated some of these major categories?
- 4: On the basis of what categories did theoretical sampling proceed? That is, how did theoretical formulations guide some of the data collection? After the theoretical sample was carried out, how representative did these categories prove to be?
- 5: What were some of the hypotheses pertaining to relations among categories? On what grounds were they formulated and tested?
- 6: Were there instances when hypotheses did not hold up against what was actually seen? How were the discrepancies accounted? How did they affect the hypotheses?
- 7: How and why was the core category selected? Was the selection sudden or gradual, difficult or easy? On what grounds were the final analytic decisions made? How did extensive "explanatory power" in relation to the phenomena under study and "relevance" as discussed earlier figure in the decisions?

APPENDIX B – Interview guide

1. The cooperative
 - a. Number of members (actives and non-actives)
 - b. Products/types of grapes
 - c. Markets
 - d. Average size of vineyards of the farms
 - e. Statute
2. History of the Cooperative
 - a. Critical moments, changes
 - b. Strategies, ...
3. Today (threats and opportunities)
 - a. Economy
 - b. Environment policies
 - c. Society
 - d. Competition
 - e. Quality (vineyards, wine, ...)
 - f. Aging of members
4. The cooperative principles
 - a. How are they followed?
 - b. Threats and opportunities
 - c. New legislation (Código Cooperativo)
5. Being a cooperative (what is good and what is bad?)
 - a. Number of members
 - b. Size of the vineyards
 - c. % grapes delivery by members
6. To be successful, a cooperative must have:
 - a. Financial capacity
 - b. infrastructure
 - c. Planning
 - d. Human resources
 - i. Employees
 - ii. Board of Directors
 - iii. Managers
 - iv. Members
 - e.

APPENDIX C – Cooperatives and unions contacted for interviews

