

The effects of business associations in the export–survival relationship: An application to the DOC Rioja wine industry

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Funding information

Interreg, Grant/Award Number: SOE3/P2/F0917 VINCI; Ministerio de Ciencia e Innovación MCIN/AEI/ 10.13039/501100011033, Grant/Award Numbers: Grant PID2020-113338RB-I00, PID2021-123154NB-I00; Departamento de Educación, Cultura y Deporte, Gobierno de Aragón Research Groups COMPETE S52_23R and CREVALOR S42_23R

Abstract

Much has been said about the role that business associations play in the survival of firms, but little is known about how this influences the relationship between exports and the survival of firms. Considering the diverging theoretical assumptions about the importance of business associations, we hypothesize in this paper on the direct effect of association membership on the survival of firms, and its moderating effect on the export–survival relationship. For Qualified Designation of Origin (DOC) Rioja wineries, we show that both exporting and association membership have a positive effect on the survival of firms, although association membership reduces the positive effect of exports to survive. These results hold up under alternative survival model specifications. The study explores the complex role of associations in the wine industry, which is important to understand in the context of the current COVID-19 crisis. [EconLit Citations: L25, L66, M16, M21].

KEYWORDS

business associations, exports, performance, survival, wine industry

Abbreviations: DOC, Qualified Designation of Origin Rioja; EU, European Union; R&D, research and development.

All the authors have contributed to the manuscript equally.

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1 | INTRODUCTION

The European Union (EU) wine sector is the EU's biggest agriculture exporter, representing 7.6% of agri-food exports in 2020 according to the European Commission. Thus, at the macro-level, it is a significant driver of economic development, and at the micro-level it affects the survival of firms in the Eurozone¹. This has sparked interest on the part of academics and politicians, and research into the export-survival relationship has been extensive. In light of the theoretical consensus among researchers about the positive effects of exporting, albeit with non-conclusive empirical evidence (Esteve-Pérez, 2021), this article examines the association membership–export–survival relationship. We focus on a firm's survival because it is crucial for economic growth and competitiveness (Giovannetti et al., 2011). Recognition of this relationship helps us understand how important associations are to a winery's survival.

Business associations “are collective bodies that are intermediaries between individual business action and State action” (Bennett, 1998, pp. 244). The essential functions of the wine industry associations are the defense, promotion, and publicity of their members. Additionally, these associations can provide complementary functions, such as seminars, conferences, and training of commercial, technical, viticulture, and administrative aspects. Related to international activity, associations can share among their members such intangible assets as international marketing skills, access to international market knowledge, and networks with international agents. Moreover, associations may promote joint activities among their exporting members, such as setting up an export consortium, which allows them to have more exposure to international networks and create a collective identity for wine consumers.

Despite theoretical consensus on the important role that business associations have played in international markets for the wine industry, only a few have tested or validated this effect in the export literature (exceptions include Tajeddin & Carney, 2019 and Wu et al., 2021 who studied the membership–export relationship.) This paper tries to fill this gap by analyzing how association membership of firms impacts on a firm's survival and its moderating effect on the export–survival relationship.

The dataset employed to test our research questions comes from a sample of Qualified Designation of Origin (DOC) Rioja wineries. In this wine region, in which there has been a loss of 10% of wineries and 16% of winegrowers in the last decade, a large number of associations have emerged in recent years (e.g., “Grupo de Empresas Vinícolas de Rioja,” “Bodegas Familiares de Rioja,” “Asociación de Bodegas por la Calidad”, etc.). Their importance in the socioeconomic landscape has been well established (Fernández-Olmos & Malorgio, 2020). The research contributions of this article are twofold. First, this study adds to the literature by combining the theory of institutional networking and internationalization into one framework. Second, this study responds to calls for further research on associations (Fernández-Olmos et al., 2021; Garrido et al., 2014; Holmes et al., 2018) by investigating the wine industry, one of the most important activities of the European Union economy (Pomarici & Sardone, 2020; Vrontis et al., 2016) and clearly export-orientated. As such, it contributes to a much-needed and more nuanced understanding of the role played by associations in this industry. It is particularly important in the context of COVID-19, which adds additional challenges to exporters.

The article is structured as follows. The next section provides the theoretical background and develops the hypotheses. The variables and data collection procedures are then described. The remaining sections describe the empirical method used and how the findings are related to the hypotheses. The final section presents a discussion of the implications, limitations, and suggestions of the study for future research.

¹<https://www.ceev.eu/priorities/external-trade-policy/>

2 | THEORY AND HYPOTHESES

As happens in many economies (Holmes et al., 2018), business associations are the leading industry bodies for wine markets and related businesses in many wine-producing regions. The research literature has identified positive and negative aspects of membership of a business association. On the positive side, associations help their members with the administrative tasks required by public authorities. Associations also operate under joint reputation management that may benefit their members and represent sector concerns to the public authorities (Bennett, 1998). Moreover, business associations offer a solution to market imperfections by establishing internal markets through which their members share and codevelop resources with other members of the association (Holmes et al., 2018). In particular, they may disseminate technical knowledge within the sector and exploit economies of scope for R&D and marketing costs (Wu et al., 2021).

On the negative side, association members and potential members may become increasingly heterogeneous, and thus this diversity may limit its effectiveness. Moreover, associations may suffer problems of reduced density of membership and under-resourcing, which generates instability over time (Bennett, 1998). These potential disadvantages of business associations are particularly felt in the DOC Rioja wine industry, in which members are not obliged to belong to an association.

Drawing on the resource-based view, transaction cost theory, and the institutional view, associations are expected to provide their members with greater opportunities to increase their survival through several actions. Firstly, economic association-affiliated firms are in a better position to develop their capabilities than association nonaffiliated firms because they have access to individual and collective resources (Chang & Hong, 2000) simultaneously. In particular, affiliated firms could access the networks of other affiliated firms (Elango & Pattnaik, 2007; Mahmood et al., 2011), share experiences, and exchange information about distribution channels and marketing skills, which enhance their ability to reach international markets (Lamin, 2013; Tajeddin & Carney, 2019). As a mechanism for closing institutional voids (Khanna & Yafeh, 2007), associations may also provide their members with reputational benefits (Gao et al., 2017) and greater visibility (Mukherjee et al., 2018).

The specific features of the institutional setting in the DOC Rioja wine industry reinforce the expected positive effect of business associations on the survival of wineries. The association effects serve two purposes. On the one hand, they promote high-quality wine, wine tourism, and wine culture to help their members domestically, but on the other hand, they also unite members to export because of their business interdependencies and need for legitimacy, evidenced by the adoption of similar actions such as the promotion of collective brands or collective participation at international wine fairs (Fernández-Olmos et al., 2021).

Likewise, associations in the DOC Rioja wine industry have also played an important role in addressing market downturns through recommendations to promote quality over quantity in wine production. Similarly, associations in the DOC Rioja wine industry have developed campaigns aimed at promoting responsible consumption. They argue that their wines are much more than alcoholic beverages, that is, their consumption is a means of enjoyment and celebration but linked to a healthy lifestyle (Fernández-Olmos, 2022).

Consequently, we argue that:

H₁: Participation in associations by firms will enhance their survival.

We analyzed the literature on the impact of exporting on a firm's performance, and several theoretical arguments support a positive effect. Much of the export literature has been based on the "learning-by-exporting" hypothesis, which argues that when firms expand into new international markets, they find greater opportunities to obtain external knowledge. International market penetration allows firms to improve their level of efficiency (Atkin et al., 2017), or the ability to use new technology thanks to international contacts (Jafari et al., 2023), whereas a firm that is confined within a narrow geographic scope is excluded (Blalock & Gertler, 2004).

Other authors suggest that exporters tend to produce a higher quality version of their goods for export, at least in developing countries. These benefits of exporting are recognized overall in terms of sales, value-added and employment, thereby providing them with a competitive edge and market power (Emami Namini et al., 2013).

Thus, there are several theoretical arguments that predict better performance from exporting firms than those that only serve domestic markets. However, studies report mixed findings (Fernández-Olmos et al., 2016). As regards the agri-food industry, numerous research studies provide evidence of the positive effects of exporting on a firm's performance (e.g., Bryla, 2012; Rodríguez-Rodríguez et al., 2012; Schiefer & Hartmann, 2008; Zouaghi & Sánchez, 2016). However, several studies haven't found a statistically significant relationship between exports and a firm's performance (e.g., Furtan & Sauer, 2008), and some have revealed a horizontal S-curve relationship (Serrano et al., 2018). Differences in the measurement of internationalization and a firm's performance, and the use of samples from different cultural contexts are several possible explanations for this lack of consensus. In this paper, we explore another potential explanation related to the importance of a firm's membership of an association.

As noted by Lee and Habte-Giorgis (2004), the value of exporting to a firm's survival is contingent on the firm's resources. By exporting, firms can achieve a competitive international position (Porter, 1990). This positive effect of exporting on survival is expected to be accelerated when the export strategy is implemented through the right selection of resources. Drawing on an institutional perspective, this resource selection is influenced, at a firm and interfirm level, by the institutional context of decisions on resources (Oliver, 1997). Thus, the premise of this paper is that institutional factors regarding association membership affect the potential for exporting firms to earn financial income, and as a result, improving their survival.

From the perspective of social capital, associations can act as a bridge between exporting firms and importers by disseminating knowledge and information². They help both sides of the relationship develop expectations about each other and build their reputation, which is essential for an export strategy.

In summary, association membership can be beneficial for exporting because they can act as incubators for providing export promotion programs that include the promotion of consultancy and management services, and training personnel on export compliance (Díez-Vial & Fernández-Olmos, 2023).

Accordingly, we hypothesize:

H₂: Association membership by firms will strengthen the positive impact of exporting on their survival.

3 | SAMPLE AND METHODOLOGY

The empirical work draws on firm-level data collected by structural surveys from wineries belonging to the DOC Rioja wine industry in Spain. The target population of wineries was extracted from the directory drawn up by the Regulatory Council of the Rioja Designation of Origin in 2017. The wine industry is strongly export-orientated, in fact, a total of 103.8 million liters of wine were exported while 130.6 million litres of wine were sold in the domestic market in 2020³. In particular, Qualified Designation of Origin (DOC) Rioja is characterized by the concentration of wine industry associations within a few kilometers⁴. Since 1991, Rioja wines have been protected by the first Calificada DO in Spain, being one of the world's designations of origin that offers the most guarantees regarding the quality and authenticity of its wines⁵. We obtained a response rate above 20%, and the sample is reasonably representative of the population of wineries. A Chi-square test ($p = 0.09$) showed no statistically significant differences between the sample and the population with respect to size using the classification of small, medium

²Burt (1992) refers to it as 'bridging ties' in a network of firms.

³<https://financialfood.es/la-doca-rioja-incremento-sus-exportaciones-un-83-durante-2020/>

⁴https://guiacomunicacion.larioja.org/?id_str=8&id_ele=34

⁵<https://www.riojawine.com/en/designation-rioja/rioja-designation-of-origin/>

and large-sized firms of the European Commission (Commission Recommendation, 2003). We checked for nonresponse biases by comparing the answers provided by early and late respondents (Armstrong & Overton, 1977). No statistically significant nonresponse bias was obtained. The variables of data measured included a firm's age and size, the education level of employees, the characteristics of family businesses, export intensity and export destination combined with the level of internationalization, association membership and the size of the social capital (see Tables 1 and 2 for a description of the variables). Given the potential endogeneity between association and survival, we employed the *t*-test to compare the means of both groups—affiliated and nonaffiliated wineries—for characteristics of wineries. No significant differences were found (see Table 3).

The basic model to investigate the association-survival relationship is specified as follows:

$$\text{Survival} = \beta_1 \text{Association} + \beta_2 \text{DOE} + \beta_3 \text{Association} * \text{DOE} + \beta_4 \text{Control_variables} + \epsilon,$$

where Survival is measured by successful firms vs. failed firms in 2020 and ϵ is the error term. The two main explanatory variables are Association and DOE (degree of exporting). Revising previous literature on institutional and resource-based views, we select the variables: Proximity_to_Members, Structural_SC, Cognitive_SC, and Relational_SC (i.e., the three dimensions of social capital) as potential control variables that explain survival.

Factor analysis was applied to know construct validity of each dimension of social capital. Given that the alpha value was more than 0.6 (Hair et al., 2006), the reliability of each construct of social capital was good. The principal component analysis was the technique for extracting components, with varimax (orthogonal) rotation, in accordance with the criteria proposed by Kaiser (components with eigenvalues of over 1 were retained). The Kaiser–Meyer–Ohlin test and Bartlett's test of sphericity were used to measure the sampling adequacy and appropriateness of the factors extracted (Brown, 2006). It turned out that one principal component was selected for further analysis in each dimension of social capital.

TABLE 1 Definition and measurement.

Variable	Measurement
Survival	Dummy with value 1 if the winery does not survive; 0 otherwise
Association	Dummy with value 1 if the winery belongs to an association; 0 otherwise
DOE	Degree of Exporting - a measure that combines the traditional proportion of the foreign sales variable and the dispersion of foreign sales across geographic regions (see a detailed description in Olmos, 2011)
Size	Number of employees
Age	The number of years the firm is active
Human_Resources	The proportion of employees with higher education
R&D_intensity	The proportion of R&D expenditure to sales
Family_TMT_ratio	The proportion of family members in the senior management team
Family_Property_ratio	It is the percentage of the winery's business owned by family members (Chrisman et al., 2007)
Proximity_to_Members	For each winery, the number of other members within the same municipality is counted (Costa-Campi & Viladecans-Marsal, 1999)
Structural_SC	Structural social capital defined with a construct (see Table 2)
Relational_SC	Relational social capital defined with a construct (see Table 2)
Cognitive_SC	Cognitive social capital defined with a construct (see Table 2)

TABLE 2 Factor analysis results-confirmatory factor analyses: Standardized loadings (ML estimations), measure reliabilities.

Name of construct	Items tapping each construct	Mean	Factor loading	Eigen value	Goodness-of-fit
Structural social capital	I conduct relations with many suppliers, clients, and competitors of DOC Rioja.	5.28	0.846	4.676	Determinant of the correlation matrix: 0.002 Bartlett test <i>p</i> : 0.000 KMO: 0.824 Reliability α : 0.892
	I often conduct relations with these suppliers, clients, and competitors.	5.24	0.848		
	Exchanges of resources, information, etc. between organizations we conduct relations with tend to include similar content.	4.67	0.809		
	The contacts we receive advice or information from know each other or any factor that helps us take important business decisions.	4.41	0.828		
	We have new contacts outside of DOC Rioja (clients, suppliers, companies, and institutions) as a result of the companies we know at DOC Rioja.	3.72	0.647		
	The organizations we are in contact with at DOC Rioja are willing to help us establish new contacts outside of DOC Rioja.	3.85	0.606		
	We have developed a network of contacts outside of DOC Rioja on our own account.	5.33	0.503		
	The contacts outside of DOC Rioja are important because they pave the way for forging new and valuable relationships.	4.99	0.676		
	The contacts outside of DOC Rioja are important because they help us anticipate new market trends.	4.53	0.636		
	Relational social capital	A close and personal interaction exists between the members of DOC Rioja that we are in contact with. We maintain close social relations with the contacts we have at DOC Rioja	4.24 4.44	0.762 0.733	

TABLE 2 (Continued)

Name of construct	Items tapping each construct	Mean	Factor loading	Eigen value	Goodness-of-fit
Cognitive social capital	We know that our contacts at DOC Rioja will always try and help us with any problems.	4.13	0.946	3.859	Determinant of the correlation matrix: 0.006 Bartlett test p: 0.000 KMO: 0.842 Reliability α : 0.942
	We can trust our contacts at DOC Rioja	4.21	0.939		
	We can help each other through our contacts at DOC Rioja to make the work easier.	4.17	0.895		
	Relationships with our contacts at DOC Rioja are characterized by a high degree of reciprocity.	4.09	0.884		
	In our relationships with our contacts at DOC Rioja, no member seeks to take advantage of another even if the opportunity arises.	4.04	0.745		
	The culture of our contacts at DOC Rioja is very similar to the situation at our company.	4			
	Our contacts at DOC Rioja share the same values, vision and goals.	3.80	0.858		
	Our company and our contacts at DOC Rioja agree on what is important for our goals to be achieved.	4.05	0.913		
	Our company and our contacts at DOC Rioja agree on how to do our job.	3.89	0.906		
	Business practices and operational mechanisms are very similar between our company and our contacts at DOC Rioja.	3.82	0.869		
The culture of our contacts at DOC Rioja is very similar to the culture at our company.	3.89	0.844			

Note: Agndal et al. (2008); Chetty and Eriksson (2002); Yli-Renko et al. (2001).

TABLE 3 Sample characteristics.

Variable	All wineries (N = 123)	Nonaffiliated wineries (N = 66)	Affiliated wineries (N = 57)	t-test
% ownership by family members	86.21	88.91	83.09	0.1586
Years in business	31.02	35.56	27.09	0.9008
No. of zones exported to	2.03	2	2.12	0.6665
% family members in TMT	80.01	81.63	78.15	0.2902
% employees with higher education	30.25	31.60	28.68	0.2898
Export intensity	27.94	28.11	27.76	0.4748
R&D intensity	1.74	1.80	1.67	0.4516
Firm size (employees)	9.89	8.38	11.65	0.7766

To analyse whether the likelihood of survival can vary by association, degree of exporting, and control variables, we use the analysis of duration (Lancaster, 1990). In this analysis, we defined survival on a dummy variable that indicates 0 whether the winery is still on business (i.e., nonfailure) or 1 whether it has a closed winery license per business (i.e., failure). Failure and nonfailure are the only two events that can occur, and the analysis of duration allows one to estimate the probability that the event “failure” will occur next period. The process observed may have started at different points in time, and, because its length is not constant over time, the random variable length of time is unavoidably censored (Giovannetti et al., 2011). Our sample includes 123 wineries, of them, 12 had exited by 2021. Our sample shows that nearly 5% of the wineries don't survive more than 20 years, and another 5% have an average survival age of 34 years.

As survival time distribution can easily be a left-skewed positive variable, standard regression techniques are inappropriate for analyzing these data (Manjón-Antolín & Arauzo-Carod, 2008). To study lifetime data, one of the most frequently used models is the semi-parametric model called the Cox regression, which requires a proportional hazard condition. However, it is a minimal assumption in comparison with that assumed by parametric models in which the survival time follows a known distribution, directly determining the effect of covariates on survival time. The advantage of using parametric models is the ease of obtaining predictions, although an inadequate parametric model results in an erroneous prediction (Klein & Moeschberger, 2003; Kleinbaum & Klein, 2012).

4 | RESULTS

As we explained in the methodology, the closure or survival of wineries is considered the desired event and the censor, respectively. The number of years between the incorporation and the closure or the censoring of the winery (i.e., the winery survives and it does not know if/when it closes its business) was used to define the event time.

Because of the censoring data, we use the Kaplan-Meier estimator and log-rank test to compare the survival distributions. This test is optimal for testing for the treatment difference, i.e., using proportional hazard regression to examine the association between one or more covariates and time. The log-rank test was used to compare survival times (see Table 4).

After adjustment by significant covariates in the log-rank test, the Cox regression model and parametric models such as Exponential, Weibull, Gompertz, Log Logistic, and Log Normal were used to determine the survival time of wineries.

TABLE 4 Profile of firms.

Association membership				% ownership by family members			Years in business						
	N	%	LR	N	%	LR	N	%	LR				
No	66	53.66	0.009	100% family-owned firms			98	79.67	0.119	1-10	17	13.82	0.701
Yes	57	46.34		Partial family-owned firms			25	20.33		11-20	144	35.77	
Total	123	100		Total	123	100		21-30		31	25.11		
								>30 years		31	25.20		
								Total		123	100		
No of zones exported to				% family members in TMT			% employees with higher education						
	N	%	LR	N	%	LR	N	%	LR				
Not exporting	35	28.46	0.009	0	14	11.38	0.713	0	41	33.33	0.163		
One zone	11	8.94		0 < x ≤ 50	11	8.95		>0%-25%	20	16.26			
Two zones	20	16.26		50 < x ≤ 80	12	9.75		>25%-50%	42	34.15			
Three zones	27	21.95		>80	86	69.92		>50%	20	16.26			
Four or more zones	30	24.39		Total	123	100		Total	100	100			
Total	123	100											
Export intensity				R&D intensity			Firm size (employees)						
	N	%	LR	N	%	LR	N	%	LR				
0	35	28.46	0.779	0	82	66.67	0.622	1-2	47	38.21	0.158		
1-10	18	14.63		<2%	11	8.94		3-5	35	28.46			
10 < x ≤ 30	28	22.76		2 ≤ x < 5	15	12.20		6-10	19	15.45			
30 < x ≤ 50	11	8.94		5 ≤ x < 10	11	8.94		11-15	7	5.59			
>50	31	25.20		≥10	4	3.25		>15	15	12.19			
Total	123	100		Total	123	100		Total	123	100			

Abbreviations: N, number of firms; %, percentage of firms; LR, log-rank test p-value; R&D, research & development.

Table 5 shows the analysis of the Cox regression model and parametric models. It can be seen that the proportional-hazards assumption is supported in the Cox regression model. Based on Table 5, the association, DOE, and the interaction Association × DOE variables were found to be statistically significant by all models.

First, we employed Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) to identify the best models. The worst-fit model according to AIC and BIC values is the Cox regression model. Among the parametric models, Log Logistic and Log Normal were the best models with the lowest AIC and BIC.

Based on the Log Logistic model, where the shape parameter is significant (p-value = 0.018), wineries not affiliated to associations compared with wineries affiliated experienced closure faster, supporting our first hypothesis.

Likewise, one unit increase in the degree of exporting of wineries decreases the time of death.

Also, the interaction variable was significant, although it negatively influences the survival of wineries. Thus, our second hypothesis cannot be corroborated.

TABLE 5 Cox regression and parametric models.

Models variables	Hazard ratio (standard error)		Time ratio (standard error)	
	Cox	Exponential	Weibull	Gompertz
Association	0.035*** (0.037)	0.023*** (0.028)	0.017*** (0.026)	0.027*** (0.034)
DOE	0.214** (0.132)	0.219** (0.149)	0.217** (0.169)	0.220** (0.143)
Association × DOE	8.021*** (5.940)	7.971*** (6.315)	8.113*** (7.142)	7.803*** (5.971)
Proximity_to_members	0.035 (0.078)	0.077 (0.164)	0.061 (0.152)	0.080 (0.165)
Structural_SC	1.043** (0.019)	1.043** (0.020)	1.043* (0.024)	1.043** (0.019)
Relational_SC	0.910** (0.036)	0.907** (0.039)	0.908* (0.045)	0.906** (0.038)
Cognitive_SC	1.005 (0.048)	1.011 (0.054)	1.004 (0.064)	1.011 (0.052)
Ln_α			0.274* (0.152)	
Gamma				-0.004 (0.007)
Lngamma				-0.547** (0.230)
Lnsigma				0.066 (0.189)
Constant		0.020*** (0.029)	0.007*** (0.011)	0.022*** (0.03)
Model fit				3.632*** (0.856)
Log likelihood	-37.314	-32.529	-31.770	-32.457
$p > \chi^2$	0.000	0.000	0.006	0.000
AIC	88.63	81.06	81.54	82.91
BIC	108.31	103.56	106.85	108.22
				104.98
				104.82

Abbreviations: AIC, Akaike Information Criterion; BIC, Bayesian Information Criterion; DOE, degree of exporting.

* p -value < 0.10.

** p -value < 0.05.

*** p -value < 0.01.

5 | DISCUSSION OF RESULTS

Our results would corroborate that associations serve a dual function as Holmes et al. (2018) argued. On the one hand, they provide knowledge, resources, and networks to help members survive in the global wine market, which is a highly competitive market. On the other hand, they collectively coordinate marketing activities to enhance the competitive positions of their members.

Similar to the results obtained by Giovannetti et al. (2011) in their sample of Italian firms, large internationalized wineries in the DOC Rioja are more likely to survive.

This paper supports the idea that the positive effects of association membership depend on the degree of exporting. In particular, this positive effect is smaller the higher the degree of exporting. This emphasizes the complex role of associations, which is necessary to understand in the current global wine market.

Affiliated wineries use the association as a network of useful relationships to seek international opportunities and gain valuable knowledge about foreign markets so that they can learn about new processes, customs, and procedures that are useful in their internationalization process.

To undergo their exporting process, wineries have to acquire adequate knowledge which is difficult to transfer between wineries, being tacit-based and learned through face-to-face interaction. As a result, when affiliated wineries lack direct experience in the new market, they have to rely on other affiliated wineries that have internalized this experience and can pass it on. This could thus explain why affiliated wineries with a lower degree of internationalization benefit more from associations than affiliated wineries with extensive international experience.

Along the same line of argument, all their affiliated wineries benefit from a shared reputation built by the association, but smaller exporting wineries attain greater benefits because they invest less in marketing and high-risk projects in comparison with larger exporting wineries.

Based on the cluster approach, DOC Rioja can be considered a geographical agglomeration of wineries and associations which offer benefits only available in a limited geographical area (Porter, 1998). These benefits may stem from externalities brought on by having more affiliated firms. That is, collocated wineries can benefit from information and knowledge spillovers. However, an agglomeration of affiliated wineries has no significant role in explaining the survival of wineries. This lack of relevance could be explained by the fact that when wineries decide to join an association, they simultaneously reduce their local interactions with nonaffiliated wineries, and as a consequence, affiliated wineries do not share learning derived from the association with neighboring wineries.

By building social capital, previous literature predicts that firms find an opportunity to establish networks that provide them with access to new and relevant knowledge along with new opportunities to compete in the global market (Chetty & Blankenburg Holm, 2000). These networks can be used to obtain business advice, take cultural customs on-board and gain access to experience abroad (Hohenthal et al., 2014; Yli-Renko et al., 2002). Contrary to our expectations, none of the three dimensions of social capital (i.e., structural, cognitive, and relational) contributes significantly to improving a winery's survival and even the effect of the structural dimension is slightly negative. Based on Zahra and George (2002), a possible explanation could be that the ability of wineries to benefit from their bridging ties not only depends on the knowledge they receive from their connections and relationships but also on their own capacity to understand and incorporate this knowledge into their own activities.

6 | CONCLUSIONS, IMPLICATIONS, AND LIMITATIONS

Using a unique dataset on DOC Rioja wineries, we empirically test the hypotheses and find that both association membership and exporting influence survival in a positive way, but that association membership has a negative impact on the export-survival relationship. Our results are robust in various survival distributions.

The findings of this paper have a number of significant implications for both theory and practice. Firstly, with regard to academic research, only a few academic studies on the impact of exporting on the survival of firms have focused on the significance of association membership, and the scant empirical evidence is inconclusive. This study contributes to our understanding of the variations in the export-survival relationship among wineries in the DOC Rioja wine industry and sheds light on why some wineries survive more than others and how some of them benefit more from association membership for their survival. Secondly, this paper confirms the evidence for the claim that more research is needed about the role of associations in the agri-food industry. Thirdly, given that market failure and institutional challenges are not likely to be successfully resolved in the short term, the economic importance of associations in the wine industry is also likely to persist. Therefore, the paper stresses the importance of shifting the focus of research on associations to understand more about how, why, and when association membership improves the performance of wineries and adds economic value to the regional economy.

An analysis of the DOC Rioja wine industry can have important managerial and policy implications for other agri-food industries that might experience similar contexts to business associations. For winery managers, discovering that the degree of internationalization significantly affects the survival of wineries suggests that wineries should strategically engage in export activity and expand into foreign markets to improve their chances of survival. International diversification offers a way for DOC Rioja wineries to upgrade. The international diversification strategy of a winery needs to be run in tandem with their decision to join an association. This study highlights the advantages and disadvantages associated with membership. Joining an association is a successful driver for surviving in the wine market, but it could be a liability if wineries want to become export-driven survivors.

These results, though promising, have limitations with respect to the general nature of the findings. Firstly, the empirical study was only conducted once, in one sector, and in one denomination. So, in the future, a longitudinal approach applied to different sectors and regional contexts would be more suitable. Secondly, the problem of reverse causality between association membership and a firm's survival is mitigated in our study, as we obtained insignificant differences among affiliated and nonaffiliated winery groups. Despite this, we recognize that we may not have completely ruled out this problem. Thirdly, the empirical analyses are based on a sample ending in 2020, the year of economic shock stemming from COVID-19, which has affected wine consumer practices, the world wine stock, and the digitalization of the wine industry. Thus, it can be expected that it has also affected exports and association membership. We leave it in our future research agenda with the use of different databases.

ACKNOWLEDGMENTS

This research was supported by the grants PID2020-113338RB-I00 and PID2021-123154NB-I00 funded by MCIN/AEI/10.13039/501100011033 and "ERDF A way of making Europe"; by the COMPETE (S52_23R) and CREVALOR (S42_23R) research groups funded by Government of Aragón (Spain) and ERDF and by the VINCI project SOE3/P2/F0917.

CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest to declare.

DATA AVAILABILITY STATEMENT

Research data are not shared. Due to privacy concerns, the data cannot be made available.

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PEER REVIEW

The peer review history for this article is available at <https://www.webofscience.com/api/gateway/wos/peer-review/10.1002/agr.21830>.

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How to cite this article: Fernández-Olmos, M., Gargallo-Castel, A. F., & Wang, R. (2023). The effects of business associations in the export–survival relationship: An application to the DOC Rioja wine industry. *Agribusiness*, 1–15. <https://doi.org/10.1002/agr.21830>