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Family Firm Heterogeneity and Its Effect on Strategy. The Case of the Spanish Wine Sector

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Abstract This research aims to cover some of the existing gap in the strategy of family firms literature, taking into account the heterogeneity of these kinds of firms. We use a logit regression methodology in order to analyse the relationship between the strategy selected by the family firm and its performance, and whether differences exist, depending on the degree of family involvement in the firm. In order to test our hypothesis, we use a sample of Spanish firms from the wine sector. Our results show that Porter's cost strategy is positively related to performance for all type of family firms, and that a Miles' analyser strategy is positively related to performance in family firms, although the effect of this strategy loses its impact as the degree of involvement of the family in the firm increases. It has also been shown that Miles' reactive strategy, in family firms with more than fifty per cent of family involvement, negatively influences performance. In short, the results show that the strategy chosen by the family firm depends on the degree of property owned by the family.

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PALABRAS CLAVE
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Heterogeneidad de la empresa familiar y su efecto en la estrategia. El caso del sector vitivinícola español

Resumen El objetivo de la investigación es cubrir alguno de los gaps existentes en la literatura sobre la estragia de las empresas familiares, teniendo en cuenta la heterogeneidad de dichas empresas. Se utiliza un análisis logit para analizar la relación entre la estrategia seleccionada por la empresa familiar y sus resultados, y si existen diferencias dependiendo del grado de implicación de la familia en la empresa. Para testar nuestras hipótesis se utiliza una muestra de empresas vitivinícolas españolas. Nuestros resultados muestran que la estrategia en costes de Porter está positivamente relacionada con el performance para todo tipo de empresas familiares, al igual que la estrategia analizadora de Miles, aunque el efecto de esta estrategia pierde su impacto cuando aumenta la implicación de la familia en la empresa. También se muestra que la estrategia reactiva de Miles, en las empresas familiares con más de un cincuenta por ciento de implicación de la familia, influencia negativamente el performance. En resumen, los resultados muestran que la estrategia seleccionada por la empresa familiar depende de la proporción de propiedad poseída por la familia.

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1. Introduction

Research into different aspects of family firms shows contradictory results. The most commonly used theoretical frameworks for the study of the family firm are the Agency Theory, the Resource-Based View (RBV), the Stewardship Theory (Mitter *et al.*, 2014) and the Socioemotional Wealth Theory (SEW) (Gómez-Mejía *et al.*, 2007). The fact that there is not a common definition of what a family firm is, leads to contradictory results, as well as the fact that the studies are carried out using samples of firms from different countries and sectors. This makes it difficult to compare the different results obtained, as the factors affecting those firms could be different between countries and sectors, and this might make the decision-making process different for the different firms (Alkaabi & Dixon, 2014; Martinsons *et al.*, 2017).

Traditionally, the literature has studied the differences in behavior between family and non-family businesses (FB and NFB), and sometimes no differences have been found. This leads us to consider that the differences might not only be between family and non-family firms, but between different types of FBs. In consequence, lately, some studies are analysing the heterogeneity of FBs and how this affects their decisions, although more research is needed in this direction (Comino-Jurado *et al.*, 2021; De Massis *et al.*, 2018). This paper tries to fill some parts of the existing gap in analysing the heterogeneity of FBs and how this affects their chosen strategy, depending on the degree of family involvement.

We will consider a sample of Spanish wineries. We have selected these kinds of firms because the wine sector has unique characteristics and the Spanish wine sector has some properties that make it especially interesting (Ferrer *et al.*, 2020). The wine industry is firmly rooted in Mediterranean traditions, including Spain, where it accounts for a large part of agricultural production. Spain is the country with the largest surface area of vineyards in the world, 966 kha in 2019, which accounted for 13.1% of the world's surface (OIV, 2020). It is the world's third producer (37.3 million of hectoliters in 2020), and wine represents 2.2% of the Spanish gross added value. The wine industry also helps to fix population in rural areas, where there is an important depopulation process, generating 427,700 jobs (2.4% of total jobs in Spain) (http://www.fev.es/sector-cifras/). But as production stabilizes in the world (around 292 million hectoliters in 2018), there is a reduction in consumption in Spain that has gone from 14 million hectoliters in the year 2000 to 10.5 million hectoliters in 2018 (OIV, 2019), leading the sector to a considerable increase in foreign trade and competitiveness between companies. Wineries have to export around 70% of this production (Serrano *et al.*, 2018). In Spain there are almost 4,300 wineries (http://www.fev.es/sector-cifras/), more than 97.6% of these firms are small (Ferrer-Lorenzo, 2018), and 60% are FB (Soler *et al.*, 2017). In this environment of great competitiveness, all companies must improve their governance and management to be able to endure, including those FB that develop their activity in the wine sector. It is important to point out that the wine sector is especially prone to the FB, which is why the wine business has a close relationship with tradition, culture, values, and property (Gallucci *et al.*, 2015).

The objetive of this study is to determine which are the strategies adopted by wine companies in Spain, and whether there are differences between family firms depending on the degree of involvement of the family in the business.

In order to answer this question, a study has been conducted among 339 wine companies in the sector, where 168 are considered FB, with different degrees of involvement of a family, in terms of percentage of shares in their capital. The resources and capabilities of these firms, their strategies and their results have been studied, taking into account both the market and their financial performance.

This article is organized as follows. The following section analyzes a review of the literature and proposes the hypotheses. Section 3 includes the description of the sample and the methodology. Finally, section 4 discusses the results, and section 5 shows the discussion, conclusions and limits of the study.

2. Literature Review and Hypothesis

2.1. Strategy

Since the emergence of the use of the concept strategy in the business arena with Von Neuman and Morgensten (1945) linked with the Theory of Games (Ansoff, 1965), different authors have tried to develop a theory of strategy from different points of view. Ansoff (1965) considers that strategic decisions have more to do with the external problems of the business rather than with the internal ones. In turn, these decisions consist of the adaptation of the firm to the environment in order to decide which products to produce and which markets to serve. During the 80s, Porter wrote two books about business strategy, "Competitive Strategy" (1980) and "Competitive Advantage" (1985), where he proposes an Industrial Organization approach to argue that the element which drives the firm to competitive advantage is its environment. In 1998, Mintzberg, Ahlstrand

and Lampel published their book "Strategic Safari", defending the existence of ten different schools of strategic thought, with different visions of the concept of strategy. Due to Mintzberg's criticism of Porter's approach, the latter published a new book in 1996, "What is strategy?". Here, he reconfigured his previous proposal and defended that strategy is doing things differently to rivals or doing similar things in a different way. In the 90s, the concept of strategy was included in the resources and capabilities approach. In that decade, the main business strategy was innovation. In the first decade of the 21st century, the attention moves to business models, which include strategy in its definition, and in the second decade the focus shifts to the idea of changing from sustainable competitive advantage to transitory sustainable advantage (Planellas, 2017).

In this article we consider two important Schools of thought in the literature from those different approaches that have studied the strategy of the firms: Miles *et al.* (1978) and Porter (1980, 1985). The first is less static than the second, since it is more adapted to business reality and its environment (Mintzberg, 2009). It has been used by several authors for the analysis of business strategy (Akman *et al.*, 2015; Camisón *et al.*, 2007; Lin *et al.*, 2014; Walker, 2013). In the wine sector, Duquesnois *et al.* (2014) and Ferrer *et al.* (2019) studied the production strategies in the French and Spanish wine sector, respectively, using the Miles and Snow typology.

Miles *et al.* (1978) try to solve three "big" problems of organizational adaptation (entrepreneurial, engineering, and administrative problems). They developed a general model called "adaptative cycle" (Ferrer-Lorenzo *et al.*, 2018), which considers that firms, in order to face this cycle, follow three different success strategies. These lead them to be defenders, analyzers, prospectors or reactors. Each typology has its own strategy to be connected with the market and generates a particular configuration, structure and process consistent with the marketing strategy. The fourth is considered a failure to adapt to organizational problems (Ferrer-Lorenzo *et al.*, 2018).

Porter´s (1985) model is based on the characteristics of the industry in which the firm operates and considers that the decision about the company's position in the industry determines the competitive strategy of the firm. He differentiates two generic strategies which can lead the firm to achieve a competitive advantage: cost leadership and differentiation. The company must choose whether to use these strategies for the entire market or for a certain segment of the market, so this is a third strategy. The firm will achieve a competitive advantage if it is able to find a position from which it can defend itself against five industry forces. These are the intensity of the rivalry between actual competitors, threat of substitute products, threat of new competitors, and the negotiation power of both customers and suppliers.

Porter's model is the most widely used approach (Brenes *et al.*, 2014; Ruiz Ortega, 2010; Spanos & Lioukas, 2001) but it has been criticized due, mainly, to the difficulty in recognizing intermediate situations (Capbell-Hunt, 2000; Gilbert & Strebel, 1988). Newton *et al.* (2015) used Porter's strategies in their study of the wine industry and found that SMEs tend to be more proactive and develop new products and markets more easily, focusing on differentiation (Ferrer-Lorenzo *et al.*, 2018).

2.2. Family business and strategy

Family businesses possess a number of resources and capabilities, as well as characteristics, which make them unique and different from NFB. This is due to the influence of the family in the business (Acquaah, 2013; Hoffman *et al.*, 2006). Some of the characteristics which differentiate FB from NFB are its long-term oritentation, strong internal spirit, higher personal commitment to the firm, ease to transmit and accumulate specific knowledge, possibility to establish internal control systems and to have a "family language" which allows them to communicate more efficiently and exchange information with more privacy. They try not to get external financing but to reinvest profits, so that the FB supports a lower level of debt than NFB, although this makes it more difficult for them to grow. FB take decisions more rapidly than NFB, they have a higher level of commitment to quality, as the name of the family is in the brand. They also have a strong relationship with suppliers, with other external stakeholders and with employees (Abella, 2007; Daily & Dollinger, 1993; Habbershon & Williams, 1999; Miller *et al.*, 2009; Salas & Galve, 2003; Tagiuri & Davis, 1996). All these characteristics determine that the strategic orientation, strategies implemented by these kinds of firms and in fact, the whole strategic management process, are different from those developed by NFB (Astrachan, 2010; Chrisman *et al.*, 2005; Harris *et al.*, 1994; Ward, 1988). This is due to the influence of the family in the business (Moores, 2009; Ward, 1988) and the impossibility of separating strategy from the family objectives, meaning that FB strategies are, in the long run, more unified and committed to achieving them (Habbershon & Williams, 1999). But the empiral research that compares FB and NFB strategies throw up contradictory results. Some authors such as Ward

(1997), Donckels and Frölich (1991), Daily and Dollinger (1993), Gudmundson *et al.* (1999), consider that the processes of strategic planning, and the resulting strategies, significantly vary among FB and NFB. However, other authors find no significant differences between the strategies of FB and NFB (Daily & Thompson, 1994; Sharma *et al.*, 1997; Westhead, 1997).

FB have mainly been studied from the point of view of the RBV, Agency Theory and Stewardship Theory (Mitter *et al.*, 2014), as well as from the SEW (Gómez-Mejía *et al.*, 2007).

The RBV considers the FB as an entity that has differential resources inherent to its condition, such as human capital, social capital, capital survival, patient capital and governance structure. This may have a positive or negative impact on its performance and its competitive advantage (Diéguez-Soto *et al.*, 2015; Dyer, 2006; Mazzi, 2011).

The agency costs due to the separation between ownership and control, lead to controversy in the studies about FB. Some researchers consider that these costs are smaller for FB, due to the coincidence of property and management in the same family, which facilitates the coincidence of objectives and flexibility (Agyapong & Boamah, 2013; Dyer, 2006; Zahra, 2005). But others consider that "altruistic" or "particularism" attitudes of managers focused on interests cause agency costs (Dyer, 2006; Mazzi, 2011) or even due to the maintenance of incompetent managers (Diéguez-Soto *et al.*, 2015; Gómez-Mejía *et al.*, 2011). Some argue that these agency costs can also occur between groups of proprietary partners, curtailing the rights of those who do not have access to management because they are in the hands of the majority family (Dyer, 2006; Mazzi, 2011).

The third approach, the stewardship theory (Corbetta & Salvato, 2004), considers that family management sometimes minimizes the search for business profit and the immediate return for its shareholders, and focuses on other objectives, such as ensuring the longevity of the business, the relationship of trust and loyalty with the workers, and the relationship of trust with the shareholders (Craig & Dibrell, 2006; Mazzi, 2011). The Stewadrship theory can be seen as an element of paternalistic leadership, fundamentally linked to the founder of the FB. For many authors, this favors the competitive situation of the company, by strengthening the sense of belonging of workers and property (Corbetta & Salvato, 2004; Craig & Dibrell, 2006; Diéguez-Soto *et al.*, 2015). In the FB, sometimes the factor "blood relationship" creates value and it is a limitation to the chosen options, which do not take place in NFB (Dyer, 2006). At the same time, the inclusion of second or third generations in the firm often damages the initial family harmony, transforming the management of the firm into a complicate environment and with legendary confrontations (Dyer, 2006). Several authors have brought to light how the performance of the company decreases when the founder is no longer in the firm (Dyer, 2006; Villalonga & Amit, 2006).

However, the family factor contributes some elements of belonging to a group that do not exist in the NFB. These include the feeling that in the product offered to the client a part of the family culture and of the pride of being part of something, is transmitted to the company, along with behaviors and strategies closer to the differentiation and reinforcement of the brand, often linked to family surnames (Bresciani *et al.*, 2016). There is some pride and offense in the choice and rejection of the option presented, an element that barely exists in NFB. That is why the FB brings very positive elements to business management such as, for example, belonging, pride in a brand, tradition, or cultural features (Dyer, 2006). But on the other hand, the family business also brings negative elements, such as the lack of equanimity, tribal defense, or the need to satisfy family political interests, often away from business management (Dyer, 2006).

Finally, the SEW approach (Gómez-Mejía *et al.*, 2007), considers the family as the decision-making unit in family businesses (Newbert & Craig, 2017). It pays attention to non-monetary rewards such as emotional connections, which can lead to not hiring outside talent but rather family members for top management positions (Lin & Wang, 2021), in order to maintain the control of the business in the family's hands, although it could lead to lower profitability or higher risk (Gómez-Mejía *et al.*, 2007; Molly *et al.*, 2019). This behavior will limit the resources and capabilities of the family firm (Li & Wang, 2021) but will explain why FB are unique and behave differently from non-family ones (Comino-Jurado *et al.*, 2021).

Despite the important number of studies that have analysed how the family influences strategy, few of them have compared the different typologies of strategies used in FB and NFB and which are more successful. Some examples are Tanewski *et al.* (2003), Madison *et al.* (2014) or Gudmundson *et al.* (1999). Studying the differences between FB and NFB in terms of strategic typology and discovering whether they have the same or different relations to performance, is therefore an area of study.

Previous studies show that, for example, FB tend not to develop international ventures as much as NFB, and this has a negative effect on their performance. However, whereas the fact that they also use a diversification strategy less than

NFB and use less debt, gives them advantages in terms of profit-enhancing (van Essen *et al.*, 2015). The lack of resources in the FB allows them to develop a culture and operating routines which are difficult to imitate (van Essen *et al.*, 2015). In fact, the FB´s diversification strategy lies in growing around personal interests and competencies instead of doing it in businesses which are beyond the knowledge of the family (Carney, 2005; and Gómez-Mejía *et al.*, 2011).

FB seem to prefer product differentiation strategies. These allow for higher selling prices for given costs, as a result of the innovation, which FB seem to practice with better results than NFB. They also diversify markets and sales as a way to reduce risks and to take advantage of market niches with the advantage generated by their higher flexibility and capacity of adaptation (Abella, 2007).

Strategy theory considers that possessing unique resources and capabilities allows the firm to achieve strategic distinctiveness and advantage (Miller *et al.*, 2018; Porter, 1996). This could lead us to suggest that if FB are capable of differentiating thanks to their unique characteristics, they will be able to achieve a competitive advantage. "The FB literature highlights the distinctiveness of family firms and their strategies" (Miller *et al.*, 2013, p. 194), they can develop long-run projects, as they are not restricted by the interests of non-family shareholders (Arregle *et al.*, 2007; Habbershon & Williams, 1999).

The strategic process within the company leads to the definition of objectives, which mark which products to serve and in which markets (Ansoff, 1965; Brenes *et al.*, 2014). The analysis ofthe strategy can be analyzed on the one hand, from the characteristics that surround the company and the choice of a position in the market in search of competitive advantage (Porter, 1980, 1985). In this way, strategy is influenced by stakeholders, who supply the company with resources, and the strategy must make both elements compatible (Miller *et al.*, 2018). And on the other hand, it can also be analyzed from the strategic decisions defined after the analysis of the internal characteristics of the company, the resources and differentiating capacities (Barney, 1991; Besanko *et al.*, 2009).

Porter's typology (1980) establishes three generic strategies: differentiation, costs and segmentation. Miles and Snow (1978) propose a configurative typology, which reflects not so much the position of the company but how it reaches its objectives and defines three success strategies: prospective, analytical and defensive, and one of failure: the reactive strategy.

Both ways of analyzing the strategy have been used within the framework of the FB, sometimes comparing it with the NFB. They are found to be more explicit in their differences in the theoretical approach than in the empirical conclusions. For example, Agyapong and Bohama (2013) conclude that both cost leadership and differentiation, enhance the performance of family hotel businesses in Ghana, with strategic leadership moderating their influences.

Some authors have pointed out that the family business presents a greater orientation towards innovation and brand prestige, as the name of the company is associated with that of the family clan, especially in the wine industry (Gallucci *et al.*, 2015; Gudmunson *et al.*, 2003; Woodfild & Husted, 2017). Porter's differentiation orientation is linked to innovation and designing new products with new possibilities. In this respect, some authors value the best position of the FB, due to its lower agency costs and its governance system, due to their image and reputation (Fuentes-Lombardo *et al.*, 2008; Mazzi, 2011; Miller & Le Breton-Miller, 2005; Miller *et al.*, 2009; Sirmon *et al.*, 2008). However, others estimate that nepotism makes the differentiation-innovation strategy difficult, due to the fact that nepotism hinders the carrying out of controls or systems to ensure quality and that risk aversion hinders innovation strategic positions (Gómez-Mejía *et al.*, 2007; Tanewski *et al.*, 2003). And finally, others assume that there is no difference between the two, with the difference lying in the way that both implement strategies and that it is not their choice (McCann *et al.*, 2001).

But although the literature has shown differences in the behavior and strategy adopted by FB and NFB, empirical work has not always found these differences. This might mean that different types of FBs must behave differently, so that the difference might be seen not only between FB and NFB, but among different types of FBs. This leads researchers to analyse the heterogeneity of FBs in terms of family involvement, and how this affects their decisions (Comino-Jurado *et al.*, 2021; De Massis *et al.*, 2018).

Based on Porter's strategies and the idea that the family influences the strategy of the firm (e.g., Miller *et al.*, 2013), we consider that the degree of involvement will have an effect on strategic decisions. Therefore, these lead us to propose the following hypotheses:

***Hypothesis 1**. The degree of family involvement (participation) will determine the strategy chosen by the firm (cost or differentiation), with both being valid to achieve business performance.*

The Miles and Snow typology (1978) does not focus on what the goals of the organization are,

but rather gives more importance to how the firm achieves them and differentiates between three strategies related to success: prospective, analytical, and defensive.

In the environment of the FB, different studies have been carried out on the configurative typology of Miles and Snow, which have thrown up different conclusions. On the one hand, some studies have found no difference between the different types of strategy among FB and NFB (Gudmundson *et al.*, 1999; Lindow *et al.*, 2010; McCann *et al.*, 2001). On the other hand, there are studies which find differences among the two groups of firms, but the results obtained vary among them. For example, whereas Daily and Dollinger (1993) found that FB are defenders and NFB are more likely to be reactors; McCann *et al.* (2001) found, for a sample of Washington state FBs, that 80% of them were grouped into two of the four typologies, prospectors and defenders.

As we have proposed in Hypothesis 1, we consider that Miles and Snow's strategies will also be affected by FB heterogeneity, so that FB might choose different strategies depending on the involvement of the family in the firm. So that the difference lies not only in whether the firm is a FB or a NFB, but also on the type of FB. Therefore, we propose the following hypothesis:

Hypothesis 2. *There is going to be a difference when choosing a prospective, analytical, or defensive strategy, depending on the degree of family participation, with the three of them being valid to achieve competitive advantage*.

As we have argued before, the research on FB has usually been based on the differences between FBs and NFBs (Chua *et al.*, 1999; Nordqvist *et al.*, 2014), but as the results obtained show contradictory results, some authors have pointed out that the reason for this might be the fact that not all FBs are the same, and also that differences might be due to the industry in which the firm develops its activity. This has led researchers, in recent years, to analyse the heterogeneity of FBs (Astrachan *et al.*, 2002; De Massis *et al.*, 2014; Hernández-Linares *et al.*, 2017). We have already argued that this might lead different types of FB to choose different strategies (Porter and Miles and Snow's), but now we would like to point out that this heterogeneity could be responsible for the different performance in different types of FB. In fact, the results from different studies show that a different level of family involvement leads to different results (Arregle *et al.*, 2017; Pacheco, 2017), as well as the sector under analysis (Alkaaby & Dixon, 2014). Therefore, in order to help to fill the gap in this area of study, the following hypothesis is proposed:

Hypothesis 3. *The degree of involvement of the family in the firm has an effect on the relationship between the strategy implemented and business performance*.

And analyzing a sample of firms in the wine sector will also contribute to filling the gap in understanding the behavior of FBs in different industries.

3. Methodology

3.1. Sample

The definition of the universe of companies operating in the wine sector in Spain has been created by means of two databases. The first is the registres of the different protected designations of origin (DOP). The second is the database of the Analysis System of Iberian Balances (SABI), taking those companies that are registered and active in 2015, under title 11.02 of the CNAE (National Classification of Economic Activities) corresponding to "Wine Companies". The final universe was made up of 3,286 entities. Following previous studies (Spanos & Lioukas, 2001), lost data were eliminated, those companies that did not have a valid telephone number or email address. Companies without a firm structure, which existed only as a subsidiary of another wine company, were also eliminated.

In this study, the FB that declares to have a shareholding in a family, regardless of the percentage of ownership that it has (Lindow *et al.*, 2010; Maury, 2006) will be considered as a FB. It is the objective of this study to determine how business competitiveness is modified as the degree of involvement of the family in the ownership of the company varies. This type of orientation is in line with the work of Panikos *et al.* (2015), Gallucci and Amato (2013) and Arosa *et al.* (2009), who demonstrate the lack of a linear relationship between the increase in family ownership and performance.

As a result of this process, the universe of independent companies was reduced to 2,413. The survey was sent by email to general managers, marketing managers and/or production managers with a telephone reminder a month later. At the end of the process, a total of 339 valid responses were received, representing 14% of the total sample, which has been considered a valid percentage for industrial sectors, according to Baruch and Holtom (2008). These data represent

a confidence level of 95% and a sampling error of 4.9%.

Table 1 reports how the total of the sample fits the classification according to the size of the sector that are available in the SABI database. Family Business companies have a smaller number of employees than non-Family Business.

Table 2 presents the volume of wine produced by the wineries that have answered the survey and is referenced in the national total. In the same table, it can be seen that the wineries that have participated in the study contribute to 17.4 % of the total wine produced in Spain, and we show the data for family and non-family business.

FB produced less wine than NFBs.The contribution of FB in the production of wine with respect to the total, according to the data of this study, is around 28%. Regarding bottled wine and referenced to the sample data, FBs accounted for 66.5% of the bottled wine, as can be seen in Table 3. This shows a different situation of the FB in the value chain, closer to consumer, and with an important role in the commercialization of the wine more than in its elaboration.

3.2. Variables

The survey was configured after an extensive review of the literature. The questions and scales

Table 1. Wineries in Spain, according to the number of employees and their percentages, compared to the wineries in the sample between family business and non-family business

Source and type of company		Micro firms (<10 employees)	Small enterprises (10-49 employees)	Medium enterprises (50-249 employees)	SMEs	Larger than 250 employees	Total
SABI data		83.2%	14.5%	0.61	99.8%	0.2%	100.0%
Sample data	Family business	79.9%	19.5%	0.6%	100.0%	0.0%	100.0%
	Non-family business	80.0%	17.1%	2.9%	100.0%	0.0%	100.0%
	Total sample	79.9%	18.5%	1.6%	100.0%	0.0%	100.0%

Source: own elaboration

Table 2. Volume of wine produced for the wineries in the sample

Sample and volume produced		Responses	Volume in thousands of liters	Percentage
Responses about family business and volume	Family business	152	106,184	27.7%
	Non-family business	98	277,266	72.3%
	Total responses	250	383,450	100.0%
Responses about volume but not family business		55	275,156	
Total responses about volumen*		305	658,606	
Volume produced in Spain in 2015 (OEMV, 2016)			3,777,000	
Percentage of total volume of wine produced by wineries that participated in the study				17.4%

Source: own data and OEMV (2016).* 34 wineries have not answered the question in the survey about volume produced, which is the reason why the number of responses is 305 and not 339

Table 3. Bottle volume according to the study sample (family business and no family business)

Sample and bottle volume		Responses	Volume in thousands of liters.	Percentage
Responses about tamily business and bottle volume	Family business	152	56,877	66.5%
	Nonfamily business	100	28,629	33.5%
	Total responses	252	85,506	100.0%
Responses about bottle volume and not family business		58	55,371	

Source: own elaboration

used have been validated in previous studies, focusing on resources and capabilities, business strategy and performance, and are the source of the research. In addition, to justify its application to the Spanish wine sector, a subsequent validation of the survey was carried out among entities, experts and managers related to the Spanish wine sector. The objective was to ensure that the survey was understandable and that it reflected the peculiarities of the industry. The elements that have been considered are presented below.

3.2.1. Dependent variable

Business performance is analyzed following Ferrer-Lorenzo, Abella-Garcés and Maza-Rubio (2017) and Spanos and Lioukas (2001), assessing two dimensions, market and financial performance, and referring to the last three years of the firm's activity. The first dimension shows the external performance of the company, evaluated by its behavior in the market through four items: the volume of sales in euros, the growth of sales volume in euros, the market share in percentage of sales in euros and the growth of market share over sales in euros. The second dimension reflects the internal performance of the company, the income generated in its economic activity (Spanos & Lioukas, 2001), through three items: profit margin, return on own capital, and net profit. On a 5-point Likert scale, the interviewees evaluate the position of their companies with respect to the competition. The vaules of the scale are between 1 to 5, where 1 means that the position of the company with respect to its competitors is "well below average"; 2 "below average"; 3 "average"; 4 "above average" and 5 "well above average". In this study, authors have used subjective scales to determine business performance. Accounting data can be subject to annual variability and may include extraordinary results and movements outside the main activity of the company. Thus, several studies confirm the confluence between subjective and objective scales (Dess & Davis, 1984; Richard *et al.*, 2009; Santos & Brito, 2012) being used in numerous empirical studies (Ferrer-Lorenzo *et al.*, 2018; Ruiz Ortega, 2010; Spanos & Lioukas, 2001).

3.2.2. Independent variables

The evaluation of the business strategy has been carried out using both the Snow and Hrebiniak (1980), method of the paragraph, identifying the typology of Miles and Snow (1978); and Porter's typology of competitive strategies.

In the Miles *et al.* (1978) method, company managers mark which of the four typologies best suits their reality (Cabello-Medina *et al.*, 2000; Camisón *et al.*, 2007; Lin et *al.*, 2014). Table 4 shows the development of the paragraph method for each strategic identification.

Table 4. Measure of strategy type

Strategy	Defining paragraph
Prospector	This type of organization typically operates within a broad product-market domain that undergoes periodic redefinition. The organization values being "first in" in new product and market areas even if not all of these efforts prove to be highly profitable. The organization responds rapidly to early signals concerning areas of opportunity, and these responses often lead to a new round of competitive actions. However, this type of organization may not maintain market strength in all of the areas it enters.
Analyzer	This type of organization attempts to maintain a stable, limited line of products or services, while at the same time moving out quickly to follow a carefully selected set of the more promising new developments in the industry. The organization is seldom "first in" with new products or services. However, by carefully monitoring the actions of major competitors in areas compatible with its stable product market base, the organization can frequently be "second in" with a more cost-efficient product or service.
Defender	This type of organization attempts to locate and maintain a secure niche in a relatively stable product or service area. The organization tends to offer a more limited range of products or services than its competitors, and it tries to protect its domain by offering higher quality, superior service, lower prices, and so forth. Often this type of organization is not at the forefront of developments in the industry. It tends to ignore industry changes that have no direct influence on current areas of operation and concentrates instead on doing the best job possible in a limited area.
Reactor	This type of organization does not appear to have a consistent product-market orientation. The organization is usually not as aggressive in maintaining established products and markets as some of its competitors, nor is it willing to take as many risks as other competitors. Rather, the organization responds in those areas where it is forced to by environmental pressures.

Source: Snow and Hrebiniak (1980)

In order to analize Porter's typology, we use one of the most commonly used models, which try to capture the typology of business strategy: the scale proposed by Robinson and Pearce (1988), and used by Ruiz Ortega (2010), Camisón *et al.* (2007), Simon and Marqués (2005) and Spanos and Lioukas (2001), among others. The scale, developed in 1988, aims to expand the generic strategies of Porter (1980) by facilitating their characterization in the empirical terms of business studies. With the sample under study, we have extracted five components: efficiency, marketing, innovation and development of new products, costs and segmentation. As a whole, these explain 60.66 % of the variance. The results of the different reliability statistics show values within the limits of acceptability, Cronbach's alpha = 0.875 and KMO = 0.862, as Table 5 illustrates.

Table 5. Factor analysis. Strategy of the firm

Variables	Alpha without item	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Comp. 5	Communality
Extremely strict product quality control procedures	0.870	0.704	0.059	0.100	- 0.243	0.136	0.587
Specific efforts to ensure a pool of highly trained experienced personnel	0.866	0.665	0.278	0.207	- 0.023	- 0.005	0.562
Continuing, overriding concern for lowest cost per unit	0.871	0.649	0.062	0.132	0.323	- 0.048	0.549
Major effort to insure availability of raw materials	0.870	0.643	0.254	- 0.071	0.113	0.025	0.496
Extensive customer service capabilities	0.871	0.565	0.015	0.368	- 0.149	- 0.043	0.479
Maintaining high inventory levels (disregard the derivative of the aging of the product)	0.870	0.535	0.189	0.007	0.250	0.260	0.452
Concerted effort to build reputation within industry	0.865	0.518	0.240	0.384	- 0.269	0.293	0.632
Building brand identification	0.867	0.489	0.400	0.236	- 0.233	0.106	0.521
Developing and refining existing products	0.867	0.474	0.207	0.322	- 0.210	0.306	0.510
Promotion advertising expenditures above the industry average	0.869	- 0.012	0.826	0.148	0.158	0.043	0.732
Major expenditure on production process oriented R&D	0.865	0.281	0.766	0.063	0.092	0.130	0.695
Innovation in marketing techniques and methods.	0.866	0.204	0.742	0.226	- 0.058	0.015	0.647
Strong influence over distribution channels	0.865	0.299	0.659	0.223	0.129	0.057	0.593
Innovation in manufacturing process	0.864	0.385	0.443	0.341	0.005	0.253	0.525
New product development	0.868	0.164	0.241	0.790	0.127	- 0.093	0.733
Broad product range	0.870	0.207	0.240	0.727	0.262	- 0.273	0.772
Emphasis on the manufacturing of speciality products	0.869	0.139	0.200	0.680	- 0.209	0.247	0.627
Products in higher priced market segments	0.872	0.143	0.196	0.471	- 0.438	0.404	0.635
Pricing below competitors	0.882	- 0.075	0.105	0.060	0.796	0.129	0.670

Variables	Alpha without item	Comp. 1	Comp. 2	Comp. 3	Comp. 4	Comp. 5	Communality
Products in lower priced market segments	0.879	0.072	0.125	- 0.023	0.786	0.086	0.647
Narrow, limited range of products	0.879	0.203	0.027	- 0.249	0.056	0.773	0.705
Only serve specific geographic markets	0.876	- 0.009	0.106	0.158	0.177	0.715	0.579
Eigen value		6.767	2.275	1.783	1.419	1.103	
% Explained variance		30.758	10.339	8.107	6.448	5.013	
Cronbach's alpha of whole scale		0.875					
% Total explained variance		60.663					
K.M.O.		0.862					
Bartlett Test							
x^2		2557.814					
Gl		231					
Significance		0.000					

Source: Own elaboration

Cost strategy. Nine indicators of the twenty-two defined by Robinson and Pearce (1988) are part of this first extracted component and explain 30.76 % of the variance. This component encompasses the factors that lead the company to take extreme care with the products offered to the customer and ensure implementation of efficient processes.

Marketing strategy. In this second component, we cite five test indicators that explain 10.34 % of the variance. In these areas, business executives demonstrate their concern for and inclination towards the control of different marketing techniques, as a strategy to achieve their business goals.

Differentation strategy. This extracted component explains 8.10 % of the variance and consists of four test indicators: development of new products, a wide range of products, emphasis on special products and high price segment products.

Low price strategy. This factor can be extracted via two indicators with a total explained variance of 6.45 %. This indicates a clear orientation toward offering products of lesser perceived benefit, with a lower price relative to competitors.

Segmentation strategy. This component refers to those companies that choose to compete through a strategy of targeting very few products to a very specific market segment and are more oriented towards high prices. The total variance explained in this case is 5.01 %.

3.2.3 Control variables

Numerous studies refer to the influence that elements such as the size of the company can have on performance. For this reason, the majority of the studies incorporate control variables that help to understand business performance (Ruiz Ortega, 2010; Rubio-Bañón & Aragón-Sánchez, 2002). In this study, we measured company size in terms of assets with seven categories with values ranging from less than 400 thousand euros to more than 20 million euros.

3.3. Model

In order to analyze the business decisions explaining business performance, a logistic regression model has been used, where the dependent variable (Y) is a categorical variable (dummy) that indicates the achievement or not of a positive performance by the firm, which will be explained by the independent variables (Xi). The coefficients of the independent variables (ßi) will determine the relationship among the independent and the dependent variables, and its sign, estimating together the probability of the event (Y = 1) (Hoetker, 2007). In our case, Y = 1 refers to obtaining a positive business result, better or much better than competitors. The independent variables are those related to strategies. To measure strategy, seven variables have been used. Two of them refer to Porter's Model: Porter Cost Strategy (Pcs) and Porter Differentiation Strategy (Pds). Another four refer to the Miles and Snow strategy model: prospective strategy (Sp), analyzer strategy (Sa), defender strategy (Sd), and reactive strategy (Sr). We also introduce Marketing Strategy (Ms), as it has been used in previous studies (Brenes *et al.*, 2014; Suárez, 1994). We do not include the strategies referring to low price and segmentation due to their low representativeness. The coefficients of each of

the variables are β_i (i=1 to 10) and they measure the sign and value of the relationship between the independent and the dependent variables. The constant of the equation is α. The quotient is called "odds" and it is the ratio between the probability that the event occurs (business success above the competition), and that the event does not occur.

$$\frac{P(Y=1)}{1-P(Y=1)} = \frac{P(Y=1)}{P(Y=0)} \quad (1)$$

The logarithm of the "odds" is known as the logit function (Hoetker, 2007).

$$\ln\left(\frac{P(Y=1)}{1-P(Y=1)}\right) = \alpha + \beta 1Pcs + \beta 2Pds + \beta 3Ms + \beta 4Sp + \beta 5Sa + \beta 6Sd + \beta 7Sr \quad (2)$$

Business performance is the dependent variable and has been defined as a variable that includes the average of the two scales, market and profitability (Ruiz Ortega, 2010), creating a dummy variable, which takes the value 1 when the firm's performance is better or much better than the competitors; and 0 otherwise.

4. Results

Descriptive statistics (table 6) indicate that 14% of the firms in the sample follow a Mile's prospective strategy, 33% a defender strategy, 35% are analyzers and only 8% are reactive. Table 7 shows the correlation coefficients of the analyzed variables.

Table 6. Descriptive statistics

	N	Min	Max	Mean	Standard deviation
Miles prospector	339	0	1	0.14	0.343
Miles defender	339	0	1	0.33	0.471
Miles analyzer	339	0	1	0.35	0.479
Miles reactor	339	0	1	0.08	0.276
Cost strategy	292	-3.14427	3.27959	0.00	1.000
Marketing strategy	292	-2.74613	2.88162	0.00	1.000
Differentation strategy	292	-2.76680	2.55606	0.00	1.000
Size	310	1	7	2.38	1.299

Table 7. Correlation coefficients

	Performance	Cost strategy	Marketing strategy	Differentiation strategy	Miles prospector	Miles analyzer	Miles defender	Miles reactor	Size
Performance	1.000								
Cost strategy	0.161**	1.000							
Marketing strategy	0.409**	- 0.003	1.000						
Differentation strategy	0.070	0.006	0.029	1.000					
Miles prospector	0.008	0.060	0.111	0.128*	1.000				
Miles analyzer	0.175**	0.037	0.221**	0.157**	- 0.293**	1.000			
Miles defender	- 0.071	0.037	- 0.194**	- 0.167**	- 0.278**	- 0.520**	1.000		
Miles reactor	- 0.144**	- 0.143*	- 0.135*	- 0.098	- 0.119*	- 0.222**	- 0.211**	1.000	
Size	0.283**	0.149*	0.250**	0.151*	0.066	0.162**	- 0.149**	0.044	1.000

** sig 0.01; * sig 0.05

4.1. Logit model for the different types of family business

We analyze the strategy factors that determine the positive result in the FB and NFB, using a logistic regression. We run four different analyses, one for each type of family business, taking into account four different situations: when the family does not own anything (0%, therefore, the case of a NFB), when it owns more than 25% of the FB, more than 50%, and more than 75 %.

The results are shown in Table 8. Regarding the control variable firm size, it is only statistically significant for the NFB sample, but not for the different types of FBs. The positive relationship indicates that, in the case of NFB, larger firms obtain a better performance. For the independent variables, only Marketing strategy is statistically significant and positively related to business performance in all the firm groups analyzed (NFB and the three different FB groups), although we can observe that the influence is more relevant for FBs. We also find some other significant relationships. Firstly, efficiency strategy (costs strategy) is positively related to business performance in the case of the different types of FB (β = 0.733, β = 0.741 and β = 0.676, respectively, and statistically significant at 99% level of confidence), but non-significant for NFBs. Secondly, the Miles' analyzer strategy is positively related to business performance only for the businesses where the family owns more than 25% of the firm (β = 1.177, $p < 0.1$), so that the firm loses the impact of this strategy on performance when the implication of the family in the firm increases. Thirdly, the Miles' reactive strategy is negatively related to business performance for FBs with more than 25% (β = - 2.151, p = 0.074) and more than 50% (β = - 2.079, p = 0.87) of the firm owned by the family. This is a negative strategy, which means that firms should avoid using it. In this case, the negative sign of the coefficient shows a negative relation, meaning that for FBs with up to more than 50% of involvement in the company, the use of this strategy negatively influences performance. We have found no significant statistical relation between innovation strategy (Porter's differentiation strategy), and Miles and Snow's prospective and defensor strategies. Therefore, according to our results, we can accept hypothesis 1, as the selection of Porter's strategy depends on the degree of property owned (involvement) by the family. In fact, we have not found a significant relationship between the differentiation strategy and firm performance, meaning that firms do not use an innovation strategy, which is consistent with the Spanish strategy of selling cheap wine. The significant relationship between a cost strategy and business performance shows that Spanish wineries use an efficiency strategy, which combined with a marketing strategy seems to be stronger. This could be explained by the characteristics of the sector itself, although FBs are more skilled, using both of them. We can also partially accept hypothesis 2, as the Miles and Snow's strategy selected by the firm depends on the family involvement in the business, although the prospective and defensor strategies do not seem to have a significant relationship with business performance, and the effect of the analyzer and reactive strategies have more influence when the involvement of the family in the firm is small. Finally, we can accept hypothesis 3, as the degree of family involvement makes a difference on the effect of the different strategies on business performance.

Table 8. Logistic regression for three different levels of family participation. Dependent variable: business performance

	Non-family business (Family business = 0%)			Family business > 25%			Family business > 50%			Family business > 75%		
Variables	β	E(β)	Sig	β	E(β)	Sig	β	E(β)	Sig	β	E(β)	Sig
Porter strategies												
Efficiency strategy (cost strategy)	0.250	1.283	0.313	0.733	2.082	0.007	0.741	2.098	0.008	0.676	1.967	0.015
Marketing strategy	0.577	1.780	0.069	1.269	3.556	0.000	1.146	3.146	0.000	1.101	3.008	0.000
Innovation strategy (differentiation)	- 0.013	0.987	0.955	- 0.075	0.928	0.765	- 0.038	0.963	0.887	0.017	1.017	0.951
Miles and Snow strategies												
Miles prospector	- 0.208	0.812	0.827	0.604	1.829	0.466	0.565	1.760	0.522	0.553	1.739	0.540
Miles analyzer	0.807	2.242	0.304	1.177	3.244	0.098	1.210	3.353	0.110	1.105	3.018	0.150
Miles defender	0.434	1.544	0.546	0.675	1.965	0.369	0.811	2.250	0.309	0.651	1.917	0.425
Miles reactor	- 0.163	0.849	0.850	- 2.151	0.116	0.074	- 2.079	0.125	0.087	- 1.823	0.162	0.139

	Non-family business (Family business = 0%)			Family business > 25%			Family business > 50%			Family business > 75%		
Control variables												
Assets	0.457	1.579	0.055	0.101	1.106	0.633	0.118	1.125	0.591	0.039	1.040	0.863
Classification table	69.8			66.7			67.8			68.8		
-2 lg likelihood	100.150			124.664			117.483			113.537		
Nagelkerkep seudo R2	0.203			0.407			0.372			0.329		
Hosmer and Lemeshow Test Chi 2	8.659			3.455			2.948			4.303		
Hosmer and Lemeshow test sig.	0.372			0.903			0.938			0.829		

Source: own elaboration

5. Discussion, Conclusion and Limitations

The studies that have analyzed the differences between FB and NFB have shown non-conclusive results. This has made researchers think that differences between different kinds of FB might explain why considering FB as a whole sometimes do not show differences between FB and NFB, and this is why these differences between FB have recently been included in the research about FB. Differences between FB is called family firms' heterogeneity and it is a topic that needs further research (Comino-Jurado *et al.*, 2021; De Massis *et al.*, 2018). In this paper we have analysed how this heterogeneity, in terms of family involvement in the business, affects the firm's strategy choice.

The special characteristics of the Spanish wine sector, and the fact that 60% of the firms in the sector are FB, have led us to consider wineries as the sample of analysis, so that in this study we have analyzed the strategies and performance of 339 Spanish wineries.

To analyze the strategy developed by the firms under study, we have considered two different approaches: the one proposed by Miles and Snow (1978) and the one proposed by Porter (1980, 1985). Miles and Snow (1978) proposed the "adaptive cycle" model, which considers that firms can follow different strategies to try to solve three "big" problems of organizational adaptation (Ferrer-Lorenzo *et al.*, 2018). This means that, depending on these strategies, they can be defenders, analyzers, prospectors or reactors. Porter´s (1985) model considers that the competitive strategy of the firm is determined by the decision of the position of the firm in the industry, and that to gain a competitive advantage, the firm can follow two different generic strategies: cost efficiency and differentiation.

But different types of firms will use different strategies and in the case of FBs, the review of the literature has thrown contradictory results when comparing the strategies applied by FB and NFB. Our results in this study have shown that these differences also exist among different kinds of FBs in the wine industry.

The study presents evidence that the relationship between the strategy used by the firm and its performance depends on the degree of involvement of the family in the business. The paper offers theoretical implications. Firstly, when analysing Porter's strategies, we have found out that for the Spanish wine businesses, the use of a cost strategy has a positive effect on business performance for family business with a share participation higher than 25%, but not for those where the family has no property at all. This result is in accordance with other studies, such as Agyapong and Bohama (2013). This reflects the use of an efficiency strategy by Spanish wineries, which has a positive effect on performance which is even stronger when a marketing strategy is also implemented.

Secondly, our results show that the marketing strategy has an effect on performance independently of the degree of family involvement, although this effect is greater for firms when the family has more than 25% of the property.

Thirdly, although previous studies find that in FBs differentiation enhances performance (Agyapong & Bohama, 2013), our results show that this research hypothesis cannot be accepted, as there is no statistical significance between the use of a differentiation strategy and business performance. This result is obtained independently of the type of FB analyzed and also for those firms where the shares owned by the family are 0%. There is no effect on performance due to the differentiation strategy, which means that these firms do not use an in-

novation strategy, which is consistent with the characteristics of the Spanish wine sector, especially when we pay attention to the typology of wine exported, which follows a strategy of selling cheap wine abroad.

Fourthly, in terms of the different strategies suggested by Miles and Snow, the degree of family involvement in the firm also determines the effect of these strategies on business performance. In this case, there is only a significant effect when considering FBs, but even then, only the analyzer and reactive strategies are significant, and only when the involvement of the family is low, and for smaller firms. It seems that when there is little participation of the firm in the business, the strategy improves, as the firm is not as reactive as when the participation is higher. This could be explained by the fact that when the family owns a large amount of the shares of the company, nepotism exists, which affects the strategy and the decisions taken by the family and the firm. This result has also been found in previous research (Gómez-Mejía *et al.*, 2007; Tanewski *et al.*, 2003).

The findings also have practical implications for FBs. They should use analyzer strategies and have a lower degree of involvement of the family in order to improve strategy and to reduce nepotism. Developing this kind of strategy can help FBs in the wine industry to improve performance.

This study has some limitations. Firstly, the use of subjective scales, although different previous studies have demonstrated their validity. Secondly, data refer to a certain period of the firm's life, although in some questions the managers are required to answer taking into account a period of 3-5 years of the firm's life. Thirdly, even though the sample is representative of the population, and it is in accordance to what these kinds of studies demand, it can always be thought that a higher rate of response could strengthen the conclusions of the study even more.

The study has proved the importance of taking FB heterogeneity as a variable under analysis, so future research should continue analysing how this heterogeneity affects other aspects of the firm, such as the firm's innovation and cooperation.

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References

Abella, S. (2007). *Recursos y estrategias de las empresas familiares manufactureras en España*. Consejo Económico y Social de Aragón (CESA), Zaragoza.

Acquaah, M. (2013). Management control systems, business strategy and performance: a comparative analysis of family and non-family businesses in a transition economy in sub-Saharan Africa. *Journal of Family Business Strategy, 4*(2), 131-146. https://doi.org/10.1016/j.jfbs.2013.03.002

Agyapong, A., & Boamah, R. B. (2013). Business strategies and competitive advantage of family hotel businesses in Ghana: the role of strategic leadership. *Journal of Applied Business Research*, *29*(2), 531-543. https://doi.org/10.19030/jabr.v29i2.7654

Akman, G., Özcan, B., & Hatipoglu, T. (2015). Fuzzy multicriteria decision making approach to innovative strategies based on Miles and Snow typology. *Journal of Intelligent Manufacturing*, *26*(3), 609-628. https://doi.org/10.1007/s10845-013-0820-4

Alkaabi, S. K., & Dixon, C. (2014). Factors affecting internationalization decision making in family businesses: an integrated literature review. *Journal of Applied Management and Entrepreneurship*, *19*(2), 53-77. https://doi.org/10.9774/GLEAF.3709.2014.ap.00005

Ansoff, H. I. (1965). *Corporate strategy: an analytic approach to business policy for growth and expansion*. New York: McGraw-Hill.

Arosa, B., Iturralde, T., & Maseda, A. (2009). Ownership structure, insiders ownership and firm performance in Spanish non-listed firms (November 13, 2009). Available at SSRN: https://ssrn.com/abstract=1505308 or http://dx.doi.org/10.2139/ssrn.1505308

Arregle J. L., Duran, P., Hitt, M. A., & van Essen, M. (2017). Why is family firms' internationalization unique? A meta-analysis. *Entrepreneurship Theory and Practice*, *41*(5), 801-831. https://doi.org/10.1111/etap.12246

Arregle, J. L., Hitt, M. A., & Sirmon, P. (2007). The development of organizational social capital: attributes of family firms. *Journal of Management Studies*, *44*(1), 73-95. https://doi.org/10.1111/j.1467-6486.2007.00665.x

Astrachan, J. H. (2010). Strategy in family business: toward a multidimensional research agenda. *Journal of Family Business Strategy*, *1*(1), 6-14. https://doi.org/10.1016/j.jfbs.2010.02.001

Astrachan, J. H., Klein, S. B., & Smyrnos, K. X. (2002). The F-PEC scale of family influence: a proposal for solving the family business definition problem. *Family Business Review*, *15*(1), 45-58. https://doi.org/10.1111/j.1741-6248.2002.00045.x

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99-120. https://doi.org/10.1177/014920639101700108

Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, *61*(8), 1139-1160. https://doi.org/10.1177/0018726708094863

Besanko, D., Dranove, D., Shanley, M., & Schaefer, S. (2009). *The economics of strategy* (5th ed.). Unites State of America: John Wiley & Sons.

Brenes, E., Montoya, D., & Ciravegna, L. (2014). Differentiation strategies in emerging markets: the case of Latin American agribusinesses. *Journal of Business Research*, *67*(5), 847-855. https://doi.org/10.1016/j.jbusres.2013.07.003

Bresciani S., Giacosa E., Broccardo L., & Culasso F. (2016). The family variable in the French and Italian wine sector. *EuroMed Journal of Business*, *11*(1), 101-118. https://doi/10.1108/EMJB-03-2015-0012

Cabello-Medina, C., García-Rodríguez, M., Jiménez-Jiménez, A., & Ruiz-Navarro, J. (2000). Tipología estratégica de Miles y Snow y factores competitivos: un análisis empírico. *Cuadernos de Economía y Dirección de la Empresa*, *7*, 365-381.

Camisón, C., Simón, F. G., & Marqués, D. P. (2007). Estrategias competitivas y desempeño empresarial: estudio comparativo de los modelos de Robinson & Pearce y Miles & Snow en el sector hotelero español. *Investigaciones Europeas de Dirección y Economía de la Empresa*, *13*(3), 161-182.

Capbell-Hunt, C. (2000). What have we learned about generic competitive strategy? A meta-analysis. *Strategic Management Journal*, *21*(2), 127-154. https://doi.org/10.1002/(SICI)1097-0266(200002)21:2<127::AID-SMJ75>3.0.CO;2-1

Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms. *Entrepreneurship Theory and Practice*, *29*(3), 249-265. https://doi.org/10.1111/j.1540-6520.2005.00081.x

Chrisman, J. J., Chua, J. H., & Sharma, P. (2005). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice*, 29(5), 555-576. https://doi.org/10.1111/j.1540-6520.2005.00098.x

Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, *23*(4), 19-39. https://doi.org/10.1177/104225879902300402

Comino-Jurado, M., Sánchez-Andújar, S., & Parrado-Martínez, P. (2021). Do dissimilarities in the family involvement in family firms lead to different levels of indebtedness? Evidence from Spain. *Management Decision*, *59*(12), 2891-2906. https://doi.org/10.1108/MD-05-2020-0582

Corbetta, G., & Salvato, C. (2004). Self-serving or self-actualizing? Models of man and agency costs in different types of family firms: A commentary on "comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence". *Entrepreneurship Theory and Practice*, *28*(4), 355-362. https://doi.org/10.1111/j.1540-6520.2004.00050.x

Craig, J., & Dibrell, C. (2006). The natural environment, innovation, and firm performance: a comparative study. *Family Business Review*, *19*(4), 275-288. https://doi.org/10.1111/j.1741-6248.2006.00075.x

Daily, C. M., & Dollinger, M. J. (1993). Alternative methodologies for identifying family - versus non family - managed businesses. *Journal of Small Business Management*, *31*(2), 79-90.

Daily, C., & Thomson, S. (1994). Ownership structure, strategic posture and the firm growth: an empirical examinations. *Family Business Review*, *7*(3), 237-249. https://doi.org/10.1111/j.1741-6248.1994.00237.x

De Massis, A., Frattini, F., Majocchi, A., & Piscitello, L. (2018). Family firms in the global economy: toward a deeper understanding of internationalization determinants, processes, and outcomes. *Global Strategy Journal*, *8*(1), 3-21. https://doi.org/10.1002/gsj.1199

De Massis, A., Kotlar, J., Chua, J. H., & Chrisman, J. J. (2014). Ability and willingness as sufficiency conditions for family-oriented particularistic behavior: Implications for theory and empirical studies. *Journal of Small Business Management*, *52*(2), 344-364. https://doi.org/10.1111/jsbm.12102

Dess, G. G., & Davis, P. S. (1984). Porter's (1980) generic strategies as determinants of strategic group membership and organizational performance. *Academy of Management Journal*, *27*(3), 467-488. https://doi.org/10.5465/256040

Diéguez-Soto, J., López-Delgado, P., & Rojo-Ramírez, A. (2015). Identifying and classifying family businesses. *Review of Managerial Science*, *9*(3), 603-634. https://doi.org/10.1007/s11846-014-0128-6

Donckels, R., & Fröhlich, E. (1991). Are family business really different? European experiences from STRATOS. *Family Business Review*, *4*(2), 149-160. https://doi.org/10.1111/j.1741-6248.1991.00149.x

Duquesnois, F., Gurau, C., & Le Roy, F. (2014). Wine producers' strategic response to a crisis situation. *International Journal of Wine Business Research*, *22*(3), 251-268. https://doi.org/10.1108/17511061011075383

Dyer, W. G. (2006). Examining the "family effect" on firm performance. *Family Business Review*, *19*(4), 253-273. https://doi.org/10.1111/j.1741-6248.2006.00074.x

Federación Española del Vino. El sector encifras. Available at http://www.fev.es/sector-cifras/ (accessed 02/25/2022).

Ferrer-Lorenzo, J. R. (2018). *Factores de competitividad del sector vitivinícola español*. PhD Thesis, University of Zaragoza. Available at: https://zaguan.unizar.es/record/101148/files/TESIS-2021-120.pdf?version=1 (last accessed: March 2022).

Ferrer, J. R., Abella-Garcés, S., & Maza-Rubio, M. T. (2020). Human resource practices and performance in small Spanish wineries, and their evolution with age and size. *Ciencia e Tecnica Vitivinicola*, *35*(2), 107-119. https://doi.org/10.1051/ctv/ctv20203502107

Ferrer, J. R., Abella-Garcés, S., & Maza, M. T. (2019). Spanish wine cooperatives' business performance: innovation capabilities and Miles and Snow strategies. *Journal of Wine Economics*, *14*(4), 409-416. https://doi.org/10.1017/jwe.2019.36

Ferrer-Lorenzo, J. R., Abella-Garcés, S., & Maza-Rubio, M. T. (2017). Competitive advantage differences between firms belonging to a business group and independent companies in the Spanish wine industry. *Economía Agraria y Recursos Naturales*, *17*(2), 105-132. https://doi.org/10.7201/earn.2017.02.05

Ferrer-Lorenzo, J. R., Maza-Rubio, M. T., & Abella-Garcés, S. (2018). Capacidades y estrategias de Miles y Snow en el sector del vino en España. Grupos vs. bodegas independientes. *Revista Española de Estudios Agrosociales y Pesqueros*, *250*, 95-125.

Fuentes-Lombardo, G., Hernández-Ortiz, M. J., & Vallejo-Martos, M. C. (2008). Reasons to grow in the family firm: a comparative analysis. *Investigaciones Europeas de Dirección y Economía de la Empresa*, *14*(3), 15-34.

Gallucci, C., Santulli, R., & Calabrò, A. (2015). Does family involvement foster or hinder firm performance? The missing role of family-based branding strategies. *Journal of Family Business Strategy*, *6*(3), 155- 165. https://doi.org/10.1016/j.jfbs.2015.07.003

Gallucci, C., & D'Amato, A. (2013). Exploring nonlinear effects of family power on the performance of Italian wine businesses. *International Journal of Wine Business Research*, *25*(3), 185-202. https://doi.org/10.1108/IJWBR-2012-0017

Gilbert, X., & Strebel, P. (1988). Developing competitive advantage. In J. B. Quinn, H. Mintzberg, & R. M. James (Eds.), *The Strategy Process* (pp. 82-93). Englewood Cliffs, NJ: Prentice-Hall.

Gómez-Mejía, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: socioemotional wealth preservation in family firms. *The Academy of Management Annals*, *5*(1), 653-707. https://doi.org/10.5465/19416520.2011.593320

Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemocional wealth and business risk in family -controlled firms: evidence from Spanish olive oil mills. *Administrative Science Quarterly, 52*(1), 106-137. https://doi.org/10.2189/asqu.52.1.106

Gudmundson, D., Hartman, E. A., & Tower, C. B. (1999). Strategic orientation: differences between family and nonfamily firms. *Family Business Review*, *12*(1), 27-39. https://doi.org/10.1111/j.1741-6248.1999.00027.x

Gudmunson, D., Tower, C. B., & Hartman, E. A. (2003). Innovation in small business: culture and ownership structure do matter. *Journal of Developmental Entrepreneursip*, *8*(1), 1-17.

Habbershon, T., & Williams, M. (1999). A resource-based framework for assessing the strategic advantages of family firms. *Family Business Review*, *12*(1), 1-25. https://doi.org/10.1111/j.1741-6248.1999.00001.x

Harris, R., Martínez, J., & Ward, J. L. (1994). Is strategy different for the family-owned business? *Family Business Review*, *7*(2), 159-174. https://doi.org/10.1111/j.1741-6248.1994.00159.x

Hernández-Linares, R., Sarkar, S., & López-Fernández, M.C. (2017). How has the family firm literature addressed its heterogeneity through classification systems? An integrated analysis. European *Journal of Family Business*, *7(1-2)*, 1-13. https://doi.org/10.1016/j.ejfb.2017.06.003

Hoetker, G. (2007). The use of logit and probit models in strategic management research: critical issues. *Strategic Management Journal*, *28*(4), 331-343. https://doi.org/10.1002/smj.582

Hoffman, J., Hoelscher, M., & Sorenson, R. (2006). Achieving sustained competitive advantage: A family capital theory. *Family Business Review*, *19*(2), 135-145. https://doi.org/10.1111/j.1741-6248.2006.00065.x

Lin, C., Tsai, H. L., & Wu, J. C. (2014). Collaboration strategy decision-making using the Miles and Snow typoloty. *Journal of Business Research*, *67*(9), 1979-1990. https://doi.org/10.1016/j.jbusres.2013.10.013

Lin, W. T., & Wang, L. C. (2021). Family firms, R&D, and internationalization: the stewardship and socio-emotional wealth perspectives. *Asia Pacific Journal of Management*, *38*(1), 91-119. https://doi.org/10.1007/s10490-018-9636-2

Lindow, C. M., Stubner, S., & Wulf, T. (2010). Strategic fit within family firms: the role of family influence and the effect on performance. *Journal of Family Business Strategy*, *1*(3), 167-178. https://doi.org/10.1016/j.jfbs.2010.08.004

Madison, K., Runyan, R. C., & Swinney, J. L. (2014). Strategic posture and performance: revealing differences between family and nonfamily firms. *Journal of Family Business Strategy*, *5*(3), 239-251. https://doi.org/10.1016/j.jfbs.2013.11.006

Martinsons, M. G., Davison, R. M., & Huang, Q. (2017). Strategic knowledge management failures in small professional service firms in China. *International Journal of Information Management*, *37*(4), 327-338. https://doi.org/10.1016/j.ijinfomgt.2017.04.003

Maury, B. (2006). Family ownership and firm performance: empirical evidence from Western European corporations. *Journal of Corporate Finance*, *12*(2), 321-341. https://doi.org/10.1016/j.jcorpfin.2005.02.002

Mazzi, C. (2011). Family business and financial performance: current state of knowledge and future research challenges. *Journal of Family Business Strategy*, *2*(3), 166-181. https://doi.org/10.1016/j.jfbs.2011.07.001

Mccann III, J. E., Leon-Guerrero, A. Y., & Haley Jr, J. D. (2001). Strategic goals and practices of innovative family businesses. *Journal of Small Business Management*, *39*(1), 50-59. https://doi.org/10.1111/0447-2778.00005

Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman, H. J. (1978). Organizational strategy, structure and process. *Academy of Management Review*, *3*(3), 546-562. https://doi.org/10.5465/amr.1978.4305755

Miller, D., Amore, M. D., Le Breton-Miller, I., Minichilli, A., & Quarato, F. (2018). Strategic distinctiveness in family firms: firm institutional heterogeneity and configurational multidimensionality. *Journal of Family Business Strategy*, *9*(1), 16-26. https://doi.org/10.1016/j.jfbs.2018.01.004

Miller, D., Lee, J., Chang, S., & Le Breton-Miller, I. (2009). Filling the institutional void: the social behavior and performance of family versus non-family technology firms in emerging markets. *Journal of International Business Studies*, *40*(5), 802-817. https://doi.org/10.1057/jibs.2009.11

Miller, D., & Le Breton-Miller, I. (2005). *Managing for the long run: Lessons in competitive advantage from great family businesses*. Boston, MA: Harvard Business Press.

Miller, D., Le Breton-Miller, I., & Lester, R. H. (2013). Family firm governance, strategic conformity, and performance: institutional vs. strategic perspectives. *Organization Science*, *24*(1), 189-209. https://doi.org/10.1287/orsc.1110.0728

Mintzberg, H. (2009). *Managing*. San Franscisco, CA: Berrett-Koehler Publishers, Inc.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). *Strategy safari. A guided tour through the wilds of strategic management*. New York, NY: Free Press.

Mitter, C., Duller, C., Feldbauer-Durstmüller, B., & Kraus, S. (2014). Internationalization of family firms: the effect of ownership and governance. *Review of Managerial Science*, *8*(1), 1-28. https://doi.org/10.1007/s11846-012-0093-x

Molly, V., Uhlaner, L. M., De Massis, A., & Laveren, E. (2019). Family-centered goals, family board representation, and debt financing. *Small Business Economics*, *53*(1), 269-286. https://doi.org/10.1007/s11187-018-0058-9

Moores, K. (2009). Paradigms and theory building in the domain of business families. *Family Business Review*, *22*(2), 167-180. https://doi.org/10.1177/0894486509333372

Newbert, S., & Craig, J. B. (2017). Moving beyond socioemotional wealth: toward a normative theory of decision making in family business. *Family Business Review*, *30*(4), 339-346. https://doi.org/10.1177/0894486517733572

Newton, S. K., Gilinsky, A., & Jordan, D. (2015). Differentiation strategies and winery financial performance: an empirical investigation. *Wine Economics and Policy*, *4*(2), 88-97. https://doi.org/10.1016/j.wep.2015.10.001

Nordqvist, M., Sharma, P., & Chirico, F. (2014). Family firm heterogeneity and governance: a configuration approach. *Journal of Small Business Management*, *52*(2), 192-209. https://doi.org/10.1111/jsbm.12096

OEMV (2016). Principales tendencias de los mercados mundiales de vino. Available at: http://www.omev.es/esp/-oemv.php (Date of consultation: January 20, 2022).

OIV International Organisation of Vine and Wine (2019). Statistical Report on World Vitiviniculture. https://www.oiv.int/public/medias/6782/oiv-2019-statistical-report-on-world-vitiviniculture.pdf (last accessed: March 2022).

OIV International Organisation of Vine and Wine (2020). State of the World Vitinicultural Sector 2019. https://www.oiv.int/js/lib/pdfjs/web/viewer.html?file=/public/medias/7298/oiv-state-of-the-vitivinicultural-sector-in-2019.pdf (last accessed: January 2021).

Pacheco, L. M. (2017). Internationalization vs family ownership and management: the case of Portuguese wine firms. *International Journal of Wine Business Research*, *29*(2), 195-209. https://doi.org/10.1108/IJWBR-10-2016-0034

Panikos, P., Savva, C. S., & Hadjielias, E. (2015). Family involvement and firm performance: evidence from UK listed firms. *Journal of Family Business Strategy*, *6*(1), 14-32. https://doi.org/10.1016/j.jfbs.2014.12.001

Planellas, M. (2017). The evolution of strategy (over six decades and thirty models). *ESADE Working Papers Series*, nº 262. Available at SSRN: https://ssrn.com/abstract=2926938 or http://dx.doi.org/10.2139/ssrn.2926938

Porter, M. E. (1980). *Techniques for analyzing industries and competitors. Competitives strategy*. New York, NY: Free Press.

Porter, M. E. (1985). *Competitive advantage: creating and sustaining superior performance*. New York, NY: Free Press.

Porter, M. E. (1996). What is strategy? *Harvard Business Review*, *74*, 61-78.

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: towards methodological best practice. *Journal of Management*, *35*(3), 718-804. https://doi.org/10.1177/0149206308330560

Robinson, R. B., & Pierce, J. A. (1988). Planned patterns of strategic behavior and their relationship to business-unit performance. *Strategic Management Journal*, *9*(1), 43-60. https://doi.org/10.1002/smj.4250090105

Rubio Bañón, A., & Aragón Sánchez, A. (2002). Factores explicativos del éxito competitive. Un studio empírico en la pyme. *Cuadernos de Gestión*, *2*(1), 49-63.

Ruiz Ortega, M. J. (2010). Competitive strategies and firm performance: technological capabilities' moderatin roles. *Journal of Business Research*, *63*(12), 1273-1281. https://doi.org/10.1016/j.jbusres.2009.09.007

Salas, V., & Galve, C. (2003). *La empresa familiar en España. Fundamentos económicos y resultados*. Bilbao, SP: Fundación BBVA. Available at: https://www.fbbva.es/wp-content/uploads/2003/06/DE_2003_La_empresa_familiar_en_Espana_Galve_y_Salas.pdf (last accessed: March, 2022).

Santos, J. B., & Brito, L. A. L. (2012). Towarsd a subjective measurement model for firm performance. *BAR- Brazilian Administration Review*, *9*(special issue), 95-117.

Serrano R., Fernández-Olmos M., & Pinilla V. (2018). Internationalization and performance in agri-food firms. *Spanish Journal of Agricultural Research*, *16*(2), e0107. https://doi.org/10.5424/sjar/2018162-12206

Sharma, P., Chrisman, J. J., & Chua, J. H. (1997). Strategic management of the family business: past research and future challenges. *Family Business Review*, *10*(1), 1-35. https://doi.org/10.1111/j.1741-6248.1997.00001.x

Simon, F. G., & Marqués, D. P. (2005). Los patrones de comportamiento estratégico en el sector hotelero español: una validación del modelo de Robinson y Pierce. *Investigaciones Europeas de Dirección y Economía de la Empresa*, *11*(2), 99-117.

Sirmon, D., Arrègle, J. L., Hitt, P., & Very, P. (2008). The role of family influence in firms' strategic response to threat of imitation. *Entrepreneurship Theory Practice*, *32*(6), 979-998. https://doi.org/10.1111/j.1540-6520.2008.00267.x

Snow, C. C., & Hrebiniak, L. G. (1980). Strategy, distinctive competence, and organizational performance. *Administrative Science Quarterly*, *25*(2), 317-336.

Soler, I. P., Gemar, G., & Guerrero-Murillo, R. (2017). Family and non-family business behavior in the wine sector: a comparative study. *European Journal of Family Business*, *7*(1-2), 65-73. https://doi.org/10.1016/j.ejfb.2017.11.001

Spanos, Y. E., & Lioukas, S. (2001). An examination into the causal logic of rent generation: contrasting Porter's competitive strategy framework and the resource-based perspective. *Strategic Management Journal*, *22*(10), 907-934. https://doi.org/10.1002/smj.174

Suárez, F. F. (1994). La competitividad de las empresas, evolución, imperativos estratégicos y características de la organización exitosa de hoy. *Estudios Públicos*, *54*, 151-174.

Tagiuri, R., & Davis, J. A. (1996). Bivalent attributes of the famiy firm. *Family Business Review*, *9*(2), 199-208. https://doi.org/10.1111/j.1741-6248.1996.00199.x

Tanewski, G. A., Prajogo, D., & Sohal, A. (2003). Strategic orientation and innovation performance between family and non-family firms. Presented at the *48th World Conference of the International Council of Small Business*, Monash University, Belfast, 15-18 June,

van Essen, M., Carney, M., Gedajlovic, E. R., & Heugens, P. P. M. A. R. (2015). How does family control influence firm strategy and performance? A meta-analysis of US publicly listed firms. *Corporate Governance: An International Review*, *23*(1), 3-24. https://doi.org/10.1111/corg.12080

Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, *80*(2), 385-417. https://doi.org/10.1016/j.jfineco.2004.12.005

Von Neuman, J., & Morgenstern, O. (1945). Theory of games and economic behavior. *Bulletin of the American Mathematical Society*, *51*(7), 498-504.

Walker, R. M. (2013). Strategic management and performance in public organizations: findings from the Miles and Snow framework. *Public Administration Review*, *73*(5), 675-685. https://doi.org/10.1111/puar.12073

Ward, J. L. (1997). Growing the family business: special challenges and best practices. *Family Business Review*, *10*(4), 323-337. https://doi.org/10.1111/j.1741-6248.1997.00323.x

Ward, J. L. (1988). The special role of strategic planning for family business. *Family Business Review*, *1*(1), 105-117. https://doi.org/10.1111/j.1741-6248.1988.00105.x

Westhead, P. (1997). Ambitions, `external´environment and strategic factor differences between family and non-family companies. *Entrepreneurship and Regional Development*, *9*(2), 127-157. https://doi.org/10.1080/08985629700000007

Woodfild, P., & Husted, K. (2017). Intergenerational knowledge sharing in family firms: Case-based evidence from the New Zealand wine industry. *Journal of Family Business Strategy*, *8*(1), 57-69. https://doi.org/10.1016/j.jfbs.2017.01.001

Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. *Family Business Review*, *18*(1), 23-40. https://doi.org/10.1111/j.1741-6248.2005.00028.x