



**Citation:** Bandieri L., Castellini A. (2023). The competitiveness of Romagna wineries. An exploratory analysis of the impact of different strategic approaches on business performance. *Wine Economics and Policy* 12(2): 15-30. doi: 10.36253/wep-12025

**Copyright:** © 2023 Bandieri L., Castellini A. This is an open access, peer-reviewed article published by Firenze University Press (<http://www.fupress.com/wep>) and distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Data Availability Statement:** All relevant data are within the paper and its Supporting Information files.

**Competing Interests:** The Author(s) declare(s) no conflict of interest.

## The competitiveness of Romagna wineries. An exploratory analysis of the impact of different strategic approaches on business performance

LORENZO BANDIERI<sup>1,\*</sup>, ALESSANDRA CASTELLINI<sup>2</sup>

<sup>1</sup> Department of agro-food sciences and technologies, University of Bologna, Via Zamboni, 33 - 40126 Bologna, Italy

<sup>2</sup> Department of agro-food sciences and technologies, University of Bologna, Via Zamboni, 33 - 40126 Bologna, Italy

E-mail: [lorenzo.bandieri@studio.unibo.it](mailto:lorenzo.bandieri@studio.unibo.it); [alessandra.casteòòomo@unibo.it](mailto:alessandra.casteòòomo@unibo.it)

\*Corresponding author

**Abstract.** This paper proposes an exploratory study of the competitiveness of Romagna wineries. A double approach has been adopted to analyse it, as both Porter's Theory of Competitive Advantage and Barney's Resource-based Theory have been considered. The final purposes are to uncover which categories of resources and capabilities are related to firm performance and to investigate the main strategic orientations of the most successful Romagna wineries. To conduct the research, an online questionnaire was sent to 115 wineries located in the Romagna territory, achieving a response rate of about 24.35%. According to the preliminary results, it has been found that the most successful wineries in this area do not follow a cost leadership strategy, while they perform a differentiation strategy. These firms put a lot of effort into building a reputation in the market. On the other hand, managerial and technological capabilities seem to be not positively related to firm performance, while marketing capabilities exert a stronger impact. This study would give an input to the strategic and managerial studies in the wine business sector, and adopt an innovative theoretical approach in the analysis of competitive advantage. Moreover, this work focuses on the Romagna territory, fulfilling the need for research that considers the local wine industry and its competitiveness, to open the way to further studies.

**Keywords:** competitive advantage, strategic orientation, resource-based theory, Romagna wineries.

---

### 1. INTRODUCTION

This study focuses on the wine industry, which is a very important and strategic agro-industrial sector worldwide. In the global market, the principal players considering both production and export are three EU nations, i.e. Italy, France, and Spain, which are responsible for about 50% of the total world wine production in 2019 [24]. In particular, the Italian wine sector is mainly composed of small and medium enterprises, as the average cultivated surface per winery is 2.1 hectares, although it records a high level of profitability and competitiveness, as the annual revenue of the sector is equal to 13.4 bn € in 2019

[15]. Moreover, the value of Italian wine exports has rocketed in the last ten years [24]. It has been calculated that the percentage weight of wine exports on the total national agri-food export is close to 15% [14]. It is also worth noting that the attitude towards wine export in volume is equal to 45.4% for Italy in 2019 [15]. In this context, the Emilia-Romagna region plays an important role, as it contributes to 5.74% of the Italian export value in 2022 and it is the first region in Italy in terms of consumption [44]. In addition, Emilia-Romagna owns certified wines that are well-known in the international scenario [45].

Some of them, such as Albana, are prerogative of the Romagna territory (the southeast area of the region).

This study aims to examine and explore the competitiveness and strategic orientations of wineries located in Romagna. Specifically, the goal is to analyse the impact that business strategies and resources and capabilities could have on the creation of a competitive advantage in the market, which is expressed by a better performance of the Consorzio Vini di Romagna wineries. To survey the critical factors for Romagna wineries in achieving their competitive advantage, this study adopts a double approach, derived from two different strategic theories: the Theory of Competitive Advantage [28, 29] and the Resource-based Theory [2]. These two strategic theories can be applied together because they analyse the competitiveness of firms from complementary points of view. Therefore, a double approach has been adopted, following the positive results already presented in the literature [10, 36, 38].

In detail, the authors investigate if wineries that follow one of Porter's competitive strategies will obtain a better performance in the market concerning their competitors or if some resources and capabilities owned by firms are positively related to their performance. Hence, a set of four hypotheses to be verified has been proposed.

The study is structured as follows: the next chapter focuses on the theoretical aspects of strategic theories and their practical applications in the wine sector. In paragraph 3, materials and methods used to conduct the analysis are presented, together with the hypotheses set. The following section reports the results of the study, while paragraph 5 presents the discussion of the results obtained. Finally, the last section shows the conclusions reached, together with managerial implications, limitations and future research directions.

## 2. LITERATURE REVIEW

### 2.1 Theoretical framework

This study takes into consideration the competitive advantage of companies, which is a necessary condition

to obtain good performance and success in the market [1, 34]. Hence, firms have to implement strategies that enable them to obtain a sustainable competitive advantage (SCA) [2].

One of the most important approaches to obtaining an SCA in the market was theorized by Barney [2]. He promoted the theory of resources and capabilities, known as Resource-Based Theory (RBT), which focuses on internal resources and capabilities controlled by the firm, viewed as the fundamental elements for the firm in order to conceive and realize strategies that improve its efficiency and effectiveness, achieving a SCA [2, 40]. Resources can be classified into three categories: physical capital, human capital and organizational capital. A company aims to develop distinctive resources and capabilities, which are the result of superiority in process management, integration of knowledge and diffusion of learning [6]. The RBT model lays its foundations on two main assumptions: the first one is that the strategic resources of companies within an industry must be heterogeneous. The second one is that resources do not have to be perfectly mobile across firms, in order to secure a long-lasting SCA obtained [2, 26]. To have the potential to be a source of SCA, a resource must have four characteristics: it must be valuable, rare, imperfectly imitable, and there cannot be strategic equivalent substitutes [2].

During the following years, many authors enriched the RBT. Regarding organizational capital resources, Nonaka [23] affirmed that organizational knowledge is created through a continuous dialogue between tacit and explicit knowledge and pointed out the importance of common knowledge, which is the intersection of individual knowledge sets. Therefore, human capital resources are directly linked with organizational capital. Human capital resources and organizational knowledge together are also known as managerial capabilities [27]. About physical capital resources, Rivard et al. [31] studied the relevance of information technology in the definition of business performance. Furthermore, another important extension of RBT was provided by Teece et al. [37], who focussed their attention on dynamic capabilities, which are the firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. A fundamental tool of dynamic capabilities is represented by technology. Even small firms must possess a bundle of technological capabilities that ensure them to keep up with the rapid evolution that is happening in this field and to take advantage of new development opportunities [16, 22].

However, some critiques have been moved against the RBT. The most relevant ones are addressed to the definition of resource, that is overly inclusive, and to the

role of value, which is exogenous to the theory and too indefinite to provide for useful theory [18, 30]. The common theme underlying these critiques is that the RBT does not sufficiently capture the essence of competitive advantage. In fact, it overestimates the possession of individual resources and underestimates the importance of bundling resources and of the human involvement in assessing and creating value [18].

Despite the importance of these critiques, RBT has progressively shifted its focus from an inside-out perspective to both an inside-out and outside-in view [3]. In this context, marketing and information about the market are two of the most relevant resources, precious to orient in an increasingly competitive scenario.

Pursuing in this change of orientation and moving to a completely outside-in perspective, the focus shifts to the other approach that can lead a firm to obtain a SCA. It was theorized by Michael Porter in the 1980s [28, 29]. He affirmed that a firm reaches success in the market by positioning itself better than competitors. He found that this position depends on five forces (barriers to entry, power of suppliers and buyers, threat of substitutes, and intensity of internal rivalry). Therefore, the objective of a company's strategic plan is to find a position that allows it to better defend itself against these forces or make it able to influence them in its favour. These strategic plans are called "competitive strategies". Two of them are generic strategies, that allow for the pursuit of a competitive advantage position: they are cost leadership and differentiation. On the other hand, the third competitive strategy, which is focalization, is given by the implementation of one of the first two strategies in a niche market [28, 29]. More in detail, cost leadership is based on the firm's ability to reduce its costs per unit, without negatively altering the characteristics of the product or service offered. On the other hand, differentiation strategy is obtained by attributing tangible or intangible elements to an offered product or service that increase its value for the target of consumers [28, 29]. Definitely, RBT and Porter's approaches are different in the sense that the last one is focused on the external environment in which the company is inlaid, while the first one is based on the interiority of a firm, or rather on resources and capabilities that it possesses. However, these two strategic theories can be used simultaneously by companies to achieve an SCA in the market.

## *2.2 Application of competitive strategies*

Various case studies embraced the abovementioned strategic theories (RBT and Porter's), taken singularly or together. Considering the Porter's model, Dess and

Davis [7] examined the strategic orientations of firms in an industry. These orientations are defined by the most used competitive methods and companies have been clustered in different groups according to them. Strategic groups reflect three of Porter's strategies, plus a fourth one: "stuck in the middle", expressing firms with no clear strategic orientation. Moreover, Robinson and Pearce [32] wanted to analyse the impact of intended strategies and planning processes on firm performance, following Porter's principles. In this case, the authors have identified four patterns in order to group firms with similar strategic orientations. These patterns are efficiency, service, product innovation and development, brand/channel influence. Otherwise, Spanos and Lioukas [36] considered both RBT and Porter's approaches and elaborated a composite model. In particular, this model includes firm assets (from RBT), industry effects (from Porter) and their relationship with the creation of a successful strategy, which finally lead to profitability. In line with this composite model, Ortega [25] focused on technological capabilities, finding that they are resources that guarantee the company to achieve an SCA through the implementation of the Porter's [28, 29] generic strategies. Many studies have been done applying Porter's and/or Barney's theories in the wine industry. Relating to the application of both theoretical frameworks, Ferrer Lorenzo et al. [10] empirically tested how resources, capabilities and strategies modulate the results of Spanish wineries. To define strategies, twenty-two competitive methods have been considered, like in the studies of Dess and Davis [7] and Robinson and Pearce [32]. An analogous research has been performed by Villanueva and Ferrer Lorenzo [38] regarding wineries located in Connecticut and Rhode Island (US). Authors have found that managerial capabilities are more important than the strategic intent in the explanation of wineries' performance. It has been also verified that differentiation strategy is linked to a better business performance with respect to competitors, and that successful wineries invest a lot in the service offered to the consumer. On the other hand, other research considered the application of just one of the two competitive theories defined above. First of all, Martinez-Canas and Ruiz-Palomino [19] applied the RBT framework by interviewing wineries' managers in Castilla-La-Mancha region (Spain), aiming to understand which are the resources and capabilities that possess VRIO attributes. Regarding the Italian wine industry, Galati et al. [11] wanted to explore the role of internal resources (tangible, intangible and financial) and their impact on the business performance of cooperatives operating in Sicily, using the RBT of firms as theoretical basis. Otherwise, various studies have applied Porter's competitive strategies to the wine

sector. In detail, a winery can decide to reduce its carbon footprint and obtain a related certification that can be a tool to differentiate in the market [12]. On the other side, wineries can opt for a power-assisted pruning and tying to diminish costs in the vineyard management compared to manual operations, becoming an essential element in following a cost leadership strategy [33].

### 3. MATERIALS AND METHODS

In order to identify Romagna wineries, information taken from websites of “Enoteca Regionale dell’Emilia-Romagna” [43], “Quattro calici” [46], “Consorzio Vini di Romagna” [42] and “Aida database” [41] has been collected and cross-referenced. So, a list of wineries has been composed. The “Consorzio Vini di Romagna” has directly collaborated with this study. The Consortium is composed of 7 cooperatives and 108 individual winemakers. Its contribution is fundamental as it works to support the quality of Romagna wines, the balance of prices and the enhancement of the product quality and its connection with the territory. Thanks to this collaboration, a questionnaire has been submitted both to Consorzio Vini di Romagna wineries and the other units of the list even if they are not members of the Consortium, informing them about the aim and importance of this research. Questionnaire has been administered online, sending e-mails to a sample of 152 wineries. To stimulate the completion of the survey, most of the wineries have been also contacted by telephone. The structure of the questionnaire has been derived from Ferrer Lorenzo et al. [10] with modifications according to the Romagna wine sector characteristics. At the end of the survey, data have been implemented and checked in order to prepare a database fitting for the successive elaborations.

#### 3.1 Hypotheses

Studying in depth the literature, it is worth noting that a high level of resources and capabilities can positively influence performance and profitability of firms, and a clear strategic orientation is crucial to obtain optimal results in the market. Therefore, in this study we have decided to take into consideration four main hypotheses that we aim to verify, in line with the study of Ferrer Lorenzo et al. [10]. Regarding resources and capabilities, we have selected two of the categories presented in the literature, i.e. managerial capabilities and technological capabilities. Consequently, the first (A) and second (B) hypothesis are:

Hypothesis A: *In Romagna wineries, the managerial capabilities owned by the firm are positively related to the firm’s performance.*

Hypothesis B: *In Romagna wineries, the technological capabilities owned by the firm are positively related to the firm’s performance.*

Then, in relation to Porter’s business strategies, the study has the objective to analyse which type of strategy is followed by Romagna wineries: leadership in cost or differentiation. Hence, hypothesis (C) and (D) are:

Hypothesis C: *The wineries tending towards a cost leadership strategy will have a better performance.*

Hypothesis D: *The wineries tending towards a differentiation strategy will have a better performance.*

#### 3.2 Measurement scale

To measure resources and capabilities, the scale used is adapted from Spanos and Lioukas [36], Ortega [25] and Ferrer Lorenzo et al. [10]. Variables are measured with a 5-point Likert scale, where companies evaluate their position with respect to their competitors and where the values of the scale are classified from 1 “much weaker than competitors” to 5 “much stronger than competitors”. Regarding strategy, responses to the twenty-two competitive strategies have been given by wineries through a self-evaluation of the grade of utilization of them. The scale adopted is again a 5-point Likert scale, where 1 stands for “not utilized at all” and 5 for “the principal strategy used”. Also the pairing of competitive methods and Porter’s generic strategies was evaluated through a 5-point Likert scale (1-least important for Porter’s strategy, 5-most important for Porter’s strategy) [7]. Finally, following Spanos and Lioukas [36] and Ortega [25], business performance is evaluated through seven indicators grouped into the two dimensions of performance described before (internal and external). All the items use a 5-point Likert scale, where companies evaluate their position with respect to competitors and where the values of the scale are rated from 1 “much weaker than competitors” to 5 “much stronger than competitors”. The use of a subjective evaluation scale is justified since it has been demonstrated that it converges with objective scale in business evaluation [35, 39]. Moreover, the validity of subjective scales has been confirmed in various empirical studies [10, 25, 36, 38]. The last section of the questionnaire deals with general characteristics of wineries. In fact, it is aimed at characterising the sample and collect general and objective information of wineries, such as billing business and assets in 2019, or the percentage of market sales according to different distribution channels.

## 4. RESULTS

## 4.1. Data gathering and sample characteristics

The data gathering started in May 2020 and finished in August 2020. It should be observed that the COVID-19 outbreak has affected the possibility to keep in touch with the wineries as well as their availability to the survey in a such difficult period. Once the questionnaires have been collected, we decided to focus the analysis only on the Consortium wineries because of their homogeneity and availability. A final number of 28 responses has been collected, out of the 115 wineries of the Consortium contacted. Therefore, the response rate is 24.35%, which is above the minimum value reported by Baruch and Holtom [4], for industrial sectors. However, the response rate is not explicative of the representativeness of the sample. The surveyed firms are 26 individual wineries and 2 cooperatives. Cooperatives have been excluded because of their small number. Table 1 summarizes the structural characteristics of the sample. It emerges that Romagna wineries are principally

small family-run enterprises. This is clear considering the average wine production, the number of long-term employees and both assets and billing business. The average surface cultivated with vineyards is about 33.4 hectares, which is representative of small/medium companies. However, 21 out of the 26 firms of the sample have a vineyard surface between 2.5 and 23 hectares, confirming the fact that the sample is principally characterized by small enterprises. The average value of 33.4 hectares is also influenced by 3 firms whose vineyard surface is above 100 hectares.

Most of these firms produces and processes grapes, and sell bottled wine on their own. They principally sell their products in the same region of production (Emilia-Romagna), while the most used distribution channel is HO.RE.CA (HOTel, REstaurant and CAtering), followed by direct sale to consumers. Finally, it results that the most produced wine is the red one, followed by white and at a great distance, by sparkling wine and rosè. It is crucial to underline that most of the wine produced and sold is PDO or PGI branded.

**Table 1.** Sample characteristics.

Variable	Mean	Standard Deviation	Min	Max
Year of establishment			1933	2020
Number of permanent employees	14	26	0	250
Vineyard surface	33.40	59.03	2.5	250
Wine production (litres; 2019)	119,212	252,714	180	1.2 Mln
Firm's activities (1=0%; 2= 0-10%; 3= 10-80%; 4= 80-100%)				
Grape production	3.88	0.33	3	4
Wine bottling	3.61	0.98	1	4
Sales	3.88	0.43	2	4
Production of wine (1= 0%; 2= 0-10%; 3= 10-25%; 4= 25-50%; 5= 50-75%; 6= 75-100%)				
% of transformation of own grapes	5.84	0.55	4	6
Red wine	5.00	0.80	4	6
White wine	3.15	0.97	1	5
Rosè wine	1.60	0.58	1	3
Sparkling wine	1.63	0.71	1	3
Assets (€; 2019) (1= < 400K; 2= 400K-1M; 3= 1-5M; 4=5-10M; 5= 10-20M; 6= > 20M)				
Billing business (€; 2019) (1= <50K; 2= 50-200K; 3= 200K-1M; 4= 1-5M; 5= 5-10M; 6= >20M)	2.38	0.87	1	4
Market sales (1=0%; 2= 0-10%; 3= 10-25%; 4= 25-50%; 5= 50-75%; 6= 75-100%)				
In the same region	4.96	1.08	2	6
Abroad	2.80	1.41	1	6
Directly to consumers	3.20	1.41	1	6
HO.RE.CA.	4.69	1.32	2	6
PDO/PGI wines	5.20	0.96	3	6

Source: our elaboration from survey data 4.2 Questionnaire and analysis of the independent and dependent variables.



**Table 2.** Performance variables – self-evaluation of winery managers with respect to competitors (Likert scale 1 “far below average” to 5 “definitely above average”).

Variable	Far below avg. 1	Below avg. 2	On avg. 3	Above avg. 4	Definit. above avg. 5
Sales volume, in €	12%	16%	40%	32%	0%
Growth in sales volume, in €	4%	12%	44%	40%	0%
Market share, % over sales, in €	12%	12%	50%	26%	0%
Growth in market share over sales, in €	12%	8%	54%	26%	0%
Profitability performance. Profit margin	4%	16%	48%	32%	0%
Profitability performance. Return on own capital	4%	20%	64%	12%	0%
Profitability performance. Net profits	4%	32%	48%	16%	0%

Source: our elaboration from survey data.

Although the sample is not so heterogeneous in terms of firm’s dimension, it is true that branches of research focus their attention only on micro and small companies, which are a typical trait of Italian agro-industrial sector [8, 9, 17].

The first section of the questionnaire aims to detect which are the most important resources and capabilities owned by Consorzio Vini di Romagna wineries. These resources and capabilities have been classified into different categories, i.e. technology, innovation, quality, information and cooperation, human capital, management, and marketing. In the second part of the questionnaire, the strategic orientation of Romagna wineries has been investigated. It is expressed by the grade of adoption of twenty-two competitive methods [32], as confirmed in bibliography [10, 25, 36, 38]. This model was developed by Dess and Davis [7] and aims to expand the generic strategies of Porter [28] facilitating their characterization and declination in empirical business studies [10]. Therefore, these twenty-two competitive methods reveal the competitive approach of wineries between Porter’s generic strategies (cost leadership or differentiation) [7]. Although there is a direct connection with Porter’s generic strategies, this further characterization is distinct and has been useful to verify the effects that different strategic behaviours have on performance [32].

In this part of the questionnaire, wineries have been also asked about their market positioning with respect to competitors and their profitability. Profitability and market positioning are used to determine business performance [36] as they refer respectively to internal and external performance of companies. Therefore, the objective is to uncover if wineries are competitive, by investigating on performance. Finally, the last branch of questions relates to general information

of companies, such as their dimension, partnership, financing, the types of wine produced, and the distribution channels used.

Table 2 presents the performance of the wineries. In particular, it has been asked to managers to position their firms in the market by taking into consideration the average level of performance of the competitors. Therefore, the evaluation is subjective but, considering the geographical focus of this study, it is real to imagine that competitors of wineries are located in the same Romagna territory. The logical process of this analysis is based on the cause-effect relationship that exists between resources and strategic orientation from one side, and profitability and performance on the other one [36]. This measurement analysis follows the research done by Ferrer Lorenzo et al. [10].

Performance is composed by four items that are referred to the external performance (sales volume, growth in sales volume, market share, growth in market share), and three the internal (profit margin, return on own capital, net profits). It emerges that wineries’ performance is acceptable, as managers consider it on average compared to competitors. Our results are in line with the research done by Ferrer Lorenzo et al. [10] and Villanueva and Ferrer Lorenzo [38]. In particular, the internal performance indicators of Romagna wineries are comparable to that of Spanish firms [10]; on the contrary, external performance values are similar to US outcomes [38].

Table 3 summarizes managerial and technological capabilities owned by Romagna wineries. It emerges that firms’ managerial capabilities are better than technological one. In detail, the interviewed Romagna wineries are characterized by excellent work climate, as 60% of the companies consider themselves stronger or much stronger than competitors. Another interesting outcome regarding managerial capabilities is represented by coor-

**Table 3.** Managerial and technological capabilities – self-evaluation of winery managers with respect to competitors (Likert scale 1 “much weaker than competitors” to 5 “much stronger than competitors”).

Variable	Much weaker 1	Weaker 2	Equal 3	Stronger 4	Much stronger 5
Managerial capabilities					
Managerial competencies	0%	20%	48%	20%	12%
Know-how and skills of employees	0%	16%	56%	24%	4%
Work climate	0%	0%	40%	48%	12%
Efficient organizational structure	0%	12%	60%	28%	0%
Coordination	0%	8%	52%	40%	0%
Strategic planning	0%	8%	64%	24%	4%
Ability to attract creative employees	8%	12%	60%	16%	4%
Technological capabilities					
Technological capabilities and equipment	8%	28%	32%	24%	8%
Efficiency and effectiveness of the production department	4%	23%	38%	35%	0%
Economies of scale	8%	40%	36%	16%	0%
Technical experience	4%	8%	42%	38%	8%

Source: our elaboration from survey data.

dination, while for technological capabilities we see that technical experience stands out. These results confirm the importance of human capital resources in positioning in the market, as some studies reported in the literature have pointed out [5, 23, 27].

Table 4 instead presents the grade of adoption of the twenty-two competitive methods of Robinson and Pearce [32]. These methods have been classified into four patterns of strategic behaviour, i.e. efficiency, service, product innovation and development, brand/channel influence. From the data gathered, we can underline high adoptions of building brand identification, developing and refining existing products, concerted effort to build reputation within the industry and extensive customer service capabilities. On the contrary, the investigated Romagna wineries do not place often products in lower-priced market segments. This is supported by % values also noticed for pricing below competitors.

#### 4.3 Multiple linear regression model

In order to verify the hypotheses, variables have been grouped into two categories: the independent, which are resources, capabilities and strategic orientation of firms, and the dependent variable represented by the performance. We have decided to apply a multiple linear regression model, that permits to distinguish the different contributions of a set of independent variables in the explanation of the dependent one. This is interesting since we can obtain a more specific and detailed result compared to the univariate regression [21]. In par-

ticular, multiple regressions for hypotheses A and B have been performed. The multiple linear regression [21] is expressed through the following formula:

$$Y_j = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \varepsilon_i \quad (1)$$

where the dependent variable,  $Y_j$ , is the performance value for the company “j”, measured as the average of the seven items contemplated in the answers related to performance (see Table 2);  $\beta_0$  is the constant;  $\beta_1, \beta_2, \dots, \beta_n$  the coefficients of the independent variables;  $X_1, X_2, \dots, X_n$  the independent variables; and  $\varepsilon_i$  is the error or the residual of the proposed model.

Moreover, with the aim to deepen our analysis, we have used a logistic regression method. On the other hand, we have applied ANOVA tests to verify hypotheses C and D.

##### 4.3.1 Regression for managerial capabilities

To test the hypothesis A (i.e., *In Romagna wineries, the managerial capabilities owned by the firm are positively related to the firm’s performance*), the regression formula includes as independent variables (X) the managerial capabilities of Consorzio Vini di Romagna wineries. This group is composed by seven items, i.e. managerial competencies, know-how and skills of employees, work climate, efficient organizational structure, coordination, strategic planning, and ability to attract creative employees (see Table 3). Therefore, the aim is to uncover which of these items influence wineries’ performance the most.

**Table 4.** Twenty-two strategy questions (=competitive methods) to capture Robinson and Pearce variables (Likert scale 1 “not used” to 5 “the principal strategy”).

Competitive methods	1	2	3	4	5
Pricing below competitors	34%	31%	31%	4%	0%
New product development	0%	15%	46%	35%	4%
Broad product range	15%	19%	39%	27%	0%
Extensive customer service capabilities	0%	4%	35%	50%	11%
Specific efforts to insure a pool of highly trained experienced personnel	8%	8%	50%	23%	11%
Extremely strict product quality control procedures	0%	4%	31%	50%	15%
Continuing, overriding concern for lowest cost per unit	8%	19%	50%	19%	4%
Maintaining high inventory levels (disregard the derivative of the aging of the product)	8%	19%	46%	27%	0%
Narrow, limited range of products	20%	36%	28%	16%	0%
Building brand identification	0%	4%	27%	38%	31%
Developing and refining existing products	0%	4%	19%	54%	23%
Strong influence over distribution channels	8%	35%	46%	11%	0%
Major effort to insure availability of raw materials	15%	35%	31%	15%	4%
Major expenditure on production process-oriented R&D	20%	28%	28%	12%	12%
Only serve specific geographic markets	19%	27%	38%	8%	8%
Promotion & advertising expenditures above the industry average	11%	31%	43%	11%	4%
Emphasis on the manufacturing of specialty products	11%	16%	27%	27%	19%
Concerted effort to build reputation within industry	0%	4%	27%	27%	42%
Innovation in manufacturing process	8%	19%	38%	27%	8%
Products in higher-priced market segments	0%	19%	46%	27%	8%
Products in lower-priced market segments	42%	31%	27%	0%	0%
Innovation in marketing techniques and methods	8%	23%	50%	15%	4%

Source: our elaboration from survey data.

From the regression output (2) it has been found that:

$$Y_j = 1.10 - 0.06 X_1 + 0.42 X_2 + 0.04 X_3 + 0.08 X_4 + 0.07 X_5 + 0.01 X_6 + X_7 + \varepsilon_i \quad (2)$$

It could be noted that  $X_2$  is the only independent variable that has a crucial influence on the explanation of performance. Other independent variables are not statistically significant. Hence, we can conclude that *know-how and skills of employees* influence positively the performance of Romagna wineries. The model is invalidated by  $R^2 = 0.27$  and  $F = 0.52$ . Therefore, the independent variables taken together are not good predictors of performance. Hence, we can assert that hypothesis A is rejected, as managerial capabilities are not positively related to performance in this case. However, it is worthwhile to underline that the rejection of this hypothesis does not imply that managerial capabilities are not important in the definition of performance. The regression has told us that they are not significant in predicting the variation of performance, but they are certainly crucial to obtain a result in the

market. This is confirmed by data reported in Table 3, where wineries of the Consorzio appear to hold optimal levels of managerial capabilities, as mean values are above 3.

#### 4.3.2 Regression for technological capabilities

To test hypothesis (B), in the regression formula the independent variables (X) are the technological capabilities owned by Consorzio Vini di Romagna wineries (i.e. *In Romagna wineries, the technological capabilities owned by the firm are positively related to the firm's performance*). These capabilities are composed of four items, i.e. technological capabilities and equipment, efficiency and effectiveness of the production division, economies of scale, and technical experience (see Table 3). Hence, the objective is to uncover which of these items influence wineries' performance the most.

In this case, the regression line assumes the following formula (3):



**Table 5.** Regression results for managerial capabilities.

Variables	Model			
	Coefficients	stat t	standard error	sign.
(X <sub>1</sub> ) managerial competencies	-0.06	-0.25	0.23	
(X <sub>2</sub> ) know-how and skills of employees	0.42	1.89	0.22	*
(X <sub>3</sub> ) work climate	0.04	0.19	0.24	
(X <sub>4</sub> ) efficient organizational structure	0.08	0.22	0.35	
(X <sub>5</sub> ) coordination	0.07	0.22	0.31	
(X <sub>6</sub> ) strategic planning	0.01	0.03	0.41	
(X <sub>7</sub> ) ability to attract creative employees	0.00	0.01	0.22	
R <sup>2</sup>		0.27		
adjusted R <sup>2</sup>		-0.03		
F		0.91		
sign. F		0.52		

Significance: \*p ≤ 0.10; \*\*p ≤ 0.05; \*\*\*p ≤ 0.001.

Source: our elaboration from survey data.

**Table 6.** Regression results for technological capabilities.

Variables	Model			
	Coefficients	stat t	standard error	sign.
(X <sub>1</sub> ) technological capabilities and equipment	0.07	0.43	0.15	
(X <sub>2</sub> ) efficiency and effectiveness of the production department	0.42	1.88	0.23	*
(X <sub>3</sub> ) economies of scale	-0.02	-0.12	0.16	
(X <sub>4</sub> ) technical experience	0.08	0.50	0.16	
R <sup>2</sup>		0.37		
adjusted R <sup>2</sup>		0.24		
F		2.94		
sign. F		**		

Significance: \*p ≤ 0.10; \*\*p ≤ 0.05; \*\*\*p ≤ 0.001.

Source: our elaboration from survey data.

$$Y_j = 1.18 + 0.07 X_1 + 0.42 X_2 - 0.02 X_3 + 0.08 X_4 + \varepsilon_i \quad (3)$$

It is worth noting that the only variable that could exert a positive influence on performance is X<sub>2</sub> (i.e. *efficiency and effectiveness of the production department*). On the other hand, the other three technological capabilities are slightly correlated with the performance of the firms. The value of R<sup>2</sup> is 0.37 and indicates that independent variables, taken together, can be moderately good predictors of the dependent one. Moreover, the model set is significant (\*\*).

Hence, we can conclude that technological capabilities are moderate predictors of performance of Consorzio Vini di Romagna wineries if we consider them all together. Therefore, it is possible to affirm that also

hypothesis B is rejected, as it is not completely confirmed that technological capabilities owned by Romagna wineries are positively related to firm's performance.

Using the same multiple linear regression formula, we have tested the relationship between other resources and capabilities of wineries and business performance, finding interesting results for marketing capabilities.

Marketing is composed of four items, i.e. knowledge of the market, control and access to distribution channels, advantageous relationships with distributors, and market served. This regression model is significant (\*\*) and we have calculated a R<sup>2</sup> of 0.53. Moreover, two out of the four independent variables that define marketing are significant predictors of wineries' performance.

**Table 7.** Marketing capabilities – self-evaluation of winery managers with respect to competitors (Likert scale 1 “much weaker than competitors” to 5 “much stronger than competitors”).

Variable	Much weaker 1	Weaker 2	Equal 3	Stronger 4	Much stronger 5
Knowledge of the market	4%	19%	46%	27%	4%
Control and access to distribution channels	8%	31%	42%	19%	0%
Advantageous relationships with distributors	8%	38%	27%	27%	0%
Market served	8%	15%	31%	42%	4%

Source: our elaboration from survey data.

**Table 8.** Regression results for marketing capabilities.

Variables	Model			
	Coefficients	stat t	standard error	sign.
(X <sub>1</sub> ) knowledge of the market	0.50	2.22	0.22	**
(X <sub>2</sub> ) control and access to distribution channels	-0.61	-2.23	0.27	**
(X <sub>3</sub> ) advantageous relationships with distributors	0.26	1.46	0.18	
(X <sub>4</sub> ) market served	0.27	2.37	0.11	**
R <sup>2</sup>		0.53		
adjusted R <sup>2</sup>		0.44		
F		5.69		
sign. F		**		

Significance: \*p≤ 0.10; \*\*p≤ 0.05; \*\*\*p≤ 0.001.

Source: our elaboration from survey data.

These predictors are X<sub>1</sub> and X<sub>4</sub> as it is demonstrated by both the importance of the coefficients and their significance value. Hence, we can conclude that *knowledge of the market* and *market served* are marketing capabilities owned by surveyed Romagna wineries that are positively related to the firm's performance.

#### 4.4 Test of hypotheses C and D

The study goes on with the objective of verifying hypotheses C and D (i.e. C: *the wineries tending towards a cost leadership strategy will have a better performance*; D: *the wineries tending towards a differentiation strategy will have a better performance*). In order to test them, we have considered the only firms that perform better than their competitors, trying to find if there is a connection with the adoption of Porter's generic strategies. The sample of individual wineries has been reduced to 10 firms, which present an average of performance items that is above 3. Regarding Porter's generic strategies, we have considered some of the twenty-two competitive methods of Robinson and Pearce [32], the only ones that are

undoubted manifestations of a cost leadership strategy or differentiation strategy [10]. Table 9 presents the mean and standard deviation values of the responses of the 10 selected wineries.

Analysing the results, it can be stated that wineries that perform better than their competitors follow a differentiation strategy orientation. In fact, these companies mainly adopt competitive methods related to differentiation strategy. In particular, these wineries put a lot of efforts into developing and refining existing products (mean of 4.10 on a scale from 1 to 5). On the other hand, firms that obtain a superior performance with respect to their competitors do not follow a cost leadership strategy. This statement is expressed by mean values that are at most 2.80. Therefore, we can confirm hypothesis D and reject hypothesis C, as wineries that perform better than their competitors tend towards a differentiation strategy, while do not follow a cost leadership strategy.

Moreover, we want to analyse the relationship between Robinson and Pearce [32] strategies, (i.e. efficiency, service, product innovation and development, brand/channel influence), and performance. Table 10 presents competitive methods associated to strategic patterns.

**Table 9.** Grade of adoption of competitive methods related to Porter's strategies (result for wineries that perform better than their competitors).

Competitive methods	Mean	Standard deviation	Min.	Max.
<b>Cost leadership</b>				
Continuing, overriding concern for lowest cost per unit	2.80	0.92	1	4
Pricing below competitors	2.10	0.88	1	3
Products in lower-priced market segments	2.20	0.92	1	3
<b>Differentiation</b>				
New product development	3.50	0.71	2	4
Developing and refining existing products	4.10	0.74	3	5
Emphasis on the manufacturing of specialty products	3.20	1.32	1	5
Products in higher-priced market segments	3.40	0.84	2	5

Source: our elaboration from survey data.

**Table 10.** Robinson and Pearce [32] strategies. Pattern of classification.

Pattern of classification	Competitive methods associated with each pattern of strategic behaviour
Efficiency	-Seek to ensure trained personnel -Pursue strict quality control -Emphasize the lowest cost per unit -Push innovation in manufacturing processes -Innovation in marketing techniques
Service	-Extensive customer service -Build reputation in the industry -Serve high-priced market segments
Product innovation and development	-New product development -Develop and refine existing products -Emphasize specialty products -Process-oriented R&D
Brand/channel influence	-Build brand identification -Influence channels of distribution -New product development -Innovation in marketing techniques

In order to do so, we have considered the mean values of responses given by Romagna wineries about the grade of adoption of competitive methods that characterize each of the four strategies. In this case, we have divided the sample into two categories, respectively sample A and sample B. Sample A is composed by the eighteen wineries that perform better than the average performance registered for Romagna wineries, while

sample B includes the seven wineries that perform worse than this average value. In addition, we have performed ANOVA tests to examine the significance of the difference between the means of sample A and B, with  $\alpha = 0.05$ . The results found are reported in Table 11.

A first analysis reveals that firms which belong to sample A adopt the selected Robinson and Pearce methods with a higher intensity than companies of sample B. In particular, registered means for *efficiency* pattern are 3.22 for sample A and 2.80 for sample B; while for *service* they are respectively 3.76 and 3.38; for *product development and innovation* respectively 3.36 and 3.03; for *brand/channel influence* 3.32 and 2.78. More in detail, each of the patterns is defined by competitive methods as we have seen [32]. The most adopted competitive methods of firms of the sample A are *build reputation in industry* and *build brand identification* with an average of 4.11; and *developing and refining existing products* with 4.06.

However, the difference between means of sample A and B is higher for *new product development* (0.79) and *build brand identification* (0.68). Moreover, these differences are the only ones to be statistically significant.

Hence, we can conclude that these two competitive methods are the most crucial detectors of winning strategic orientations of the interviewed Romagna wineries. In general terms, the pattern *brand/channel influence* is the most determinant and significant, because these two methods are included in this pattern. Therefore, we can deduce that wineries that follow a brand/channel influence strategy orientation will have a better performance than their competitors. Moreover, this analysis confirms the conclusions achieved by Dess and Davis [7], as firms that follow a strategic orientation will obtain greater results than firms that are "stuck in the middle", i.e. firms with no clear strategic intentions. This is verified

**Table 11.** Analysis of the relationships between Robinson and Pearce strategic patterns and performance of Consorzio Vini di Romagna wineries.

Competitive methods and strategic patterns	Sample A		Sample B		Difference A/B	
	Mean	Variance	Mean	Variance	Sign.	F
Efficiency	3.22		2.80			
Seek to ensure trained personnel	3.44	1.20	2.71	0.57	0.12	2.59
Pursue strict quality control	3.89	0.69	3.43	0.29	0.19	1.82
Emphasize the lowest cost per unit	3.11	0.81	2.43	0.95	0.11	2.77
Push innovation in manufacturing processes	2.77	1.59	2.71	1.57	0.91	0.01
Innovation in marketing techniques	2.89	1.05	2.71	0.57	0.69	0.17
Service	3.76		3.38			
Extensive customer service	3.83	0.62	3.43	0.29	0.22	1.55
Build reputation in the industry	4.11	1.05	3.86	0.48	0.55	0.36
Serve high-priced market segments	3.33	0.71	2.86	0.81	0.22	1.56
Product innovation and development	3.36		3.03			
New product development	3.50	0.62	2.71	0.24	0.02	** 6.00
Develop and refine existing products	4.06	0.64	3.57	0.29	0.16	2.15
Emphasize specialty products	3.22	1.59	3.14	1.81	0.89	0.02
Process oriented R&D	2.67	1.76	2.71	1.57	0.94	0.01
Brand/channel influence	3.32		2.78			
Build brand identification	4.11	0.81	3.43	0.29	0.07	* 3.49
Influence channels of distribution	2.78	0.65	2.29	0.57	0.18	1.93
New product development	3.50	0.62	2.71	0.24	0.02	** 6.00
Innovation in marketing techniques	2.89	1.05	2.71	0.57	0.69	0.17

Significance: \* $p \leq 0.10$ ; \*\* $p \leq 0.05$ ; \*\*\* $p \leq 0.001$ .

Source: our elaboration from survey data.

since firms of sample A adopt competitive methods with a higher intensity than firms of sample B.

## 5. DISCUSSION

In this exploratory study we have demonstrated that the interviewed wineries in Romagna which perform better than their competitors do not follow a cost leadership strategy. On the other hand, they follow a differentiation strategy. Both these results are in tune with the findings obtained by Ferrer Lorenzo et al. [10] and by Villanueva and Ferrer Lorenzo [38]. The connection between differentiation strategy and performance confirms also the reasonings of Galletto and Barisan [12], which has stated that differentiation is crucial to reach visibility and success in highly competitive markets, such as wine. Moreover, we have found that, among the four strategic patterns defined by Robinson and Pearce [32], the one that exerts a stronger impact on the achievement of a better performance is brand/channel influence. This result is in line with the research of Ferrer Lorenzo et al. [10]. These alignments

can be explained since wineries located in both territories (Spain and Romagna) put a considerable effort into marketing techniques, aiming to differentiate and offer a qualitative product to the customers, and trying to build a reputation in the market. We have also found a connection with the study of Di Toma et al. [8], who underlined the importance of building a reputation as a critical factor for the success of small and family businesses.

On the other hand, it has been demonstrated the absence of positive relationships between managerial and technological capabilities and firm performance. Nonetheless, it is crucial to say that managerial capabilities are fundamental for the surveyed Romagna wineries, even though they are not good predictors of performance. In fact, these firms own on average high levels of managerial capabilities, confirming that they are crucial to compete in the market. Regarding technological capabilities, we have found that they are only partial predictors of performance. In general terms, results regarding both managerial and technological capabilities confirm the analysis of Kelliher and Reindl [17], which have asserted that micro-firms are characterized by “resource poverty”, especially experiencing financial constraints.

The analyses presented in this paper are again in line with the previously cited study of Duarte Alonso and Bressan [9], who concluded that the small size of the business is perceived as a crucial weakness by interviewed managers.

However, another finding of this research concerns the relevance of marketing capabilities. In particular, *knowledge of the market* and *market served* may have statistically significant relationships with performance. Moreover, marketing capabilities taken together are good predictors of the dependent variable. Therefore, our findings confirm the conclusions of Mu [20], who stated that firms with a superior inside-out marketing capability achieve higher levels of performance, especially regarding new product development. This ultimate outcome is linked with the relationship that has been found between brand/channel influence strategy and performance, as this strategic orientation can be implemented basing on optimal marketing capabilities. In particular, the concomitant importance of marketing capabilities, differentiation and brand/channel influence strategy suggests us that Romagna wine industry is very competitive, and firms are putting energies and resources to stand out in the market. This outcome is corroborated by the fact that the surveyed firms put a considerable emphasis into building a brand reputation and concentrate on developing and refining existing products (see Table 4).

## 6. CONCLUSIONS

This study investigates the drivers that could explain the competitive advantage of wineries located in Romagna territory. The assumption at its basis is that the competitive advantage is translated into a better firm performance [1, 34]. The final aim of this research was to examine which could be the pivotal factors that affect the performance of Romagna wineries. In order to do so, two different and complementary theoretical frameworks have been considered, i.e. Porter's Theory of Competitive Advantage [28, 29] and Barney's Resource-based Theory [2]. It has been analysed which are the categories of resources and capabilities that could be positively related to firm performance. Moreover, we have examined which are the competitive methods and the strategic orientations adopted by the most successful wineries in Romagna. The tool that has allowed us to collect the necessary data is the survey through a questionnaire. Thanks to the results of the data analysis, it is possible to propose some interesting reflections. First of all, considering the information collected from the respondents,

we have rejected the hypothesis that, in this sample, the best-performing companies are those who follow a cost leadership strategy, while it has been verified that they follow a differentiation strategy. Moreover, among Robinson and Pearce [32] strategies, brand/channel influence stands out, as most successful wineries follow this orientation. On the other hand, we have rejected both hypotheses set on resources and capabilities, as both managerial and technological capabilities owned by the surveyed firms are not positively related to performance. However, we have found positive influences of some of these capabilities taken singularly, and it has been uncovered that marketing capabilities can impact on final performance.

### 6.1 Implications

The survey results suggest that Romagna wine industry is very competitive. It is principally composed by small enterprises and, on the basis of this study, they appear to want to differentiate in the market. In particular, the aim of the respondents is to develop peculiar products and build a positive brand reputation, concentrating on marketing aspects, and putting the customers' desires at the centre of their strategic behaviour. These firms also target their products mainly to high-priced market segments. Therefore, we have found that these Romagna wineries adopt a more outside-in approach in the creation of their strategy and identity. This does not imply that resources and capabilities are not important for firms; on the contrary, they are crucial to survive in a competitive market, such as the Italian wine industry. This is true, especially for managerial capabilities, which are owned on average at high levels by Romagna wineries. On the other hand, according to the results it appears that technological capabilities are held on lower levels, indicating thus that they could represent a weakness to be healed in order to be more competitive. This reasoning is corroborated since technology evolves with great rapidity in nowadays world and could be an interesting tool to differentiate and perform better than competitors, as some research has pointed out [22,25,33,36].

However, we have verified the importance of marketing capabilities, which are the most related to the external environment considering the bundle of resources that a firm can possess. Therefore, our outcomes indicate that in a similar situation managers should continue to potentiate their marketing capabilities in order to reach a greater performance than the current one.



## 6.2 Limitations and future research

In conclusion, it is important to underline that the results obtained could have been influenced by the negative effects that the Covid-19 pandemic has had on the global economy, as the survey was administered to firms in the period going from May to August 2020 (when Italy was just shyly emerging from the first total lockdown due to the virus). In particular, one of the most used distribution channels by the Romagna wineries, which is HO.RE.CA., has been strongly limited by this pandemic. The study presents some limitations; the most important one is related to the small size of the sample. Although a good percentage of Consorzio Vini di Romagna wineries replied to the questionnaire, definitive conclusions are difficult to draw. In fact, this is an exploratory research that is not explicative of the representativeness of the entire population of Romagna wineries. Another limitation could be represented by the use of subjective scales in the definition of performance. However, it has been demonstrated that these scales converge with objective ones [35, 39], and they were adopted in various empirical studies [10, 25, 36, 38]. It is also worth noting that the statistical models used have been useful for the analyses done, but they can be strengthened in future developments of the paper. Finally, this research represents the starting point for new studies regarding other wine industries in the Italian territory, in order to make a map of the competitiveness in a country where wine is rooted in the local culture and represents a strategic product in the global market.

### ACKNOWLEDGEMENTS

We want to thank the Director of the Consorzio Vini di Romagna for the availability and the collaboration, that have been precious for the conduction of this study. We also want to warmly thank Juan Ramon Ferrer Lorenzo and Emiliano Villanueva for involving us in this research; we have been honourable to collaborate with them, and hope to work together again.

### REFERENCES

- [1] Amadieu, P., & Viviani, J.-L. (2010). Intangible effort and performance: the case of the French wine industry. *Agribusiness*, 26(2), 280–306.
- [2] Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*. <https://doi.org/10.1177/014920639101700108>
- [3] Barney, J. B., Ketchen, D. J., & Wright, M. (2011). The future of resource-based theory: Revitalization or decline? *Journal of Management*, 37(5), 1299–1315. <https://doi.org/10.1177/0149206310391805>
- [4] 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>
- [5] Coff, R., & Kryscynski, D. (2011). Drilling for micro-foundations of human capital-based competitive advantages. *Journal of Management*, 37(5), 1429–1443. <https://doi.org/10.1177/0149206310397772>
- [6] Day, G. S. (1994). The capabilities of market-driven organisation. *Journal of Marketing*, 58(4), 37–52. Retrieved from <https://tutcat.linneanet.fi/cgi-bin/Pwebrecon.cgi?v2=1&ti=1,1&SEQ=20151206185005&SC=Title&SA=Market driven strategy: processes for creating value: with a new introduction /&PID=UKWgm-5lx0VVZAsxWDCvvPcVjM4z&S ID=4%5Cnftp://ftp.repec.org/opt/ReDIF/RePEc/sy>
- [7] 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>
- [8] Di Toma, P., Lazzini, A., & Montanari, S. (2012). Entrepreneurial strategies and corporate governance: experiences from the Italian wine industry. *Corporate Board: Role, Duties & Composition*, 8(2), 44–60.
- [9] Duarte Alonso, A., & Bressan, A. (2016). A resource-based view of the firm and micro and small Italian wine firms. *International Journal of Wine Business Research*, 28(4), 349–368. <https://doi.org/10.1108/IJWBR-12-2015-0051>
- [10] Ferrer Lorenzo, J. R., Maza Rubio, M. T., & Abella Garcés, S. (2018). The competitive advantage in business, capabilities and strategy. What general performance factors are found in the Spanish wine industry? *Wine Economics and Policy*, 7(2), 94–108. <https://doi.org/10.1016/j.wep.2018.04.001>
- [11] Galati, A., Tulone, A., Tinervia, S., & Crescimanno, M. (2019). The role of internal resources in the competitive positioning of Sicilian wine cooperatives. *International Journal of Globalisation and Small Business*, 10(4), 324–337. <https://doi.org/10.1504/ijgsb.2019.103582>
- [12] Galletto, L., & Barisan, L. (2019). Carbon Footprint as a Lever for Sustained Competitive Strategy in Developing a Smart Oenology: Evidence from an Exploratory Study in Italy. *Sustainability*. <https://doi.org/10.3390/su11051483>

- [13] Hooley, G. J., Greenley, G. E., Cadogan, J. W., & Fahy, J. (2005). The performance impact of marketing resources. *Journal of Business Research*, 58(1 SPEC.ISS), 18–27. [https://doi.org/10.1016/S0148-2963\(03\)00109-7](https://doi.org/10.1016/S0148-2963(03)00109-7)
- [14] ISMEA. (2020a). *Scambi con l'estero. La bilancia agroalimentare nazionale nel 2019*.
- [15] ISMEA. (2020b). *Scheda di settore: Vino*.
- [16] Julien, P. A. (1995). New technologies and technological information in small businesses. *Journal of Business Venturing*, 10(6), 459–475. [https://doi.org/10.1016/0883-9026\(95\)00084-L](https://doi.org/10.1016/0883-9026(95)00084-L)
- [17] Kelliher, F., & Reinl, L. (2009). A resource-based view of micro-firm management practice. *Journal of Small Business and Enterprise Development*, 16(3), 521–532. <https://doi.org/10.1108/14626000910977206>
- [18] Kraaijenbrink, J., Spender, J. C., & Groen, A. J. (2010). The Resource-based view: A review and assessment of its critiques. *Journal of Management*, 36(1), 349–372. <https://doi.org/10.1177/0149206309350775>
- [19] Martinez-Canas, R., & Ruiz-Palomino, P. (2013). A resource-based view of wine quality in the Spanish region of Castilla-La Mancha. *Actual Problems of Economics*, 145(7), 378–387.
- [20] Mu, J. (2015). Marketing capability, organizational adaptation and new product development performance. *Industrial Marketing Management*, 49, 151–166. <https://doi.org/10.1016/j.indmarman.2015.05.003>
- [21] Nathans, L. L., Oswald, F. L., & Nimon, K. (2012). Interpreting multiple linear regression: A guidebook of variable importance. *Practical Assessment, Research and Evaluation*, 17(9), 1–19.
- [22] Neill, S. (2014). Technology and Marketing Capabilities in a Developing Economic Context: Assessing the Resource-Based View within a Boundary Condition. *International Journal of Business and Economics*, 13(1), 75–92.
- [23] Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1), 14–37. <https://doi.org/10.1287/orsc.5.1.14>
- [24] OIV. (2020). *State of the World Vitivinicultural Sector in 2019*.
- [25] Ortega, M. J. (2010). Competitive strategies and firm performance: Technological capabilities' moderating roles. *Journal of Business Research*, 63(12), 1273–1281. <https://doi.org/10.1016/j.jbusres.2009.09.007>
- [26] Peteraf, M. A. (1993). The Cornerstones of Competitive Advantage: A Resource-Based View. *Strategic Management Journal*, 14(3), 179–191. <https://doi.org/10.1002/smj.4250140303>
- [27] Pickett, L. (1998). Competencies and Managerial Effectiveness: Putting Competencies to Work. *Public Personnel Management*, 27(1), 103–115. <https://doi.org/10.1177/009102609802700110>
- [28] Porter, M. E. (1980). *Competitive strategy: Techniques for analyzing industries and competition*. New York: Free Press.
- [29] Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York: Free Press.
- [30] Priem, R. L., & Butler, J. E. (2001). Is the Resource-Based “View” a Useful Perspective for Strategic Management Research? *The Academy of Management Review*, 26(1), 22–40.
- [31] Rivard, S., Raymond, L., & Verreault, D. (2006). Resource-based view and competitive strategy: An integrated model of the contribution of information technology to firm performance. *Journal of Strategic Information Systems*, 15(1), 29–50. <https://doi.org/10.1016/j.jsis.2005.06.003>
- [32] Robinson, R. B., & Pearce, J. A. (1988). Planned Patterns of Strategic Behavior and Their Relationship to Business- Unit Performance. *Strategic Management Journal*, 9(1), 43–60. Retrieved from <http://www.jstor.org/stable/2486001>
- [33] Sgroi, F., Di Trapani, M. A., Testa, R., & Tudisca, S. (2014). Strategy to increase the farm competitiveness. *American Journal of Agricultural and Biological Sciences*, 9(3), 394–400. <https://doi.org/10.3844/ajabssp.2014.394.400>
- [34] Simon-Elorz, K., Castillo-Valero, J. S., & Garcia-Cortijo, M. C. (2015). Economic performance and the crisis: strategies adopted by the wineries of Castilla-La Mancha (Spain). *Agribusiness*, 31(1), 107–131.
- [35] Sirmon, D. G., Hitt, M. A., Arregle, J.-L., & Campbell, J. T. (2010). The dynamic interplay of capability strengths and weaknesses: investigating the bases of temporary competitive advantage. *Strategic Management Journal*, 1409(June 2008), 1386–1409.
- [36] 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>
- [37] Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Knowledge and Strategy*, 18(March), 77–116. [https://doi.org/10.1142/9789812796929\\_0004](https://doi.org/10.1142/9789812796929_0004)
- [38] Villanueva, E. C., & Ferrer Lorenzo, J. R. (2020). Rhode Island and Connecticut wineries business

strategy, performance, and management capabilities: a survey of managerial practices. *Journal of Wine Research*, 31(2), 124–140. <https://doi.org/10.1080/09571264.2020.1780574>

- [39] Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W., & West, M. (2004). On the validity of subjective measures of company performance. *Personnel Psychology*, 95–118.
- [40] Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 5(2), 171–180. Retrieved from <https://www.jstor.org/stable/2486175>

#### WEBSITES

- [41] <https://aida.bvdinfo.com/> (accessed January 2020)
- [42] <https://www.consorziovinidiromagna.it/> (accessed January 2020)
- [43] <https://www.enotecaemiliaromagna.it/it/> (accessed January 2020)
- [44] <http://www.inumeridelvino.it/> (accessed November 2023)
- [45] <https://www.italianfoodexcellence.com/> (accessed November 2023)
- [46] <https://www.quattrocalici.it/> (accessed January 2020)