

WINE INDUSTRY BUSINESS: A BIBLIOMETRIC ANALYSIS

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ABSTRACT

Aim: This study offers a comprehensive bibliometric analysis of the academic literature on the wine industry, aiming to identify key research streams, emerging trends, core topics, and potential avenues for future investigation. It provides a structured and in-depth overview of the current state of research in this field, laying the groundwork for future scholarly contributions. **Methodology:** The analysis combines co-authorship network exploration and keyword co-occurrence mapping using VOSviewer software, based on literature published between 2000 and 2022. It identifies the most prolific journals, articles, authors, and countries, while also mapping the thematic structure of research collaborations. **Results:** The findings indicate that recent research focuses primarily on wine industry performance, innovation, quality, knowledge management, and collaborative networks. Future research directions, inferred from articles with low co-occurrence rates and early access publications, highlight topics such as sustainability, entrepreneurship, female leadership, and alternative business models (e.g., cooperatives). **Originality:** Despite the growing interest in the wine sector, there remains a lack of focused studies addressing the areas of Management, Strategy, and Economics. This paper contributes to filling that gap by offering a comprehensive understanding of these dimensions and identifying underexplored opportunities that may guide future research agendas.

Keywords: wine industry, bibliometric analysis, performance analysis, co-authorship analysis, keyword co-occurrence, VOSviewer

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LA INDUSTRIA DEL VINO: UN ANÁLISIS BIBLIOMÉTRICO

RESUMEN

Objetivo: este estudio presenta un análisis bibliométrico exhaustivo de la literatura sobre el sector vitivinícola, con el objetivo de identificar las principales corrientes de investigación, sus tendencias emergentes, temas principales y futuras investigaciones; proporciona una visión estructurada y comprehensiva del estado actual de la investigación en el ámbito vitivinícola, sentando las bases para futuros estudios en estas áreas críticas. **Metodología:** para realizar este análisis bibliométrico se han utilizado el análisis de coautoría y el software VOSviewer, evaluando la literatura publicada entre el 2000 y 2022. Se identificaron las revistas, artículos, autores y países más productivos, además de mapear la estructura temática de las colaboraciones autorales. **Resultados:** los resultados muestran que los temas más actuales se basan en los rendimientos de la industria del vino y el avance en innovación, calidad, conocimiento y redes de colaboración entre los competidores. Los resultados del análisis de las líneas futuras de investigación fueron obtenidos a través de la interpretación de los artículos con un menor índice de coocurrencia y de acceso anticipado, destacando los estudios que abordan los temas de la sostenibilidad, emprendimiento, liderazgo femenino y modelos de negocio alternativos, como las cooperativas. **Originalidad:** ante la escasez de investigaciones enfocadas del sector exclusivamente en aspectos de dirección, estrategia y economía, junto con el creciente interés de académicos y profesionales, el valor de este artículo reside en poder contribuir al entendimiento integral de esta área de conocimiento y destacar las áreas de oportunidad poco exploradas.

Palabras clave: industria del vino, análisis bibliométrico, análisis de rendimiento, análisis de coautoría, coocurrencia de palabras clave, VOSviewer

1. INTRODUCTION

In today's globalized context, organizations are increasingly affected by factors such as cost reduction, rapid technological development, and the need to respond quickly to consumers rather than to competitors (Nieto & Rodríguez, 2011; Williamson, 2016). While large multinational corporations struggle under these conditions, the situation is even more difficult for small and medium-sized enterprises (SMEs) and family businesses. In this context, multinational corporations are the first to benefit from internationalization as a growth strategy, as they are seen as key agents in the transfer of knowledge to local companies or SMEs (Saliola & Zanfei, 2009).

Small firms are abandoning the misconception that international competitiveness does not affect their sphere of operation (Chen et al., 2016; Pla-Barber et al., 2021). They begin to operate in the same international market as multinational corporations and must cope with traditional disadvantages such as a limited institutional support (Bužavaitė & Korsakienė, 2018), scarce resources and entry barriers in foreign countries (Lee et al., 2012; Steinhäuser et al., 2021), among other obstacles. Dabić et al. (2020) point out that 95 % of the world's

organizational structure is composed of small and medium-sized enterprises, which allows SMEs to be considered the backbone of most national economies.

The wine industry is a significant contributor to both the economies and reputations of several countries around the world (Alonso Ugaglia & Peres, 2017). Recent data highlight the industry's global importance (Cimini & Moresi, 2022), with production ranging from 253,9 to 262,2 million hectoliters, the majority of which is produced in the European Union. In 2020, global wine exports reached 106 million hectoliters, valued at 32 billion euros. The industry is largely composed of SMEs, making it more vulnerable to a wide range of barriers. A clear polarity has been observed between "Old World" producers —mainly Mediterranean and European countries such as Spain, Italy, France, and Portugal— and "New World" producers, including South Africa, Chile, Argentina, and others (Cassi et al., 2011). For several decades, the latter have sought to challenge the dominance of countries traditionally considered archetypes of the wine industry, largely through technological innovation and global marketing strategies (Aleixandre et al., 2016). Other emerging challenges in this sector include high vulnerability to climate change and the constant pressure to improve product quality (Webb et al., 2007).

In an industry of both public and private interest, a comprehensive review of the state of the art in wine business research is essential. Previous bibliometric research has either focused on biology —specifically, the study of phenolic compounds in grapes and wine (Aleixandre-Tudo et al., 2019)— or has been limited to specific geographical areas —as in the case of Latin America by Aleixandre et al. (2013)—.

However, few relevant studies have examined the wine industry from the perspective of business, management, and organization. Mota et al. (2020), study the connection between social and territorial factors and performance in the wine industry, addressing a gap in previous research on specific performance measures. Social factors such as education and labor conditions appear to be crucial. Higher levels of staff education stimulate productivity and operational efficiency by enabling the adoption of sustainable and high-quality practices, which are essential in a traditional industry such as wine. Territorial development —such as cultivated area and grape variety— are a strategic factor in determining production capacity and product differentiation. These dimensions, along with economic and environmental aspects, can enhance the performance of wine industry through the sustainable optimization of resources.

Carollo et al. (2022) explored the various factors that influence wine consumer preferences and behaviors, emphasizing the role of marketing in enhancing customer-centric strategies. The study highlighted that consumer decision-making is shaped by both intrinsic product characteristics and extrinsic elements such as price, eco-friendly labeling, and packaging. It also examined how these perceptions vary across different generations and local cultures. What distinguishes this research from earlier studies is its comprehensive approach, which incorporates both product attributes and brand preference. Santos et al. (2019) conducted a comprehensive literature review to explore the intersection of the wine industry and tourism. Their analysis highlights the importance of wine tourism and identifies three key experiential dimensions —situational, cognitive, and emotional— that can enhance visitor engagement and generate greater long-term benefits compared to competing firms. Unlike previous studies, the measurement scales they propose focus on the sensory and multifaceted nature of the industry.

As illustrated by the examples above, research on the wine industry has been fragmented over the years. These studies share a common methodology, employing bibliometric approaches to review the existing literature in specific thematic areas.

The present investigation employs bibliometric techniques—including co-authorship analysis and keyword co-occurrence—to map research trends, identify prominent scholars, and reveal collaboration patterns within the wine industry, all examined through the lens of management, business, and economics. Co-authorship analysis provides insights into the collaborative landscape and enables the identification of key authors, institutions, and geographic regions influential in the field (Glänzel & Schubert, 2004; Kumar, 2015). In parallel, keyword co-occurrence analysis identifies prominent themes and emerging areas of research by examining the frequency and interconnections of the most frequently used keywords in the literature (Zupic & Čater, 2015).

This twofold perspective—authorship and thematic keyword clusters—will be essential for understanding prominent trends and identifying unexplored domains where new or interdisciplinary research can contribute to further advancements. Identifying representative authors of each trend will help establish reference points to guide future research agendas. The research aims pursued in this article are as follows:

- Conduct a descriptive analysis of the wine industry literature over time, focusing on the most significant information at both micro and macro levels—including key authors, top journals, universities, and countries.
- Identify knowledge clusters or communities in the wine industry by analyzing the co-authorship of scientific publications resulting from author collaborations. Recurrent research topics will also be identified through keyword co-occurrence analysis. Investigate the main current areas of interest and the potential future research lines based on lower levels of co-authorship.

The article is structured into the following sections: Methodology, Results, and Discussion, and Conclusions.

2. METHODOLOGY

Bibliometric analysis is a quantitative research method used to evaluate scientific literature through the study of citation networks, keyword co-occurrences, and publication metrics across diverse academic fields (Ellegaard, 2018).

The variables analyzed include leading authors, journals, and institutions in the wine field, as well as knowledge clusters, current research areas, and potential future research directions. Performance analysis will be used to assess the first three variables. Its goal is to evaluate and quantify the productivity and impact of researchers, institutions, countries and journals within specific disciplines (Lezama-Nicolás et al., 2018). Regarding the bibliometric indicators used, this study focuses on the number of publications and citations obtained by authors, as well as the widely recognized H-index, which combines both metrics and is widely adopted in academic settings (Gaviria-Marin et al., 2019).

Through keyword co-occurrence analysis (Callon et al., 1983), it is possible to quantify the thematic evolution of wine industry research in the fields of management, business and economics. This bibliometric technique measures the frequency of specific keywords

appearing in the academic literature, helping to identify foundational and current research trends as well as thematic shifts that may indicate future research directions (Abedin et al., 2021; Leung et al., 2017). To visualize the results, the VOSviewer software will be used. Co-authorship analysis aims to structure knowledge clusters and reveal collaborative networks among authors working in the same research area (Khanra et al., 2022). In contrast, co-citation analysis may overlook this perspective, as it focuses on how often two documents are cited together and how they relate to current research trends (Small, 1973).

Co-authorship analysis enables the identification of active collaborations between researchers, facilitating more immediate exchanges of ideas and the integration of diverse expertise, as noted by Börner et al. (2005). This technique can also reveal influential research nodes and groups, forming a “global brain” of scientific activity in which knowledge is constantly shared and developed. Newman (2004) demonstrated the value of this technique in highlighting key thematic areas by mapping intellectual leaders who drive the development of new scientific ideas. This approach can uncover emerging interdisciplinary trends, particularly in fields characterized by cross-disciplinary collaboration, such as wine business literature (Adams, 2012). In this process, international collaborations may give rise to new research areas, underscoring the importance of institutional and geographic dimensions (Glänzel & Schubert, 2004; Wagner & Leydesdorff, 2005).

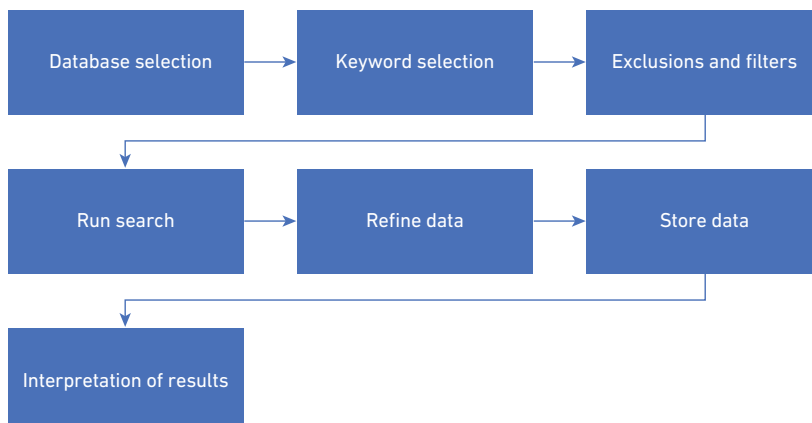
Rather than remaining on the surface of a static field of knowledge through co-citations, this study uses co-authorship analysis to explore the current and evolving ideas of the authors who shape the academic landscape of the wine industry business and to identify new trends or emerging themes in the field.

To extend the analysis of future research trends, this study also examines Early Access articles. These articles grant us access to the most recent research findings, enabling the early detection of emerging trends and offering a more detailed view of the latest research. These articles offer insights into the evolution of the most current research topics, as they have been peer-reviewed but not yet formally published in journal issues.

The methodology followed in this study is structured into the following main stages, ensuring the study's replicability.

Figure 1

Bibliometric Analysis Process



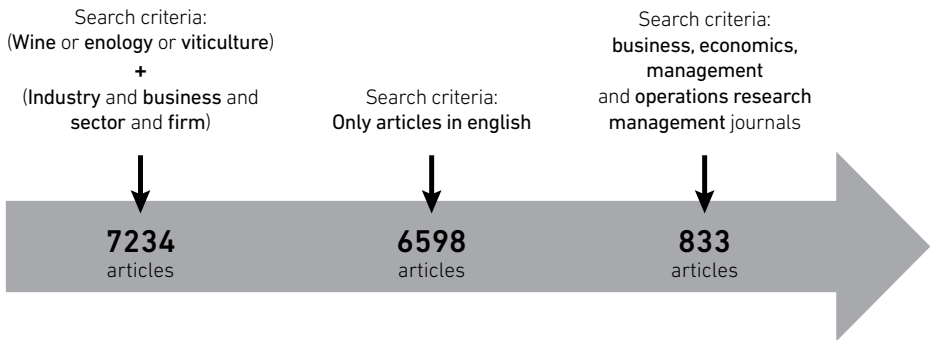
Various databases are available for data collection in bibliometric studies, including Web of Science, Scopus, or Google Scholar. In this study, and through institutional access provided by the University of Zaragoza, all data will be exclusively extracted from the Web of Science Core Collection, and its Social Sciences Citation Index due to its affinity with the Management, Business, and Economics disciplines.

The Web of Science (WoS) is recognized as the world’s leading citation database, containing records from high-impact journals—including open-access journals— conference proceedings, and books dating back to 1900 (Web of Science, 2022). This database offers several advantages for conducting bibliometric research. WoS indexes only peer-reviewed journals, ensuring high-quality data compared to other databases (Martín-Martín et al., 2018). It also provides advanced analytical tools —such as Journal Impact Factor and Citation Reports— to measure research impact and conduct detailed analyses (Falagas et al., 2008). Additionally, its long-standing citation history makes it a preferred database in many leading academic journals (Abramo & D’Angelo, 2017; Thelwall, 2017).

The research terms selected for the analysis were ‘wine’, ‘enology’, ‘viticulture’ (linked by the OR operator) combined with ‘industry’, ‘business’, ‘sector’, and ‘firm’ (linked by the AND operator). To maximize the scope of the search, only word stems were used, with the addition of the asterisk (*) as a wildcard symbol. The time frame selected for the analysis spans from 1900 to 2022. Regarding research filters, the analysis was limited to articles published in English and appearing in journals categorized under Economics, Management, Business, and Operations Research Management, in order to obtain a representative sample of the relevant literature of the wine business (Mongeon & Paul-Hus, 2016).The final search was conducted in August 2022, resulting in a total of 833 articles: 25 articles belonged to the 20th century and 808 articles belonged to the 21st century (16 classified as Early Access). The detailed analysis focuses on articles published between 2000 to 2022. Articles from the 20th century are referenced briefly, with only a superficial review compared to the in-depth examination of the 21st century publications.

Figure 2 describes the complete progression of the search process— from the raw results, through the application of filters, to the final dataset of 833 articles.

Figure 2
Progression of the Search



Once the final sample was obtained from the database, the complete records of all articles were exported in both plain text and Excel formats. Subsequently, the titles and abstracts of the articles were reviewed to ensure alignment with the established scope of study. After confirming that all 833 articles fell within the scope, the data were processed in VOSviewer software for subsequent co-authorship and keyword co-occurrence analyses through scientific mapping.

3. RESULTS

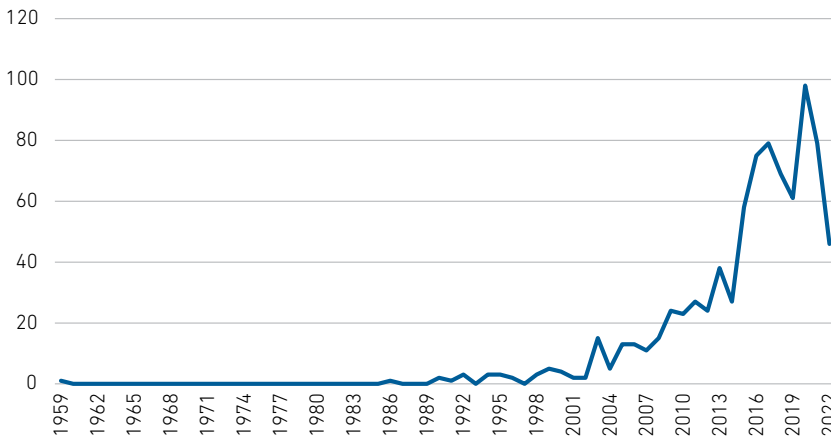
The following sections present and discuss the results derived from the final dataset of 833 articles, using data visualization tools to illustrate the findings.

3.1 Scientific Production from 20th Century to 2022

The analysis of scientific production in the wine industry literature from 1959 to mid-2022 is presented in Figure 3. In the 20th century, research output was limited, with the first known publication dating back to 1959 in the journal "De Economist" (Netherlands Economic Review) although the author is unknown.

Figure 3

Number of Publications, 20th-21st Century



Scientific production in the wine industry did not begin to take shape until 1999, after reaching five articles. A notable increase in research productivity is observed in the 21st century. The first significant growth occurred in 2003, when the annual publication count reached fifteen articles. By contrast, the early 2000s were less prolific, with only two to five articles published annually. However, a clear growth trend is observed in later years, with 2015, 2016, and 2020 standing out as particularly productive, registering 58, 75, and 98 publications, respectively. A decline began in 2016, with publications stabilizing at around seventy articles per year, before rising again in 2020.

The peaks in research publications correspond to significant industry events and trends. Between 2015 and 2016, studies explored the challenges and implications of digital transformation for wine businesses, including its impact on competitiveness and the importance of internationalization and knowledge transfer for small firms (Fernández-Olmos & Díez-Vial, 2015; Gil & Mataveli, 2017; Hess et al., 2016) . In 2020, growing interest in sustainability and corporate responsibility emerged, reflecting in the wine industry's sensitivity to climate change and stakeholder perceptions (Festa et al., 2020; Pucci et al., 2020). Additionally, the disruptive effects of the COVID-19 pandemic in 2020-2021 led to a slight decline in publication output and a growing emphasis on risk management and organizational resilience as survival strategies (Bressan et al., 2021; Browne et al., 2020; Giacomarra et al., 2021).

3.2 Performance analysis

Table 1 lists the top 20 representative journals out of a total of 384 included in the database. These 20 journals account for 233 of the 833 articles, representing nearly one-third of the total sample —an indication of their central role despite the broad scope of the database. The *Journal of Wine Economics* is the most prominent, accounting 4,9 % of the total articles. It is followed closely by *Agribusiness* (2,5 %), *Journal of Business Research* (2,2 %), *Quality Access to Success* (1,9 %), and *International Journal of Contemporary Hospitality Management* (1,6 %).

Table 1
Top 20 Representative Wine Industry Journals

Name of the journal	Number of articles	Share (%)
Journal Of Wine Economic	41	4,9
Agribusiness	21	2,5
Journal Of Business Research	19	2,2
Quality Access to Success	16	1,9
International Journal of Contemporary Hospitality Management	14	1,6
Industrial Marketing Management	11	1,3
Social Sustainability in The Global Wine Industry Concepts and Cases	11	1,3
Australian Journal of Agricultural and Resource Economics	10	1,2
American Journal of Agricultural Economics	9	1,0
Journal Of Business Ethics	9	1,0
Applied Economics	8	0,9
Regional Studies	8	0,9
Revista De Historia Industrial	7	0,9
Administrative Science Quarterly	7	0,8
Bio Based and Applied Economics	7	0,8
Business Strategy and The Environment	7	0,8
Cornell Hospitality Quarterly	7	0,8

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Name of the journal	Number of articles	Share (%)
Custos E Agronegocio On Line	7	0,8
International Journal of Entrepreneurial Behavior Research	7	0,8
Palgrave Pivot	7	0,8
Total Articles	233	27,9

Table 2 shows the 20 most representative authors during the analysis period. This analysis reveals notable differences in publication output (measured by the total number of articles), research impact (measured by total citations), and the H-index, which reflects both productivity and quality of publications. Furthermore, the list reflects a diverse geographical distribution, with authors affiliated with institutions in various countries.

Academic production, measured by the total number of articles (TA), varies among authors. For example, Abel Duarte Alonso from RMIT University in Australia has published thirteen articles, while other researchers have fewer publications. However, the number of citations (TC) does not directly correspond to publication output. Researchers like Elisa Giuliani (University of Pisa, Italy), with only 10 articles, have achieved significant impact—accumulating 1698 citations and surpassing other researchers with more publications.

The H-index measures both the number of publications and their impact, revealing each researcher's capacity to produce highly cited work. In this case, the H-index varies from 2 to 8, with Elisa Giuliani standing out with a score of 8—the highest on the list—followed by Andrea Morrison and Roberta Rabellotti, both with a score of 6, highlighting the relevance of their publications in this field. The ratios of citations per article (C/Art) and per author (C/A) serve as indicators of the influence of individual publications. Giuliani stands out with 169,8 citations per article, followed by Andrea Morrison (43,14) and Roberta Rabellotti (39,71), indicating that their publications are highly referenced. These figures contrast with authors such as Sylvaine Castellano, who, despite having six articles, has accumulated only twelve citations, indicating a lower impact.

Table 2
Top 20 Most Representative Authors in Wine Industry Business

R	Author's name	University	Country	TA	TC	H	C/A	C/Art
1	Alonso, Abel Duarte	RMIT University	Australia	13	95	5	7.3	7.3
2	Anderson, Kym	Australian National University	Australia	12	146	7	7.3	12.1
3	Crick, James M.	University of Leicester	England	12	157	7	31.4	13
4	Giuliani, Elisa	University of Pisa	Italy	10	1698	8	94.3	169.8
5	Crick, Dave	University of Ottawa	Canada	9	99	5	16.5	11
6	Rebelo, João	Universidade de Trás-os-Montes e Alto Douro	Portugal	8	27	3	6.7	3.3
7	Morrison, Andrea	University of Pavia	Italy	7	302	6	25.1	43.1
8	Rabellotti, Roberta	University of Pavia	Italy	7	278	6	23.1	397
9	Agnoli, Laura	Univ Bourgogne Franche Comte	France	6	32	3	6.4	5.3
10	Bonn, Mark A.	State University System of Florida	USA	6	184	5	26.2	30.6
11	Castellano, Sylvaine	EM Normandie Business Sch	France	6	12	2	2	2
12	Spielmann, Nathalie	NEOMA Business School	France	6	68	5	10.8	10.8
13	Basso, Franco	Pontificia Universidad Catolica de Valparaiso	Chile	5	39	3	9.7	7.8
14	Capitello, Roberta	University of Verona	Italy	5	23	3	4.6	4.6
15	Cuomo, Maria Teresa	University of Salerno	Italy	5	84	4	12	16.8
16	Diez-Vial, Isabel	Complutense University of Madrid	Spain	5	96	5	8.7	19.2
17	Festa, Giuseppe	University of Salerno	Italy	5	84	4	12	16.8
18	Galbreath, Jeremy	Curtin University	Australia	5	109	4	9.9	21.8
19	Gergaud, Olivier	Kedge Business School	France	5	94	4	10.4	18.8
20	Gil, Alfonso J.	Universidad Nacional de Educacion a Distancia (UNED)	Spain	5	65	4	8.1	13

Note. R = Ranking; TA = Total number of articles published; TC = Total citations; H = H index; C/A = citations per year; C/Art = average citations per articles

Regarding author contributions, some of their most cited articles are highlighted below. At the time of the study, Abel Duarte Alonso from RMIT University (Australia) stood out for exploration of the tourism potential of Australian vineyards and his analysis of the intentions to establish wine tourism, based on semi-structured and telephone interviews (Alonso & Liu, 2010). Elisa Giuliani of the University of Pisa (Italy), for instance, is known for studying the influence of firms' absorptive capacities on the cluster knowledge system —whether internal or external— as a mechanism for acquiring knowledge and fostering innovation (Giuliani & Bell, 2005).

Additionally, a subsequent analysis conducted through Web of Science confirms a correlation between two additional units of analysis: countries and universities, as indicated in Table 3. It illustrates the growing influence of "New World" countries —such as Australia, the United States, and Chile, which together account for 829 citations— in contrast to the traditional dominance of "Old World" countries such as Italy, Spain, and France. Among the ten leading authors, four are affiliated in emerging wine-producing countries (Australia, England, Canada, and the United States), as opposed to established producers (Italy, Portugal, France, and Spain), who collectively account for 2863 citations.

3.3 Current Trends in Wine Industry Business Literature

For this analysis, the section is divided into two parts: an examination of the most highly cited articles and an exploration of the most frequently used keywords.

Most Cited Articles

Table 3 presents a list of the most relevant articles, based on the number of citations to date. The top-ranked article, authored by Giuliani and Bell (2005), has received 678 citations. In this paper, the authors focused on intra-cluster learning as a driver of innovative performance. Based on a social network analysis, they concluded that knowledge diffusion is more prevalent among firms with higher absorptive capacity. The Chilean wine industry is used as a case study, notable for its long production tradition but limited economic returns until the 1980s.

The most recent article is "Catch-up Cycles and Changes in Industrial Leadership: Windows of Opportunity and Responses of Firms and Countries in the Evolution of Sectoral Systems", authored by Lee & Malerba (2017). Ranked 12th, the article presents a theoretical framework of "catch-up cycles" in industrial leadership, whereby latecomer firms surpass incumbents by leveraging windows of opportunity in technology, demand, and policy. The framework is supported by evidence from sectors such as mobile phones, semiconductors, and wine. In contrast, the oldest article —cited 147 times since 1991—, is a longitudinal study covering the period 1946 to 1984 in the California wine industry. It concludes that organizational change in these firms was driven by environmental variations (Delacroix & Swaminathan, 1991).

Based on the analysis of the abstracts, titles and citation data, the dominant research themes and citation trends have been identified. Among the thirty most cited articles, four main thematic groups have been identified.

The first group focuses on the analysis of knowledge networks and innovation dynamics, with notable contributions from Giuliani & Arza (2009) and Giuliani & Bell (2005). This thematic line is characterized by the analysis of knowledge networks within a Chilean wine cluster and by collaborations between academic and industrial institutions. The second

thematic line explores the management of brand reputation and authenticity —a key issue for wineries seeking to differentiate themselves from competitors. This group includes the work of Landon and Smith (1998) and Beverland (2005), who investigates how luxury wineries build their brand image and how brand image affects market value.

The third thematic approach focuses on sustainability strategies, including green certifications (Delmas & Grant, 2014) and the implementation of sustainable supply chain models (Varsei & Polyakovskiy, 2017). These strategies are important due to their influence on stakeholders' perceptions of product value. The final thematic group centers on the study of competition and market strategies as fundamental elements for understanding the dynamics of competition in the wine industry. This group of studies explores how the status of producers in the California wine market is related to product quality, competitive positioning, and, ultimately, organizational success (Benjamin & Podolny, 1999). Additionally, the work of Baum and Mezias (1992) is noteworthy for drawing parallels between the hotel and wine industries. The authors analyze several factors —such as population density, organizational size, geographic location, and price levels— that can affect organizational survival rates.

Regarding age and citation count, a positive correlation is observed: publications from the 1990s —such as Baum and Mezias (1992) and Benjamin and Podolny (1999)— tend to have accumulated more citations over time. Moreover, articles published in high-impact journals —such as *Research Policy* and *Administrative Science Quarterly*— also exhibit higher citation rates, as illustrated by Giuliani and Arza (2009), Giuliani and Bell (2005) and Beverland (2005). In addition, there is a noticeable concentration of articles originating from Old World countries —such as Italy and France— alongside a growing presence of contributions from New World countries, including the United States, Argentina and South Africa.

Table 3
The 30 Most cited Articles on the Wine Industry

R	Title	Authors	Y	TC
1	The micro-determinants of meso-level learning and innovation: evidence from a Chilean wine cluster	Giuliani, E; Bell, M	2005	678
2	The selective nature of knowledge networks in clusters: evidence from the wine industry	Giuliani, E	2007	496
3	Wine online: Search costs affect competition on price, quality, and distribution	Lynch, JG; Ariely, D	2000	491
4	Localized competition and organizational failure in the manhattan hotel industry, 1898-1990	Baum, Jac; Mezias, Sj	1992	468
5	Status, quality, and social order in the California wine industry	Benjamin, BA; Podolny, JM	1999	426
6	Crafting brand authenticity: The case of luxury wines	Beverland, MB	2005	390
7	Critical success factors for wine tourism regions: a demand analysis	Getz, D; Brown, G	2006	386
8	Industrial districts - old wine in new bottles	Harrison, B	1992	385
9	Identities, genres, and organizational forms	Hsu, G; Hannan, MT	2005	346

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R	Title	Authors	Y	TC
10	Entrepreneurial legacy: Toward a theory of how some family firms nurture transgenerational entrepreneurship	Jaskiewicz, Peter; Combs, James G.; Rau, Sabine B.	2015	292
11	South African wine routes: some perspectives on the wine tourism industry's structural dimensions and wine tourism product	Bruwer, J	2003	249
12	Catch-up cycles and changes in industrial leadership: Windows of opportunity and responses of firms and countries in the evolution of sectoral systems	Lee, Keun; Malerba, Franco	2017	221
13	Which Way is Up in Upgrading? Trajectories of Change in the Value Chain for South African Wine	Ponte, Stefano; Ewert, Joachim	2009	212
14	Quality expectations, reputation, and price	Landon, S; Smith, CE	1998	153
15	Strategic alliances along the Niagara Wine Route	Telfer, DJ	2001	149
16	Cosmetic, speculative, and adaptive organizational-change in the wine industry - a longitudinal-study	Delacroix, J; Swaminathan, A	1991	147
17	Quality Sorting and Trade: Firm-level Evidence for French Wine	Crozet, Matthieu; Head, Keith; Mayer, Thierry	2012	145
18	Local food: a source for destination attraction	Bjork, Peter; Kauppinen-Raisanen, Hannele	2016	143
19	What drives the formation of 'valuable' university-industry linkages? Insights from the wine industry	Giuliani, Elisa; Arza, Valeria	2009	143
20	Like milk or wine: Does firm performance improve with age?	Coad, Alex; Segarra, Agusti; Teruel, Mercedes	2013	141
21	The dynamics of evolving markets - the effects of business sales and age on dissolutions and divestitures	Mitchell, W	1994	133
22	Network dynamics in regional clusters: Evidence from Chile	Giuliani, Elisa	2013	126
23	Eco-Labeling Strategies and Price-Premium: The Wine Industry Puzzle	Delmas, Magali A.; Grant, Laura E.	2014	123
24	Resource partitioning and the evolution of specialist organizations: The role of location and identity in the US wine industry	Swaminathan, A	2001	122
25	Public-private institutions as catalysts of upgrading in emerging market societies	McDermott, Gerald A.; Corredoira, Rafael A.; Kruse, Gregory	2009	120
26	Sustainable supply chain network design: A case of the wine industry in Australia	Varsei, Mohsen; Polyakovskiy, Sergey	2017	112
27	Market Segment Analysis to Target Young Adult Wine Drinkers	Thach, Elizabeth C.; Olsen, Janeen E.	2006	112
28	Category Reinterpretation and Defection: Modernism and Tradition in Italian Winemaking	Negro, Giacomo; Hannan, Michael T.; Rao, Hayagreeva	2011	110

(continues)

(continued)

R	Title	Authors	Y	TC
29	The proliferation of specialist organizations in the American Wine Industry, 1941-1990	Swaminathan, A	1995	109
30	Wine tourism: Motivating visitors through core and supplementary services	Byrd, Erick T.; Canziani, Bonnie; Hsieh, Yu-Chin (Jerrie); Debbage, Keith; Sonmez, Sevil	2016	108

Note. R = Ranking; Y = Year of publication; TC = Total citation

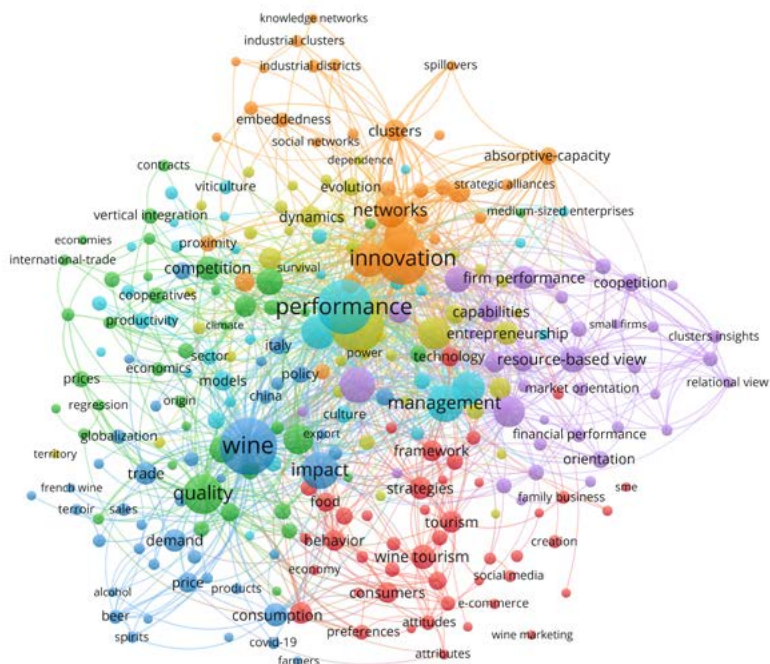
Most popular keywords

Out of a total of 3448 keywords, a minimum threshold of five occurrences was set, resulting in 270 keywords that this criterion. Figure 4 shows the most frequently used keywords in the 2022 literature, distributed across seven clusters. The most common keyword is “performance”, with 118 occurrences, represented in light blue. This is followed by “innovation” (orange), and the study of the wine industry (dark blue).

Among the secondary clusters, notable keywords include "quality" (green, 67 occurrences), "networks" in the orange cluster, "knowledge", and "resource-based view theory", which will be discussed in the following sections. Less prevalent themes that warrant future exploration include sustainability, climate change, cooperation, entrepreneurship and consumption and behavioral preferences.

Figure 4

Co-Occurrence of the Main Research Topics in the Wine Industry Business



Based on each cluster and the keyword occurrences listed in Table 4, we identified the most prevalent terms and associated them with specific thematic lines.

In the light blue cluster, the most frequent keywords are: *performance* (118 occurrences), *quality* (67), *sustainability* (47), and *capabilities* (23). Overall, this cluster is focused on management and supply chain aspects, with a particular emphasis on sustainability. The red cluster is mainly characterized by studies of consumer behavior (21 occurrences) and the adoption of technologies and innovation in the wine industry (105 occurrences). The yellow cluster focuses on the analysis of business performance and market dynamics (32 occurrences) in the wine industry (127 occurrences), with particular attention to competitive advantage (30 occurrences). The dark blue cluster suggests a focus on economic policy development, with significant representation from New World countries such as China, Chile, South Africa and the United States. The green cluster includes strategic management studies related to the wine industry, with a governance perspective on reputation (23 and 12 occurrences, respectively). The purple cluster highlights the relationship between Corporate Social Responsibility (CSR) and theoretical perspectives such as the resource-based view and the dynamic capabilities of wineries. Finally, the orange cluster focuses on knowledge management (45 occurrences), networking (46) and inter-firm cooperation (42).

Considering the strength of the connections between the words *business* (total link strength: 269) and *knowledge* (289), these can be considered foundational concepts that bridge multiple subfields of research. Emerging trends are also evident in the appearance of newer keywords such as *COVID-19*, *social media*, *consumption*, and *behavioral preferences*.

Table 4

Most-Used Keywords

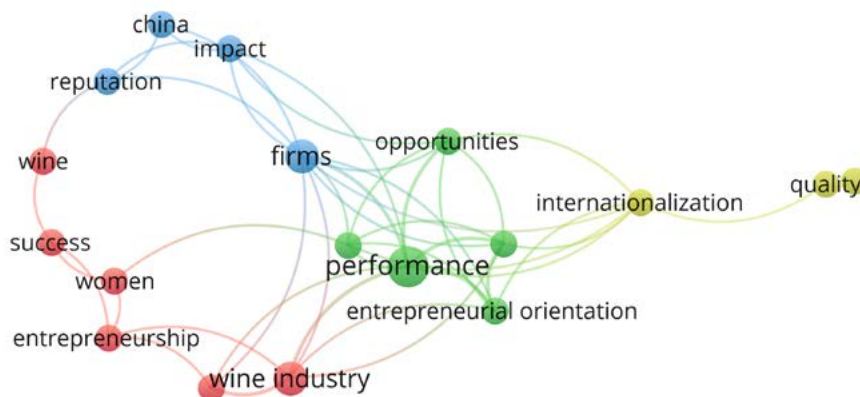
R	Keywords	OC	R	Keywords	OC
1	Performance	118	11	Strategy	46
2	Innovation	105	12	Networks	46
3	Wine	127	13	Sustainability	47
4	Wine industry	114	14	Industry	52
5	Management	59	15	Resource-based view	31
6	Determinants	53	16	Competitive advantage	30
7	Firms	49	17	Model	40
8	Quality	67	18	Capabilities	23
9	Knowledge	45	19	Clusters	23
10	Impact	59	20	Cooperation	23

Note. R= ranking; OC=occurrence.

The results of the co-occurrence analysis are further supported by the findings presented in Figure 5, which displays the outcomes of the analysis conducted on Early Access articles. As explained in the Methodology section, this analysis aims to explore emerging research trends in greater depth. Unlike previously examined articles, these are unpublished manuscripts that have completed peer-review and been accepted for publication.

Figure 5

Early Access Articles' Co-Occurrence Analysis



Based on the distribution of the nodes, the emergence of new research areas can be observed, particularly in the study of family entrepreneurship, organizational resilience and the gender perspectives.

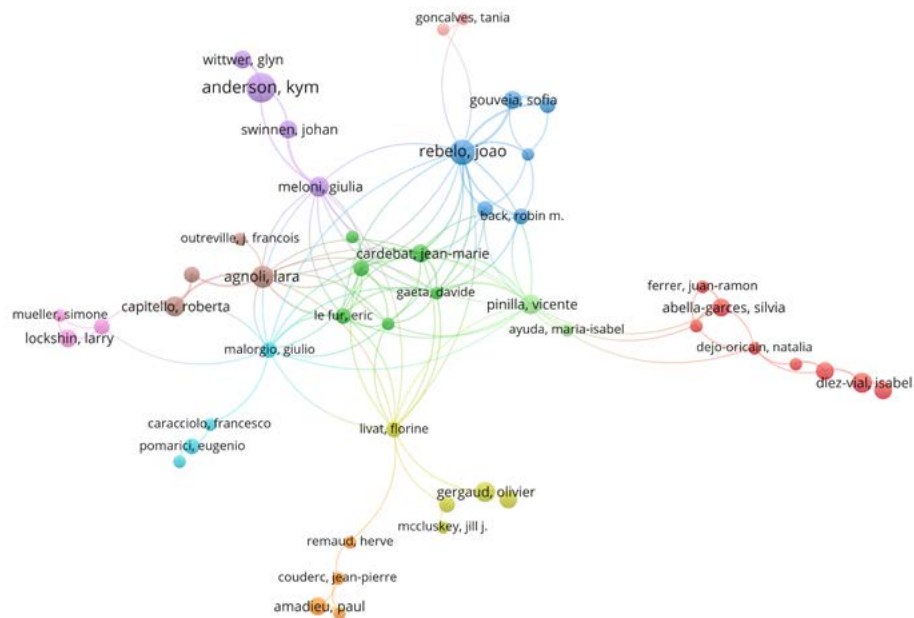
The green cluster, which includes predominant themes such as entrepreneurship or entrepreneurial orientation (Combs et al., 2021), appears as the conceptual core of future research. This cluster also shows connections with the blue cluster, particularly around terms such as *internationalization*, *success* and *reputation*. As in the previous sections, New World countries —such as China— stand out within this cluster (Richter et al., 2021). Within the red cluster, the quantitative and qualitative impact of women-led wineries is particularly noteworthy and should be further explored in future studies, given the traditionally male-dominated character of the wine industry (Casprini et al., 2022).

Themes such as internationalization, innovation in business models and performance are expected to remain relevant in future research, as they were consistently present in the earlier keyword co-occurrence analysis.

3.4 Co-authorship network analysis

While the previous sections have provided a static overview of the wine industry field and a synthesis of its literature —highlighting the most relevant articles and authors as a knowledge base for future reference—, this section focuses on organizing the scientific output based on intellectual collaborations among authors. Following the methodology described, the most representative authors are associated with their corresponding research fields, represented in 11 clusters, as shown in Figure 6.

Figure 6
Co-Authorship Network in Wine Industry Research



To carry out the analysis, we use VOSviewer software, resulting in the visual representation of 11 co-authorship clusters, where nodes represent authors linked to each other for sharing the authorship of one or more articles. In the following table, the authors and their corresponding clusters are also attached.

Table 5
Co-Authorship Clusters Structured by Authors

Cluster	Colour	Authors
1	Red	Abella-Garces, Silvia; Dejo-Oricain, Natalia; Diez-Vial, Isabel; Fernández - Olmos, Marta; Ferrer, Juan – Ramon; Rosell - Martinez, Jorge; Serrano, Raúl
2	Green	Cardebat, Jean-Marie; Fanasch, Patrizia; Frick, Bernd; Gaeta, Davide; Le Fur, Eric; Schmel, Gunter
3	Dark blue	Back, Robin M.; Faria, Samuel; Gouveia, Sofia; Guedes, Alexandre; Niklas, Britta; Rebelo, Joao
4	Yellow	Delmas, Magali A.; Gergaud, Olivier; Livat, Florine; Mccluskey, Jill J.; Rickard, Bradley J.
5	Purple	Anderson, Kym; Meloni, Giulia; Swinnen, Johan; Wittwer, Glyn
6	Light blue	Caracciolo, Francesco; Malorgio, Giulio; Pomarici, Eugenio; Sardone, Roberta
7	Orange	Amadieu, Paul; Couderc, Jean-Pierre; Remaud, Herve; Viviani, Jean – Laurent

(continues)

(continued)

Cluster	Colour	Authors
8	Brown	Agnoli, Lara; Begalli, Diego; Capitello, Roberta; Outreville, J.Francois;
9	Pink	Corsi, Armando Maria; Lockshin, Larry; Mueller, Simone
10	Dark pink	Goncalves, Tania; Lourenco-Gomes, Lina
11	Light green	Ayuda, Maria-Isabel; Pinilla, Vicente

3.5 Research Streams

Based on the analyses of the documents included in the co-authorship study, we grouped the 11 clusters into four major research streams, each accompanied by representative bibliographies: (1) Determinants of Performance in Wine Industry, (2) Consumer dimension in with Wine Industry, (3) Wine Industry Business Models, and (4) Wine Industry Business Sustainability. The results and their interpretation are presented below.

Determinants of Performance in the Wine Industry

This research stream includes contributions from authors across various countries who assess the key factors that enhance the performance of the wine industry.

Exporting is identified as the main strategy to foster growth in an industry largely composed of SMEs. In this context, the resource-based view theory is also considered as a key framework for ensuring long-term sustainable competitiveness (Amadiou & Viviani, 2010; Fernández-Olmos, 2011).

This theory emphasizes the importance of firms acquiring as many intangible resources as possible — particularly those that cannot be replicated by competitors. Several authors identify as valuable resources product and brand reputation (Costanigro et al., 2010), the geographical distribution of firms (Diez-Vial, 2011; Meloni & Swinnen, 2018), varying levels of R&D investment (Zhao et al., 2003), social capital (Díez-Vial & Montoro-Sánchez, 2014), and knowledge as a means of accelerating internationalization among small and medium-sized enterprises (Fernández-Olmos & Díez-Vial, 2015).

Other determinants studied include the type of governance — particularly decisions related to buying or selling (Fernández-Olmos et al., 2009)—, ownership structure (Frick, 2004), human capital (De Salvo et al., 2017), national public policies (Faria et al., 2020; Meloni et al., 2019), market structure (Cembalo et al., 2014), and pricing (Outreville, 2015).

This research stream is represented by authors from clusters 1,2,3,4,5,7,8, and 11.

Consumer Dimension in the Wine Industry

This research stream focuses on the study of consumer interactions and perceptions in the wine industry. It primarily examines psychological factors that influence the choice of a particular wine (Santisi et al., 2018), consumer decision patterns shaped by national culture (Begalli et al., 2015), country-specific regulations (Anderson et al., 2018), the consumer's level of experience with wine consumption (Capitello et al., 2015), the relationship between

perceived product quality and willingness to pay a higher or lower price (Cardebat & Figuet, 2009; Gonçalves et al., 2020), and consumer behavior during disruptive events such as the COVID-19 pandemic (Niklas et al., 2022).

This research stream is represented by authors from clusters 1,2,3,4,5,6,8,9,10 and 11.

Wine Industry Business Models

This dimension explores how practitioners can move beyond traditional, stereotypical business models —such as SMEs and family-owned firms— common in both Old and New World contexts (Remaud & Couderc, 2006; Serrano et al., 2022), by adopting alternative models such as cooperatives, corporations, and wine tourism.

Although cooperatives are often associated with lower product quality, weaker reputations and, poorer economic performance, the authors —through case studies of firms from various regions such as Germany, Italy, Austria (Fanasch & Frick, 2018), and France (Valette et al., 2018)— demonstrate that positive economic outcomes are possible when cooperative principles are applied strategically.

In Regarding wine tourism, Back et al. (2021) highlight the concept of micro-cluster farms —an unexplored area in the literature— as a strategy to connect wineries with nearby businesses in order to generate greater benefits and stimulate rural development.

This research stream is represented by authors from clusters 1,2,3,7, and 11.

Wine Industry Business Sustainability

As part of the agricultural sector and therefore highly sensitive to climate change, the wine industry increasingly demands attention to corporate sustainability and the ability of firms to preserve resources for future generations (Delmas & Gergaud, 2014). In response to growing demand from environmentally conscious consumers, “eco” certifications and labels have emerged. These are examined in several studies that pose key questions: Do these labels indicate superior product quality (Delmas & Grant, 2014)? Are eco- certifications more effective than conventional ones (Delmas & Lessem, 2017)? And do consumers actually understand what these labels represent (Capitello & Sirieix, 2019)?

These topics are primarily addressed by authors from clusters 4, 6, and 8.

4. DISCUSSION AND CONCLUSIONS

The present bibliometric analysis aimed to describe the evolution of the literature on the wine industry and identify emerging research trends. The analysis encompassed 833 articles and included performance, co-citation and co-authorship analyses.

At the micro level, the key authors who form the theoretical foundation of this research field have been identified, along with their most relevant findings for future reference. At the macro level, the geographical polarity between companies from the Old World and the New World has been examined. The former group holds a historical advantage in terms of publications, citations and accumulated knowledge. However, the emergence of countries such as China, Australia and the United States indicates a shifting landscape- Traditionally, this industry has been perceived as more traditional and less technologically advanced.

Today, companies in these emerging countries are increasingly associated with technological advancement, aligning with future research directions focused on innovation-oriented strategies and technologies to be applied.

The identification of co-authorship clusters, along with the most and least frequently occurring keywords has allowed us to distinguish the most prevalent themes in current research. Since the 1990s, research has consistently addressed how companies can achieve greater economic impact. Initially, studies focused on the local level. Over time, strong correlations emerged with other sub-themes such as quality standards, product sustainability, and consumer perception. As a result, company performance is now assessed not only in terms of economic outcomes or competitiveness, but also in terms of resilience and the ability to survive disruptive events such as climate change or COVID-19. In terms of organizational systems, there is a growing interest in alternative models such as cooperatives and wine tourism, while still acknowledging the traditional dominance of small and medium-sized enterprises.

Low frequency keywords, the most cited journals, and research trends with limited co-authorship help highlight emerging fields that are likely to become central in future studies. These will include various thematic branches, such as new forms of collaboration —with academic institutions and even with competitors—, sustainability strategies as a strategic pillar, and the continued exploration of consumer perception and factors that influence it, such as social media and national regulations. These emerging trends also a shift away from viewing women solely as consumers, highlighting instead the potential for studying female leadership, both in small and medium-sized wineries and in the alternative models mentioned above. Themes such as reputation and entrepreneurship, which emerged early in the literature, are also expected to remain relevant in future research.

4.1 Limitations

Although this study offers a solid and detailed analysis of the state of the art in wine industry research, several limitations should be acknowledged. Firstly, the study relied on a single data source. While previous studies have validated the use of Web of Science, integrating additional databases such as Scopus or Google Scholar could enhance the robustness of the findings. Additionally, only articles published in English were included, which may have excluded valuable perspectives from studies written in Spanish, Italian or French.

Second, the performance analysis relied on a single index. This section used the H-index exclusively, as it is widely recognized as a measure of an author's impact. However, it has certain limitations —for instance, it is insensitive to highly cited papers and may disadvantage early-career researchers (Bornmann & Daniel, 2007). To address this, we propose using complementary indices such as the g-index, which assigns greater weight to highly cited articles (Abramo et al., 2013; Egghe, 2006), and the m-index, which helps to normalize differences between the academic trajectories of senior and early-career researchers (Kamrani et al., 2021).

4.2 Implications

These results reveal areas of interest for both academic and professional audiences. For researchers, valuable insights could be gained by incorporating perspectives from other disciplines, such as Agronomy or Environmental Sciences. These topics were explicitly excluded from the current bibliometric analysis; therefore, expanding the study's scope to include categories addressing sustainability, gender, or marketing would be valuable. For

practitioners, new organizational models —such as cooperatives or micro-farms— offer promising avenues for exploration. Although these models have received limited attention so far, monitoring future developments could yield important findings.

In conclusion, the bibliometric analysis has provided a foundational framework for underlining the evolution and future directions of the wine industry, as well as for guiding strategic, academic and policy decisions to better prepare the sector for future disruptions.

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Data Availability

The data supporting this study are preserved and available upon request to the corresponding author.

Conflict of Interest

No potential conflict of interest was reported by the author(s).

Authors Contribution

ASA: Conceptualization, Methodology, Software, Data curation, Writing- Original draft preparation, Investigation, Visualization.

MFO: Supervision, Validation, Reviewing and Editing.

REFERENCES

- Abedin, B., Jafarzadeh, H., & Olszak, C. M. (2021). Thirty six years of information systems management: A bibliometric and thematic analysis. *Information Systems Management*, 38(2), 151-164. <https://doi.org/10.1080/10580530.2020.1781987>
- Abramo, G., & D'Angelo, C. A. (2017). Does your surname affect the citability of your publications? *Journal of Informetrics*, 11(1), 121-127. <https://doi.org/10.1016/J.JOI.2016.12.003>
- Abramo, G., D'Angelo, C. A., & Viel, F. (2013). Assessing the accuracy of the h- and g-indexes for measuring researchers' productivity. *Journal of the American Society for Information Science and Technology*, 64(6), 1224-1234. <https://doi.org/10.1002/asi.22828>
- Adams, J. (2012). Collaborations: The rise of research networks. *Nature*, 490, 335-336. <https://doi.org/10.1038/490335a>
- Aleixandre, J. L., Aleixandre-Tudó, J. L., Bolaños-Pizarro, M., & Aleixandre-Benavent, R. (2016). Viticulture and oenology scientific research: The Old World versus the New World wine-producing countries. *International Journal of Information Management*, 36(3), 389-396. <https://doi.org/10.1016/j.ijinfomgt.2016.01.003>

- Aleixandre, J. L., Bordeu, E., Aleixandre-Tudó, J. L., Bolaños, M., & Aleixandre-Benavent, R. (2013). Scientific productivity and collaboration in viticulture and enology in Latin American countries. *Ciencia e Investigación Agraria*, 40(2), 429-443. <https://doi.org/10.4067/s0718-16202013000200017>
- Aleixandre-Tudo, J. L., Castelló-Cogollos, L., Aleixandre, J. L., & Aleixandre-Benavent, R. (2019). Unravelling the scientific research on grape and wine phenolic compounds: A bibliometric study. *Scientometrics*, 119(1), 119-147. <https://doi.org/10.1007/s11192-019-03029-8>
- Alonso, A. D., & Liu, Y. (2010). Wine tourism development in emerging Western Australian regions. *International Journal of Contemporary Hospitality Management*, 22(2), 245-262. <https://doi.org/10.1108/0959611011018214>
- Alonso Ugaglia, A., & Peres, S. (2017). Knowledge dynamics and climate change issues in the wine industry: A literature review. *Journal of Innovation Economics*, 24(3), 105-125. <https://doi.org/10.3917/jie.pr1.0016>
- Amadiou, P., & Viviani, J. L. (2010). Intangible effort and performance: The case of the French wine industry. *Agribusiness*, 26(2), 280-306. <https://doi.org/10.1002/agr.20226>
- Anderson, K., Meloni, G., & Swinnen, J. (2018). Global alcohol markets: Evolving consumption patterns, regulations, and industrial organizations. *Annual Review of Resource Economics*, 10, 105-132. <https://doi.org/10.1146/annurev-resource-100517-023331>
- Back, R. M., Lowry, L. L., & Higgins, L. M. (2021). Exploring a wine farm micro-cluster: A novel business model of diversified ownership. *Journal of Vacation Marketing*, 27(1), 103-116. <https://doi.org/10.1177/1356766720954258>
- Baum, J. A. C., & Mezias, S. J. (1992). Localized competition and organizational failure in the Manhattan hotel industry, 1898-1990. *Administrative Science Quarterly*, 37(4), 580-604. <https://doi.org/10.2307/2393473>
- Begalli, D., Capitello, R., & Agnoli, L. (2015). Territorial-based marketing strategies for typical agro-food products: Issues and perspectives. In G. Popescu & A. Jea-Vasile (Eds.), *Agricultural Management Strategies in a Changing Economy* (pp. 30-51).
- Benjamin, B. A., & Podolny, J. M. (1999). Status, quality, and social order in the California wine industry. *Administrative Science Quarterly*, 44(3), 563-589. <https://doi.org/10.2307/2666962>
- Beverland, M. B. (2005). Crafting Brand Authenticity: The Case of Luxury Wines. *Journal of Management Studies*, 42(5), 1003-1029. <https://doi.org/10.1111/j.1467-6486.2005.00530.x>
- Börner, K., Dall'asta, L., Ke, W., & Vespignani, A. (2005). Studying the emerging global brain: Analyzing and visualizing the impact of co-authorship teams. *Complexity*, 10(4), 57-67. <https://doi.org/10.1002/cplx.20078>
- Bornmann, L., & Daniel, H. D. (2007). What do we know about the *h* index? *Journal of the American Society for Information Science and Technology*, 58(9), 1381-1385. <https://doi.org/10.1002/asi.20609>
- Bressan, A., Duarte Alonso, A., & Kok, S. K. (2021). Confronting the unprecedented: Micro and

- small businesses in the age of COVID-19. *International Journal of Entrepreneurial Behaviour and Research*, 27(3), 799-820. <https://doi.org/10.1108/IJEBR-09-2020-0602>
- Browne, M., Balan, P., & Lindsay, N. (2020). The business models of small family wineries. *Journal of Family Business Management*, 11(2), 223-237. <https://doi.org/10.1108/JFBM-10-2019-0071>
- Bužavaitė, M., & Korsakienė, R. (2018). Inter-personal and inter-organizational networks in internationalization of SMEs: A bibliometric analysis and review. *Open Economics*, 1(1), 94-104. <https://doi.org/10.1515/openec-2018-0003>
- Callon, M., Courtial, J. P., Turner, W. A., & Bauin, S. (1983). From translations to problematic networks: An introduction to co-word analysis. *Social Science Information*, 22(2), 191-235. <https://doi.org/10.1177/053901883022002003>
- Capitello, R., Agnoli, L., & Begalli, D. (2015). Determinants of consumer behaviour in novice markets: The case of wine. *Journal of Research in Marketing and Entrepreneurship*, 17(1), 110-126. <https://doi.org/10.1108/JRME-07-2014-0012>
- Capitello, R., & Sirieix, L. (2019). What does 'sustainable wine' mean? an investigation of French and Italian wine consumers. In *Social Sustainability in the Global Wine Industry: Concepts and Cases* (pp. 137-154). https://doi.org/10.1007/978-3-030-30413-3_10
- Cardebat, J. M., & Figueat, J. M. (2009). Estimation of a hedonic price equation for Alsace, Beaujolais and Provence wines. *Applied Economics Letters*, 16(9), 921-927. <https://doi.org/10.1080/13504850701222145>
- Carollo, A., Fong, S., Gabrieli, G., Mulatti, C., & Esposito, G. (2022). To wine or not to wine? A scientometric approach to 65+ years of wine preference and selection studies. *British Food Journal*, 124(13), 409-431. <https://doi.org/10.1108/BFJ-01-2022-0011/FULL/PDF>
- Casprini, E., Pucci, T., & Zanni, L. (2022). From growth goals to proactive organizational resilience: First evidence in women-led and non-women-led Italian wineries. *Review of Managerial Science*, 17, 1017-1036. <https://doi.org/10.1007/s11846-022-00557-1>
- Cassi, L., Morrison, A., & Rabellotti, R. (2011). The changing geography of science in wine: Evidence from emerging countries. In E. Giuliani, A. Morrison & R. Rabellotti (Eds.), *Innovation and Technological Catch-Up: The Changing Geography of Wine Production* (pp. 43-65). <https://doi.org/10.4337/9780857930514.00009>
- Cembalo, L., Caracciolo, F., & Pomarici, E. (2014). Drinking cheaply: The demand for basic wine in Italy. *Australian Journal of Agricultural and Resource Economics*, 58(3), 374-391. <https://doi.org/10.1111/1467-8489.12059>
- Chen, J., Sousa, C. M. P., & He, X. (2016). The determinants of export performance: A review of the literature 2006-2014. *International Marketing Review*, 33(5), 626-670. <https://doi.org/10.1108/IMR-10-2015-0212/FULL/PDF>
- Cimini, A., & Moresi, M. (2022). Research trends in the oenological and viticulture sectors. *Australian Journal of Grape and Wine Research*, 28(3), 475-491. <https://doi.org/10.1111/ajgw.12546>

- Combs, J. G., Jaskiewicz, P., Rau, S. B., & Agrawal, R. (2021). Inheriting the legacy but not the business: When and where do family nonsuccessors become entrepreneurial? *Journal of Small Business Management*, 61(4), 1961-1990. <https://doi.org/10.1080/00472778.2021.1883038>
- Costanigro, M., McCluskey, J. J., & Goemans, C. (2010). The economics of nested names: Name specificity, reputations, and price premia. *American Journal of Agricultural Economics*, 92(5), 1339-1350. <https://doi.org/10.1093/ajae/aaq065>
- Dabić, M., Maley, J., Dana, L. P., Novak, I., Pellegrini, M. M., & Caputo, A. (2020). Pathways of SME internationalization: A bibliometric and systematic review. *Small Business Economics*, 55(3), 705-725. <https://doi.org/10.1007/s11187-019-00181-6>
- De Salvo, M., Begalli, D., Capitello, R., Agnoli, L., & Tabouratzi, E. (2017). Determinants of winegrowers' profitability: Evidence from an Eastern Europe wine region. *EuroMed Journal of Business*, 12(3), 300-315. <https://doi.org/10.1108/EMJB-12-2016-0043>
- Delacroix, J., & Swaminathan, A. (1991). Cosmetic, speculative, and adaptive organizational change in the wine industry: A longitudinal study. *Administrative Science Quarterly*, 36(4), 631-661. <https://doi.org/10.2307/2393277>
- Delmas, M. A., & Gergaud, O. (2014). Sustainable certification for future generations: The case of family business. *Family Business Review*, 27(3), 228-243. <https://doi.org/10.1177/0894486514538651>
- Delmas, M. A., & Grant, L. E. (2014). Eco-labeling strategies and price-premium: The wine industry puzzle. *Business and Society*, 53(1), 6-44. <https://doi.org/10.1177/0007650310362254>
- Delmas, M. A., & Lessem, N. (2017). Eco-premium or eco-penalty? Eco-labels and quality in the organic wine market. *Business and Society*, 56(2), 318-356. <https://doi.org/10.1177/0007650315576119>
- Diez-Vial, I. (2011). Geographical cluster and performance: The case of Iberian ham. *Food Policy*, 36(4), 517-525. <https://doi.org/10.1016/j.foodpol.2011.04.002>
- Díez-Vial, I., & Montoro-Sánchez, Á. (2014). Social capital as a driver of local knowledge exchange: A social network analysis. *Knowledge Management Research and Practice*, 12(3), 276-288. <https://doi.org/10.1057/kmrp.2014.7>
- Egghe, L. (2006). Theory and practise of the *g*-index. *Scientometrics*, 69(1), 131-152. <https://doi.org/10.1007/s11192-006-0144-7>
- Ellegaard, O. (2018). The application of bibliometric analysis: disciplinary and user aspects. *Scientometrics*, 116(1), 181-202. <https://doi.org/10.1007/s11192-018-2765-z>
- Falagas, M. E., Pitsouni, E. I., Malietzis, G. A., & Pappas, G. (2008). Comparison of PubMed, Scopus, Web of Science, and Google Scholar: strengths and weaknesses. *The FASEB Journal*, 22(2), 338-342. <https://doi.org/10.1096/fj.07-9492lsf>
- Fanasch, P., & Frick, B. (2018). What makes cooperatives successful? Identifying the determinants of their organizational performance. *Journal of Wine Economics*, 13(3), 1-27. <https://doi.org/10.1017/jwe.2018.28>

- Faria, S., Rebelo, J., & Gouveia, S. (2020). Firms' export performance: A fractional econometric approach. *Journal of Business Economics and Management*, 21(2), 521-542. <https://doi.org/10.3846/jbem.2020.11934>
- Fernández-Olmos, M. (2011). The determinants of internationalization: Evidence from the wine industry. *Applied Economic Perspectives and Policy*, 33(3), 384-401. <https://doi.org/10.1093/aep/017>
- Fernández-Olmos, M., & Díez-Vial, I. (2015). Internationalization pathways and the performance of SMEs. *European Journal of Marketing*, 49(3-4), 420-443. <https://doi.org/10.1108/EJM-06-2012-0365>
- Fernández-Olmos, M., Rosell-Martínez, J., & Espitia-Escuer, M. A. (2009). Vertical integration in the wine industry: A transaction costs analysis on the Rioja DOCa. *Agribusiness*, 25(2), 231-250. <https://doi.org/10.1002/agr.20196>
- Festa, G., Shams, S. M. R., Metallo, G., & Cuomo, M. T. (2020). Opportunities and challenges in the contribution of wine routes to wine tourism in Italy – A stakeholders' perspective of development. *Tourism Management Perspectives*, 33, 100585. <https://doi.org/10.1016/j.tmp.2019.100585>
- Frick, B. (2004). Does ownership matter? Empirical evidence from the German wine industry. *Kyklos*, 57(3), 357-386. <https://doi.org/10.1111/j.0023-5962.2004.00258.x>
- Gaviria-Marin, M., Merigó, J. M., & Baier-Fuentes, H. (2019). Knowledge management: A global examination based on bibliometric analysis. *Technological Forecasting and Social Change*, 140, 194-220. <https://doi.org/10.1016/j.techfore.2018.07.006>
- Giacomarra, M., Shams, S. M. R., Crescimanno, M., Sakka, G., Gregori, G. L., & Galati, A. (2021). Internal vs. external R&D teams: Evidences from the Italian wine industry. *Journal of Business Research*, 128, 752-761. <https://doi.org/10.1016/j.jbusres.2019.05.029>
- Gil, A. J., & Mataveli, M. (2017). The relevance of information transfer in learning culture: A multigroup study by firm size in the wine industry. *Management Decision*, 55(8), 1698-1716. <https://doi.org/10.1108/MD-11-2016-0800>
- Giuliani, E., & Arza, V. (2009). What drives the formation of "valuable" university-industry linkages? Insights from the wine industry. *Research Policy*, 38(6), 906-921. <https://doi.org/10.1016/j.respol.2009.02.006>
- Giuliani, E., & Bell, M. (2005). The micro-determinants of meso-level learning and innovation: Evidence from a Chilean wine cluster. *Research Policy*, 34(1), 47-68. <https://doi.org/10.1016/j.respol.2004.10.008>
- Glänzel, W., & Schubert, A. (2004). Analysing scientific networks through co-authorship. *Handbook of Quantitative Science and Technology Research*, 257-276. https://doi.org/10.1007/1-4020-2755-9_12
- Gonçalves, T., Pinto, L. M. C., & Lourenço-Gomes, L. (2020). Attribute non-attendance in wine choice: Contrasts between stated and inferred approaches. *Economic Analysis and Policy*, 66, 262-275. <https://doi.org/10.1016/j.eap.2020.04.011>

- Hess, T., Benlian, A., Matt, C., & Wiesböck, F. (2016). Options for formulating a digital transformation strategy. *MIS Quarterly Executive*, 15(2), 123-139. <https://doi.org/10.4324/9780429286797-7>
- Kamrani, P., Dorsch, I., & Stock, W. G. (2021). Do researchers know what the h-index is? And how do they estimate its importance? *Scientometrics*, 126(7), 5489-5508. <https://doi.org/10.1007/s11192-021-03968-1>
- Khanra, S., Kaur, P., Joseph, R. P., Malik, A., & Dhir, A. (2022). A resource-based view of green innovation as a strategic firm resource: Present status and future directions. *Business Strategy and the Environment*, 31(4), 1395-1413. <https://doi.org/10.1002/bse.2961>
- Kumar, S. (2015). Co-authorship networks: A review of the literature. *Aslib Journal of Information Management*, 67(1), 55-73. <https://doi.org/10.1108/AJIM-09-2014-0116/FULL/XML>
- Landon, S., & Smith, C. E. (1998). Quality expectations, reputation, and price. *Southern Economic Journal*, 64(3), 628-647. <https://doi.org/10.2307/1060783>
- Lee, H., Kelley, D., Lee, J., & Lee, S. (2012). SME survival: The impact of internationalization, technology resources, and alliances. *Journal of Small Business Management*, 50(1), 1-19. <https://doi.org/10.1111/j.1540-627X.2011.00341.x>
- Lee, K., & Malerba, F. (2017). Catch-up cycles and changes in industrial leadership: Windows of opportunity and responses of firms and countries in the evolution of sectoral systems. *Research Policy*, 46(2), 338-351. <https://doi.org/10.1016/j.respol.2016.09.006>
- Leung, X. Y., Sun, J., & Bai, B. (2017). Bibliometrics of social media research: A co-citation and co-word analysis. *International Journal of Hospitality Management*, 66, 35-45. <https://doi.org/10.1016/j.ijhm.2017.06.012>
- Lezama-Nicolás, R., Rodríguez-Salvador, M., Río-Belver, R., & Bildosola, I. (2018). A bibliometric method for assessing technological maturity: The case of additive manufacturing. *Scientometrics*, 117(3), 1425-1452. <https://doi.org/10.1007/s11192-018-2941-1>
- Martín-Martín, A., Orduna-Malea, E., Thelwall, M., & Delgado López-Cózar, E. (2018). Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories. *Journal of Informetrics*, 12(4), 1160-1177. <https://doi.org/10.1016/j.joi.2018.09.002>
- Meloni, G., Anderson, K., Deconinck, K., & Swinnen, J. (2019). Wine regulations. *Applied Economic Perspectives and Policy*, 41(4), 620-649. <https://doi.org/10.1093/aep/pz025>
- Meloni, G., & Swinnen, J. (2018). Trade and terroir. The political economy of the world's first geographical indications. *Food Policy*, 81, 1-20. <https://doi.org/10.1016/j.foodpol.2018.10.003>
- Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: a comparative analysis. *Scientometrics*, 106(1), 213-228. <https://doi.org/10.1007/s11192-015-1765-5>
- Mota, J., Moreira, A., Costa, R., Serrão, S., Pais-Magalhães, V., & Costa, C. (2020). Performance indicators to support firm-level decision-making in the wine industry: A systematic literature review. *International Journal of Wine Business Research*, 33(2), 217-237. <https://doi.org/10.1108/IJWBR-06-2020-0027>

- Newman, M. E. J. (2004). Coauthorship networks and patterns of scientific collaboration. *Proceedings of the National Academy of Sciences of the United States of America*, 101(SUPPL. 1), 5200-5205. <https://doi.org/10.1073/pnas.0307545100>
- Nieto, M. J., & Rodríguez, A. (2011). Offshoring of RD: Looking abroad to improve innovation performance. *Journal of International Business Studies*, 42(3), 345-361. <https://doi.org/10.1057/jibs.2010.59>
- Niklas, B., Cardebat, J. M., Back, R. M., Gaeta, D., Pinilla, V., Rebelo, J., Jara-Rojas, R., & Schamel, G. (2022). Wine industry perceptions and reactions to the COVID-19 crisis in the Old and New Worlds: Do business models make a difference? *Agribusiness*, 38(4), 810-831. <https://doi.org/10.1002/AGR.21748>
- Outreville, J. F. (2015). The market structure–performance relationship applied to the Canadian wine industry. *Applied Economics Letters*, 22(18), 1486-1492. <https://doi.org/10.1080/13504851.2015.1042133>
- Pla-Barber, J., Botella-Andreu, A., & Villar, C. (2021). Intermediate units in multinational corporations: A resource dependency view on coordinative versus entrepreneurial roles. *International Business Review*, 30(1), 101773. <https://doi.org/10.1016/j.ibusrev.2020.101773>
- Pucci, T., Casprini, E., Galati, A., & Zanni, L. (2020). The virtuous cycle of stakeholder engagement in developing a sustainability culture: Salcheto winery. *Journal of Business Research*, 119, 364-376. <https://doi.org/10.1016/j.jbusres.2018.11.009>
- Remaud, H., & Couderc, J. P. (2006). Wine business practices: A new versus old wine world perspective. *Agribusiness*, 22(3), 405-416. <https://doi.org/10.1002/agr.20094>
- Richter, B., Yang, Y., & Hanf, J. H. (2021). Dragon head enterprises in China's wine production – case study results. *Journal of Agribusiness in Developing and Emerging Economies*, 13(2), 229-242. <https://doi.org/10.1108/JADEE-04-2021-0081>
- Saliola, F., & Zanfei, A. (2009). Multinational firms, global value chains and the organization of knowledge transfer. *Research Policy*, 38(2), 369-381. <https://doi.org/10.1016/j.respol.2008.11.003>
- Santisi, G., Platania, S., & Vullo, C. (2018). A psychological analysis of wine and food consumption in Sicily: The marketing experience implication. *Quality - Access to Success*, 19(S1), 458-462. <https://www.scopus.com/record/display.uri?eid=2-s2.0-85044428237&origin=inward&txGid=bcb9b5c0879ce3a067d11a385dd80385>
- Santos, V. R., Ramos, P., Almeida, N., & Santos-Pavón, E. (2019). Wine and wine tourism experience: A theoretical and conceptual review. In *Worldwide Hospitality and Tourism Themes* (Vol. 11, Issue 6, pp. 718-730). <https://doi.org/10.1108/WHATT-09-2019-0053>
- Serrano, R., Dejo-Oricain, N., Ferrer, J., Pinilla, V., Abella-Garcés, S., & Maza, M. T. (2022). Domestic clustered networks and internationalization of agrifood SMEs. *Agribusiness*, 39(1), 167-195. <https://doi.org/10.1002/AGR.21761>
- Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science*, 24(4), 265-269. <https://doi.org/10.1002/ASI.4630240406>

- Steinhäuser, V. P. S., Paula, F. de O., & de Macedo-Soares, T. D. L. van A. (2021). Internationalization of SMEs: a systematic review of 20 years of research. *Journal of International Entrepreneurship*, 19(2), 164-195. <https://doi.org/10.1007/s10843-020-00271-7>
- Thelwall, M. (2017). Are Mendeley reader counts useful impact indicators in all fields? *Scientometrics*, 113(3), 1721-1731. <https://doi.org/10.1007/s11192-017-2557-x>
- Valette, J., Amadiou, P., & Sentis, P. (2018). Cooperatives versus corporations: Survival in the French wine industry. *Journal of Wine Economics*, 13(3), 328-354. <https://doi.org/10.1017/jwe.20171>
- Varsei, M., & Polyakovskiy, S. (2017). Sustainable supply chain network design: A case of the wine industry in Australia. *Omega*, 66(Part B), 236-247. <https://doi.org/10.1016/j.omega.2015.11.009>
- Wagner, C. S., & Leydesdorff, L. (2005). Network structure, self-organization, and the growth of international collaboration in science. *Research Policy*, 34(10), 1608-1618. <https://doi.org/10.1016/j.respol.2005.08.002>
- Web of Science. (2022, May 10). *Web of Science core collection overview*. <https://webofscience.help.clarivate.com/en-us/Content/wos-core-collection/wos-core-collection.htm>
- Webb, L. B., Whetton, P. H., & Barlow, E. W. R. (2007). Modelled impact of future climate change on the phenology of wine grapes in Australia. *Australian Journal of Grape and Wine Research*, 13(3), 165-175. <https://doi.org/10.1111/j.1755-0238.2007.tb00247.x>
- Williamson, P. J. (2016). Building and leveraging dynamic capabilities: Insights from accelerated innovation in China. *Global Strategy Journal*, 6(3), 197-210. <https://doi.org/10.1002/GSJ.1124>
- Zhao, X., Anderson, K., & Wittwer, G. (2003). Who gains from Australian generic wine promotion and R and D? *Australian Journal of Agricultural and Resource Economics*, 47(2), 181-209. <https://doi.org/10.1111/1467-8489.00209>
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429-472. <https://doi.org/10.1177/1094428114562629>