COMPARATIVE ANALYSIS OF AWARD-WINNING WINES FROM ROMANIA VERSUS THE TOP WORLDWIDE PRODUCING COUNTRIES

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Abstract

This study investigates award trends in international wine competitions, comparing the performance of Romanian wines to those from top global wine-producing countries. By analysing the number and distribution of awards, the research highlights Romania's positioning in the global wine industry. The findings reveal patterns that show top wine producing countries participation in specific international competitions and their performance, as well as showcasing the growing presence of Romanian wines in these prestigious fairs and the type of medals won. Tableau was used for data organization and analysis to identify trends and patterns, where the outcomes show that despite competing with established wine-producing nations, Romania demonstrates significant progress, with notable achievements linked to its unique varietals and improving quality standards. Additionally, a concentration analysis was conducted to gain a deeper insight into the competitive landscape and the distribution of medals among countries. The study underscores the importance of strategic promotion and continued innovation to sustain and enhance Romania's competitive edge in the global wine market.

Key words: wine industry, international competitions, award-winning, top producing wine countries

INTRODUCTION

Wine competitions worldwide are usually known as opportunities for wine producers to have a better visibility in the international wine market. Some of the competitions have a long history, where usually there are a significant number of participants worldwide that are eager to receive a medal. On the other side, [9] state that some wineries are hesitant to participate in such type of wine competitions claiming the subjectivity of the judging process. Furthermore, other papers [19] are demonstrating that some of the consumers are sceptical as well regarding the judging process. However, the potential of marketing and reputational gains after a wine competition are much more significant.

Wine fairs have become essential for the global wine industry, serving as key pillars for wineries to enhance their reputation, differentiate their products [15], and achieve premium prices. The medals from the international wine competitions show to the consumers the quality of the wine, introduce the specific winery in the global market, and

bring the competitive advantage through other trade partners. For instance, medals awarded at wine competitions give the winery the opportunity to significantly increase the prices of the wine, highlighting the direct benefits of participation for the producers [22].

Additionally, the benefits of competing in international wine competitions extend beyond pricing, as there are some studies emphasising that usually consumers perceive the awarded wines as more qualitative. [23] in their research demonstrate that a factor of high importance is the country of origin of the wine and its reputation participating in wine competitions. For example, if a country is known for its old tradition in winning medals in international wine fairs, this has a significant influence in consumer perception regarding all the wines in general from that specific country which includes further effects purchasing decisions [27]. Besides, acknowledged positive effects for consumer behaviour in wine purchasing, according to [21], the medals and awards reinforce the branding efforts of the winery, where the participation in wine fairs is used as a marketing tool for penetrating new markets, especially for emerging wineries with limited recognition.

Wine competitions are events where wines are evaluated and judged by panels of experts through blind tastings to determine their quality [20]. Wines are enrolled by the winery in these competitions, where in general a fee is charged for each wine that the producers submit. Furthermore, all the enrolled wines are divided in various categories, for example by type, regions, grape variety, and vintage [25]. The judging process is based on wine professionals and experts that are tasting in blind each wine considering flavour, colour, aroma, balance, and afterwards the judges are assigning some scores. In the end, the total scores are consolidated, and each rank corresponds to awards like Gold, Silver, or Bronze medals depending of each competition [26]. These wine fairs aim to recognize excellence, provide feedback to producers, and guide consumers in selecting qualitative wines [14]. Moreover, worldwide there are many wine competitions organized across the globe, giving the wine producers the opportunity to choose from a large list where to expose their products.

These competitions, for example Mundus Vini, International Wine & Spirit Competitions, Decanter World Wine Awards or Berliner Wine Trophy play a crucial role in the global wine industry, offering producers the opportunity to showcase their wines while helping consumers identify the best wines in the market [2].

Therefore, this study aims to analyse viticultural competitions and their impact on the wine industry, comparing Romania with the top wine-producing countries during the period 2020-2024. It explores the role and significance of these competitions, assesses Romania's participation and performance, and compares the results with those of leading wine-producing nations. The study concludes with key findings and potential implications for the Romanian wine sector.

MATERIALS AND METHODS

This study examines the results between the world's top wine-producing countries compared to Romania in regard to their success in major international wine competitions.

The research focuses on six prestigious competitions: Mundus Vini (summer tasting), Vinarium International Wine Contest, International Wine & Spirit Competition (IWSC), Berliner Wine Trophy (winter tasting), Decanter World Wine Awards (DWWA), and Asia Wine Trophy.

The objective is to analyse which countries win the most awards and identify potential trends in global wine excellence.

Data was gathered from both primary and secondary sources, such as official competition results – award winners from the past five years were collected from competition websites and wine industry reports as statistics regarding wine production allowing for recent trends to considered. Going further, (International Organisation of Vine and Wine) report was used to identify the world's largest wine producing countries where the first ten (France, Italy, Spain, United States of America, Chile, Australia, South Africa, Argentina, Germany, Portugal) were chosen for the comparison to Romania.

For each country the number of medals depending on the type that were won per competition was recorded and the results were evaluated using Tableau.

Tableau is a tool for data visualization and analysis that helps to interpret the distribution of wine competition awards. This tool allows for the creation of interactive dashboards, enabling efficient exploration of trends, comparisons, and patterns, while for the statistics, Pearson's correlation coefficient was used, which measures the linear relationship between two continuous variables, in this case being number of medals won and wine production. Additionally, a concentration analysis (CR4 - Concentration Ratio 4 and HHI - Herfindahl-Hirschman Index) wasused to better understand the competitive landscape and concentration of medals won across countries.

RESULTS AND DISCUSSIONS

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The Table 1 below allows for a clear comparison of the competitions, outlining their founding year, location, organizer, frequency, approximate no. of participants, evaluation criteria, and award distinctions. By analysing these aspects, we can assess Romania's positioning in the global wine competition landscape relative to top wine-producing nations.

Table 1. Competitions overview

Competition	Year Founded	Country	Organizer	Frequency	Participants & Representativity	Judging Panel	Tasting Process	Awards & Criteria
Mundus Vini	2001	Germany	Meininger Verlag	Twice a year (Feb, Aug)	11,000+ wines globally	Sommeliers, winemakers, journalists, traders	Blind tasting	Silver, Gold, Grand Gold
Vinarium International Wine Contest	-	Romania	ASER Consulting & ADAR	Annually	Global participation, focus on Eastern & Central Europe	Sommeliers, wine critics	Blind tasting	Grand Gold, Gold, Silver
International Wine & Spirit Competition (IWSC)	1969	United Kingdom	IWSC Ltd.	Annually	Global participation	International experts	Blind tasting + technical analysis	Bronze, Silver, Gold, Trophies
Berliner Wine Trophy	2004	Germany	OIV (International Organisation of Vine and Wine)	Twice a year (Winter, Summer)	Thousands of producers worldwide	International wine experts	Blind tasting	Grand Gold, Gold, Silver
Decanter World Wine Awards (DWWA)	2004	United Kingdom	Decanter Magazine	Annually	Global participation	200+ Masters of Wine, Master Sommeliers, critics	Blind tasting	Commended, Bronze, Silver, Gold, Platinum, Best in Show
Asia Wine Trophy	2013	Asia	OIV (International Organisation of Vine and Wine) & UIOE (International Union of Oenologists)	Annually	Thousands of global producers	Asian & international experts	Blind tasting	Grand Gold, Gold, Silver

Source: [12], [13], [18], [25], [29], [30].

The analysis of wine competitions awards reveals that Italy (24,835 medals), France (21,762 medals) and Spain (17,076 medals) receive the highest number of awards in the last 5 years. Firstly, these 3 countries emerge as the

leading nations, this dominance can be attributed to the cultivated surfaced area with grapes, where Spain, France and Italy are the first 3 in Europe, and in top 4 globally [11] (Fig. 1).

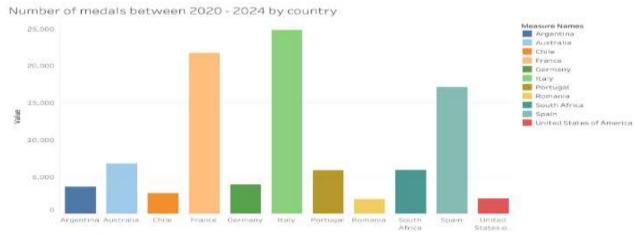


Fig. 1. Number of medals between 2020 - 2024 by country Source: Processed information from competitions websites.

Moreover, their consistent success in international wine competitions can be attributed centuries of winemaking diverse terroirs, and stringent traditions, quality standards [3]. These countries continue to dominate both old world and new world wine markets, reinforcing their position as industry leaders. From the European market, Portugal demonstrates significant success in wine competitions, accumulating a substantial number of medals, almost 6,000 medals for the analysed period of the chosen competitions. Australia and South Africa show notable performances in wine competitions, coming

strong behind the top 3 main wine producing countries. These countries, known for their distinctive terroirs and innovative winemaking, techniques [1], continue to gain international recognition. Romania has earned the least number of medals in international competitions, summing only 1,968 medals from the analysed countries. However, the country is positioning itself as a rising player in the global wine industry. Although it does not yet compete with the high medal counts of Italy or France, its performance suggests steady progress in international recognition as showed in the following figures.

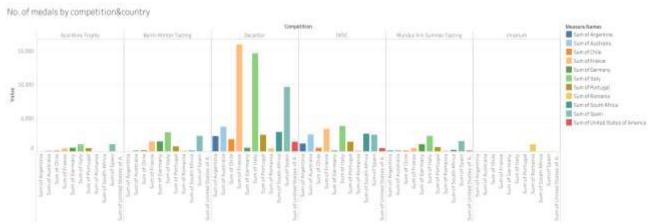


Fig. 2 Number of medals by competition and country Source: Processed information from competitions websites

On the other side, in regard to which wine competition has awarded the highest number of medals, it seems that in Decanter were won 96,138 medals, being the competition with the most diversity of medals as well. The countries that stand out are France and Italy, where these 2 continue to dominate international wine awards, particularly in the Decanter Wine Awards, where they have secured the highest number of medals. Germany, Portugal, and Australia show strong results, mostly in competitions like Mundus Vini, IWSC and Berliner Winter Tasting. However, The United States, despite being a major wine producer a relatively has gained [11],representation in some European competitions, while Chile is cumulating with 15% more medals than the United States. For Romania a moderate number of medals across different competitions were won, demonstrating a growing presence in the international wine scene. In competitions such as Mundus Vini Berliner Winter Tasting, Romania performs relatively well, with medal counts comparable to or exceeding those of some established wine nations. However, in highly prestigious events like Decanter, Romania's medal count (442 medals) is significantly lower than that of France (15,879 medals), Italy (14,570 medals), or Spain (9,617 medals). In terms of trends between 2020 – 2024 as per when considering each no. 3. competition and type of medal, France leads in Decanter and IWSC, winning 29.98% Gold medals in 2023 only in Decanter competition, while Italy achieved 17.02%. At the same time, Italy dominates Mundus Vini and Berliner Winter Tasting, achieving 34.57% Gold medals in 2024 at Mundus Vini, and 32.47% Gold medals in 2022 at Berliner Winter Tasting. Spain demonstrates consistent growth in various competitions, particularly in Decanter

(9,617 medals in total) and the Berliner Winter Tasting (2,344 medals in total). Meanwhile, Australia and South Africa have emerged as strong contenders in the Silver (e.g. 2,484 medals Australia and 2,519 medals South Africa) and Bronze (3,388 medals Australia and 2,839 medals South Africa) categories mostly in Decanter and the IWSC. Romania, with its focus on Vinarium were it won 1,092 medals in total, it has found success in this competition area mainly because it is the competition host and that most contenders are coming from Romania, but it falls short in global representation when compared to the more dominant presence of France, Italy, and Spain. Countries such as Chile and Argentina occupy not so strong positions in global wine competitions, as can be seen in Table 2.

Table 2. Distribution of total medals

Country	% Total No. of medals			
Argentina	3.77			
Australia	7.03			
Chile	2.95			
France	22.45			
Germany	4.09			
Italy	25.62			
Portugal	6.12			
Romania	2.03			
South Africa	6.13			
Spain	17.62			
United States of	2.19			
America				

Sources: Processed information from wine competitions websites.

However, while they do not achieve the same number of Gold medals as France, Italy, or Spain, they perform strongly in the Silver and Bronze categories, particularly in prestigious events like Decanter and the IWSC same as Australia and South Africa.

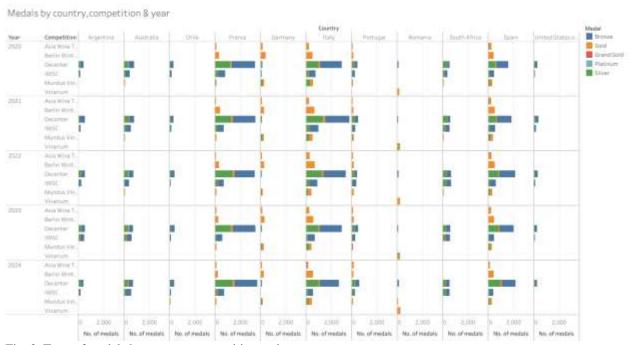


Fig. 3. Type of medals by country, competition and year Source: Processed information from competitions Websites.

For instance, Argentina secured 154 (17%) Silver medals at the IWSC in 2023, while Chile earned 136 Bronze medals in 2021.

In regards, to the most special awards like Platinum from Decanter or Grand Gold from Mundus Vini Summer Tasting, Berliner Winter Tasting, Asia Wine Trophy and Vinarium, Romania also achieves several Grand Gold medals at Vinarium, reaching a few medals in 2023, while for the rest of the competitions with Grand Gold medals in the analysed period, the country won at least one per competition.

In regard to the participation, it can be noticed from the below Fig. 4 the wide participation of the countries in various wine competitions; considering the number of medals won this is a clear indication of their active involvement in such type of events. Additionally, the range of competitions indicates different focuses, such as regional preferences, for instance the case of Romania with the Vinarium competition or a broad interest in international wine competitions. Old world wine-producing countries such as France, Italy, and Spain maintain a dominant presence in major wine competitions, including Decanter, Mundus Vini Summer Tasting, and Berliner Winter Tasting, reflecting their established position in the global wine industry. Australia, South Africa, Chile, and Argentina are increasingly active in these competitions, like Decanter or IWSC, signalling their rising influence as prominent countries from new world wine producers. Decanter and Mundus Vini Summer Tasting stand out as the most widely entered competitions, drawing participation from nearly all countries, while Vinarium remains an event with a lower participation of the top wine-producing countries. involvement in all major competitions might be considered a strong asset where the country tries to consolidate its position among the leaders.

For a deeper comprehension of the analysis, wine production was included as it plays a crucial role in understanding the dynamics of wine competitions, as it offers valuable context

for assessing the scale and influence of various wine-producing countries.

It refers to the total volume of wine produced of the analysed countries in the period of 2020 – 2024, measured in hectolitres (hl) (Fig. 5). This metric reflects the capacity of a country's wine industry, its economic significance, and its competitiveness on the global stage.

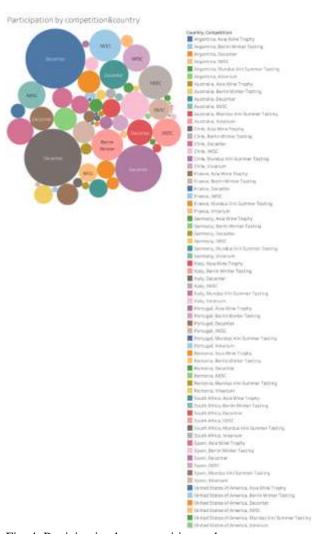


Fig. 4. Participation by competition and country Source: Processed information from competitions websites

France, Italy, and Spain consistently lead global wine production, a trend that reflects their dominance in international wine competitions. These wine-producing countries benefit from large-scale production, long-established winemaking traditions, and a broad variety of wines [4], enabling them to perform well across multiple competition categories. Meanwhile, new world wine nations like Australia, Chile, and Argentina are

experiencing strong and increasing production levels, which bolster their growing presence and success in competitions, driven by investments in quality and innovation [16]. In contrast, countries such as Germany, and Romania produce smaller quantities but focus on high-quality, specialized wines that excel in local competitions, e.g. Germany at Berliner Wine Tasting, while Romania at Vinarium. However, some countries, including Spain, face notable fluctuations in production from year to year, which can affect their ability to compete consistently at the highest level.





Fig. 5. Wine production (1,000 hl) Source: Processed information from [11].

The relationship between wine production volumes and the number of medals awarded in international wine competitions offers significant insights into the dynamics of the global wine industry. Countries with high wine production, such as France, Italy, and Spain, benefit from their substantial production capacities, which allow them to submit a diverse range of wines to competitions, thereby increasing their likelihood of securing medals across various categories.

In addition, Australia, Chile, and Argentina, exhibit a positive correlation between increasing production levels and rising medal counts as Figure 6 shows. With moderate to high production volumes, combined with ongoing investments in viticulture and winemaking innovations [7], these nations have positioned themselves as competitive contenders in international competitions. This trend emphasizes the importance of both quantity and quality in achieving success on the global stage.

In contrast, countries with smaller production volumes [11], such as Germany, Portugal, and Romania, despite their lower production levels,

these countries achieve considerable success in niche categories. For example, Romania's performance in the competition since is the main winner (81.56% medals won), despite its relatively modest production levels, demonstrates how targeted excellence can provide significant competitive advantages. Fluctuations in production, as seen in Spain, can impact a country's consistency in competition outcomes. Spain's sharp decline in production from 40,949 thousand hectoliters in 2020 to 23,834 thousand hectoliters in 2023 may account for variations in its medal number during this period. Such variability illustrates the challenges posed by external factors, including climate change [28] and economic shifts, which can influence both production levels and competitive performance.

In addition, while high wine production volumes often correlate with success in international competitions, the role of quality, specialization, and strategic focus should not be overlooked. While traditional wineproducing countries maintain their leadership, rest of the players countries in wine market are increasingly competitive, reflecting evolving nature of the global wine industry. If we are to look at the United States, the country does not follow the trend, meaning that even it has a significant wine production, the count of medals is quite low.

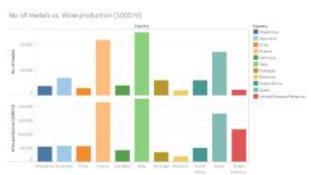


Fig. 6. No. of medals vs. Wine production (hl)
Source: Processed information from [11] and competitions websites

For a deeper understanding of the relationship between number of medals and wine production, a correlation between the two has been performed. The value of the correlation r = 0.918064670 (Fig.7) reveals a general positive correlation between wine production

volumes and the number of medals awarded in international competitions.

Oldword wine countries such as France, Italy, and Spain are positioned in the upper-right quadrant, reflecting their high production levels alongside substantial medal counts. This pattern aligns with their long-established large-scale reputations, production capabilities, and ability to produce a wide range of wines. The United States demonstrates moderate performance, with notable high production and a reasonable number of medals, reflecting its growing influence in the global wine industry.

Australia, Chile, and Argentina, occupy the middle range of the graph, indicating moderate production levels and an increasing number of medals. This suggests that these nations are becoming more competitive. In contrast, countries such as Germany and Portugal have lower production volumes but still achieve a significant number of medals, underscoring their focus on producing high-quality, specialized wines rather than prioritizing volume [24].

Romania emerges as an outlier, with relatively low wine production but a higher number of medals, likely due to its dominance in local competitions like Vinarium. Similarly, South Africa shows moderate production levels and medal counts, reflecting its growing presence and recognition on the global wine stage.

The scatter plot above (Fig. 7) highlights that, while higher wine production is generally associated with greater success in competitions, other factors might be also critical. Countries with smaller production volumes can still achieve significant success by targeting specific markets or prioritizing quality over quantity.

This analysis emphasizes dynamic the relationship between production capacity and competitive success, offering a nuanced perspective on the factors that drive performance in international wine competitions.

Furthermore, a concentration analysis has been conducted for medal-winning countries in wine competitions that helps to assess the

competitiveness and dominance of certain nations in the global wine market.

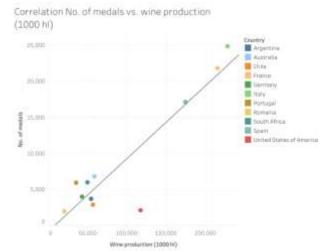


Fig. 7. Scatter plot – correlation between no. of medals and wine production (hl)

Source: Processed information from [11] and competitions websites.

For the concentration analysis the CR4 coefficient was calculated considering the top 4 countries with the highest number of medals won, as per below formula:

$$CR4 = \frac{M1 + M2 + M3 + M4}{Total\ Medals} \times 100....(1)$$

where:

M1, M2, M3, M4 are top 4 countries in terms of number of medals

Total medals are the sum of all medals for the analysed countries.

$$\frac{CR4}{24,835 + 21,762 + 17,076 + 6,810} \times 100$$

The result of CR4 72.72% indicates that top 4 countries (France, Italy, Spain and Australia) in terms of medals receive a large share of the awards, this shows a high level of concentration.

On the other side, HHI was calculated considering the formula below:

$$HHI = \sum_{i=1}^{n} g \left(\frac{Mi}{Total \ medals} \ x \ 100 \right)^{2}(2)$$

where:

Mi is the number of medals won by each country i

Total medals is the sum of all medals by all countries

N is the number of participants

The result of HHI is 1,644.05 that indicates a moderate concentration, where a few participants are winning a significant number of medals.

Overall, the concentration analysis shows moderate competition between the countries that participate in such types of events, few leaders maintain a strong position, while the rest of the countries have a moderate contribution to the results.

CONCLUSIONS

The analysis international wine of competitions results highlights distinct performance patterns among the analysed countries. France, Italy, and Spain continue to dominate, consistently securing the highest number of medals across various competitions. Their success is driven by large-scale production, long-standing winemaking traditions, and the ability to compete across multiple categories. While France and Italy maintain relatively stable medal counts, Spain exhibits more fluctuations, likely influenced by variations in production.

In contrast, new world wine countries such as Australia, South Africa, Chile, and Argentina show increasing competitiveness, particularly in Silver and Bronze categories. These countries, though not yet rivalling the medal counts of oldworld leaders, benefit from growing investments in viticulture and winemaking innovation. On the other side, for the United States the number of medals won have decreased from 2021 to 2024, but still performs better in international competitions than Romania.

Germany and Portugal, despite producing smaller volumes than France, Italy, or Spain, maintain a strong presence in the participation to international competitions, showing great resilience. Romania, however, presents a unique case, unlike the big wine producers, the country has a relatively low overall wine

production yet achieves a notable number of medals. This isprimarily due to its participation in Vinarium, a competition where it dominates, whereas its presence in globally recognized competitions such as Decanter and IWSC remains limited. Compared to Germany and Portugal, which secure medals across multiple competitions, Romania's success is highly concentrated in a single event. This contrasts with Australia and South Africa, which, despite having similar or slightly higher production volumes, compete successfully across a broader range of international competitions, while Romania's performance in Vinarium highlights the impactful participation in its local competition. concentration analysis reveals moderately concentrated competitive environment, where a few leading countries dominate the medal distribution, while the rest of the countries contribute moderately to the results.

Overall, while high wine production volumes generally correlate with greater competition success, Romania demonstrates that the participation in local competitions can also yield competitive advantages. However, to achieve broader international recognition, expanding its presence in prestigious competitions like Decanter or IWSC may be necessary to further focus on more visibility on the global wine market.

REFERENCES

[1]Anderson, K., Pinilla, V., 2018,. Old and New Producing Countries in the International Wine Market, 1850-1938. Academia.edu. https://www.academia.edu/69038191, Accessed on

February 16, 2025.

[2]Beverage Trade Network, https://beveragetradenetwork.com/, Accessed on February 15, 2025.

[3]Charters, S., Gibb, C., 2019, Viticulture and Oenology Scientific Research: The Old World versus the New World Wine-Producing Countries. Academia.edu. https://www.academia.edu/87573543, Accessed on February 16, 2025.

[4] Cholette, S., Castaldi, R., 2005, The Globalization of the Wine Industry: Implications for Old and New World Producers.

https://www.researchgate.net/publication/265748503 Accessed on February 17, 2025.

- [5]Decanter.com, https://www.decanter.com/, Accessed on January 7, 2025.
- [6]Depetris Chauvin, N., Valentin, D., Behrens, J. H., Rodrigues, H., 2024, Country-of-Origin as bias inducer in experts' wine judgments A sensory experiment in a world wine fair. International Journal of Gastronomy and Food Science, No. 35.
- [7]Fleming, E., Mounter, S., Grant, B., Griffith, G. and Villano, R., 2014, The New World challenge: Performance trends in wine production in major wine-exporting countries in the 2000s and their implications for the Australian wine industry. Wine Economics and Policy, Vol. 3(2), 115 126.
- [8]Guṭan, V., Zugravu, C.L., Turek Rahoveanu, M.M., Zugravu, G.A., 2024, Trends regarding development the sustainable wine tourism in the Republic of Moldova. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol. 24(3), 395-401.
- [9]Herbst, F. J., von Arnim, C., 2009, The role and influence of wine awards as perceived by the South African wine consumers. Acta Commercii, Vol. 9, 90–101.
- [10]Hopfer, H., Heymann, H., 2014, Judging wine quality: Do we need experts, consumers or trained panelists? Food Quality and Preference, No. 32, 221 233.
- [11]International Organisation of Vine and Wine (OIV), 2025, www.oiv.int, Accessed on January 23, 2025.
- [12]IWCB.ro, https://www.iwcb.ro/, Accessed on January 7, 2025.
- [13]IWSC.net, https://iwsc.net/, Accessed on January 7, 2025.
- [14]Karlsson, P., 2024, What good are wine competitions? BKWineMagazine, https://www.bkwine.com/opinion/good-and-bad-with-wine-competitions/?utm_source=chatgpt.com, Accessed on January 23, 2025.
- [15]Lădaru, R.G., Beciu, S., 2014, Marketing research on wine consumers preferences in Romania. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol. 14(3), 127-130.
- [16]Lehram, E., 2017, Argentina vs. Australia Wine Industries: A Reasonable Comparison? https://www.vineconnections.com/argentina-vs-
- australia-wine-industry-comparison/, Accessed on February 17, 2025.
- [17]Livat, F., Remaud, H., Fernandez-Olmos, M., 2024, Factors explaining differences in wine experts' ratings: The case of gender, credentials, occupation and peer effects. Food Research International, No. 191.
- [18] Mundus Vini, https://www.meininger.de/, Accessed on January 7, 2025.
- [19] Neuninger, R., Mather, D., Duncan, T., 2017, Consumer's scepticism of wine awards: A study of consumers' use of wine awards. Journal of Retailing and Consumer Services, Vol. 35, 98–105.
- [20]New York Wines, n.d.. How a Wine competition works. New York Wine & Grape Foundation. https://newyorkwines.org/how-a-wine-competition-

- works/?utm_source=chatgpt.com, Accessed on January 23, 2025.
- [21]Niklas, B., 2024, The effect of South African wine certifications on price premiums and marginal costs: A two-stage hedonic approach. Economic Modelling, no. 132.
- [22]Paroissien, E., Visser, M., 2018, The causal impact of medals on wine producers' prices and the gains from participating in contests. American Association of Wine Economists, AAWE Working Paper, No. 223.
- [23]Rodrigues, H., Rolaz, J., Franco-Luesma, E., Sáenz-Navajas, M.-P., Behrens, J., Valentin, D., Depetris-Chauvin, N., 2020, How the country-of-origin impacts wine traders' mental representation about wines: A study in a world wine trade fair. Food Research International, No. 137, 109480.
- [24]Singh, R., 2022, Pinot & Port: Germany & Portugal shine bright. https://rumasingh.com/2022/06/13/pinot-port-germany-portugal-shine-bright/, Accessed on February 28, 2025.
- [25]Sommelier Wine Awards. The judging process. https://www.sommelierwineawards.com/about/the-judging-process, Accessed on January 23, 2025.
- [26] Tach, L., 2024, Inside The Secretive World Of Wine Competitions. Forbes.
- https://www.forbes.com/sites/lizthach/2024/03/12/a-glimpse-inside-the-secret-world-of-wine-judging-competitions/, Accessed on January 23, 2025.
- [27]Turek Rahoveanu, M., M., Turek Rahoveanu, A., 2024, Marketing and innovation in the Romanian wine market. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol. 24(1), 999-1011.
- [28]van Leeuwen, C., Sgubin, G., Bois, B., Ollat, N., Swingedouw, D., Zito, S., Gambetta, G., 2024, Climate change impacts and adaptations of wine production. Nature Reviews Earth&Environ, No. 5, 258–275.
- [29] Wine-Searcher, https://www.wine-searcher.com/, Accessed on February 15, 2025.
- [30]Wine-trophy.com, https://www.wine-trophy.com/, Accessed on January 7, 2025.