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ALTERNATIVE INVESTMENTS BASED ON THE EXAMPLE OF INVESTMENTS IN WINE FROM THE BORDFAUX REGION

ABSTRACT

The purpose of the article. The article aims to indicate the economic conditions influencing the prices and distribution of Bordeaux wines on the European market, as well as to identify the key factors shaping their value. It raises the question of which aspects, including seasonality, quality, prestige, and consumer behavior, play a role in shaping the market for this unique good.

Methodology. The study employs a literature review and secondary data analysis concerning Bordeaux wine prices. The methodology is based on the synthesis and description of conclusions from other authors, supplemented with a bibliometric analysis of literature from the Web of Science database covering the years 2001–2024. The bibliometric analysis aimed to identify major research trends and map the knowledge structure in the field of wine investment. Comparative analyses of prices across different seasons and quality categories were also conducted, taking into account factors such as vintage and region of origin. Statistical analyses were performed on the data to draw conclusions about the wine price dynamics over recent years.

Results of the research. The research results indicate that the price of Bordeaux wines is influenced by both objective factors, such as quality and region of origin, and subjective factors, such as prestige and vintage. Seasonality was also found to play a significant role, affecting wine availability and prices at different times of the year. Ultimately, consumer preferences, especially among collectors and enthusiasts, significantly impact the market value of Bordeaux wine, underscoring the complexity of this market segment.

Research hypothesis. The research hypothesis assumes that the investment value of Bordeaux wines is determined to a greater extent by the reputation and brand of the winery than by the objective quality of the product.

Keywords: alternative investments, Bordeaux, investment wine

JEL Class: C83, Q11, L66, D5, Q1



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Introduction

Alternative investments are — as the name suggests — a form created in certain opposition to classical forms of investment (e.g., stocks, bonds, investment funds). As Najman (2020) points out, alternative investments are not something historically new, as the accumulation of wealth through the acquisition of luxury goods already took place in ancient times. Alternative investments are difficult to define and categorize. The essence of some of these investments lies in the ownership of a particular item (most often a luxury or collectible good), but defining them solely through this lens would exclude, for example, hedge funds, which are also considered alternative investments (Perez, 2011). The issue of defining alternative investments has been raised, among others, by Banasik (2016), who notes the multitude of ambiguous and sometimes mutually exclusive definitions. Researchers attempting to define alternative investments struggle to create a definition that, as a rule, should synthetically encompass all assets classified as alternative investments, whereas even among researchers there is a lack of consensus regarding some forms of investment. For example, according to Pełka (2009) real estate investments are classified as alternative investments, while according to Cichorska (2015) they are considered classical investments.

Banaś (2023) notes that alternative investments are an attractive option in a dynamic, unstable environment, particularly in the context of long-term investments. This thesis can also be confirmed in the case of the investment wine market. Antczak (2017) indicates that wine of very high quality (such as those from Bordeaux) reaches maturity after five—seven years, and the optimal maturation period is as long as 12–18 years. Gierałtowska (2014a) observes that, in the case of wine, a short-term investment strategy is impossible due to high transaction costs and low liquidity. Thus, it is a market resistant to speculation.

Gierałtowska (2014b) also notes that, due to its physical form, wine has the potential to maintain its value during periods of financial crises or hyperinflation.

Ostrowska (2011), in turn, classifies wine as an emotional asset, which Adamska (2015) defines as an object of investment that brings investors satisfaction simply from owning the invested object. This outlines an image of wine as an asset bringing both material benefits and the joy of ownership. Tatarkiewicz (1985) pointed out that for people with a possessive personality, owning things is important for achieving happiness. Nowak (2016), on the other hand, notes that the collectible aspect can also be beneficial for society, as the collector protects an item from possible loss or destruction. In the case of alternative investments, the role of the investor intertwines with that of the collector. From an economic standpoint, however, the most important role of such a person is as a market participant influencing the proper valuation of a given asset. Masztalerz (2010) points out that market value is the averaged opinion of investors on the actual value of a company, which can also be applied to investment assets. Potrykus (2015) points to the high level of interest in wine investment.

Trading of investment wines is coordinated mainly through specialized exchanges, the most popular of which is the London exchange Liv-ex (London International Vintners Exchange), whose rules of operation are based on capital market exchanges (Martysz & Gogiel, 2019). Wine is also a product that requires appropriate storage conditions. As Gierałtowska (2014a) notes, it should be stored in special cellars where temperature, pressure, and humidity are monitored to provide appropriate maturation conditions.

The aim of this article is to identify the economic conditions affecting the prices and distribution of Bordeaux wines on the European market and to identify the key factors shaping their value.

The research hypothesis assumes that the investment value of Bordeaux wines is determined to a greater extent by the reputation and brand of the winery than by the objective quality of the product.

Research methodology

In this study, bibliometric analysis was employed for a systematic review of the literature regarding wine investment. The bibliometric analysis was conducted in accordance with the methodology proposed by Aria & Cuccurullo (2017), which enables the identification of key research trends as well as principal authors and publications within a given domain.

Data for analysis was retrieved exclusively from the Web of Science database, encompassing publications from 2001 to 2024. The search was conducted using the keywords "Bordeaux" AND "investment wine" to identify relevant scholarly literature specifically addressing Bordeaux wine as an investment asset. The selection of this database was justified by the high quality of its indexed journals and comprehensive bibliometric data. The period 2001–2024 was chosen as it represents the contemporary era of wine investment research, capturing both the maturation of traditional markets and the emergence of digital trading platforms, whilst providing sufficient temporal depth for identifying long-term trends and patterns in scholarly output.

The principal stages of the study comprised:

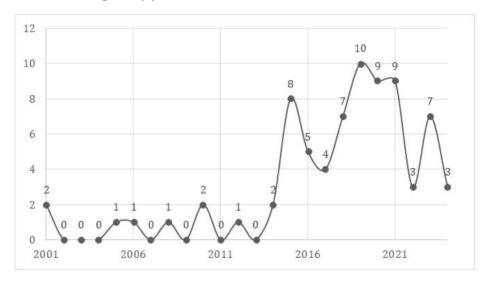
- defining keywords associated with wine investment ("Bordeaux", "investment wine");
- 2. retrieving data from the Web of Science database using the specified search terms;

- 3. conducting keyword co-occurrence analysis;
- 4. identifying thematic clusters;
- 5. performing citation network analysis.

Literature review

For the purpose of the bibliometric analysis, the bibliometrix tool (Aria & Cuccurullo, 2017) was employed. A total of 75 publications authored by 409 individuals were gathered from the Web of Science (WoS) database, all focusing on alternative investments in wines from the Bordeaux region. The analyzed articles covered the period from 2001 to 2024.

Figure 1.Number of published articles in the WoS database on investments in wines from the Bordeaux region, by year



Source: Own elaboration based on data from the Web of Science (WoS) database, processed using the bibliometrix tool.

Figure 1 illustrates the number of articles published in the Web of Science (WoS) database on the topic of investments in Bordeaux wines, broken down by year. The initial period (2001–2014) is characterized by sporadic publications, usually limited to one or two articles annually. This stage may be regarded as a period of low research interest.

From 2015 onwards, a distinct increase in the number of publications is evident, peaking in 2019 when as many as ten articles were published. In 2020 and 2021, this number slightly decreased, although it remained high, reaching nine articles per year. In recent years (2022–2024), a slight decline can be observed, but the number of articles remained stable, fluctuating between three and seven publications annually.

The overall trend indicates growing interest in the subject of Bordeaux wine investments, especially after 2015, which suggests heightened scholarly attention to this topic over the past decade.

Table 1.Citation statistics for published articles in the WoS database on investments in wines from the Bordeaux region, broken down by year

Rok	MeanTCperArt ¹	N	MeanTCperYear ²	CitableYears
2001	98.00	2	4.08	24
2005	0.00	1	0.00	20
2006	10.00	1	0.53	19
2008	55.00	1	3.24	17
2010	19.50	2	1.30	15
2012	53.00	1	4.08	13
2014	31.00	2	2.82	11
2015	28.62	8	2.86	10

¹ Average total citations per article in the dataset.

² Average citations per article per year since publication.

Rok	MeanTCperArt ¹	N	MeanTCperYear ²	CitableYears
2016	19.80	5	2.20	9
2017	14.25	4	1.78	8
2018	85.14	7	12.16	7
2019	14.10	10	2.35	6
2020	7.78	9	1.56	5
2021	6.56	9	1.64	4
2022	5.00	3	1.67	3
2023	2.29	7	1.15	2
2024	1.33	3	1.33	1

Source: Own elaboration based on data from the Web of Science (WoS) database, processed using the bibliometrix tool.

Table 1 presents the average number of citations per article by year for studies on investments in Bordeaux wines, published in the Web of Science database. The columns provide information on the number of articles published in a given year (N), the average number of citations per article in the year of publication (MeanTCperArt), the average number of citations per article for each year following publication (MeanTCperYear), and the number of years in which an article could be cited (CitableYears).

In 2001, the highest average number of citations per article (MeanTCperArt) was recorded at 98 citations, although the annual average (MeanTCperYear) was only 4.08 citations. In 2018, the average number of citations per article was also high, reaching 85.14, while the annual average (MeanTCperYear) was 12.16 citations, which is the highest value in this column.

In recent years, the number of citations per article has been decreasing — particularly since 2021, when the annual average number of citations per article has not exceeded two. The length of the period during

which articles can be cited shortens with the year of publication, which is natural for more recent research.

The most cited study (139 citations) turned out to be "Wine Market Prices and Investment under Uncertainty: an Econometric Model for Bordeaux Crus Classés" from 2001 (Jones & Storchmann, 2001). The article analyzes the impact of climatic factors, quality aspects, and the aging process on Bordeaux wine prices, focusing on Crus Classés vineyards. The authors present an econometric model that includes factors such as climate, grape composition, expert ratings, and wine aging. The results indicate that Merlot is more sensitive to climate change than Cabernet Sauvignon. Optimal weather conditions, such as a warm and dry summer, foster higher wine prices by improving grape quality.

Quality ratings — for example, as Parker points — significantly affect prices, especially for wines dominated by Cabernet Sauvignon. In smaller vineyards, an increase in rating causes a greater rise in prices than in larger estates. Aging has a positive effect on wine prices, especially for wines with higher Merlot content, as increasing rarity raises their value. The model predicts that the 1995 vintage will have higher prices than 1994, while the 1996 and 1997 vintages will have lower prices due to poorer climatic conditions, which affected their quality.

The authors conclude that investments in Bordeaux wines should take into account grape composition and estate size, as well as the impact of climatic conditions in a given year. It should be noted that the analysis does not include the prestige of the vineyard, as is covered in later analyses described in this publication.

Table 2.The most common key phrases of published articles in the WoS database on investments in wines from the Bordeaux region

Termin	Liczba	Termin	Liczba	Termin	Liczba
quality	23	cointegration	4	brand	2
investment	20	demand	4	california	2
return	17	growth	4	climate	2
bordeaux wine	14	oil	4	consumption	2
market	11	reputation	4	determinants	2
prices	9	risk	4	determines	2
asset	8	volatility	4	dynamics	2
diversification	8	cabernet-sauvignon	3	expert opinion	2
price	8	exchange-rates	3	exuberance	2
fine wine	7	red wine	3	firms	2
impact	7	time-series	3	gas-exchange	2
markets	6	vitis-vinifera l	3	grapevine phenology	2
savor	6	wine	3	hedge	2
art	5	art investment	2	information	2
equation	5	auction	2	management	2
bordeaux	4	auction market	2	mass-spectrometry	2
climate-change	4			model	2

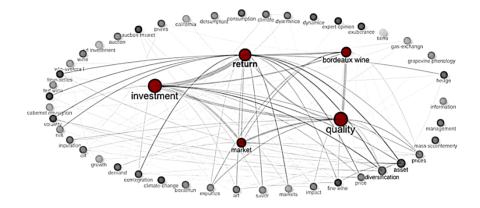
Source: Own elaboration based on data from the Web of Science (WoS) database, processed using the bibliometrix tool.

Table 2 presents the frequency of keywords related to investments in Bordeaux wines, wine economics, and the influence of various factors on the wine market. The most frequent keywords are "quality" (23), "investment" (20), and "return" (17), indicating dominant topics concerning the quality, profitability, and returns on investments within the wine market.

Other commonly occurring words include "bordeaux wine" (14), "market" (11), and "prices" (9), emphasizing an interest in the analysis of prices and the Bordeaux wine market. Terms associated with assets and diversification, such as "asset" and "diversification" (each with eight occurrences), are also significant, suggesting that wine is considered an alternative form of investment within the context of portfolio diversification.

Less frequently appearing keywords, such as "volatility" (4), "risk" (4), and "climate-change" (4), reflect an interest in market risk and volatility in the context of climate change, which can impact grape cultivation and wine quality.

Figure 2.Co-occurrence network of keywords related to investments and the Bordeaux wine market



Source: Own elaboration based on data from the Web of Science (WoS) database, processed using the bibliometrix tool.

Figure 2 presents the co-occurrence network of keywords related to the topic of wine investment, the Bordeaux wine market, and wine economics. Each keyword is represented as a node, and its size and proximity to other nodes indicate both the frequency and the strength of its co-occurrence with other words.

The central concepts are "quality" and "investment," which suggests that the main issues analyzed in the network concern the relationship between wine quality and its investment value. "Return" is also closely linked to investments, demonstrating that return on investment is a significant topic of analysis. Words such as "market," "prices," and "diversification" are also

strongly connected, indicating that portfolio diversification and market analysis are key elements of the discussion.

The network contains several thematic clusters. The green cluster focuses on "quality" and "market," suggesting an emphasis on the impact of wine quality on its market position. The blue cluster includes words such as "investment," "diversification," "risk," and "volatility," indicating discussions about risk and diversification strategies in the context of investment. The red cluster, with terms such as "reputation," "climate," and "brand," may refer to external factors influencing the perceived value of wine.

Some more distant nodes, such as "grapevine phenology" and "vitisvinifera l.," refer to biological topics, which may indicate the influence of climatic and agricultural factors on wine production and quality. The node related to "mass-spectrometry" is also noteworthy.

Determinants of investment wine prices

Le Fur and Outreville (2019) analyze wine investments as an alternative form of capital allocation, emphasizing their role in portfolio diversification. A key observation is that, although wine investments are a relatively new type of asset, their value is increasing, particularly in the case of fine wines from renowned regions such as Bordeaux. In their study, Le Fur and Outreville clearly indicate that these wines are valuable not only as alternative assets but also as unique luxury goods whose prices are determined by both microeconomic factors (wine characteristics, producer reputation) and macroeconomic factors (market conditions). From a portfolio diversification perspective, Le Fur and Outreville point out that wine investments can complement traditional assets. Wine, as a physical asset not linked to other financial assets, can act as a kind of "financial umbrella" during periods of market turmoil. Studies show that wine indices, such as the Liv-ex Fine Wine 100, can provide diversification benefits

in a portfolio based on stock markets. Le Fur refers to the low correlation between the wine market and stock markets, which is an argument in favor of including fine wines in a portfolio, especially as a hedge against inflation and instability in financial markets.

The study emphasizes that the main factors influencing the prices of investment wines are their prestige and rarity. This explains why the most valuable wines come from a limited number of top estates in the Bordeaux region, such as Château Lafite Rothschild, Margaux, or Haut-Brion. The high quality and limited supply of these wines mean they are treated as "blue chips" on the wine market, and their prices have shown significant resistance to market fluctuations in recent years. The researchers also analyze the impact of the popularity of these wines on the auction market, pointing to their exceptionally low correlation with traditional stock markets, which makes them a potentially stable component of an investment portfolio in times of economic uncertainty.

An additional element of the analysis is the use of hedonic models to assess wine value; using such models is one of the basic methods in the study of alternative wine investments (Cardebat & Figuet, 2004). As the authors note, most research on wine investments focuses on the relationship between quality and price, employing various regression methods. Hedonic modeling allows for the inclusion of both subjective sensory traits and more objective quality indicators, such as vintage year or vineyard reputation. The authors explain that the prices of high-quality wines are resistant to sudden market changes, offering investors an opportunity to diversify risk by investing in wines that are not closely correlated with stock and bond markets.

As Marcinkowska (2010) notes, most investment wines are from Bordeaux-Medoc and Saint-Émilion, as well as Burgundy and Rhine wines

classified as Premier Cru 1855 by the Bordeaux Chamber of Commerce (Appendix 1, Table 3), although it is worth noting that some prestigious investment wines are still not included in this classification (e.g., Château Pétrus). The Premier Cru classification from 1855 applies exclusively to the Medoc region and has only been modified twice: first on September 16, 1855, to include Château Cantemerle, and again in 1973, when Château Mouton-Rothschild was awarded Premier Cru status. However, the classification itself was a ranking of the best-selling wines in the years prior to 1855, and since then, there are certainly other wines on the market of similar or even better quality. It is also worth mentioning the famous Paris Tasting (also called the Judgment of Paris, a name referencing the Judgment of Paris from Greek mythology), where a jury composed of sommeliers, owners of renowned restaurants, and wine institutes awarded the Californian Stag's Leap Wine Cellars (127.5 points) more points than the Premier Cru wines tasted at the time, including Château Mouton-Rothschild (126 points). An American wine also won in the white wine category. Therefore, it is worthwhile to also pay attention to Californian wines as well as wines from outside France, as in the future they may achieve equally favorable or even better taste profiles. Their current lower prices offer an advantage, since unlike Bordeaux or Burgundy wines, they are only now gaining popularity and their price is less dependent on prestige. On the other hand, they may be more difficult to liquidate, which significantly affects their evaluation as an investment tool.

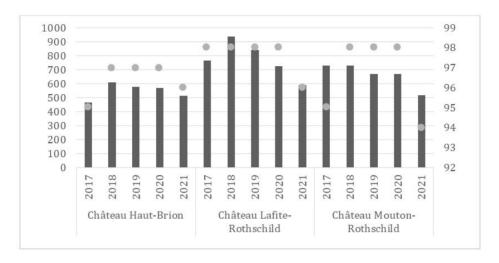
In assessing the importance of these factors (taste versus brand value), we can refer to the research of Ashenfelter and Quandt (1999), who analyzed the statistical significance of the wines tasted in Paris. According to their research, only the results for Stag's Leap Wine Cellars and Château Montrose were statistically significant, while the other results could not be differentiated on this

basis. We can thus conclude that the brand of wine, and therefore its history, prestige, etc., is a more important factor in the acquisition of investment wine, whereas Californian wines may offer a better price-to-quality ratio. This thesis is also confirmed by the studies of Cardebat and Figuet (2004), where statistical analysis demonstrated that reputation outweighs quality. An interesting perspective on wine assessment is also provided by Dong et al. (2020), who found that for some wines (e.g., Château Latour 2009), despite significant differences in tasting notes regarding wine characteristics, each reviewer rated the wine between 99 and 100 points. This is likely due to the fact that high-quality wines that have been aged appropriately feature a rich bouquet of aromas, and everyone can find their preferred notes within them.

As Mora and Livat (2013) note, numerous factors influence wine prices, as evidenced in previous studies. Earlier research highlighted the importance of origin (Nerlove, 1995), weather conditions (Di Vittorio & Ginsburgh, 1996), and sensory attributes such as taste (Combris et al., 1997; Cardebat & Figuet, 2009). Other works emphasized vineyard reputation (Landon & Smith, 1997; 1998), grape variety (Steiner, 2004), and the quantity of wine available on the market (Lima, 2006). Further studies expanded this perspective by including production technology (Gergaud & Ginsburgh, 2010), expert ratings (Dubois & Nauges, 2010), certification systems such as quality and green certificates (Delmas & Grant, 2010), and tasting scores (Ramirez, 2010). At the same time, Mora and Livat (2013) stress that external communication by the vineyard plays a crucial role, with the investment aspect being most visible in the Medoc region — renowned for its exclusive, high-value, and prestigious wines.

Figure 3.

Comparison of prices (in Euros) and ratings (on a scale of up to 100) of Bordeaux Premier Grand Cru wines as of 25/07/2023 according to winedeciderpro.com (2025)



Source: Own elaboration based on data from winedeciderpro.com (2025).

The selection of vineyards presented in Figure 3 results from the intent to compare three highest-valued estates from the previously mentioned Bordeaux wine classification, focusing on the years 2017–2021. As observed in Figure 4, wines from Chateau Lafite-Rothschild consistently achieved the highest prices in this comparison, regardless of their ratings.

An interesting trend can be noted with Chateau Mouton-Rothschild, where, despite a lower wine rating in 2017, its price matched that of 2018 — a vintage with a significantly better score. For Chateau Haut-Brion, on the other hand, a correlation is evident between a decline in wine ratings and corresponding decreases in price.

In all cases, 2021 was not a favorable vintage for Bordeaux wines. That year, natural factors such as mildew and frost led to lower wine production in the

Bordeaux region compared to the previous year. While the reduced number of bottles produced in 2021 could potentially have boosted wine prices, other weather-related issues (such as less sunshine) are likely to have affected the sensory qualities of the wines. Although a score of 95/100 is considered very good, only wines with ratings between 97 and 100/100 are regarded as exceptional, and such scores were mainly observed for the 2018–2020 vintages (McCoy, 2022).

Investment wines, especially those from prestigious and renowned estates, typically achieve very high ratings from wine critics, often exceeding 90 out of 100 points. Such high scores not only attest to quality, but also serve as indicators of a wine's uniqueness and distinction, enhancing its perceived value. These stringent quality standards contribute to both price growth and the long-term stability of the wine's value.

The main advantage of wines from the Bordeaux region lies in their reputation and the worldwide prestige they enjoy. Despite wines of similar quality being produced in other parts of the world, Bordeaux wines maintain consistent popularity in the wine community. From an investor's perspective, they also remain an attractive choice for diversifying investment instruments.

However, investing in wines from this region also entails certain risks. One such risk is the possibility that potential buyers might withdraw if they start to focus more on the price-to-quality ratio rather than the prestige of a given wine, which is, after all, a subjective perception based on a certain level of respect and appreciation for the history of the particular vineyard. Advances in winemaking technology significantly increase this risk. It was noted as early as 2013 that wines such as Chateau Lafite-Rothschild were targets of counterfeiting in the People's Republic of China (Jones, 2013). While this issue has long been recognized, it remains relevant: in subsequent

years, counterfeit Bordeaux wines continued to find their way to Europe. In 2023, Chinese authorities seized counterfeit bottles of Chateau Lafite and Penfolds valued at an estimated \$150 million (Mustacich, 2023). Such actions are likely motivated by pressure from France, as well as China's desire to maintain good relations with France and to pursue food safety initiatives. However, it should be considered that, should relations between France (or the European Union) and China deteriorate, China might "turn a blind eye" to the export of counterfeit wine. Finally, one should also consider a scenario in which technological progress makes it possible to produce wines with similar, identical, or even superior flavor characteristics. In such a case, neither purchasing wine from a particular vineyard nor maturing it over time would be economically justified. This does not mean, however, that the market for alternative investments in wines would cease to exist, but it could suffer a significant downturn, especially if new production methods prove cheaper than traditional ones and more environmentally friendly.

When assessing the prospects for Bordeaux wines, an ambiguous picture emerges. On one hand, these are long-established wines, rich in history, widely recognized, and highly prestigious. On the other, their valuation may be affected by factors that have an obvious impact on the volume and quality of the harvest, such as climate and weather, but also by technological innovations that could improve the quality of existing wines or increase competition by expanding the range of wines with outstanding taste profiles. Lastly, the geopolitical factor that affects the prevalence of counterfeit wines in circulation could, in future, negatively influence Bordeaux wine prices, since potential conflicts between the EU and China are possible. In such a scenario, investing in wine could become disadvantageous or even impossible for the layperson unable to distinguish originals from counterfeits.

Summary

Verification of the research hypothesis confirms that the investment value of Bordeaux wines is indeed determined to a greater extent by the reputation and brand of the winery than by the objective quality of the product. The bibliometric analysis and literature review revealed that the prices of Bordeaux wines are shaped by both objective factors, such as quality, vintage and region of origin, and subjective factors, including prestige, reputation, and expert ratings. Seasonality plays a significant role, affecting the availability and prices of wine at different times of the year, consumer preferences, especially among collectors and enthusiasts, exert a strong influence on the market value of these wines.

The research objective was achieved by indicating the key economic conditions affecting the prices of Bordeaux wines, including: the prestige and reputation of the producer, limited supply, vintage specificity, expert assessments, quality certificates, adaptation to climate change, and the particular conditions of investment and collector demand.

In summary, investments in wines from the Bordeaux region represent a fascinating area of alternative investment instruments. From an investor's perspective, choosing to invest in such assets requires a thorough understanding of the market and careful consideration of the various factors influencing wine prices.

In recent years, Bordeaux wines have maintained their reputation and prestige on the global market, making them an attractive component of an investment portfolio. However, certain challenges and risks associated with this form of investment have also been observed. These include not only variable weather conditions but also advancing production technology, which may affect the balance between price and quality.

The threat posed by counterfeiting — highlighted by cases involving fake bottles of Chateau Lafite-Rothschild and Penfolds in China — must also be

taken into account. This phenomenon demands ongoing vigilance from investors, especially in light of potential changes in international relations.

Ultimately, the outlook for investing in Bordeaux wines remains uncertain. Despite their longstanding tradition and worldwide acclaim, investors must remain aware of the evolving environment where technology, weather conditions, and geopolitical factors can all affect these wines' value. The worth of Bordeaux wine depends not only on its intrinsic quality but also on the market's ability to understand and appreciate the subtleties and distinctions in taste, which influence perceptions of a vineyard's prestige.

Therefore, making decisions about investing in such assets requires caution, analysis of market trends, and an understanding of the variable factors affecting both price and quality. Nonetheless, wine from the Bordeaux region remains a unique and attractive option for investors seeking diversity within their portfolios.

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Appendix 1

Table 3.Classification of Bordeaux wines from 1855

Class	Vinery		
1er Grands Cru Classes	Château Lafite-Rothschild (Pauillac), Château Margaux (Margaux), Château Latour (Pauillac), Château Mouton-Rothschild (Pauillac), Château Haut-Brion.		
2eme Grands Cru Classes	Château Rausan-Ségla (Margaux), Château Rauzan-Gassies (Margaux), Château Gruaud-Larose (St-Julien), Château Brane-Cantenac (Cantenac), Château Léoville-Las-Cases (St-Julien), Château Léoville-Parton (St-Julien), Château Dufort-Vivens (Margaux), Château Lascombes (Margaux), Château Pichon-Longueville (Pauillac), Château Pichon-Longueville-Lallande (Pauillac), Château Ducru-Beaucaillou (St-Julien), Château Cos d'Estournel (St-Estèphe), Château Montrose (St-Estèphe).		
3eme Grands Cru Classes	Château Giscours (Labarde), Château Kirwan (Cantenac), Château d'Issan, Cantenac, Château Lagrange, St-Julien, Château Langoa (St-Julien), Château Malescot-St-Exupery (Margaux), Château Cantenc-Brown (Cantenac), Château Palmer (Cantenac), Château La Lagune (Ludon), Château Desmirail (Margaux), Château Calon-Ségur (St-Estèphe), Château Ferrière (Margaux), Château Marquis-d'Alesme-Becker (Margaux), Château Boyd-Cantenac (Cantenac).		
4eme Grands Cru Classes	Château St. Pierre (St-Julien), Château Branaire-Ducru (St-Julien), Château Talbot (St-Julien), Château Duhart-Milon (Pauillac), Château Pouget (Cantenac), Château La Tour Carnet (St-Laurent), Château Beychevelle (St-Julien), Château Prieuré (Cantenac), Château Marquis de Terme (Margaux), Château Lafon-Rochet (St-Estèphe).		
5eme Grands Cru Classes	Château Pontet Canet (Pauillac), Château Batailley (Pauillac), Château Haut-Batailley (Pauillac), Château du Tertre (Arsac), Château Haut-Bages-Libéral (Pauillac), Château Pédesclaux (Pauillac), Château Grand-Puy-Lacoste (Pauillac), Château Grand-Puy-Ducasse (Pauillac), Château Lynch-Bages (Pauillac), Château Lynch-Moussas (Pauillac), Château Dauzac (Labarde), Château Mouton-d'Armailhacq (Pauillac), Château Belgrave (St-Laurent), Château Camensac (St-Laurent), Château Cos-Labory (St-Estèphe), Château Clerc-Millon (Pauillac), Château Croizet-Bages (Pauillac), Château Cantemerle (Macau).		

Source: Own elaboration based on: Bordeaux.com (2023).