SCIENTIFIC HORIZONS

Journal homepage: https://sciencehorizon.com.ua Scientific Horizons, 28(3), 117-132



UDC 338.45 DOI: 10.48077/scihor3.2025.117

Economic potential of the wine industry in the context of EU integration

Iryna Kormyshkina^{*}

PhD

Mykolaiv National Agrarian University 54008, 9 Georgiy Gongadze Str., Mykolaiv, Ukraine https://orcid.org/0009-0002-9670-2295

Article's History:

Received:	15.07.2024
Revised:	21.01.2025
Accepted:	26.02.2025

Abstract. The study aimed to assess the economic potential of the wine industry in the Odesa region in the context of Ukraine's integration into the European Union and to identify strategic directions for its sustainable development. The study analysed the natural, economic and social factors that contribute to the development of the industry, as well as the challenges faced by winemakers in the context of globalisation and adaptation to European Union standards. The study examined the functioning of leading wineries such as Shabo, Kolonist, French Boulevard and Vinhol Oksamytne, emphasising export success, innovations and marketing strategies. The main results of the study demonstrated that the Odesa region is the leader in wine production in Ukraine, accounting for more than 60% of the national output. Despite the high quality of its products and compliance with international standards, Ukrainian wine exports to European countries have been declining in recent years due to war and economic difficulties. At the same time, the main challenges were identified, including competition with European producers, the need to adapt to regulatory requirements, and the need for innovation in production and marketing. The proposed development strategies include improving technological processes, producing biological and premium wines, developing clusters of wineries and strengthening government support through subsidies, grant programmes and measures to promote Ukrainian wine internationally. The conclusions confirmed that the implementation of these strategies will help to strengthen the competitiveness of the wine industry in Odesa region, expand its export potential, develop wine tourism and establish Ukraine as a promising wine region in the global market. The results obtained can be used for the development of regional wine policy and the implementation of support programmes for the industry

Keywords: viticulture; wine tourism; innovative technologies; international trade; organic production; product competitiveness; European integration processes

Suggested Citation:

Kormyshkina, I. (2025). Economic potential of the wine industry in the context of EU integration. *Scientific Horizons*, 28(3), 117-132. doi: 10.48077/scihor3.2025.117.



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)

*Corresponding author

INTRODUCTION

Winemaking is one of the oldest branches of the agricultural sector, which not only has significant economic importance but also plays an important role in the cultural and social development of the regions. In Ukraine, the industry is a key sector of the economy, especially in southern regions such as the Odesa region, which is a leader in wine production due to favourable natural conditions, historical traditions and economic potential. In the context of EU integration, the relevance of studying the economic potential of the Odesa region's wine industry is growing, as new opportunities are opening for access to European markets, access to modern technologies and financial resources. At the same time, the industry is facing the challenges of globalisation, changing consumer trends, climate change and the need to adapt to EU standards. This requires a study of the current state, problems and prospects of the wine industry, as well as the identification of strategies to improve its competitiveness and sustainability in the context of European integration.

The topic of developing sustainable practices in winemaking is gaining increasing attention in scientific research. O. Shebanina et al. (2023) examined the role of environmental insurance as a tool for the recovery of Ukrainian regions after the war, focusing on green reconstruction. The authors emphasised the importance of insurance mechanisms for financing environmental projects and mitigating risks in an unstable economic environment. The study offered specific recommendations for integrating environmental insurance into the regional recovery system and assessed its impact on the economy and the environment. The potential of local economic development in the context of globalisation was studied by V. Shebanin et al. (2022). This analysis demonstrated that local industries, such as winemaking, can contribute to economic growth if innovative approaches to management, marketing, and export activities are applied. The authors emphasised the importance of international support, through grant programmes that help develop infrastructure and technology. Energy efficiency in the wine industry was studied by M. de Castro et al. (2024) in an analysis of current challenges and opportunities for improving the energy efficiency of production processes. The study presents an analysis of technologies that help reduce energy consumption and costs in winemaking, including the use of renewable energy sources. These approaches are of particular importance for wineries in the Odesa region that seek to reduce costs and meet European environmental standards.

J.W. Jiménez and R. Zurdo (2024) explored the potential of using blockchain technologies to ensure transparency and increase trust in winemakers' products. The study emphasised that digital technologies can significantly optimise production and marketing processes, in particular in product traceability. J.M. Alston and D. Gaeta (2021) analysed the economic and political aspects of European wine appeals, including their impact on market regulation, competition and product quality. The study analysed the historical background and current challenges, including consumer preferences, in detail. The main achievement of the study was the generalisation of data, but it did not propose innovative approaches to solving the identified problems. A. Soceanu et al. (2021) proposed an interdisciplinary approach to wine industry waste recycling, addressing economic, environmental and technological aspects. The study demonstrated how waste management can create added value for businesses and reduce environmental impact. However, the study addressed theoretical aspects, omitting practical implementations. R. Silvestri et al. (2023) investigated how blockchain technologies have contributed to building trust and creating competitive advantages in the wine industry. The paper considered a resource-based approach to innovation and demonstrated how blockchain ensures transparency and reliability of data. The main drawback was the limited coverage of technology adoption in small and medium-sized enterprises.

M. Wagner *et al.* (2023) examined the vision for sustainable development of the global wine industry, proposing strategies to reduce environmental impact. The authors analysed current challenges, including climate change, and proposed specific environmental initiatives. The study was in-depth, but limited to a broad conceptual vision, without specific actionable tools for local producers. The role of cooperatives in winemaking, in particular their impact on sustainable development and digitalisation, was analysed by B. Richter and J.H. Hanf (2021). The study demonstrated how innovation can support the sustainability and efficiency of cooperatives.

Despite the significant economic potential of the Odesa region's wine industry in the context of European integration, the issues of adaptation of producers to European regulations, the impact of climate change on viticulture, and economic challenges, including competition and financial barriers, remain insufficiently studied. Therefore, the study aimed to determine the economic potential of the wine industry in the Odesa region in the context of EU integration, as well as to outline ways to increase its competitiveness and sustainability. The study examined the current state of the industry, identifying the main problems and challenges related to adaptation to European standards, changing consumer trends and the impact of climate change, and developing recommendations for the integration of local producers into European markets.

MATERIALS AND METHODS

To conduct the study of the wine industry in the Odesa region, a comprehensive approach was applied, including quantitative, qualitative, comparative and historical methods of analysis. The main sources of data were official statistical reports of the State Statistics Service of Ukraine (n.d.). The analysis covered data from 2018 to 2024, which was used to study the dynamics of the industry development, export volumes, economic indicators and changes caused by geopolitical and economic factors. The historical method was used to analyse the evolution of the wine industry in the Odesa region, in particular, the development of viticulture and winemaking traditions from ancient times to the present. This identified the key factors that shaped the unique character of the region's products, such as local grape varieties, in particular Odesa Black and Sukholimansky White, which are an important element of the modern identity of the products.

To analyse the natural factors of the industry's development, data on the region's climatic conditions and soil characteristics were used. These indicators assessed the impact of the environment on winemaking and identified the key conditions that contributed to the development of the industry in the region under study. The benchmarking method was used to compare the practices of winemakers in the Odesa region with leading European wine regions such as France, Italy and Spain by key criteria, including soil quality, vineyard yields, production regulation and certification, marketing strategies, and the level of integration of producers into international trade networks. This was used to assess the competitiveness of the region's products and identify the prospects for implementing best practices to adapt to European standards and consumer requirements.

The case study was used to analyse in detail the activities of the region's leading wineries, such as Shabo, Kolonist, Frantsuzsky Bulvar and Vinhol Oksamytne, with a focus on their production strategy, grape growing practices, level of technological modernisation, export activity, marketing approaches and compliance with international quality standards. This explored unique business models, identifying best practices, comparing the strengths and weaknesses of the companies and defining the impact of the local and international contexts. This contributed to the development of recommendations for the development of the industry in the areas of marketing, production, export and wine tourism.

A content analysis of publications in industry and academic journals assessed current trends in the wine market, including the demand for biowine, the development of organic viticulture and the popularity of wine tourism. This method also identified key challenges, such as competition with European producers and the high cost of implementing environmental standards. The combination of these methods created a comprehensive overview of the current state of the industry, its prospects and challenges. This approach ensured both analytical depth and practical orientation of the study, which became the basis for formulating recommendations for the development of winemaking in the Odesa region.

RESULTS AND DISCUSSION

The importance of the wine industry for the Odesa region. The wine industry is one of the key sectors of the Odesa region's economy, providing production and employment, especially in rural areas. The region occupies more than 60% of Ukraine's vineyards, which is approximately 24-26 thousand hectares. However, over the past 10 years, there has been a downward trend in vineyards: while in 2013 the area under plantation in the region was approximately 30 thousand hectares, by 2023 this figure had decreased by about 15-20%, due to economic difficulties, climate change, and the effects of military operations (State Statistics Service of Ukraine, n.d.; Nahurna & Kurylenko, 2024). Wineries in the Odesa region, such as French Boulevard and Vynkhol Oksamytne, are examples of successful businesses that combine tradition with innovation.

The economic impact of the industry is manifested in the production of wine, which covers the entire value chain from growing grapes to selling finished products. Winemaking also stimulates the development of related sectors, such as agriculture, logistics, tourism, packaging, marketing and export operations. Viticulture and winemaking provide between 5,000 and 7,000 permanent jobs for residents of the Odesa region, with this figure doubling during the seasonal period, contributing to the development of local infrastructure and creating favourable conditions for attracting investment (Odesa Regional State Administration, 2023). Wine exports from the Odesa region, especially to the European Union, are an important source of foreign exchange earnings. During the prewar period (until 2022), the Odesa region demonstrated a steady increase in wine exports, which indicates a high level of confidence in its quality. In January-July 2022, the volume of exports of goods amounted to USD 1,082.2 million, which is 59.3% more than in the same period of 2021. Most goods were exported to Romania, Turkey, Bulgaria, Egypt, Moldova, Italy, and Spain (Steblovska, 2022).

The cultural impact of winemaking goes far beyond the economic sphere. Winemaking traditions are part of the cultural heritage of the region, reflected in folklore, artistic practices and local customs, attesting to their historical connection with viticulture. Wine festivals, such as the Days of Wine and Vines in Shabo, attract both Ukrainian and international tourists. Oenotourism (wine tourism) is becoming an important tool for promoting the region and stimulating the development of the hotel and restaurant business. In addition, winemaking actively promotes a positive image of the Odesa region as a region with a rich history, high-guality products and hospitable traditions. These factors contribute to the development of tourism in the Odesa region, combining the natural features of the area with the opportunity to learn about the traditions of winemaking and taste the products.

Ukraine's European integration creates both new opportunities and serious challenges for the Odesa region's wine industry. One of the key achievements was the opening of access to the European Union market, which is one of the largest consumer markets in the world. In January-September 2023, Ukraine exported 9.66 thousand tonnes of grape wine worth USD 6.59 million. The main importers of Ukrainian wine among the EU countries are Romania and Moldova (9.7 thousand tonnes..., 2023). In total, Ukrainian wines are exported to 49 countries, which indicates a growing interest in the products of Ukrainian winemakers on the international market (Ukrainian wines are..., 2024). In 2024, total exports of Ukrainian goods to the EU increased by more than USD 1 billion compared to 2023, reaching USD 24.5 billion, which is more than 59% of the country's total exports (Ministry of Economy of Ukraine, 2024).

For wine producers, this is an opportunity to expand their presence outside of Ukraine, increase exports and strengthen their position internationally. At the same time, integration requires winemakers to adapt to EU regulatory standards in terms of product quality, packaging, certification and environmental friendliness. This requires significant financial investments in the modernisation of enterprises, the introduction of new technologies and staff training. The need to create innovative products, such as biowine and premium wines, that meet current trends in the European market is particularly relevant. The Odesa wine industry faces competition from leading European producers such as France, Italy and Spain. As of September 2024, the average price of a 0.75-litre bottle of Ukrainian table wine in Ukraine was UAH 110.41, which is significantly lower than its imported counterparts (Minfin, 2024). This creates a competitive advantage in the price segment. Ukrainian winemakers actively participate in international events to promote their products. In particular, the Wine & Spirits Ukraine 2024 exhibition, which took place on 29-31 October 2024 in Kyiv, became a platform for meetings between producers and distributors and retailers.

Strategies for promoting Ukrainian wines include participation in international exhibitions, development of unique offers, marketing and branding, and government support. A comprehensive approach that combines affordability, product uniqueness and effective marketing will consolidate Ukrainian wines on the international market. However, there are significant opportunities alongside the challenges. Attracting European investment and grant programmes can help modernise production and improve product quality. Integration into global wine associations will facilitate the exchange of experience and strengthen international relations. In addition, European markets provide opportunities for the development of new niches, such as organic winemaking, which is becoming increasingly popular among consumers. Thus, the Odesa region's wine industry has significant potential in the context of European integration, which can be realised with active state support, investment and a strategic approach to the development of the industry.

Development of winemaking in the Odesa region. Odesa region is the largest viticulture region in Ukraine, with more than 60% of the country's wine production. The area of vineyards is about 24-39 thousand hectares, depending on the source, with production concentrated in Bolhrad, Tarutino and Saratsky districts (Steblovska, 2023). The region has a temperate continental climate with warm summers (+21-23°C) and mild winters (-2-5°C). Annual rainfall is 340-470 mm, which creates optimal conditions for viticulture. The growing season lasts 168-210 days. The soils are predominantly black: ordinary soils cover 66.4% of the vineyards, and southern soils cover 33.6% (Babych et al., 2021). The high natural fertility is conducive to growing grapes and producing quality wines. The region's infrastructure includes modern wineries, laboratories, and wine tourism centres, which ensures the development of the industry and increases export potential.

Wine production in the Odesa region remains a key agricultural sector and an important element of the region's economy. The combination of long-standing traditions, favourable natural conditions and modern technologies allows local winemakers to create products that meet high-quality standards and are popular both in Ukraine and abroad. Overall, Ukraine produces more than 7 million decalitres of grape wines annually, with the Odesa region accounting for 60% of this volume (Odesa Regional State Administration, 2021). Among the most common are Aligote, which occupies 16.2% of the total vineyard area, Cabernet Sauvignon 13.1%, Rkatsiteli 7.4%, Odesa Black 6%, Merlot 5.7% and Chardonnay 5.3%. These varieties provide a wide range of wines that meet different consumer preferences and international quality standards (Verkhovna Rada of Ukraine, 2024). The main wineries in the Odesa region include industry leaders (Table 1).

Table 1. Main wine producers of the Odesa region					
Producer	Main specialisation	Peculiarities			
Shabo	Wines, brandy, champagne, grappa	Exports to more than 20 countries, innovations, wine tourism			
Colonist	Premium wines for export	Handmade, distinctive taste characteristics, participation in international exhibitions			
French Boulevard	Champagne wines, sparkling wines, dry wines	Traditional production, modern technologies, and popularity in the domestic market			
Vinhol Velvet	Table and semi-sweet wines, fruit drinks	Local varieties, affordable prices, focus on the mass consumer			
Source: compiled b	y the author				

Wine producers in the Odesa region vary significantly in terms of scale, market orientation and production approaches, creating a diverse ecosystem in the region. Shabo is the largest winery in the region, with 1,250 hectares of vineyards and a capacity to produce 15 million litres of wine per year. The company is focused on the mass production of high-quality products, including wines, brandy and sparkling wine. As of 2024, the company's exports exceeded 17% of total Ukrainian wine exports, which indicates its leading position in the international market. The company exports its products to more than 20 European countries, including Germany, Poland, Latvia, Lithuania, France and Sweden. The main export items are red wines, which account for about 60% of the company's total exports. The key to success was the introduction of certification following ISO 22000 and Hazard Analysis and Critical Control Points (HACCP) standards, which ensures the trust of European consumers. Moreover, in 2022, the company presented its products at 8 international exhibitions, winning 12 awards, including gold medals for sparkling wines.

Kolonist, unlike Shabo, is a medium-sized producer specialising in premium wines. Their vineyards cover 66 hectares, and production volumes are inferior to those of large farms. However, Kolonist focuses on high-quality products, which allows it to be successful in niche market segments. In 2024, the company exported about 28% of its production, mainly to the UK, Poland and Germany. The total volume of Kolonist exports was about 20 thousand bottles per year, with an emphasis on wines made from international grape varieties (Cabernet Sauvignon, Merlot, Chardonnay, Riesling). Medals won at international competitions, including the Decanter World Wine Awards in London, where Kolonist won a silver award for Chardonnay in 2020, played a special role in the development of exports. This has significantly increased brand awareness among European consumers.

French Boulevard is one of the oldest wineries in the Odesa region, known for its many years of experience and classical production traditions. The company has 1,500 hectares of vineyards and three wineries that process over 10,000 tonnes of grapes annually. The winery specialises in the production of sparkling wines, sparkling drinks and dry wines. By combining traditional methods and modern technologies, the company creates products that have gained popularity both in the domestic market and abroad. The French Boulevard winery combines traditional production methods with modern technologies to ensure the high quality of its products. In particular, the company uses the Charmat method to produce sparkling wines, in which secondary fermentation takes place in large steel tanks under pressure. This method preserves the freshness and brightness of the wine's flavour.

Established in 1998 in the village of Oksamytne, Bolhrad district, Odesa region, Vinhol Oksamytne specialises in the production of table and semi-sweet wines and fruit drinks. The company owns 550 hectares of domestic vineyards and cooperates with local growers to process grapes from an additional 600 hectares. Thus, the total area of vineyards operated by the company is about 1,150 hectares. In 2022, Vinhol Oksamytne produced 200,000 bottles of wine, but the company has ambitious plans to increase this volume to 1 million bottles in the coming years. The company is equipped with modern European-made equipment for all stages of production, including Italian crushers and French Vaslin Bucher pneumatic presses for delicate grape pressing, as well as an Italian bottling line for still and sparkling wines. The presence of a certified laboratory ensures full control of the production process and guarantees consistently high product guality.

Features of natural conditions: climate, soils and their impact on grape quality. Odesa region is characterised by a temperate continental climate with long warm summers and mild winters, which contributes to the uniform ripening of grapes. The growing season lasts from 168 to 210 days, and the sum of active temperatures ranges from 28-34°C. In the summer months, the average relative humidity at 13:00 does not exceed 55%, which is an important factor for the ripening process. However, the region's vineyards are exposed to several climate risks, including droughts, dust storms and windstorms, which can affect the quality and quantity of the harvest. The Black Sea acts as a natural thermoregulator, providing optimal temperature differences between day and night, which is important for preserving the aroma and acidity of grapes. According to the Ukrainian Hydrometeorological Centre, the average air temperature in Odesa in July is +23°C (daytime +27, nighttime +24). This indicates insignificant daily temperature fluctuations, which contribute to the formation of grape guality characteristics. Soil conditions in the Odesa region are central to the region's viticulture. The predominant soil types are chernozems, loams and sandy soils. Black soils, formed on loess rocks, are characterised by high humus and calcium content, which favours the cultivation of both international and local grape varieties. Loams, which consist of a mixture of sand, clay and silt, provide good fertility and moisture retention, which is important for the stable development of the vine. Due to their ability to drain guickly, sandy soils are conducive to growing grapes with a high sugar concentration, which is particularly suitable to produce light white wines with low acidity and low tannin concentration. In general, the mineral composition of the soils in the Odesa region, in particular the presence of calcium and other minerals, gives wines a rich flavour profile (Babych et al., 2021). In the Danube region, where sandy soils predominate, growers obtain grapes with high acidity, which makes wines from this region particularly expressive (Table 2).

177

Table 2. Agroclimatic indicators of Odesa region					
Region	The sum of active temperatures, °C	The average temperature of the warmest month, °C	Precipitation per year, mm	Soil type	
Odesa region	3200-3600	22-24	330-450	Chestnut, southern black soil	

Source: compiled by the author based on I.M. Babych et al. (2021)

Odesa region is characterised by favourable agricultural-climatic conditions for viticulture, combining a high sum of active temperatures, moderately warm summer temperatures, optimal rainfall and fertile soils. These conditions ensure stable ripening of grapes and the formation of high-quality raw materials for winemaking. These factors, together with the geographical location, create an ideal environment for the development of viticulture and winemaking in the region. Odesa region is a region where, along with international varieties, unique local grape varieties (Odesa Black, Sukholimansky White) are grown, which form the identity of local wines. One such variety is Odesa Black - a hybrid created by Ukrainian breeders. This variety is famous for its deep colour, pronounced tannins and rich aromatic profile. Odesa Black wines are well suited for ageing and are highly competitive on the international market. Another important variety is Sukholimansky White, which is used to produce light white wines with a delicate aroma and refreshing acidity. This variety is particularly appreciated by connoisseurs of dry wines with a delicate flavour profile. Unique grape varieties

grown in the Odesa region add a local flavour to the products and help to promote them among consumers looking for authentic taste experiences.

The current state of the wine industry. The decline in vineyard areas in the Odesa region, which began to occur from 2022 to 2024, is determined by several factors. The economic reasons include higher production costs and low purchase prices for technical grapes, which reduce the profitability of viticulture. In addition, the decline in exports of Ukrainian wine products and the prevalence of imported wines on the Ukrainian market make it difficult for local producers to sell their products. Climatic factors, such as moisture deficit and soil degradation, also harm vineyard yields. Additionally, low motivation to establish new vineyards and a decline in the production of planting material exacerbate the problem. The lack of systematic control over the quality and safety of wine products and the high tax burden on the industry creates additional obstacles to the development of viticulture in the region. Figure 1 shows the dynamics of the reduction of vineyard areas in the Odesa region over the past 5 years.

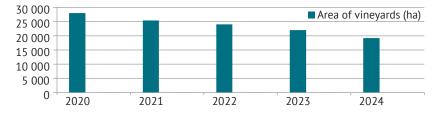


Figure 1. Dynamics of reduction of vineyard areas in the Odesa region over the past 5 years (2020-2024) *Source:* compiled by the author based on Odesa Regional State Administration (2021), Verkhovna Rada of Ukraine (2024)

The graph shows a steady downward trend in vineyard areas in the Odesa region over the past five years. The main reasons for this decline are economic difficulties, reduced government support, climate change and the effects of military operations. According to the Odesa Regional State Administration (2021), the area of new vineyards decreased significantly in 2020, and yields decreased due to unfavourable weather conditions. The Verkhovna Rada of Ukraine (2024) also confirms the overall reduction in vineyard areas in the country, which directly affects wine production. This trend is causing concern among winemakers in the region and requires the introduction of programmes to support viticulture, modernise production processes and develop wine tourism to stimulate the industry.

In 2019-2023, grape yields in Ukraine, particularly in the Odesa region, were growing, reaching

93 cwt/ha in 2023. However, in 2024, due to drought and heat, the figure decreased by 30%. The increase in yields was driven by the introduction of drip irrigation, the use of biological products and genetically resistant varieties that increase the resilience of vineyards to stressful conditions (Fig. 2). At the same time, vineyard areas are shrinking due to economic factors, including rising production costs, difficulties with the sales market and reduced government support. The increase in yields partially compensates for the reduction in planted areas, ensuring a stable level of production. Climate risks, including rising temperatures and droughts, pose a significant challenge to the industry. Adapting to the changes requires the introduction of modern agricultural technologies, breeding of resistant varieties and the development of effective irrigation strategies.

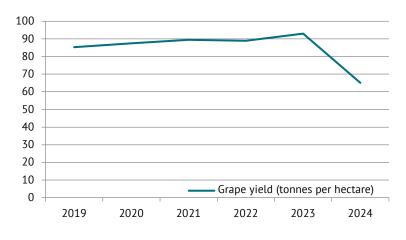


Figure 2. Dynamics of grape yield in Ukraine, 2019-2024 (t/ha) *Source:* compiled by the authors based on the State Statistics Service of Ukraine (n.d.)

The economic performance of the wine industry is showing steady growth. In 2022, the Odesa region produced more than 140 thousand tonnes of grapes, from which more than 10 million litres of wine were produced. Exports of wine products from the region totalled approximately USD 7 million. Ukrainian wine producers exported products worth USD 16.5 million. Of this amount, the Odesa region exported wines worth USD 7 million, which is approximately 42% of Ukraine's total wine exports. The main markets were the EU and Asian countries, namely Germany, Poland and Lithuania, China, Japan and South Korea. Medium and premium wines are in high demand, which encourages producers to improve the quality of their products and adapt them to international standards. In addition, there is growing interest in organic and natural wines. Consumers are increasingly paying attention to the origin and production methods of wine, preferring environmentally friendly products (Nabiyev et al., 2024). This requires producers to comply with international quality and safety standards. Adaptation of Ukrainian winemakers to international markets involves certification of products following EU standards, introduction of eco-friendly production, and improvement of labelling to ensure transparency of the origin and composition of wines. Such measures help to increase the competitiveness of Ukrainian wines on the global market and strengthen their position in the segment of high-quality wine products. The industry provides jobs for more than 20,000 people, including seasonal workers, and creates additional employment opportunities in related sectors, such as tourism, packaging and logistics.

The development of wine tourism in the region is an important area for economic growth. Every year, Odesa region's wineries welcome more than 200,000 tourists. For instance, the Shabo and Kolonist wineries have become popular tourist attractions, offering tasting tours and cultural events. The government recognises the potential of wine tourism and provides support for its development. In particular, the Odesa region is implementing the Tourism and Resorts Development Programme for 2021-2023, which provides measures to promote the development of wine tourism, including marketing support and infrastructure development. In addition, the state supports the development of wine tourism through programmes aimed at developing rural, green, wine, event and gastronomic tourism. This includes international marketing support and infrastructure development to improve the tourist experience (Report on the..., 2021). This approach helps not only to promote products but also to attract investment to the region. Thus, the Odesa region's wine industry demonstrates a high level of development and significant potential. Unique natural conditions, support for international standards and demand for Ukrainian wines abroad create prospects for further growth, modernisation of production and strengthening of the region's position in the global market.

The impact of war on the wine industry in the Odesa region. At the beginning of 2022, there were about 180 wineries in Ukraine. Of these, 49 were in the Odesa region. In 2021, wine production in Ukraine was about 100 million litres, with the Odesa region accounting for about 60% of this volume, which corresponds to approximately 60 million litres. The viticulture and wine industry in the Odesa region is an important source of employment. According to the Odesa Regional State Administration (2023), the industry employs between 5,000 and 7,000 permanent workers, and this number doubles during the seasonal period. In addition, almost 4,500 people work in the wine industry. The martial law that began in 2022 had a significant impact on the region's wine industry. In 2023, the area of vineyards decreased by 2,800 hectares, which indicates a significant reduction in production potential. The main reasons were the loss of access to certain areas, the destruction of infrastructure and general economic difficulties. As a result, wine production volumes decreased. In 2022, Ukraine produced 55 million litres of wine, which is half of the pre-war figures (State Statistics Service of Ukraine, n.d.).

The destruction of the Gostomel Glassworks, one of the largest producers of glass packaging in Ukraine, has created significant challenges for the wine industry. As a result, companies faced a shortage of glass packaging, which complicated production processes and increased costs. To overcome this problem, some producers have turned to alternative suppliers in Ukraine, such as Kostopil Glassworks, which is investing around UAH 500 million in the construction of a new furnace to increase production capacity. However, due to limited domestic resources, some wineries were forced to switch to imported glass packaging, which increased costs and dependence on external suppliers. The logistical difficulties caused by the hostilities also had a significant impact on Ukrainian wine exports. The blockade of the Black Sea ports, through which about 95% of Ukrainian exports passed before the war, led to an almost complete halt in sea deliveries from March to mid-August 2022. This forced producers to look for alternative routes, through the western land borders, which increased transport costs and delivery times. As a result, wine exports declined significantly, although the exact figures need to be further clarified. The blockade of ports has forced Ukrainian exporters to refocus on alternative markets and supply routes. Exports began to be made via Ukraine's western borders, using rail and road transport. This partially compensated for the losses caused by the blockade of ports but led to an increase in logistics costs and delivery times. Thus, the destruction of critical infrastructure and logistical constraints have had a significant impact on the Ukrainian wine industry, forcing producers to adapt to new conditions and look for alternative solutions to support production and exports (Russia's war against..., 2022).

As of 2023, there were 144 wineries in Ukraine, of which 29 were small producers. The decrease in the number of small wineries compared to the pre-war period indicates a decline in activity in the industry. The main reasons for this are financial difficulties caused by economic instability and rising production costs. Some small producers were forced to cease operations due to the inability to ensure profitability. Others tried to adapt by changing the format of their operations by switching to the production of craft wines or expanding their product range. However, such changes required additional investment and did not always bring the expected results. Thus, small wineries faced serious challenges, which affected their market presence.

The decline in vineyard areas and the decline in wine production negatively affected the region's economy. The wine industry, which provided thousands of jobs, has suffered significant losses. In villages and small towns, where viticulture is the main source of income, the impact was particularly severe. However, even in the face of war, wineries continue to adapt to new challenges (Rexhepi et al., 2023). Leading producers, such as Shabo and Kolonist, have focused their efforts on maintaining production capacity and supporting exports. They are focusing on expanding their product range to include the production of craft wines and other grape-based beverages such as grappa and chacha. This improves the efficiency of raw materials and meets the diverse needs of consumers. In addition, winemakers actively participate in international wine fairs, promotional tours and tastings, which helps to promote Ukrainian wine on the global market and support exports even during the war. The martial law significantly affected the wine industry in the Odesa region, reducing production volumes, vineyard areas and the number of companies. At the same time, winemakers are demonstrating resilience and striving to maintain key positions in the domestic and foreign markets. The industry's further development will depend on government support, infrastructure upgrades and international investment.

European integration: challenges and opportunities. Despite the potential for Ukraine's integration into the European market, the volume of wine exports from the country has been declining over the past five years (2020-2024). In 2023, exports totalled 9.66 thousand tonnes, which is the lowest figure for the period (Fig. 3). The main reasons for the decline were challenges related to logistical constraints, war and economic instability. At the same time, demand for Ukrainian wine in Romania, Moldova and other countries remains stable, which creates the basis for restoring export potential in the future.

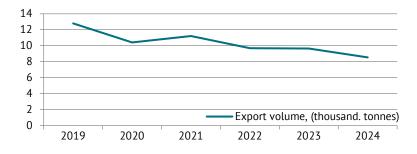


Figure 3. Dynamics of wine exports from Ukraine, 2019-2024 (thousand tonnes) *Source:* compiled by the authors based on the State Statistics Service of Ukraine (n.d.)

European integration opens both significant opportunities and challenges for the Odesa region's wine industry. Joining the free trade area with the European Union creates favourable conditions for expanding sales markets. Ukrainian winemakers are gaining access to one of the largest and most developed markets in the world. European consumers are interested in new winemaking regions, and Ukrainian wines can attract their attention due to their uniqueness and value for money. Of particular interest are wines made from indigenous grape varieties, such as Odesa Black, which have no alternatives in the world. The introduction of European quality standards is a key area of development for Ukrainian winemaking, which helps to increase consumer confidence, and access to international markets and improve the competitiveness of products (Palamarchuk & Tysyachnyi, 2023). The main standards being introduced in the industry include HACCP, which ensures safety control at all stages of production, the International Food Standard, which guarantees that products meet international quality requirements, and EU organic standards, which regulate the production of organic wine. Ukrainian producers, such as Shabo and Kolonist, are actively working to certify their products following these requirements. However, certification requires significant financial resources, which makes it difficult for small businesses to access. To support producers, the government and international organisations provide financial assistance and advisory support, including through organic certification programmes. The introduction of these standards not only facilitates the integration of Ukrainian winemakers into the global market but also improves the quality of products in line with modern requirements.

Integration also opens access to European investment programmes and grants. EU funds, such as Horizon Europe (2019), offer financial support for modernising production, introducing innovative technologies and developing infrastructure. Thanks to these resources, wineries in the Odesa region can increase their competitiveness, expand their export potential and improve their production processes. However, along with opportunities, European integration also brings several challenges for winemakers. One of the most significant is competition with European producers such as France, Italy and Spain, which have many years of experience, developed infrastructure and strong brands. To gain a foothold in the market, Ukrainian winemakers need to offer a unique product and find their niche, such as through organic production or a focus on local grape varieties (Haleeva et al., 2024). Another challenge is the need to adapt to new standards and regulatory requirements. The process of product certification, bringing production in line with EU norms and integrating environmental principles into viticulture requires significant financial and time investments. For many small producers, this can be a substantial; challenge

that requires government support and educational programmes. Innovations in production and marketing are another important component of competitiveness. The introduction of modern fermentation, filtration and storage technologies, as well as the active use of digital platforms to promote products and attract consumers, help to compete effectively on an international level (Rama *et al.*, 2023). Thus, European integration creates broad prospects for the development of the Odesa region's wine industry, but the realisation of these opportunities requires adaptation, an innovative approach and active state and international support.

As of 2024, the main export markets for Ukrainian wine remain in European countries. Romania and Moldova account for the largest share of supplies, together accounting for 50% of total exports (Fig. 4). Other important markets are Poland, Germany and the Czech Republic. There is still scope for expanding exports to other EU countries, which can be achieved through marketing strategies and the adaptation of products to local consumers' requirements.

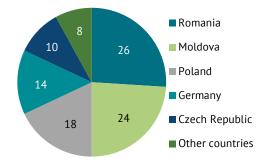


Figure 4. Main markets for wine exports from Ukraine, 2024 (share in %) Source: compiled by the authors based on the State Statistics Service of Ukraine (n.d.)

Expansion of exports to the European Union is one of the most promising areas for Odesa region winemakers. Modern consumers in the EU prefer high-quality wines, especially those of premium and organic production. The Odesa region has the potential to develop both segments thanks to its unique grape varieties, such as Odesa Black and Sukholimansky White, and natural conditions that favour organic viticulture. Demand for biowine in the EU is growing at 10% annually, and the Odesa region can take advantage of this trend by expanding organic production. Focusing on the premium segment will also increase the added value of products, increasing the profitability of farms. For instance, Kolonist Winery is already implementing a strategy to enter the premium market in the EU, receiving high praise from international experts.

Development of wine tourism in the Odesa region. Odesa region already demonstrates successful examples of wine tourism development. For instance, the Shabo Wine Culture Centre is one of the most popular

tourist destinations in the region, receiving more than 50,000 visitors annually. Tourists can witness vineyards, visit wine cellars and have wine tastings. This approach not only promotes the Shabo brand but also contributes to a positive image of the region. Kolonist Winery actively develops wine tourism by organising various events for wine connoisseurs. These include vineyard and winery tours, professional tastings, and participation in international festivals. For instance, in 2024, Kolonist presented its wines for the first time at the Dijon Vine Festival in France, where it received high praise from renowned French experts and sommeliers. The winery hosts festivals of young wine, which include vineyard tours, introduction to production technology, professional tastings and lunches with traditional dishes of Danube Bessarabia. Such events attract tourists from both Ukraine and abroad, promoting the region as a wine tourism destination. Thanks to successful examples of wine tourism, new opportunities for infrastructure development are emerging in the region, including the construction of themed hotels, restaurants and festivals. For instance, the annual Wine Days festival in Shabo has already become an international event that attracts tourists and winemakers from different countries.

The creation of clusters of wineries is a prominent way to strengthen the economic potential of the industry. One such example is the initiative to create the Odesa Region Wines cluster, which brings together several dozen small and medium-sized producers (Bolhrad District State Administration, 2023). As part of this initiative, winemakers work together to improve product quality, share experiences, and promote the region's brand on the international market. For instance, the Ukrainian brand Big Wines, which is part of the international group of companies Vinos de La Luz, has started operations in the Borodynska community of Bolhrad district, Odesa region. The company has leased 84 hectares of vineyards and purchased 20 hectares for new plantings (International Company to..., 2024). This initiative promotes the development of the region's wine industry and demonstrates the potential for attracting foreign investment through cooperation with international partners.

Development strategies for the wine industry in the Odesa region. To ensure the sustainable development of the wine industry in the Odesa region, it is necessary to implement a set of strategic measures aimed at increasing the competitiveness of products, adapting to modern market requirements and receiving support from the state. These strategies include improving production processes, expanding the product range and active government support for the industry. One of the key areas of development is the improvement of production technologies. Wineries in the Odesa region need to invest in modern equipment that allows them to control quality at every stage of production. For instance, the introduction of automated temperature and humidity control systems during fermentation significantly improves the quality of wine. It is also worth using modern methods of purification and filtration to ensure product stability during storage and transportation.

Expanding our product range is another promising area. Demand for bio and organic products is showing steady growth globally. According to a study by IWSR (2024), the global organic wine market reached 1 billion bottles in 2020, accounting for approximately 3.6% of total wine consumption. This figure is forecast to rise to 4% by 2026, with an average annual growth rate of 6.2%. The European Union, which is the largest market for organic wine, is experiencing particularly strong demand. In France and Germany, sales of biowine increased by 10% and 8% respectively in 2020. These trends indicate the prospects for the development of biowine production, and Odesa region producers, given the favourable natural conditions of the region, have the opportunity to successfully occupy this niche in the international market. In addition, a focus on premium wines made from indigenous grape varieties, such as Odesa Black and Sukholimansky White, will create a unique product that can become a hallmark of the region on the international market. Winemakers should also consider the trend towards lower alcohol content and the production of non-alcoholic wines, which are popular among young consumers in the EU.

Ukrainian integration into the European Union creates significant opportunities for the development of the wine industry, through access to numerous EU support programmes (Bezhenar, 2024). One of these initiatives is the EU4Business: Recovery, Competitiveness and Internationalisation of Small and Medium-sized Enterprises programme, which is co-funded by the European Union and the German government. The programme aims to support Ukraine's economic resilience, recovery and growth, create better conditions for the development of Ukrainian small and medium-sized enterprises, and support innovation and exports. It has developed a practical guide that provides detailed recommendations for Ukrainian winemakers on how to enter EU markets (Hellier & Nerpiy, 2024). These initiatives aim to finance innovation, modernise production, implement environmental standards, and promote products on international markets. Winemakers in the Odesa region, a key wine-growing region of the country, can actively use these tools to strengthen their competitiveness.

One of the leading programmes available to winemakers is Horizon Europe (2019), which funds innovative projects in the agriculture and food industry. This programme supports the development of the latest technologies in winemaking, such as the use of digital solutions for vineyard management or reducing the impact of climate change on crop quality. By participating in Horizon Europe, wineries can not only modernise production but also improve the quality of their products in line with current trends. The

EU4Business programme focuses on supporting small and medium-sized businesses in the Eastern Partnership countries, including Ukraine. For winemakers, the programme offers access to cost-effective financing to modernise production facilities, provide training and access international markets. For instance, through cooperation with the European Bank for Reconstruction and Development, wineries can receive loans to purchase modern equipment or implement environmental technologies. The COSME programme aims to improve the competitiveness of small and medium-sized enterprises (European Commission, 2014). Under this initiative, wineries can receive funding to participate in international exhibitions, develop marketing strategies and brand their products. This allows local producers, such as Shabo and Kolonist, to increase the visibility of their products and expand exports. Another tool is the Technical Assistance and Information Exchange Instrument, which provides technical support and advice to countries integrating into the EU (European Commission, n.d.a). This programme provides training for Ukrainian winemakers with the participation of European experts who help them implement modern quality standards, such as ISO 22000 and HACCP. Thanks to this initiative, wineries in the Odesa region can adapt their processes to the requirements of European markets.

The European Green Deal programmes aimed at supporting sustainable development should be noted separately (European Commission, n.d.b). Winemakers are offered grants to implement energy-efficient technologies, minimise production waste and develop organic wines, which are becoming increasingly popular in the European market. Additional opportunities are created by the European Agricultural Fund for Rural Development, which finances projects to modernise wineries, develop oenotourism, and support young farmers (European Commission, 2021). For instance, participation in this programme allows winemakers to invest in the creation of tourist routes and tasting rooms, which increases the popularity of local brands. For winemakers in the Odesa region, access to EU support programmes is not only an opportunity to modernise production but also a tool to enter new markets and strengthen their positions in a competitive environment. The use of financial instruments, training and technical assistance allows the region to remain a leader in winemaking in Ukraine and develop its reputation internationally.

The study determined that the wine industry in Odesa region has significant potential in the context of Ukraine's integration into the European Union. In particular, the study deterined that the region has unique natural conditions, historical traditions of winemaking and active implementation of innovations, which contributes to the competitiveness of products. These results are important as they confirm that the industry can become a key driver of regional economic development and exports. The results are consistent with the research of other scholars. For instance, G.O. Gratsiotova (2019) emphasised the importance of strategic changes in the wine industry, noting that technology modernisation and innovation can significantly increase the efficiency of enterprises. The study confirmed that such changes are crucial for adaptation to EU standards. Similarly, N.O. Gladun (2022) noted the importance of foreign economic strategies for wineries, emphasising that access to international markets requires product certification and compliance with European standards. In this context, the results of the study indicate that certification according to ISO 22000 and HACCP standards significantly contributed to increasing the credibility of Ukrainian wine at the international level.

The relevance of the results to international studies was also analysed. For example, M. Dressler and I. Paunovic (2021) examined innovative business models in winemaking, focusing on the importance of digitalisation and the integration of new technologies. The examples of the introduction of modern technologies at enterprises in the Odesa region, such as automated quality control systems, identified in the study, are consistent with the conclusions of these authors. E. Pomarici and R. Sardone (2020) analysed EU policy in the field of winemaking, noting that support through the Common Agricultural Policy contributes to the modernisation of production and the implementation of environmental standards. The study determined that access to European grant programmes, such as Horizon Europe and EU4Business, opens new opportunities for winemakers in the Odesa region. Particularly noteworthy are the results of research by R. Leonavičius (2024), which analysed the impact of the European Green Deal on winemaking. According to these studies, the integration of environmental standards and the introduction of energy-efficient technologies are key aspects for maintaining competitiveness. The study confirmed that such measures are already being actively implemented by leading producers in the Odesa region, such as Shabo and Kolonist. The identified challenges are also consistent with the findings of other researchers. For example, K. Deconinck and J. Swinnen (2015) focused on the economic barriers for small and medium-sized wineries in adapting to new market conditions. The study determined that high costs of certification and innovation are a significant challenge for producers in the Odesa region.

Additional analysis has confirmed that the results of the study are consistent with the findings of M. Dressler (2018), who analysed the German wine market and emphasised the importance of strategic management and economic planning to improve the competitiveness of the industry. Similarly, A. Figurek *et al.* (2023) emphasised the importance of a multi-level analysis of economic efficiency in the EU wine industry, which confirms the need to use several indicators to assess the efficiency of wineries in the Odesa region. In addition, E. Pomarici *et al.* (2021) studied the evolution and competitiveness of the Italian wine sector, pointing out the need to integrate innovation and preserve traditions. In this context, the study of the Odesa region's wine industry determined that the combination of innovative approaches and local authenticity contributes to the formation of a positive image of products in the international market.

P. Lombardi et al. (2016) emphasised the importance of competitiveness in intra-European trade. This is consistent with the results of the analysis of the export activities of wineries in the Odesa region, which are actively expanding their presence in the EU markets. The analysis of the profitability of viticulture in the EU presented in the study by G. Pappalardo et al. (2013) confirmed the importance of regional natural conditions and technological efficiency as key success factors. The economic potential of the Odesa region's wine industry, its export activity and profitability identified in this paper are consistent with these findings. In addition, the study by F. Cafaggi and P. lamiceli (2010) emphasised the importance of inter-firm networks in the European wine industry, which correlates with the proposal to introduce a cluster model of cooperation between wineries in the Odesa region. This approach will facilitate the exchange of experience and joint promotion of the regional brand on the international market. The analysis of multi-level regulation of winemaking presented by V. Valle (2022) also corresponds to the findings of this study, in highlighting the challenges associated with adaptation to European standards and strategies to overcome them.

Additionally, F. Schulz et al. (2022) analysed the impact of the EU alcohol policy on the German wine industry, noting that increased regulation can create barriers to exports. This confirms the importance of the adaptation of Ukrainian producers to changes in the regulatory sphere. A. Galati et al. (2017) analysed internal resources as a key factor in increasing competitiveness, which was also confirmed by the results of the study of the activities of enterprises in Odesa region. A. Ugaglia et al. (2019) noted that the integration of third-party certification systems contributes to product quality assurance, which is consistent with the data on product certification of Odesa region enterprises. Prospects for further research include a deeper analysis of the impact of climate change on winemaking, which is especially important for the Odesa region. R. Skiba (2025) pointed out that climate change can significantly affect the quality of grapes and yields. C. Brito et al. (2024) proposed strategies for achieving sustainable development in winemaking that can be integrated into the development of the Odesa region. The results correlate with the ideas presented by J. Ibáñez-Jiménez and R. Palomo-Zurdo (2024), which discuss the potential of distributed ledger technologies in addressing the economic and social challenges of the wine industry. Based on the results of the study and their consistency with other works, it was concluded that the wine industry of the Odesa region has all the prerequisites for sustainable development in the context of European integration. However, the realisation of this potential requires active state support, attraction of investments and integration of innovations into production processes. A summary of the findings forms the basis for the next section, which is devoted to conclusions and practical recommendations.

CONCLUSIONS

The study determined that the Odesa region's wine industry is a key component of the region's economy and one of the most promising sectors in the context of Ukraine's integration into the European Union. The region's unique natural conditions, including a favourable climate, diverse soils and geographical location, create ideal conditions for growing grapes and producing high-quality wine. At the same time, the historical traditions of winemaking and modern innovative approaches ensure that the products are competitive both in the domestic and foreign markets. In 2024, the Odesa region exported a total of 8.54 thousand tonnes of wine, with the main markets being Poland, Germany and Latvia. These figures confirm the region's status as the country's leading wine-producing centre.

The study determined that the region's leading producers, such as Shabo, Kolonist, Frantsuzsky Bulvar and Vinhol Oksamytne, have successfully adapted to EU standards by implementing ISO 22000 and HACCP certification. This is not only to meet the requirements of the European market but also to create a positive image of Ukrainian wines. An important discovery was the growing demand for bio and organic products in the European Union, where the annual growth of this segment is about 10%. Odesa region producers have all the prerequisites to meet this demand thanks to unique local grape varieties such as Odesa Black and Sukholimansky White. Wine tourism has become another important driver of the industry. In 2022, more than 50,000 tourists visited the region's wineries, including Shabo and Kolonist, which demonstrates a high interest in tasting tours, wine festivals and cultural events. The development of enotourism not only promotes the popularisation of products but also shapes the image of the Odesa region as a unique tourist destination.

At the same time, the study revealed several challenges facing the industry. Among the main barriers are high competition with leading European manufacturers, with France, Italy and Spain, high costs of implementing environmental technologies and modernising production, and the need to comply with strict EU standards. Despite these challenges, the support of international programmes such as Horizon Europe, EU4Business and the Technical Assistance and Information Exchange Instrument creates the conditions for obtaining funding, technical assistance and advice to help winemakers improve their production and marketing processes. Based on the results of the study, the author proposes strategic directions for the development of the industry: expanding exports through a focus on the premium segment and organic products, intensifying oenotourism through the creation of wine and gastronomic routes and the organisation of festivals, the introduction of modern technologies and a cluster model of cooperation between wineries. The importance of state support was also highlighted, through subsidies for production modernisation, participation in international exhibitions and promotion of Ukrainian wines on foreign markets.

Limitations of the study include the lack of access to detailed economic and statistical data, which makes

it difficult to predict long-term trends. Future research should focus on studying the impact of climate change on the wine industry in the Odesa region, analysing consumer preferences in different EU countries, and developing marketing strategies to promote Ukrainian wine. In general, the findings emphasise that the wine industry in the Odesa region has all the opportunities for sustainable development if the proposed strategic measures are implemented.

ACKNOWLEDGEMENTS

None.

CONFLICT OF INTEREST

The author declares no conflict of interest.

REFERENCES

- [1] 9.7 thousand tonnes of wine exported in 9 months of 2023. (2023). Retrieved from <u>https://surli.cc/rpmtyk</u>.
- [2] Alston, J.M., & Gaeta, D. (2021). Reflections on the political economy of European wine appellations. *Italian Economic Journal*, 7, 219-258. doi: 10.1007/s40797-021-00145-4.
- [3] Babych, I.M., Bondar, M.V., Boyko, P.M., & Demenyuk, O.M. (2021). Influence of soil and climate conditions of grape growing on the quality of table red wines. *SWorldJournal*, 1(07-01), 70-76. doi: 10.30888/2663-5712.2021-07-01-049.
- [4] Bezhenar, I. (2024). Wine production in Ukraine: Challenges, opportunities today. *Ekonomika APK*, 31(5), 20-34. doi: 10.32317/ekon.apk/5.2024.20.
- [5] Bolhrad District State Administration. (2023). *Bolhrad region winegrowers to create a wine cluster*. Retrieved from <u>https://bolgrad-rda.od.gov.ua/2023/03/vynogradari-bolgradshyny-stvoryuvaly-vynnyj-klaster/</u>.
- [6] Brito, C., Pereira, S., Martins, S., Monteiro, A., Moutinho-Pereira, J.M., & Dinis, L. (2024). Strategies for achieving the sustainable development goals across the wine chain: A review. *Frontiers in Sustainable Food Systems*, 8, article number 1437872. doi: 10.3389/fsufs.2024.1437872.
- [7] Cafaggi, F., & lamiceli, P. (2010). *Inter-firm networks in the European wine industry*. Retrieved from <u>https://cadmus.eui.eu/handle/1814/15654</u>.
- [8] de Castro, M., Baptista, J., Matos, C., Valente, A., & Briga-Sá, A. (2024). Energy efficiency in winemaking industry: Challenges and opportunities. *Science of the Total Environment*, 930, article number 172383 <u>doi: 10.1016/j.scitotenv.2024.172383</u>.
- [9] Deconinck, K., & Swinnen, J. (2015). The economics of planting rights in wine production. *European Review of Agricultural Economics*, 42(3), 419-440. doi: 10.1093/erae/jbu028.
- [10] Dressler, M. (2018). The German wine market: A comprehensive strategic and economic analysis. *Beverages*, 4(4), article number 92. doi: 10.3390/beverages4040092.
- [11] Dressler, M., & Paunovic, I. (2021). Converging and diverging business model innovation in regional intersectoral cooperation-exploring wine industry 4.0. *European Journal of Innovation Management*, 24(5), 1625-1652. <u>doi: 10.1108/EJIM-04-2020-0142</u>.
- [12] European Commission. (2014). *Competitiveness of enterprises and SMEs*. Retrieved from <u>https://ec.europa.eu/</u> info/funding-tenders/opportunities/portal/screen/programmes/cosme.
- [13] European Commission. (2021). *European agricultural fund for rural development*. Retrieved from <u>https://</u> <u>commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/european-agricultural-fund-</u> <u>rural-development-eafrd_en</u>.
- [14] European Commission. (n.d.a). *Technical assistance and information exchange*. Retrieved from https://surl.li/wswwsh.
- [15] European Commission. (n.d.b). *Research and innovation for the European Green Deal*. Retrieved from https://research-and-innovation.ec.europa.eu/strategy/strategy-research-and-innovation/environment-and-climate/european-green-deal_en.
- [16] Figurek, A., Thrassou, A., & Vrontis, D. (2023). Economic performance of wine production in EU: A multi-indicator comparative analysis. *Journal for Global Business Advancement*, 16(1), 3-30. <u>doi: 10.1504/JGBA.2023.137469</u>.
- [17] Galati, A., Crescimanno, M., Tinervia, S., Iliopoulos, C., & Theodorakopoulou, I. (2017). Internal resources as tools to increase the global competition: The Italian wine industry case. *British Food Journal*, 119(11), 2406-2420. doi: 10.1108/BFJ-02-2017-0092.

129

- [18] Gladun, N.O. (2022). Foreign economic strategy of the wine industry enterprises. Retrieved from <u>https://reposit.nupp.edu.ua/handle/PoltNTU/13443</u>.
- [19] Gratsiotova, G.O. (2019). Strategy introduction of changes at the enterprises of the wine-making industry. *Economic Journal Odessa Polytechnic University*, 9(3), 161-172. <u>doi: 10.5281/zenodo.3886265</u>.
- [20] Haleeva, A., Hruban, V., Horbunov, M., & Ruzhniak, M. (2024). Improving the process of plant protection mechanisation in grape growing. Ukrainian Black Sea Region Agrarian Science, 28(4), 85-95. doi: 10.56407/ bs.agrarian/4.2024.85.
- [21] Hellier, M., & Nerpiy, S. (2024). *A practical guide to exporting wine to the European Union*. Retrieved from https://investincherkasyregion.gov.ua/sites/default/files/winemanual_ukr_final_2024_july8_compres.pdf.
- [22] Horizon Europe. (2019). Retrieved from <u>https://commission.europa.eu/funding-tenders/find-funding/eu-funding-programmes/horizon-europe_en</u>.
- [23] Ibáñez-Jiménez, J.W., & Palomo-Zurdo, R. (2024). *Wine tokenisation: The opportunity of DLT technologyfor the economic and social challenges of the wine sector*. Retrieved from <u>https://hdl.handle.net/20.500.14352/104211</u>.
- [24] International company to produce wine in Odesa region. (2024). Retrieved from <u>https://agroportal.ua/news/</u><u>novosti-kompanii/mizhnarodna-kompaniya-viroblyatime-vino-na-odeshchini</u>.
- [25] IWSR. (2024). Organic, natural and other alternative wines offer growth in a challenging landscape. Retrieved from https://www.theiwsr.com/organic-wine-market-trends.
- [26] Jiménez, J.W., & Zurdo, R.J. (2024). Wine tokenisation: The opportunity of DLT technology for the economic and social challenges of the wine sector. *Revista de Estudios Cooperativos*, 146(1), article number e95352. doi: 10.5209/REVE.95352.
- [27] Leonavičius, R. (2024). *Impact of the European Green Deal on the European wine industry: A case study of Spain*. Retrieved from <u>https://epublications.vu.lt/object/elaba:210547258/</u>.
- [28] Lombardi, P., Dal Bianco, A., Freda, R., Caracciolo, F., & Cembalo, L. (2016). Development and trade competitiveness of the European wine sector: A gravity analysis of intra-EU flows. *Wine Economics and Policy*, 5(1), 50-59. doi: 10.1016/j.wep.2015.12.002.
- [29] Minfin. (2024). Average prices for domestic wine in September 2024. Retrieved from https://index.minfin.com.ua/ua/markets/product-prices/2024-09/.
- [30] Ministry of Economy of Ukraine. (2024). Ukrainian exports increased by 13.4% to \$41 billion in 2024, – Yulia Svyrydenko. Retrieved from <u>https://me.gov.ua/News/Detail/c002eb6c-48b5-4e33-b819-53c8c2ea237b?lang=uk-UA&title=UkrainskiiEksport2024</u>.
- [31] Nabiyev, A., Kazimova, İ., Mammadaliyeva, M., Maharramova, S., Nasrullayeva, G., & Yusifova, M. (2024). Determining biochemical qualitative indicators of grapes during long-term storage. *Eastern-European Journal* of Enterprise Technologies, 2(11(128)), 64-75. doi: 10.15587/1729-4061.2024.302794.
- [32] Nahurna, N., & Kurylenko, Yu. (2024). Study of the winemaking market of Ukraine as an infrastructure for wine tourism. *Innovations and Technologies in the Service Sphere and Food Industry*, 3(13), 101-105. doi:10.32782/2708-4949.3(13).2024.15.
- [33] Odesa Regional State Administration. (2021). *The area under vineyards decreased in Odesa region*. Retrieved from <u>https://odaold.od.gov.ua/v-odeskij-oblasti-skorytylys-ploshhi-pid-vynogradnykamy/</u>.
- [34] Odesa Regional State Administration. (2023). *Odesa region The wine-making business card of Ukraine*. Retrieved from https://agro.od.gov.ua/2023/03/15/odeshhyna-vynorobna-vizytivka-ukrayiny/.
- [35] Palamarchuk, I., & Tysyachnyi, O. (2023). Research of varietal resources of grapes in the conditions of the Forest Steppe of Ukraine. *Scientific Reports of the National University of Life and Environmental Sciences of Ukraine*, 19(5), 1-10. doi: 10.31548/dopovidi5(105).2023.003.
- [36] Pappalardo, G., Scienza, A., Vindigni, G., & D'Amico, M. (2013). Profitability of wine grape growing in the EU member states. *Journal of Wine Research*, 24(1), 59-76. doi: 10.1080/09571264.2012.724392.
- [37] Pomarici, E., & Sardone, R. (2020). EU wine policy in the framework of the CAP: Post-2020 challenges. *Agricultural and Food Economics*, 8, article number 17. doi: 10.1186/s40100-020-00159-z.
- [38] Pomarici, E., Corsi, A., Mazzarino, S., & Sardone, R. (2021). The Italian wine sector: Evolution, structure, competitiveness and future challenges of an enduring leader. *Italian Economic Journal*, 7(2), 259-295. doi: 10.1007/s40797-021-00144-5.
- [39] Rama, H.H., Rama, V.H., & Rexhepi, B.R. (2023). The impact of marketing and technological factors on the quality, safety and sales of wine. *Quality Access to Success*, 24(196), 49-53. <u>doi: 10.47750/QAS/24.196.06</u>.
- [40] Report on the implementation of the programme of socio-economic and cultural development of Odesa region for the first half of 2021. (2021). Retrieved from <u>https://oblrada.od.gov.ua/wp-content/uploads/21-9-VIII.pdf</u>.
- [41] Rexhepi, B.R., Berisha, B.I., & Xhaferi, B.S. (2023). Analysis of the impact of the war on the economic state of agriculture in Ukraine. *Economic Affairs (New Delhi)*, 68, 839-844. doi: 10.46852/0424-2513.2s.2023.29.

- [42] Richter, B., & Hanf, J.H. (2021). Cooperatives in the wine industry: Sustainable management practices and digitalisation. *Sustainability*, 13(10), article number 5543. doi: 10.3390/su13105543.
- [43] Russia's war against Ukraine: Impact on global food security and the EU's response. (2022). Retrieved from https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733667/EPRS_BRI%282022%29733667_XL.pdf.
- [44] Schulz, F.N., Richter, B., & Hanf, J.H. (2022). Current developments in European alcohol policy: An analysis of possible impacts on the German wine industry. *Beverages*, 8(4), article number 75. <u>doi: 10.3390/ beveraages8040075</u>.
- [45] Shebanin, V., Shebanina, O., Kormyshkin, Y., Kliuchnyk, A., Umanska, V., & Reshetilov, G. (2022). Local economic development: Its potential and quality in the context of globalization. *International Journal for Quality Research*, 16(4), 1001-1012. doi: 10.24874/IJQR16.04-02.
- [46] Shebanina, O., Kormyshkin, I., Reshetilov, G., Allakhverdiyeva, I., & Kliuchnyk, A. (2023). The role of environmental insurance in "green" post-war rebuilding of Ukrainian regions. *Economic Affairs*, 68, 845-851. <u>doi: 10.46852/0424-2513.2s.2023.30</u>.
- [47] Silvestri, R., Adamashvili, N., Fiore, M., & Galati, A. (2023). How blockchain technology generates a trust-based competitive advantage in the wine industry: A resource based view perspective. *European Business Review*, 35(5), 713-736. doi: 10.1108/EBR-10-2022-0217.
- [48] Skiba, R. (2025). Wine growing essentials for small scale sustainable viniculture. London: After Midnight Publishing.
- [49] Soceanu, A., Dobrinas, S., Sirbu, A., Manea, N., & Popescu, V. (2021). Economic aspects of waste recovery in the wine industry. A multidisciplinary approach. *Science of the Total Environment*, 759, article number 143543. <u>doi: 10.1016/j.scitotenv.2020.143543</u>.
- [50] State Statistics Service of Ukraine. (n.d.). *Grape processing and production of wine materials*. Retrieved from <u>https://www.ukrstat.gov.ua/operativ/operativ2018/sg/pvvv/arh_pvvv_u.html</u>.
- [51] Steblovska,A. (2022). It increased by 60%: Odesa region became the leader in exports of goods in Ukraine. Retrieved from https://suspilne.media/odesa/293720-zbilsivsa-na-60-odeska-oblast-stala-liderom-eksportu-tovariv-v-ukraini/.
- [52] Steblovska, A. (2023). *More than 60% of Ukraine's wine production is concentrated in Odesa region*. Retrieved from <u>https://suspilne.media/odesa/548063-na-odesini-zoseredzeno-ponad-60-vinorobstva-ukraini/</u>.
- [53] Ugaglia, A.A., Cardebat, J.-M., & Corsi, A. (2019). *The Palgrave handbook of wine industry economics*. Cham: Palgrave Macmillan. <u>doi: 10.1007/978-3-319-98633-3</u>.
- [54] Ukrainian wines are exported to almost 50 countries. (2024). Retrieved from https://landlord.ua/news/ ukrainski-vyna-eksportuiut-do-maizhe-50-krain/.
- [55] Valle, V.T. (2022). *The multilevel regulation of wine production: prospects for the sector in a Green Europe*. Retrieved from https://repositorium.sdum.uminho.pt/handle/1822/83995.
- [56] Verkhovna Rada of Ukraine. (2024). *The viticulture and winemaking industry must comply with the rules of the European Union, Olexandr Gaidu*. Retrieved from <u>https://www.rada.gov.ua/news/news_kom/251757.html</u>.
- [57] Wagner, M., Stanbury, P., Dietrich, T., Döring, J., Ewert, J., Foerster, C., Freund, M., Friedel, M., Kammann, C., Koch, M., Owtam, T., Schultz, H.R., Voss-Fels, K., & Hanf, J. (2023). Developing a sustainability vision for the global wine industry. *Sustainability*, 15(13), article number 10487. doi: 10.3390/su151310487.

131

Економічний потенціал виноробної промисловості в умовах інтеграції до ЄС

Ірина Кормишкіна Доктор філософії Миколаївський національний аграрний університет 54008, вулиця Георгія Гонгадзе, 9, м. Миколаїв, Україна https://orcid.org/0009-0002-9670-2295

Анотація. Метою дослідження було оцінити економічний потенціал виноробної галузі Одеської області в умовах інтеграції України до Європейського Союзу та визначити стратегічні напрями її сталого розвитку. У дослідженні було проаналізовано природні, економічні та соціальні фактори, що сприяють розвитку галузі, а також виклики, які постали перед виноробами в умовах глобалізації та адаптації до стандартів Європейського Союзу. Розглядалося функціонування провідних виноробних підприємств, таких як «Шабо», «Колоніст», «Французький бульвар» та «Винхол Оксамитне», з акцентом на їхній експортний успіх, інновації та маркетингові стратегії. Основні результати дослідження показали, що Одеська область є лідером у виробництві вина в Україні, забезпечуючи понад 60 відсотків національного виробництва. Попри високу якість продукції та відповідність міжнародним стандартам, експорт українського вина до європейських країн останніми роками знижується через воєнні дії та економічні труднощі. Водночас визначено основні виклики, зокрема конкуренцію з європейськими виробниками, необхідність адаптації до регуляторних вимог і потребу в інноваціях у виробництві та маркетингу. Запропоновані стратегії розвитку включають вдосконалення технологічних процесів, виробництво біологічних та преміальних вин, розвиток кластерів виноробних господарств і посилення державної підтримки через субсидії, грантові програми та заходи з популяризації українського вина на міжнародному рівні. Висновки підтвердили, що впровадження цих стратегій сприятиме зміцненню конкурентоспроможності виноробної галузі Одеської області, розширенню її експортного потенціалу, розвитку винного туризму та утвердженню України як перспективного виноробного регіону на світовому ринку. Отримані результати є корисними для розробки регіональної політики у сфері виноробства та впровадження програм підтримки галузі

Ключові слова: виноградарство; винний туризм; інноваційні технології; міжнародна торгівля; органічне виробництво; конкурентоспроможність продукції; євроінтегаційні процеси