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COMPETITIVENESS OF THE WINE SECTOR IN EU COUNTRIES

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Abstract

To achieve a competitive advantage in the EU and the local wine market, wine producers must constantly look for new opportunities and evolving market needs. The growth of competition, partly fuelled by the emergence of New World countries in the global wine market, is forcing incumbent producers to seek innovation in production technology and develop new market approaches. In these attempts, producers often lack a broader understanding of the interconnectedness of factors that shape the competitive arena.

This paper aims to analyze the orientation of national wine sectors in 15 EU Member States (EU15) towards a foreign trade or domestic consumption, based on factors such as the value of export, production capacity, consumption, and average wine prices. The data used are obtained from official statistics: Eurostat statistics (COMEXT database), COMTRADE database (UN), national statistics from 2005 to 2018; as well as some data presented by previous research. The goal is to present the current state of the 15 EU countries' wine sector competitiveness and discuss approaches aimed at improving their competitiveness. The results will provide useful information for wine producers

and policymakers in charge of regulating the wine sector at the national and EU level.

Keywords: *competitiveness, wine sector, EU countries, export, import*

JEL Classification: L66

1. INTRODUCTION

This paper provides a comparison between the wine sectors in 15 EU Member State countries (EU15): Bulgaria, the Czech Republic, Germany, Greece, Spain, France, Croatia, Italy, Cyprus, Hungary, Austria, Portugal, Romania, Slovenia, and Slovakia, to recognize the adequate indicators relevant for improving the competitive advantage of the wine industry. The countries in the sample include those with a developed wine industry.

The European Union is the biggest producer of wine in the world, with an average annual production of about 167 million hectolitres, which is about 65% of world production (ec.europa.eu). Through the Common Agricultural Policy (CAP) and the Common Market Organization (CMO) Regulation on agricultural products, the European Union encourages the development of the wine sector by making EU wine producers more competitive, by making market-management rules simpler, clearer and more effective and by preserving the tradition of making wine.

In the last 20 years, the global wine market has experienced rapid globalization, exports have doubled (Alonso et al., 2017), New World countries (Chile, Australia, South Africa, Argentina) have emerged on the world wine scene, consumer expectations have changed and the quality of wine has significantly risen. New World countries and the United States base their production on drastically larger average plantation sizes than EU producers and, consequently, incur lower production costs. Even though the EU measures are designed to keep the European wine production competitive and recognized in quality, the effects of these measures are doubtful, especially for smaller producers.

The competitive economies are the ones that have recognized the factors driving the improvement of productivity and have built the country's prosperity on them. Competitiveness can be defined and measured in many ways. The World Economic Forum (WEF 2018) defines competitiveness as *"a set of institutions, policies, and factors that determine the level of productivity of a country"* and it ranks the

competitiveness of about 140 countries through the Global Competitiveness Index (GCI). The European Union defines a competitive economy as an *"economy with a sustained high rate of productivity growth"* (eur-lex.europa.eu). Boosting competitiveness within EU countries is one of the EU's key political priorities. But, according to Porter (1990), the basic unit of analysis for the understanding competition is the industry. Firms are the ones that compete in the international market. Encouraging innovations and the use of new technologies leads to a more competitive business environment and long-run growth (Sener, Saridogan, 2011). One of the six focuses of the EU Enterprise Policy is *"encouraging business to embrace information and communications technologies"* to create more competitive enterprises.

To be competitive in a certain market, a business entity should be able to minimize long-run average cost. However, firms of a quite different size within an industry, which is usually connected with costs (economies of scale), are often able to compete in the long run. Firms of different sizes can survive in competitive markets if they can produce at similar levels of marginal costs. This situation can be the result of significant variations in the accessibility and price of the main inputs such as labor, agricultural land energy, etc. For example, to be cost-effective, the European wine producers have to reach output levels that would enable them to introduce cost-saving technologies both in vineyards and wine cellars. Depending on the availability of resources i.e. depending on the degree of specialization, there is more than one level at which a wine producer can achieve maximal price efficiency. Europe's main competitors, especially from South America, grow wine grapes on vastly bigger plantations and at lower prices of accessible labor and are thus able to reach significant cost advantages over most European producers. However, small European wine producers can "make use" of the wine production tradition and enhance the reputation of their brand, and, based on it, achieve higher prices for smaller volume production. Considering that a significant part of wine-producing countries in Europe is also popular tourist destinations (Italy, Spain, Portugal, France, Greek, Croatia), the wine producers in these countries, especially smaller ones, can sell their products to tourists for a premium price as a part of a wider tourist offer giving tourists a "bite" of authenticity (private hotels, restaurant offering "craft" wine, etc.). As we find the specificity of the wine sector often country related, the emphasis in this research is on countries rather than on particular firms. Even in a "wider picture", a typical wine consumer tends to recognize the reputation of a wine sort or wine-producing country better than the reputation of a par-

ticular wine producer. Therefore, to understand the competitiveness of a wine-producing country, we chose to analyze the main indicators of wine business: production, consumption, values of export at a country level and the average price of a still wine at the country level.

The research idea behind this paper is to assess the orientation of the EU wine sector towards exports at the country level. We used pooled OLS method to see how production, consumption and average price influence the export of wine, and thus the competitiveness of the EU wine sector.

The paper is structured as follows. After a brief introduction, we present the trends in production, consumption, import, and export of wine in the 15 observed EU countries. The third part of the paper presents the key results of the empirical analysis. The paper ends with a discussion on the findings and concluding remarks.

2. LITERATURE REVIEW

All EU Member States are part of the Common Agricultural Policy (CAP), which aims to support agriculture by stimulating quality production and increasing competitiveness. The CAP is the most integrated of all EU policies. Since its creation in 1962, the CAP has undergone several adjustments and reforms. Although the share of the budget has been steadily decreasing, from 75% of the total EU budget in 1985 to 43.5% in the 2007-2013 period, and 37.8% in the period 2014-2020, the largest part of the EU budget is still allocated for CAP (Ugaglia et al., 2019).

According to the European Commission's Evaluation of the CAP Measures Applicable to the Wine Sector report from 2018, between 2000 and 2012, the wine production and consumption and area under vines in the EU decreased especially in the leading countries, Spain and Italy by 17% and France by 13%. During the same period, the New World countries (especially Argentina and Chile), China and the USA increased in wine areas and volume of production. This trend is still present. The average prices are increasing and as well as the export of bottled wine (Mariani et al., 2014) suggesting that the EU has specialized in the production and exports of higher quality, bottled wines. Although the Old World countries have a long tradition in wine production and high-quality standards, the New World countries have worked hard in building the

wine industry, their infrastructure, and reputation. After the globalization of the wine industry, the New World countries have responded well to new consumer expectations. Mora (2007) singled out price competitiveness and brand power as an explanation of the success of the New World countries.

The aim of the 2013 CAP reform, was to have a more global and integrated approach with the goal to be more efficient, targeted and coherent to enable competitiveness and sustainability of the agricultural sector. To achieve long-term goals, the reform focuses on enhanced competitiveness, improved sustainability, and greater effectiveness. Increasing competitiveness is desired to be achieved directly by changes to market mechanisms, particularly through the removal of production constraints. All the restrictions on production volumes ended with the 2013 reform. The 2014-2020 reform continues to strengthen the policy of moving away from the product towards the producer. The agricultural sector is faced with an aging farmer population, which is why young farmers entering the sector, have the opportunity the get additional first pillar payment (CAP; direct payments to farmers). The challenge of the new reform is to score the right balance between effectiveness and efficiency and to keep the rules as simple as possible. The second pillar of the CAP, the rural development policy, is designed to support rural areas in the EU and meet a wide range of economic, environmental and territorial challenges of the 21st century. Given that the new 2014-2020 CAP reform was adopted in 2013, the effects will be visible in the years to come. The new reform puts a greater focus on competitiveness, innovation, and climate change.

Although the CMO reform adopted in 2008 was aimed at boosting the competitiveness of the wine sector, Balogh and Jambor (2017) concluded that the reform weakened the international competitiveness of the European winemakers and that the European Union had not responded well to new global challenges (emergence of New World countries in the wine scene, climate changes, etc.). They suggested that the CMO should be revised. Papadopoulos (2015) also concluded that the CAP continued to be inefficient in lowering the social inequalities of rural areas. Although the CAP has undergone several reforms from 1962, especially in the last two decades, where it faced numerous challenges relating to production capacities, environmental concern, food safety, and quality, uneven agricultural and socio-economic structure of EU member states, etc., it seems that it did not overcome all the challenges faced by EU agriculture. The old and new EU member states have differently developed agricultural sectors - it is considered to be better developed in the old member states. The share

of small farms is higher in the Mediterranean and eastern European countries and the share of large farms in northern and western European countries (Papadopoulos, 2015). The "economic size" of EU farms is also significantly different between the old and the new EU member states (Eurostat statistics). Considering the diversity of 28 EU member states, it is a great challenge to address the needs of all Member States through a common policy.

Among previous research analyzing determinants of wine production at the country level and making conclusions regarding the competitiveness of the wine sector those made by Bentzen & Smith (2009) and Vlachos (2017) should be mentioned, especially as the latter of the two used similar methodological approach.

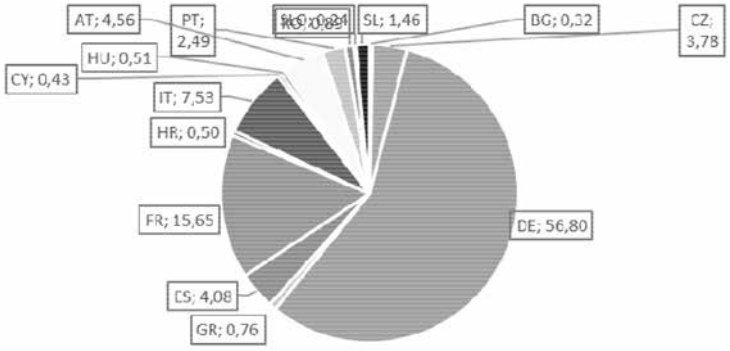
3. THE EUROPEAN WINE SECTOR

The European Union is the leader in the world production of wine and is the biggest exporter of wine. Italy, Spain, and France are the countries with the largest single wine production. Together they account for 51% of the world wine production and 55% of the world wine export. However, the fast changes in technology, consumer habits and needs, climate changes and the arrival of the New World countries on the world wine market, dictate a rapid adaptation of policies and rules for further survival and development of the wine sector. Due to the rapid development of the wine sector in New World countries, the EU wine producers face many challenges in the EU market resulting in lower performance in the global wine market. The number of farms, specialist vineyards, has dropped by 22.5% from 2005 (573.760 farms) to 2016 (444.270 farms) in the countries observed in this paper[1] (http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do) i.e. in 12 of them with the exclusion of Romania and Slovenia. The utilized agriculture area has also decreased, but only by 3.3%, which indicates that smaller farms were closed.

In the following section, we will show the share of individual countries in the total imports and exports of the examined sample (EU15) and their trends in terms of production, consumption and average price of still wine, in the period from 2005 to. 2018.

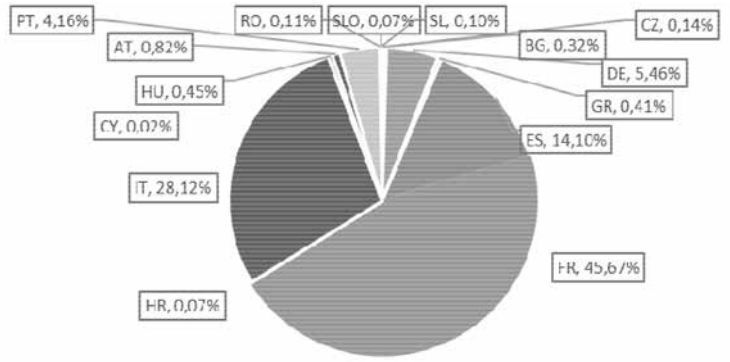
[1] Croatia is not included because it was not a EU member state until 2013

Graph 1. Import of wine 2005-2018



Source: authors

Graph 2. Export of wine 2005-2018



Source: authors

The imports and exports of wine in the entire EU, during the 14 observed years, recorded a constant increase, however, the exports grew at faster rates. In that period, the imports increased by 42%, while the exports by 87%. In 2005, exports were 28% higher than imports, and in 2018 it was even 69% higher.

In the same period, the imports in the 15 observed countries increased by 59% and exports by 80%. Of the 15 countries observed in this paper, the largest importer was Germany, which has a traditional culture of wine consumption but has lower production since a significant part of the country is not suitable for wine production.

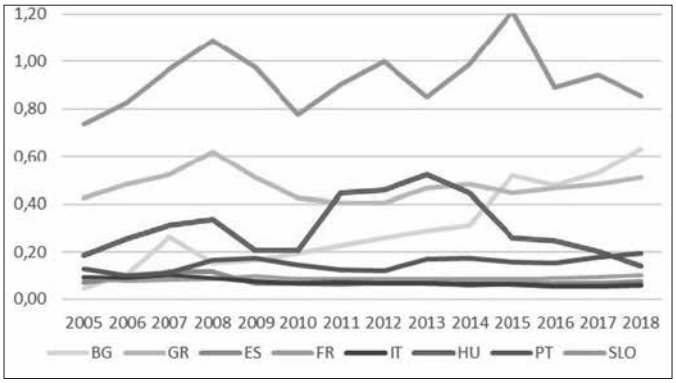
The EU is the largest exporter of wine in the world. In 2018, the exports were four times higher than imports. The EU15 imported 35% of total wine imports

and exported 94% of total wine exports of all EU Member States. In the 14 years, the exports to non-EU countries increased by 135%; in 2009 the export to non-EU countries was 39% of total EU15 exports, and in 2018, it accounted for over 50%. This was caused primarily by a significant increase in wine consumption in Asian markets, primarily in China, which is not a significant wine producer and where wines produced in the EU, especially in France and Italy, have a great reputation and high price. The wine is imported mainly from the Member States (nearly 90%).

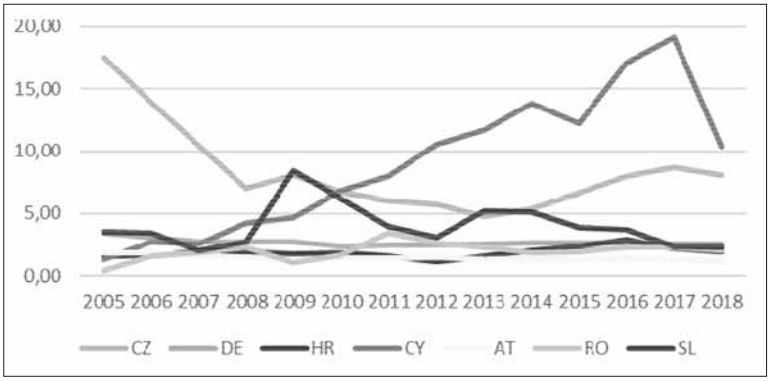
Given that the average vineyard area in the EU is far smaller than in the New World countries, the EU producers cannot compete in the world market with cheap wines. As a result, the EU policy is aimed at increasing the wine quality and profiling EU wine producers as producers of high quality, more expensive wines. This is in line with the CAP policy of restructuring and converting intra-EU vineyards planted in less suitable locations, and encouraging vineyard planting in good locations. As expected, the largest exporters of wine from the observed countries are France, Italy and Spain (together they export 88% of wine exported from the observed countries) and Portugal, which exports 4% of the wine exported from 15 observed countries (which is significant, considering the size of Portugal).

The next graph shows the import/export ration (I/E ratio). Countries are divided into two images. The first image shows countries that export more than they import so their import/export ration is less than 1 in most observed years. The second image shows countries that import more than they export so the I/E ratio is more than 1.

Graph 3. Import/Export ratio



Source: authors

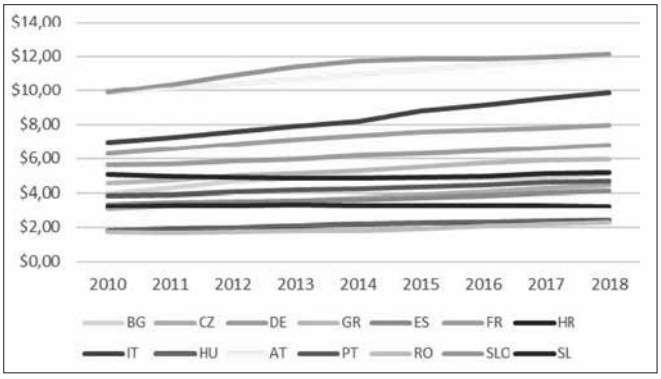


Source: authors

Half of the 15 observed countries export more than they import (Graph 3, first image). These countries are traditional wine countries or traditional wine regions (like the Black Sea region in Bulgaria). Within the other observed countries, the import/export ratio (I/E ratio) is also related to consumption trends. Significant progress, in terms of wine production and consumption and a decrease in imports, is evident in the Czech Republic (in the period from 2005 to 2018, consumption increased by 75%, production by 58%, and the I/E ratio decreased by 55%) and Slovakia (in the period from 2005 to 2018, consumption increased by 16%, production by 28%, and the I/E ratio decreased by 30%).

The next graph shows the average price movement, expressed in US$, in the period from 2010 until 2018.

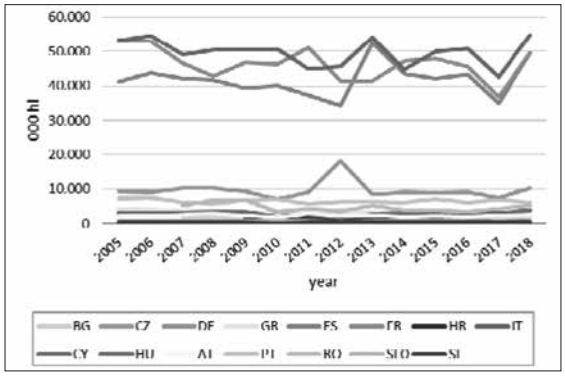
Graph 4. The average price for still wine 2010-2018 (in US$)



Source: authors

Almost all the observed countries recorded an increase in the price of still wine, from 20 to 40 percent in the period from 2010 to 2018. The exemption was Slovakia, which significantly increased production, and Croatia, where the economic crisis lasted longer than in other countries and where wine producers were reluctant to raise their prices.

Graph 5. Average production (000 hl)



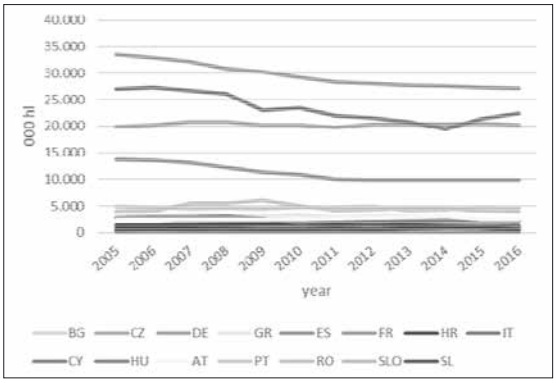
Source: authors

Trends in wine production in Italy, France, and Spain, as traditional wine countries, are positioned at the top part of the Graph (5). Production in these three countries was stable over the observed period, while annual fluctuations amounted to up to 20 percent depending on the good/bad harvest (climate and weather conditions).[2] Although production was stable, the area under vineyards was reduced by over 10% in all three countries, which leads to the conclusion that they used the EU funds for the restructuring of vineyards and focused on the production of quality wines, which led to an increase in the average price of quality wines.

In all other analyzed countries, except Germany, the area under vineyards was also reduced. The production, as well, remained stable except Cyprus that reported a decrease both in vineyard areas and in production by about 50%.

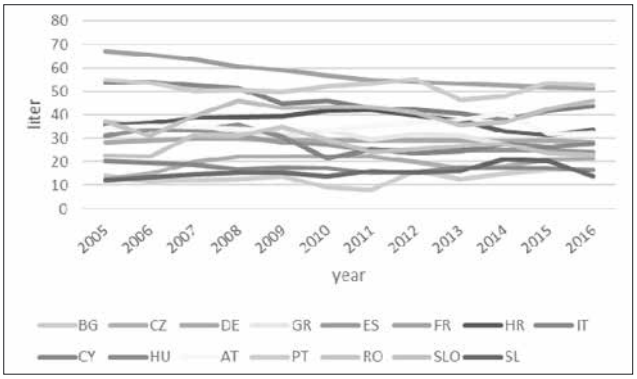
[2] Average yield in Croatia is between 11 and 12 t/ha for quality wines (Pravilnik o proizvodnji vina, NN 96/03)

Graph 6. Consumption (000 hl)



Source: authors

Graph 7. Consumption (l per capita)



Source: authors

In most of the observed countries, we register a decline in wine consumption and wine consumption per capita (Graph 7), except in Bulgaria, the Czech Republic, Slovenia, and Slovakia. This phenomenon requires further research, but we speculate that this could be attributed to consumer trends.

4. DATA, METHODOLOGY, MODEL DEVELOPMENT AND RESULTS OF EMPIRICAL ANALYSIS

The research was conducted to get a better understanding of factors that influence wine production and wine export in the 15 observed EU countries with a developed wine sector.

The data used in the empirical analysis are panel data for the 2005-2018 period. The variables used in the econometric analysis are presented in Table 1.

Table 1. Definition of variables

Variable	Acronym	Definition	Data sources
AVERAGE PRODUCTION	AVPROD	Average production includes vinified (P. D. O. wines, P. G. I. wines, Varietal and other wines) and non-vinified wines. Average production is expressed in thousands of hl.	Eurostat statistics (ec. europa.ru)
CONSUMPTION	CONS	Consumption is calculated with the population data from the United Nation Population Division and refers to the adult population, 15 years and older. Consumption is expressed in liters per capita.	International Organisation of Vine and Wine (www.oiv.int)
EXPORT	EXP	Export data include export outside and inside the EU. Export is expressed in euros.	Eurostat statistics (ec. europa.ru)
AVERAGE PRICE OF STILL WINE	AVGPC	Data on the average price of still wine is expressed in US dollars.	Statista (www.statista.com)

Source: authors

The pooled OLS method was used to see how production, consumption and average price influence the export of wine, and thus the competitiveness of the EU wine sector. Vlachos (2017) previously used the pooled OLS method to explore the economic factors that influence wine production.

After descriptive statistics final model is formed.

Table 2. Descriptive Statistics

Variable	Variable	Obs	Mean	Std.Dev.	Min	Max
Export	EXP	210	1.070e+09	2.110e+09	1.244e+06	9.350e+09
Average production	AVGPROD	196	1.100e+07	1.720e+07	79000	5.480e+07
Consumption (l/ capita)	CONS	180	31.78	13.18	7.9	67.10
Average price of still wine	AVGPC	126	5.584	2.895	1.7	12.11

The model which will be tested is:

$$\mathbf{lnEXP = \beta_0 + \beta_1 lnAVGPROD + \beta_2 lnCONS + \beta_3 lnAVGPC} + \Gamma \text{tyearlyFE} + \mathbf{u_{it}}$$

A logarithmic transformation of the model was performed, making the estimated model, log-log model.

Table 3. Estimation results of exports as a function of production, consumption per capita and the average price of still wine

	(1)
	lnEXP
lnAVGPROD	1.339***
	(0.0539)
lnCONS	-0.549*
	(0.266)
lnAVGPC	0.767***
	(0.221)
Yearly FE	Yes
_cons	-0.715
	(0.879)
N	98
R^2	0.871

Standard errors in parentheses
* p < 0.05, ** p < 0.01, *** p < 0.001

The estimated equation of the Model 1 is:

lnEXP = -0.715 + 1.339 lnAVGPROD - 0.549 lnCONS + 0.767 lnAVGPC

The model is estimated using the OLS estimator. According to the interpretation of the results obtained an increase in the average production of wine by 1 percent leads to an increase of export by 1.34 percent. An increase in consumption per capita by 1 percent leads to a decrease in export by 0.55 percent. An increase in the average price of still wine by 1 percent leads to an increase in export by 0.77 percent.

5. DISCUSSION AND CONCLUSION

Changes in production and consumer trends and the arrival of the New World countries on the world wine market led to the need for an EU CAP policy reform to preserve the competitiveness of traditional EU wine countries. The conducted research and the interpretation of the obtained model lead to

the conclusion that the competitiveness of the EU wine sector is increasing and that the CAP policy contributed to an increase in EU wine exports. Given the increase in the average price of still wine and the increase in exports, we conclude that the EU wine producers have focused on exports, on producing higher quality and more expensive wines.

The increase in the size of the vineyards enables producers to achieve technologically driven economies of scale both on plantations and in cellars. In parts of the world with higher availability and lower price of labor, some of the technology can be substituted by engaging more workers on the plantation. New World countries became the growing force in the wine industry by using size advantages mostly combined with lower labor costs. The European wine producers typically have limited options to increase plantation size and are confronted with high prices and low availability of labor. Moreover, the European wine production industry can be considered as above averagely regulated and under the dominant influence of a few big member states, especially France. As France together with Spain and Italy, makes *the big three* of the EU wine production and export, wine policies in the EU are pushing technological progress and enhancement of both quality and prices of produced wine. As a simple example, we can mention that the incentives which wine producers can get through wine envelope programs are encouraging not only investment in technology but also the abandonment of old, lower-quality wine plantations. This policy suits well the big producers and exporters that can build recognizable brands on their own but is also one of the reasons why the surface area under vineyards is getting smaller in most countries analyzed in our sample.

The New World countries have the size advantage, and consequently, cost advantage over the traditional wine producers from Europe. The European answer to that challenge is, as previously explained, in focusing on the production of quality wines that can be sold at higher or even premium prices. Due to their tradition, and production volume sufficient to export outside the EU, wine products from France, Italy, and Spain have built a worldwide reputation. However, the smaller wine-producing countries in the EU cannot rely on these advantages as they have smaller volumes produced by numerous small wineries. They rely on selling a majority of their production on domestic markets to tourists and their citizens.

The OLS model in our analysis supports the conclusion that the EU strategy to increase the share of high/er quality wines are successful because an increase in average price leads to an increase in export.

As numerous small producers from the EU can sell their products for a significantly higher price than that of their low-cost competitors from the New World, it seems that the retail markets for quality wines recognize reputation, tradition and other intangibles. Consequently, even producers form smaller countries with limited marketing budgets that invest in technology and quality can differentiate themselves from foreign competition and survive by selling their products at a higher price.

In this paper, all European viticulture countries are analyzed without taking into account their specificities. Future research should be focused on in-depth analysis of individual country specificities and needs. That would enable the analysis of the impact of unique EU policies on the development and competitiveness of the wine sector in individual countries, and on reaching production and technological standards in countries with less wine tradition and lower level of development. Also, future research should focus on analyzing the impact of new technologies and innovations on the EU wine sector competitiveness and on reducing the gap between EU countries. The thesis that automation and application of new technologies lead to a reduction in production costs and an increase in the operational efficiency of individual companies, depending on the used technology, the availability of the workforce and the size of the plantation, should be tested in the wine sector. Also, given that the conclusion that an increase in average price leads to the increase in export is inconsistent with the theoretical assumption, it should be investigated in future research. The authors assume that the increase in price is caused by an increase in wine quality and that the export market better accepts higher quality wines. To make a conclusion it is necessary to analyze in which markets the increased exports are achieved (inside or outside EU).

6. REFERENCES

Balogh, J. M. & Jambor, A. (2017). The Global Competitiveness of European Wine Producers. *British Food Journal*, 119(9), p. 2076-2088.

Bentzen, J., Smith, V. (2009). Wine production in Denmark. Do the characteristics of the vineyards affect the chances for awards? Working paper. [available at https://www.researchgate.net/publication/46470077, access February 4, 2020]

EUR-Lex [available at https://eur-lex.europa.eu/homepage.html, access January 27, 2020]
European Commission (2018). Evaluation of the CAP measures applicable to the wine sector [available at https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/evaluation-policy-measures_en, access January 27, 2020]
European Commission (2013). Overview of CAP Reform 2014-2020 [available at https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/agri-policy-perspectives-brief-05_en.pdf, access February 2, 2020]
International Organization of Vine and Wine (OIV) [available at http://www.oiv.int/, access January 18, 2020]
Lombardi, P., 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), p. 50-59.
Mariani, A., Napoletano, F., Vecchio, R. & Pomarici, E. (2014). Europe and Wine Exports: The Key Role of Trade Policy. *EuroChoices*, 13(3), 46-53.
Mariani, A., Napoletano, F., Vecchio, R. & Pomarici, E. (2014). Tariff and Non-Tariff Barriers to Wine Exports and Initiatives to Reduce Their Effects. *Agricultural Economics Review*, 15(1), p. 5-24.
Mora, P. (2007). Key Success Factors in Today's Wine Sector. *International Journal of Case Method Research & Application*, 19(1), p. 25-33.
Papadopoulos, A. G. (2015). The Impact of the CAP on Agriculture and Rural Areas of EU Member States. *Agrarian South: Journal of Political Economy*, 4(1), p. 22-53.
Porter, M. E. (1990). *The Competitive Advantage of Nations*. New York: The Free Press
Vlachos, V. A. (2017). A macroeconomic estimation of wine production in Greece. *Wine Economics and Policy*, 6(1), 3-13.
Sener, S., Saridogan, E. (2011). The Effects of Science-Technology-Innovation on Competitiveness and Economic Growth. *Procedia Social and Behavioral Sciences*, 24, p. 815-828.
Ugaglia, A. A., et al. (2019). *Handbook of Wine Industry Economics*. Palgrave Macmillan
Zakon o vinu, NN 96/03 [available at https://narodne-novine.nn.hr/clanci/sluzbeni/2003_06_96_1219.html, access February 9, 2020]