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CHANGES IN THE INTERNATIONAL WINE TRADE AND POLICIES FOR THE PROMOTION OF MOLDOVAN WINES

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Original Article

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ABSTRACT

From an economic perspective, the COVID-19 crisis has been an exogenous shock to most local and international markets. Due to the COVID-19 pandemic, physical separation (or social distancing) to prevent the spread of the virus has led to feelings of isolation and loneliness, increasing the prevalence of depression, anxiety, post-traumatic stress disorders, and insomnia in the population. However, during the lockdown, technological devices have provided a way for people to maintain social connections with friends, family, their social networks, and/or the wider community. This article analyzes the changes on the international wine market and estimates the exports of Moldovan wine, especially in the neighboring region, which includes Romania, Ukraine and Bulgaria to Nigeria, considered a new market and characterized by the lack of traditions in wine consumption.

Keywords: *international wine trade, Moldovan wines, policies for the promotion*

1. INTRODUCTION

In recent years, the changes in the world wine market was caused by the health factor; and starting from February 2022 in addition to the military factor in Eastern Europe, directly conditioned new limitations in production and logistics and, in this regard, the need to adjust policies and strategies, consumption and export in the field of wine, which would, on the one hand, maintain the parameters previously achieved, and which would highlight new opportunities for countries to position themselves in traditional and new international markets. This general state of uncertainty also characterizes the Moldovan wine industry, when exports in the period 2018-2020 fell from US $ 137.9 million, 139.6 to 134.4, given that the selling price practically varied slightly (1.0-0.9-1.0 respectively) (ITS, 2020).
The literature is yet inconclusive about the impact of uncertainty on wine consumption (Johnbull, 2021). The COVID-19 crisis has disrupted distribution channels and reduced social interactions, suggesting a strong reduction in wine consumption frequency. The data enables us to analyze from the perspective of changes in the international wine trade and policies for the promotion of Moldovan wines on new markets.

2. METHODS

Present study aims to explore the changes in the international wine trade and policies for the promotion of Moldovan wines. For this purpose, the following methods were used in the article: comparison, graphic method, survey etc.

Present study focuses on two directions, which include the HEG Geneva survey and regional exports, both with the ultimate goal of identifying regional reserves in exports and promoting Moldovan wine on the world market.

First direction - analysis of data obtained from the survey "Study on factors of innovation and quality improvement in the wine sector", organized by HEG Geneva, which helps to complete the knowledge about the Moldovan wine sector, including the exporter, through data comparable, given that the Vine and Wine Register of the Republic of Moldova includes 89766 vineyards and 328 wineries. The survey included 166 wineries, the data obtained from 10 wineries were used in the analysis.

The second direction - in our study we tried to analyze the data on the export of wine from the Republic of Moldova and the neighboring region, which includes Romania, Ukraine and Bulgaria to Nigeria, considered a new market and characterized by lack of traditions in wine consumption.

2.1. THE MOLDOVAN WINE EXPORT

Consumers use wine as a social product, its consumption has been an essential part of culture – even in the most primitive culture. Wine plays a significant role in social events. Wine consumption evokes a social status to consumers in the eyes of the public and can be used to signal equality or social membership amongst consumers (Mueller, Umberger, 2009). Furthermore, a consumer use wine to express gratitude, for relief from thirst, for toasting to successful business agreements and is increasingly gaining preference as a gift item during festival periods (Dodd, Laverie, Wilcox, Duhan, 2005).

Wine is perceived to be complex. It is perhaps best to argue that complexity is an intangible rather than a physical attribute. Therefore, the complexity of wine can be assessed by how much the effect the various wine elements, harmoniously knit together, impart a sensation that is intriguing, provocative and engages the mind or captures the consumers' interest (Lockshin, Mueller, Louviere, Francis, Osidacz, 2009). The taste of wine is the most important value attribute considered by wine consumers and taste has a strong relationship with choice (Charters, Pettigrew, 2006), so when taste cannot be assessed, it creates uncertainties which impact on consumer behavior.

At the same time, in 2020, the value (in current US $) of exports of "alcoholic beverages" (SITC group 112) decreased by 8.0% (compared to 1.6% average growth rate from 2016-2020) to reach 80.7 bln US $ (tab.2). Exports of this commodity accounted for 5.9% of world exports of SITC sections 0 + 1, and 0.5% of total world merchandise exports (tab.1).

Table 1. Exports - imports, Moldova, 2006-2020, US$.

	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Values in Bn (US$) Import / Export	53,0 / 51,0	62,5 / 61,2	67,6 / 66,0	59,8 / 58,1	64,6 / 64,2	75,1 / 75,4	76,9/ 78,0	80,6 / 81,8	81,2 / 81,5	75,2 / 75,0	76,6 / 75,6	82,8 / 81,9	89,2 / 88,4	89,3 / 87,7	83,0 / 80,7
As a % of SITC section (%) Import / Export	7,6 / 7,6	7,5 / 7,6	6,8 / 6,9	6,7 / 6,7	6,6 / 6,6	6,3 / 6,4	6,5 / 6,6	6,5 / 6,5	6,3 / 6,3	6,3 / 6,4	6,4 / 6,4	6,4 / 6,4	6,6 / 6,6	6,6 / 6,5	6,0 / 5,9
As a % of world trade (%) Import/ Export	0,4 / 0,4	0,4 / 0,4	0,4 / 0,4	0,5 / 0,5	0,4 / 0,4	0,4 / 0,4	0,4 / 0,4	0,4 / 0,4	0,4 / 0,4	0,5 / 0,5	0,5 / 0,5	0,5 / 0,5	0,5 / 0,5	0,5 / 0,5	0,5 / 0,5

Source: International Trade Statistics Yearbook, Vol. II, 2020.

France, Italy and United Kingdom were the top exporters in 2020 (Tab.2). They accounted for 18,6%, 11,3% and 9,3% of world exports, respectively. USA, United Kingdom and Germany were the top destinations. The top 15 countries/areas accounted for 82,6% and 74,0% of total world exports and imports, respectively. In 2020, France was the country/area with the highest value of net exports (+11,9 bln US$), followed by Italy (+7,6 bln US$).

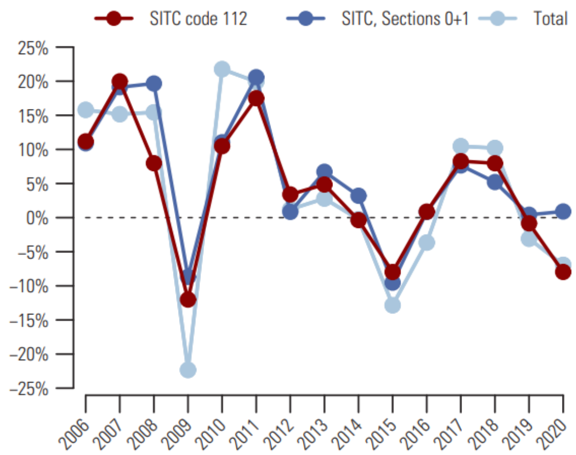
Table 2. Top exporting countries or areas in 2020.

Country/area	**Value, mil. US$**	**Avg. growth (%) 16-20**	**Growth (%) 19-20**	**World share %**	
					Cum.
World	80712,7	1,6	-8,0	100,0	
France	15039,3	1,4	-11,3	18,6	18,6
Italy	9092,6	5,2	-1,0	11,3	29,9
UK	7536,9	-3,2	-20,1	9,3	39,2
Mexico	7114,5	15,6	8,4	8,8	48,1
Spain	4167,3	1,5	-3,2	5,2	53,2
USA	3959,3	-1,1	-7,9	4,9	58,1
Germany	3474,1	-3,5	-14,8	4,3	62,4
Netherlands	3467,3	3,1	0,4	4,3	66,7
Belgium	2464,7	8,4	-0,1	3,1	69,8
Singapore	2246,9	-3,4	-23,2	2,8	72,6
Australia	2146,3	3,3	-9,3	2,7	75,2
Chile	1838,4	-0,5	-5,9	2,3	77,5
Ireland	1550,7	4,7	-13,6	1,9	79,4
New Zealand	1375,2	4,0	6,3	1,7	81,1
Portugal	1197,3	4,6	6,0	1,5	82,6

Source: International Trade Statistics Yearbook, Vol. II, 2020.

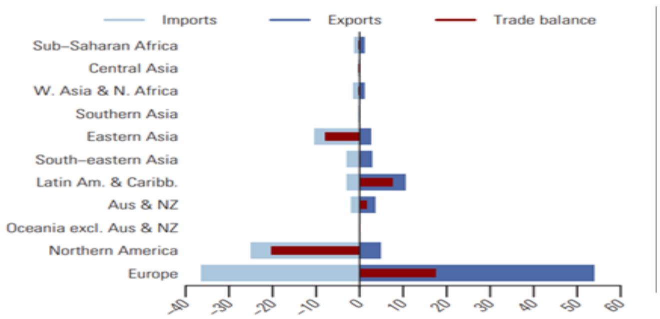
By SDG regions (Fig.2), the largest surpluses in this product group were recorded by Europe (+17,5 bln US$), Latin America and the Caribbean (+7,6 bln US$) and Australia and New Zealand (+1.6 bln US$). The largest trade deficits were recorded by Northern America (-20,3 bln US$), Eastern Asia (-7,8 bln US$) and Western Asia and Northern Africa (-238,5 mln US$) (ITS, 2020, vol.II).

Figure 1. Annual growth rates of exports, 2006-2020, in % by year.



Source: 2020 International Trade Statistics Yearbook, Vol. II.

Figure 2. Trade balance by SDG regions 2020, Bln US$.



Source: 2020 International Trade Statistics Yearbook, Vol. II.

This study is important as the Nigeria wine market though growing is at infancy and understanding the drivers or characteristics that influence the behavior of consumers is critical to the growth of this emerging market. On these assumptions, the study sets out to deconstruct the alcoholic beverage consumption patterns to the growth of this emerging market and thus increase the export of Moldovan wines. Nigeria's Spirits market valued at $2bn and growing at 6% on average per year (USDA, 2016). The GAIN report notes that 75% of the spirits consumed in Nigeria are locally made, while imported spirits account for $500m of the total value of spirits consumed. The report, however, said that imported spirits of various classifications continue to gain acceptance among the growing young and educated middle-class. Nigeria's large population of 185 million people provides a large market for alcoholic beverages valued at more than $6.5bn. It notes that while spirits constitute about 30% of the market for alcoholic beverages, wine making up the remaining 15%. The country's increasing urbanization and the rising number of female alcohol drinkers, especially in large cities, such as Lagos, Port Harcourt and Abuja, is also resulting in a remarkable switch from consumption of relatively inexpensive local spirits to higher priced imported ones," they noted. The report points out that the European Union (EU) 60% and South Africa 22% are the leading suppliers to the market, however, other countries such as Russia, Ukraine, Mexico, United States, Brazil, Canada, among others also supply to the market. But in the period 2018-2021

Moldova did not appear in the Top (Ugbo J., Duca A., 2020) (Tab.3).

In the absence of a clear national strategy, on the one hand, and a lack of data in the literature, most studies are based on data at country / region or company level with small and incomparable samples between terroirs/countries, export efforts of Moldovan wines have focused on fragmented experiences of exporters, from strategies to differentiate foreign markets (for the Chinese or Japanese market), domination (for the Russian market), delimitation (African market), destruction strategy or subversive strategy (for the Arab market), to retention strategy (for European markets). Some studies show that Nigeria's middle-class and the emerging young consumers are adopting consumption patterns similar to Western countries and are increasingly developing preferences for premium imported brands (Ugbo J., Duca A., 2019). Bhattacharyya (The drinks business, 2012) estimates that 5.2m people, representing the top 10% of earners among the 156 m population, account for 43% of wine consumption in the country - this is the group to target". With most economic activity taking place in Nigeria's key cities of Lagos, Abuja, Kano, Kaduna, Onitsha and Port Harcourt, potential wine markets are being identified and developed with luxury hotels and restaurants catering to the affluent consumers in these areas. Currently, importer distributors account for around 70% of distribution, with the balance imported directly by retailers and the hospitality sector.

Table 3. Ranking of EU main Agri-food trade partners and Nigeria.

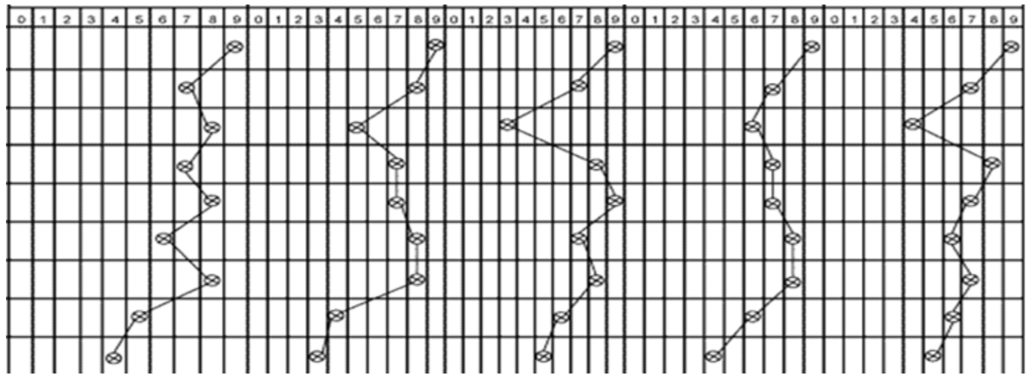
	Top Destinations: 2021	Value (million EUR)	% Share Extra-EU		Top Origins: 2021	Value (million EUR)	% Share Extra-EU
1	United Kingdom	41 926	21.4	1	Brazil	13 542	10.5
2	USA	24 499	12.5	2	United Kingdom	11 837	9.2
3	China	17 135	8.7	3	USA	9 258	7.2
4	Switzerland	9 846	5.0	4	Ukraine	6 896	5.3
5	Japan	7 384	3.8	5	China	6 094	4.7
6	Russia	7 355	3.7	6	Indonesia	5 607	4.3
7	Norway	5 412	2.8	7	Argentina	5 189	4.0
8	Canada	4 049	2.1	8	Turkey	5 030	3.9
9	South Korea	3 939	2.0	9	Switzerland	4 520	3.5
10	Saudi Arabia	3 631	1.8	10	Ivory Coast	3 340	2.6
11	Turkey	3 555	1.8	11	India	2 920	2.3
12	Australia	3 299	1.7	12	Canada	2 828	2.2
13	Ukraine	3 107	1.6	13	Peru	2 708	2.1
14	Algeria	2 950	1.5	14	Malaysia	2 680	2.1
15	Israel	2 647	1.3	15	Morocco	2 628	2.0
16	Morocco	2 364	1.2	16	South Africa	2 291	1.8
17	United Arab Emirates	2 347	1.2	17	Vietnam	2 233	1.7
18	Egypt	2 181	1.1	18	Russia	2 180	1.7
19	Hong Kong	2 157	1.1	19	Colombia	2 145	1.7
20	Singapore	1 957	1.0	20	Serbia	1 962	1.5
25	Nigeria	1 614	0.8	36	Nigeria	655	0.5
	Rest of the World	44 560	21.7		Rest of the World	33 352	25.0

	Top Destinations: 2018	Value Mio €	% Share Extra-EU		Top Origins: 2018	Value Mio €	% Share Extra-EU
1	USA	22 256	16.2	1	USA	12 078	10.4
2	China	11 101	8.1	2	Brazil	11 910	10.2
3	Switzerland	8 254	6.0	3	China	5 711	4.9
4	Japan	6 642	4.8	4	Ukraine	5 617	4.8
5	Russia	6 624	4.8	5	Argentina	5 136	4.4
6	Norway	4 496	3.3	6	Switzerland	4 593	3.9
7	Saudi Arabia	3 814	2.8	7	Turkey	4 482	3.9
8	Canada	3 707	2.7	8	Indonesia	4 341	3.7
9	Hong Kong	3 679	2.7	9	Ivory Coast	3 361	2.9
10	Australia	3 384	2.5	10	India	3 153	2.7
11	Turkey	3 147	2.3	11	South Africa	2 898	2.5
12	South Korea	3 028	2.2	12	Chile	2 505	2.2
13	Algeria	2 660	1.9	13	Vietnam	2 494	2.1
14	United Arab Emirates	2 625	1.9	14	New Zealand	2 433	2.1
15	Singapore	2 419	1.8	15	Thailand	2 423	2.1
16	Ukraine	2 064	1.5	16	Morocco	2 396	2.1
17	Israel	1 955	1.4	17	Peru	2 280	2.0
18	Brazil	1 784	1.3	18	Colombia	2 187	1.9
19	South Africa	1 711	1.2	19	Australia	2 073	1.8
20	Egypt	1 528	1.1	20	Canada	1 988	1.7
32	Nigeria	859	0.6	40	Nigeria	569	0.5
	Rest of the World	40 650	28.5		Rest of the World	32 251	26.7

Source: Eurostat, 2022.

To implement a global strategy, it is important to clearly define profitable market segments. This goal is served by conducting global segmentation, the essence of which is to identify "paired" country markets with similar characteristics (Fig.3).

Figure 3. Matrix for the selection of paired countries.

Country	Elements of the marketing mix				
	Product	Price	Promotion	Intermediaries	Distribution
France Germany Italy Netherlands Belgium UK Switzerland Spain Portugal					

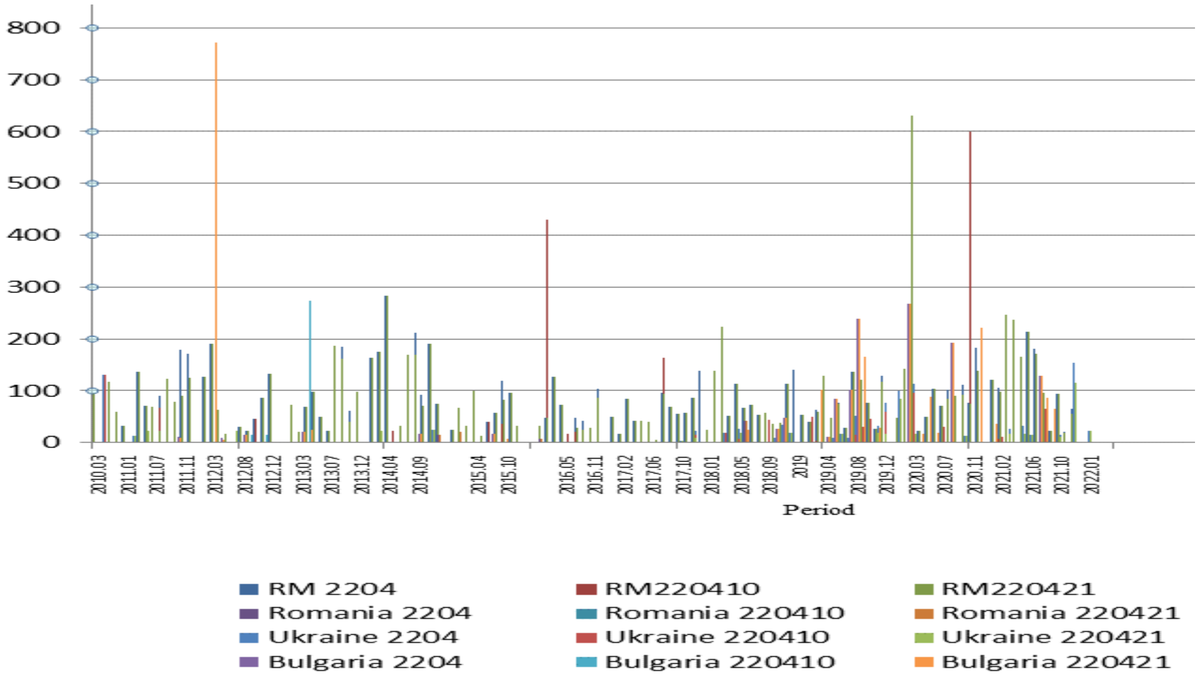
Source: Groshev, Krasnoslobodtsev (2013).

Based on the specificity of the product underlying the brand, the approach for wine applies to products resulting from production activity, which can be easily standardized according to unique criteria, even if there is no consensus on the criteria for classifying wines. “Retract”, “jump” and “attachment” can be used to penetrate the world market. The first path is the longest, it takes years, but it allows companies to gain experience. The second way allows to gain rapid visibility on the world market due to the resources of integrative companies, which can both consume and distribute the production of these companies born “global”. The third way is related to international M&A policy. The evolution of the Moldovan wine route on the world market seems to have two stages: the first - around 1992, the Moldovan wine sector appearing with the strongest presence in world statistics, and the second stage - until 2020, when taking into account the potential reserves of the sector, the concentrated presence through the country brand was decided. Apropos, the economy starts to recoverin cyclical periods in certain quarters, thus providing us with the impression that it is emerging from the crisis (Zoran M., 2015).

3. RESULTS

In present study is analyzed the data on the export of wine from the Republic of Moldova and the neighboring region, which includes Romania, Ukraine and Bulgaria to Nigeria, considered a new market and characterized by the lack of traditions in wine consumption (Annex 1, Tab.1).

Figure 4. Moldovan wine export to the neighboring regions.



Source: elaborated by the author based on ITS data.

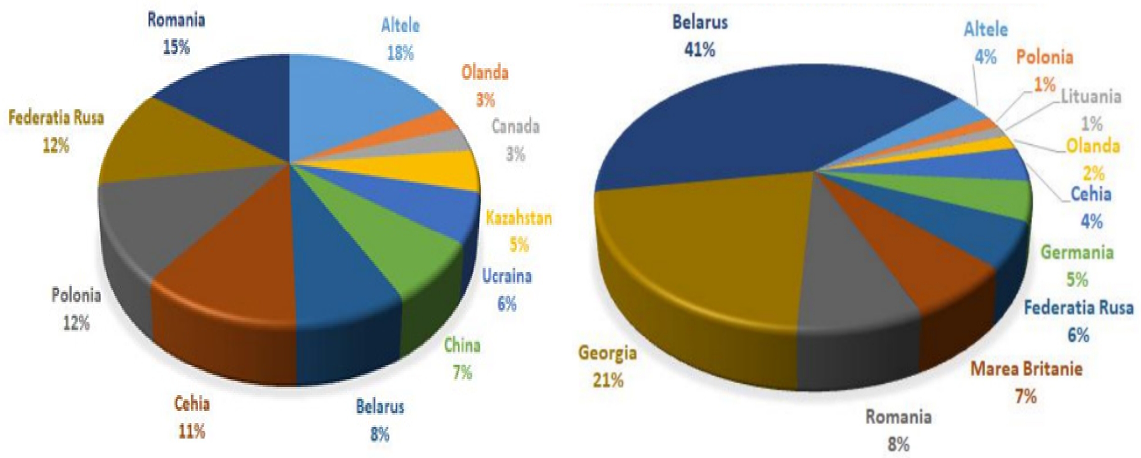
The analysis presents that the Nigerian market has shown interest in exporting wine from the region only recently, starting with December 2017, when there is a certain intensification of export flows for the Republic of Moldova and Ukraine, and June 2018, when these flows Bulgaria joins, Romania remaining indifferent to this market. In the structure of exports, the largest share is the unbottled wines in volumes of 2 liters, Bulgaria and Ukraine testing 2012 and 2019 respectively the capacities of 10 liters.

According to data from AAWE (American Association of Wine Economists) and Comtrade, Moldova ranks 11th in the Top 75 of 2020 of wine exporters in bulk, the other countries in the region analyzed 26-28 places for Romania, Bulgaria and Ukraine respectively.

According to ONVV (The National Office of Vine and Wine), the dynamics of Moldovan wine exports in 2020 have changed, with the export of bottled wines increasing for 6 countries, especially the Netherlands + 180.6%, Belarus + 92.4%, Romania + 26.5%, Kazakhstan + 25.7%, Czech Republic + 2.7% and decreasing for 4 countries, especially China -36.8%, Canada -16.1%, Poland - 4.4% , Russia -3.7% (Fig.5a).

The export of bulk wines also changed, increasing for Romania + 164.1%, Germany + 112.2%, Poland + 82.6%, the Netherlands + 67.9%, Lithuania + 65.0% and the United Kingdom + 13.6% and decreasing for Russia - 72.5%, Belarus -23.8%, Georgia - 7.5%, Czech Republic -2.2% (Fig.5b).

Figure 5. Top 10 destinations, export dynamics 10 months 2020 of Moldovan wines (a) bottled and (b) in bulk (mln litres).



a b

Source: ONVV data.

For the second direction of the study, based on the HEG Geneva survey, the data obtained from 10 wineries-exporters were used, corresponding to the two out of 4 (Annex 2. Tab.4) By country wine regions with PGI Protected Geographical Indication (Codru, Ștefan Vodă, Valul of Trajan and Divine):

- PODGORIA VIN SRL (Valul lui Traian PGI region);
- VINDICUM SRL (Codru PGI region);
- Winery Carlevana / Dionysos-Mereni SA (Trajan's Valley region PGI);
- Tronciu Wines (Traian PGI Wave region);
- Winetage Sari LLC (Trajan's Valley region PGI);
- Tataru Wines Winery (Codru PGI region);
- Minalia Winery / Vineyard (Valul lui Traian PGI region);
- DUMITRAȘ WINERY (Codru PGI region);
- Aurvin (ICS DK-Intertrade SRL) (Valul lui Traian PGI region).

In this analysis we used data obtained from 5 wineries out of a total of 10 wineries participating in the survey to questions 118-128 in the export chapter of the survey.
Thus, to the question "For how long have you been exporting your wine?" the answers were distributed as follows: 1- 1 ÷ 5 years and 4 - over 20 years (Tab.6).

Table 6. Export survey: For how long have you been exporting your wine?

Q118	Q85316324	For how long have you been exporting your wine?						
Q118.A1	Q85316324.A271287159	1 to 5 years	1				x	
Q118.A2	Q85316324.A271287160	5 to 10 years						
Q118.A3	Q85316324.A271287161	10 to 20 years						
Q118.A4	Q85316324.A271287162	>20 years	4	x	x	x		x
			Total	1	2	3	4	10

Source: Author's calculation.

To the question "How much of your production volume do you regularly export?" all respondent wineries responded - over 70% (Tab.7).

Table 7. Export survey: How much of your volume of production do you regularly export?

Q119	**Q85316325**	**How much of your volume of production do you regularly export?**					
Q119.A1	Q85316325.A271287163	<5%					
Q119.A2	Q85316325.A271287164	5% to 15%					
Q119.A3	Q85316325.A271287165	15% to 30%					
Q119.A4	Q85316325.A271287166	30% to 50%					
Q119.A5	Q85316325.A271287167	50% to 70%					
Q119.A6	Q85316325.A271287168	>70%	5	x	x	x	x	x
			Total	1	2	3	4	10

Source: Author's calculation.

To the question "How much does your export represent in terms of total wine sales value?" the answers were distributed as follows: 1 - 50-70% and 4 - over 70% (Tab.8).

Table 8. Export survey: How much does your export represent in terms of total wine sales value?

Q120	**Q85316326**	**How much does your export represent in terms of total wine sales value?**						
Q120.A1	Q85316326.A271287169	<5%						
Q120.A2	Q85316326.A271287170	5% to 15%						
Q120.A3	Q85316326.A271287171	15% to 30%						
Q120.A4	Q85316326.A271287172	30% to 50%						
Q120.A5	Q85316326.A271287173	50% to 70%	1	x				
Q120.A6	Q85316326.A271287174	>70%	4		x	x	x	x
			Total	1	2	3	4	10

Source: Author's calculation.

To the question "How many different labels (sku) do you export?" the answers were very varied, from 2 labels to 150, so that the winery with 1-5 years experience exports up to 80 labels, and the one with experience over 20 years – 150 (Tab.9).

Table 9. Export survey: How much does your export represent in terms of total wine sales value?

Q121	**Q85316327**	**How many different labels (sku) do you export?**					
Q121.A1	Q85316327.A271287175		80	2	20	30	150

Source: Author's calculation.

To the question "How many countries did you export wine last year?" responses ranged from 12 countries for wineries with export experience of up to 5 years to 0-6-15 countries - for those with more than 20 years of experience in foreign trade (Tab.10).

Table 10. Export survey: To how many countries did you export wine last year?

Q122	Q85316328	To how many countries did you export wine last year?					
Q122.A1	Q85316328.A271287176		12	6	6	0	15

To the question "What are the three main countries to which you export?" responses focused on 8 countries, of which Russia was named as the first country to be exported twice out of 5, Poland was named as the second country to be exported twice and 5 as the third country export destination - Czech Republic (Tab.11).

Table 11. Export survey: What are the three main countries to which you export?

Q123	Q85316329	What are the three main countries to which you export?					
Q123.A1	Q85316329.A271287177	1.	Russia	Romania	Belarus	Germania	Russia
Q123.C1	Q85316329.C2325092	In volume		25	54		
Q123.C2	Q85316329.C2325093	Value					
Q123.A2	Q85316329.A271287178	2.	China	Belarus	Polonia	Polonia	Polonia
Q123.C1	Q85316329.C2325092	In volume		20	70		
Q123.C2	Q85316329.C2325093	Value					
Q123.A3	Q85316329.A271287179	3.	Romania	Cehia	China	Anglia	Cehia
Q123.C1	Q85316329.C2325092	In volume		20	72		
Q123.C2	Q85316329.C2325093	Value					

Source: Author's calculation.

To the question "How satisfied are you with your wine export performance?" the answers were divided into grades 2 to 5, showing that all 5 respondents are satisfied with the performance achieved. For a more detailed analysis later we will use the regression method (Tab.12).

Table 12. Export survey: How satisfied are you with your wine export performance?

Q124	**Q85316330**	**How satisfied are you with your wine export performance?**						
Q124.A1	Q85316330.A271287180	Export volume						
Q124.C1	Q85316332.C2325102	Not satisfied-1						
Q124.C2	Q85316332.C2325103	2	2			x		x
Q124.C3	Q85316332.C2325104	3						
Q124.C4	Q85316332.C2325105	4	2	x	x			
Q124.C5	Q85316332.C2325106	5- to very satisfied	1				x	
Q124.A2	Q85316330.A271287181	Value per bottle						
Q124.C1	Q85316332.C2325102	Not satisfied-1						
Q124.C2	Q85316332.C2325103	2						
Q124.C3	Q85316332.C2325104	3	2			x		x
Q124.C4	Q85316332.C2325105	4	2	x	x			
Q124.C5	Q85316332.C2325106	5- to very satisfied	1				x	
Q124.A3	Q85316330.A271287182	Number of countries exported						
Q124.C1	Q85316332.C2325102	Not satisfied-1						
Q124.C2	Q85316332.C2325103	2	2					x
Q124.C3	Q85316332.C2325104	3	1	x				
Q124.C4	Q85316332.C2325105	4	1		x			
Q124.C5	Q85316332.C2325106	5- to very satisfied	1				x	
Q124.A4	Q85316330.A271287183	Number of labels (sku) exported						
Q124.C1	Q85316332.C2325102	Not satisfied-1						
Q124.C2	Q85316332.C2325103	2	1			x		
Q124.C3	Q85316332.C2325104	3	2		x			x
Q124.C4	Q85316332.C2325105	4						
Q124.C5	Q85316332.C2325106	5- to very satisfied	2	x			x	
Q124.A5	Q85316330.A271287184	Export logistics						
Q124.C1	Q85316332.C2325102	Not satisfied-1						
Q124.C2	Q85316332.C2325103	2						
Q124.C3	Q85316332.C2325104	3	1			x		
Q124.C4	Q85316332.C2325105	4	2		x			x
Q124.C5	Q85316332.C2325106	5- to very satisfied	2	x			x	
Q124.A6	Q85316330.A271287185	International brand recognition						
Q124.C1	Q85316332.C2325102	Not satisfied-1						
Q124.C2	Q85316332.C2325103	2	2	x		x		
Q124.C3	Q85316332.C2325104	3	1		x			
Q124.C4	Q85316332.C2325105	4	1					x
Q124.C5	Q85316332.C2325106	5- to very satisfied	1				x	
		Not satisfied-1	0					
		2	7					
		3	7					
		4	8					
		5- to very satisfied	8					

Source: Author's calculation.

To the question "How do these factors affect your wine export performance?" the responses leaned sharply toward "satisfied" and "very satisfied." For a more detailed analysis later we will use the regression method (Tab.13).

Table 13. Export survey: How do these factors affect your wine export performance?

Q125	**Q85316331**	**How do these factors affect your wine export performance?**						
Q125.A1	Q85316331.A271287186	Your wine production costs						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3	1			x		
Q125.C4	Q85316332.C2325105	4	1		x			
Q125.C5	Q85316332.C2325106	5- to very satisfied	3	x			x	x
Q125.A2	Q85316331.A271287187	Exchange rate						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	3	x			x	x
Q125.C5	Q85316332.C2325106	5- to very satisfied	2		x	x		
Q125.A3	Q85316331.A271287188	Country wine image abroad						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	3	x	x		x	
Q125.C5	Q85316332.C2325106	5- to very satisfied	2			x		x
Q125.A4	Q85316331.A271287189	Custom duties (country of origin export taxes)						
Q125.C1	Q85316332.C2325102	Not satisfied-1	1	x				
Q125.C2	Q85316332.C2325103	2	2			x		x
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	1		x			
Q125.C5	Q85316332.C2325106	5- to very satisfied	1				x	
Q125.A5	Q85316331.A271287190	Custom duties (country of destination import taxes)						
Q125.C1	Q85316332.C2325102	Not satisfied-1	1	x				
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	1		x			
Q125.C5	Q85316332.C2325106	5- to very satisfied	3			x	x	x
Q125.A6	Q85316331.A271287191	The size of your winery						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2	1	x				
Q125.C3	Q85316332.C2325104	3	3			x	x	x
Q125.C4	Q85316332.C2325105	4	1		x			
Q125.C5	Q85316332.C2325106	5- to very satisfied						
Q125.A7	Q85316331.A271287192	Marketing and logistic costs						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2	1	x				
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	3		x	x	x	
Q125.C5	Q85316332.C2325106	5- to very satisfied	1					x
Q125.A8	Q85316331.A271287193	National export promotion agencies						
Q125.C1	Q85316332.C2325102	Not satisfied-1	2	x				x
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	3		x	x	x	
Q125.C5	Q85316332.C2325106	5- to very satisfied						
Q125.A9	Q85316331.A271287194	Uncertainty of regular orders						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3	1	x				
Q125.C4	Q85316332.C2325105	4	2		x		x	
Q125.C5	Q85316332.C2325106	5- to very satisfied	2			x		x
Q125.A10	Q85316331.A271287195	Language barrier						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2	1	x				
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	3		x		x	x
Q125.C5	Q85316332.C2325106	5- to very satisfied	1			x		
Q125.A11	Q85316331.A271287196	Finding trading partners						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	3		x		x	x
Q125.C5	Q85316332.C2325106	5- to very satisfied	2	x		x		
Q125.A12	Q85316331.A271287197	Reliability of trading partners						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2	1					x
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	1		x			
Q125.C5	Q85316332.C2325106	5- to very satisfied	3	x		x	x	
Q125.A13	Q85316331.A271287198	Domestic competition						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3						
Q125.C4	Q85316332.C2325105	4	1		x			
Q125.C5	Q85316332.C2325106	5- to very satisfied	4	x		x	x	x
Q125.A14	Q85316331.A271287199	Financial resources						
Q125.C1	Q85316332.C2325102	Not satisfied-1						
Q125.C2	Q85316332.C2325103	2						
Q125.C3	Q85316332.C2325104	3	1			x		
Q125.C4	Q85316332.C2325105	4	1		x			
Q125.C5	Q85316332.C2325106	5- to very satisfied	3	x			x	x
		Not satisfied-1	4					
		2	6					
		3	6					
		4	27					
		5- to very satisfied	27					

Source: Author's calculation.

To the question "Which elements of the value chain did you have to adapt to export wine?" the responses leaned sharply towards "changes" and "important changes" for all elements. For a more detailed analysis later we will use the regression method (Tab.14).

Table 14. Export survey: Which elements of the value chain did you have to adapt to export wine?

Q126	**Q85316332**	**Which elements of the value chain did you have to adapt to export wine?**						
Q126.A1	Q85316332.A271287200	Grape varieties						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3						
Q126.C4	Q85316332.C2325105	4	2		x			x
Q126.C5	Q85316332.C2325106	5- to major change	3	x		x	x	
Q126.A2	Q85316332.A271287201	Terroir selection						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3	1					x
Q126.C4	Q85316332.C2325105	4	2		x	x		
Q126.C5	Q85316332.C2325106	5- to major change	2	x			x	
Q126.A3	Q85316332.A271287202	Agronomic practices						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3						
Q126.C4	Q85316332.C2325105	4	2		x	x		
Q126.C5	Q85316332.C2325106	5- to major change	3	x			x	x
Q126.A4	Q85316332.A271287203	Blending						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2	1					x
Q126.C3	Q85316332.C2325104	3						
Q126.C4	Q85316332.C2325105	4	2	x	x			
Q126.C5	Q85316332.C2325106	5- to major change	2			x	x	
Q126.A5	Q85316332.A271287204	Aging procedure						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3	1					x
Q126.C4	Q85316332.C2325105	4	2	x	x			
Q126.C5	Q85316332.C2325106	5- to major change	2			x	x	
Q126.A6	Q85316332.A271287205	Bottling & capping						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3						
Q126.C4	Q85316332.C2325105	4	3	x	x			x
Q126.C5	Q85316332.C2325106	5- to major change	2			x	x	
Q126.A7	Q85316332.A271287206	Labeling						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3						
Q126.C4	Q85316332.C2325105	4	3	x	x			x
Q126.C5	Q85316332.C2325106	5- to major change	2			x	x	
Q126.A8	Q85316332.A271287207	Promotion						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3						
Q126.C4	Q85316332.C2325105	4	1		x			
Q126.C5	Q85316332.C2325106	5- to major change	4	x		x	x	x
Q126.A9	Q85316332.A271287208	Distribution						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3						
Q126.C4	Q85316332.C2325105	4	1		x			
Q126.C5	Q85316332.C2325106	5- to major change	4	x		x	x	x
Q126.A10	Q85316332.A271287209	Pricing						
Q126.C1	Q85316332.C2325102	No change -1						
Q126.C2	Q85316332.C2325103	2						
Q126.C3	Q85316332.C2325104	3						
Q126.C4	Q85316332.C2325105	4	1		x			
Q126.C5	Q85316332.C2325106	5- to major change	4	x		x	x	x
		No change -1						
		2	1					
		3	2					
		4	19					
		5- to major change	28					

Source: Author's calculation.

To the question “Which exporting method do you generally use?” all respondents replied that they use the direct export method (Tab.15).

Table 15. Export survey: Which exporting method do you generally use?

Q127	**Q85316333**	**Which exporting method do you generally use?**					
Q127.A1	Q85316333.A271287210	Direct export (selling to an importer or distributor based in the target export market)	x	x	x	x	x
Q127.A2	Q85316333.A271287211	Indirect export (selling to an agent or exporter based in your country)					

Source: Author’s calculation.

To the question “In what format do you export (check all that apply)?” all 5 respondents answered that they use bottle export, 4 use bulk export and 3 respondents use tetra pak. For a more detailed analysis later we will use the regression method (Tab.16).

Table 16. In what format do you export (check all that apply)?

Q128	**Q85316334**	**In what format do you export (check all that apply)?**					
Q128.A1	Q85316334.A271287212	In bulk	x	x	x		x
Q128.A2	Q85316334.A271287213	In bottle	x	x	x	x	x
Q128.A3	Q85316334.A271287214	In cans/tetra pak	x	x	x		
Q128.A4	Q85316334.A271287215	Other					

Source: Author’s calculation.

4. DISCUSSION

One of the reasons for the reduction in exports of bottled wine would be the still poor promotion of Moldovan wine regions on foreign markets.

There are 4 wine regions in the Republic of Moldova. These wine regions are Codru, Ștefan Vodă, Valul lui Traian and Divin. Each Moldovan wine region is run by an association of local Moldovan wine producers with PGI. All PGIs are protected both in the Republic of Moldova and in the EU.

The survey showed that 4 out of 5 respondents have experience in export activity over 20 years, all exporting over 70% of the volume of wine produced and over 70% of sales value. More experienced wineries export an unlimited number of labels. Exports were made in 12 countries for wineries with shorter export experience, up to 5 years and 6-15 countries - for those with more than 20 years of experience in foreign trade. The most popular export destinations are 8 countries, of which as the first country as an export destination twice out of 5 was named Russia, as the second country as an export destination 3 times was named Poland, and as the third country of destination of the export - Czech Republic, all exporters demonstrating satisfaction with the performance achieved.

Among the factors that influenced the export performance (production costs, exchange rates, image of country wine abroad, customs duties, winery size, marketing and logistics costs, national export promotion agencies, uncertainty of regular orders, language barriers, finding trading partners, reliability of trading partners, internal competition, financial resources), 4 factors were mentioned having a very strong negative effect (export taxes - 1, import taxes - 1, national promotion agency - 2).

Among the elements of the value chain that had to be adapted for export (grape varieties, terroir selection, agronomic practices, blending, aging procedure, bottling & capping, labeling, distribution, pricing) were mentioned blending, terroir selection and aging procedure as those that have needed more effort.

The survey showed that all respondents answered that they use the direct export method, the bottle format, of which 4 use bulk export and 3 respondents use tetra pak.

The analysis presents that the Nigerian market has shown interest in exporting wine from the region only recently, starting with December 2017, when there is a certain intensification of export flows for the Republic of Moldova and Ukraine, and June 2018, when these flows Bulgaria joins, Romania remaining indifferent to this market. In the structure of exports, the largest share is the unbottled wines in volumes of 2 liters, Bulgaria and Ukraine testing 2012 and 2019 respectively the capacities of 10 liters.

5. CONCLUSION

Thus, our study shows that the tendency to export Moldovan wine in bulk is quite clear, which can be considered the result of the still weak promotion actions on the foreign markets of the wine regions of the Republic of Moldova, as well as the actions under the unique brand of which, in the end, substantially reduces the added value of exports.

The evolution of the Moldovan wine route on the world market have two stages: 1992 - the Moldovan wine sector appearing with the strongest presence in world statistics, and - until 2020, the concentrated presence through the country brand was decided.

Probably one of the reasons for the poor wine exports would be the still weak promotion of the Moldovan wine regions on foreign markets.

The study showed that the more experience in the export activity, the higher the share of exports in the volume of wine produced and in the value of sales, as well as the number of labels.

In the opinion of wineries 4 factors have a very strong negative effect such as: export taxes, import taxes, national promotion agency; along with the factors that influenced the export performance (production costs, exchange rates, the image of country wine abroad, customs duties, winery size, marketing and logistics costs, national export promotion agencies, uncertainty of regular orders, language barriers, finding of trading partners, reliability of trading partners, internal competition, financial resources).

Among the elements of the value chain that had to be adapted for export (grape varieties, land selection, agronomic practices, blending, aging procedure, bottling and capping, labeling, distribution, prices) wineries mentioned blending, land selection and aging procedure that needed more effort.

Our study shows that in the region there is interest in exporting wines to new markets, especially Nigeria, outlining quite clearly the tendency to export Moldovan wine in bulk, which can be considered the result of still weak promotion on foreign markets; and sub-evaluated the country's unique brand, the insufficient volume of information about Moldovan wines and wineries, which, in the end, substantially reduces the added value of exports. Subsequently, our study focused on the application of methods of mathematical-statistical analysis of data obtained from the HEG Geneva survey, which helped to identify cause-effect relationships and identify factors influencing the efficiency of export activity of wineries in Moldova, which ensured the comparability of data and contributed to the appropriate adjustment of the strategies for the presence of Moldovan wines on international markets, including new markets.

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