

Sparkling wine market analysis

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Abstract. The data on sparkling wine market size and structure are presented in relation to Russian and global markets. The structural analysis of the Russian market of sparkling wine is conducted on the basis of realized consumer demand. National market of sparkling wine is formed mainly on the basis of secondary wine-making, based on imported wine-making materials. Imported bottled wines come mainly from Italy. Detailed characteristics of the structure of realized consumer demand for sparkling wine are presented; these include the weighted average price, consumer preferences of color, taste, and geographical appellation of origin. Each of these parameters is characterized both by physical volume and monetary terms. It is concluded that the traditional preferences of Russian consumers is rather conservative in terms of choosing varieties of sparkling wine.

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Introduction

Back in 1900, the founder of the industrial production of sparkling wine in the Russian Empire, Prince L.S. Golitsyn, presented "Novosvetskoye champagne" for tasting at the World Exhibition in Paris (*Exposition Universelle*). This was Russia's breakthrough champagne, produced in his own "New World" winery of sparkling wine in 1899. In that year Golitsyn's winery, situated in the village of Paradise on the Crimean shore of the Black Sea Sudak-Liman bay, produced 60 thousand bottles of champagne. Since the nature of the Crimean estuary favored winegrowing, and the winery strictly followed the traditional champagne production technology, the wines were of exceptional quality.

In those days France not so fervently followed the use of the term "champagne" by winemakers outside the Champagne region. However, the acknowledgement of Russian champagne competence by Russian prince was largely braggadocio.

For this reason champagne bottles, presented for competitive tasting, were wrapped in foil. When unanimous decision of the competition commission has recognized the champagne, represented by Prince Golitsyn, to be the best, Count Chandon, chairman of the committee, asked to turn a bottle upside down to read the name of the French company, which has won the highest rating. However, the bottom was engraved with the inscription: "New World", the Prince Golitsyn's Winery. This champagne has won "Grand Prix" (Silver Vase) and Large Gold Medal at the Paris exhibition. While in Russia, it was sold under the label of "Russian champagne".

Materials and research methods

The following materials were research targets at various survey stages:

- statistical data of *Comité Interprofessionnel du Vin de Champagne*, *United Nations and IWSR* [1, 2, 3, 4];
- statistical data of the Research Center for Federal and Regional Alcohol Markets "RCFRAM" (RF) and non-profit partnership "Association of Kuban Exporters and Importers" on sparkling wine and champagne production, imports and exports to/from Russia [5,6];
- statistics on retail sales of sparkling wine in the largest supermarkets in Novosibirsk, Kemerovo and Novokuznetsk, provided by trading system managers in the format of *MS Excel* database;

Statistical data were analyzed based on methods of mathematical statistics, as well as correlation and regression analyzes [7].

Market research was conducted by the techniques involved quota, sampling, and standardized observations, the structured approach based on a number of attributes, the combined methods for obtaining information (public and private), as well as personal observation of food retailing enterprises in Kemerovo during the period from December of 2012 to December 2013.

Studies of the selling proposition structure of sparkling wine were conducted by marketing audit of sales statistics (January-December 2012). Data were calculated both in kind (physical sales) and in monetary terms.

Prediction of per capita and the national potential output of beer consumption was performed using correlation and regression analysis [8].

Main part

According to data of the British Institute IWSR (*International Wine and Spirit Research*), the world market for sparkling wine is dynamic, both in quantitative and qualitative terms. In 2010 the world market was set to 15.9 million hectoliters [9]. To date (2012) it has reached a value of 7.7% of the total volume of grape wines, i.e. 20.6 million hectoliters [4]. This figure will reduce down to a volume of 18.2 million hectoliters by 2016 [9].



Fig.1. Sales of sparkling wine in Russia

In contrast to the champagne segment of the Russian consumer market (1.11 million liters per year) [1], the imports volume of sparkling wine for consumption in Russia is several dozen times higher (37.8 million liters per year) [5]. Together with the national production of this type wine, the noted figure is several hundred times more and equals to 269 million liters (2011) [6]. These facts confirm the hypothesis that a champagne segment both in Russian (4.1%) and worldwide (5-10%) markets is rather small (in kind).

The Russian market of sparkling wine is formed mainly due to Russia's *own winemaking*. Its scope, according to Fig. 2, has been dynamically changed in the last decade, with a tendency to increase. By 2012, it amounted to 269 million liters, showing a growth starting from the value of 195 million liters in 2004. [5] The proportion of imports in countrywide consumption of these wines for a specified period, according to Fig. 1, averaged to 8.1% [6], with an annual growth rate of 1.22. This trend is likely to continue for the next 2-3 years.

To predict the likely consumption of sparkling wine by 2016, it is appropriate to use the equation setting time dependence of market volume, expressed in kind, with a one-year step (1):

$$Y = -0.05X^3 + 0.58X^2 - 0.44X + 18.99 \quad (R^2 = 0,93) \quad (1)$$

where: Y is annual sales of sparkling wine in the Russian consumer market, million dal;

X is a serial number of the time step since 2004 (taken as a unit).

At the same outlined trend, sales of sparkling wine in the consumer market of the Russian Federation by 2016 is likely to fall (going down to 215-220 million liters

per year), whereas the proportion of the total imports, on the contrary, will increase up to 22-25%.

The sparkling wine market structure is characterized by geographical appellation of production and consumption, consumer preferences, market saturation and price levels of trade deals.

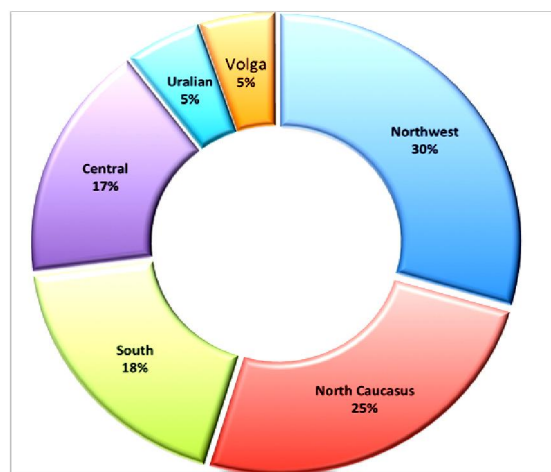


Fig. 2. Percentage of sparkling wine production by various Russian Federal Districts

Figure 2 shows the distribution diagram (2011) of the national production of sparkling wine by federal districts of the Russian Federation [5]. The data presented show that the enterprises of Northwest (29.6%) and the North Caucasian (25.1%) federal districts are leaders in this type winemaking. These two federal districts provide for more than half of the national sparkling wine production and together with the Southern District the portion in the national production volume grows to almost $\frac{3}{4}$ of the concerned index value.

In accordance with Fig. 3 (2011) [5], more than half of the grapes (53%) is harvested in the Southern District, while the proportion of the North Caucasus District accounts for just 43.5%, and the proportion of the Northwest District is only 0.2% of the total annual grapes harvested in Russia.

Such discrepancy in production function and required resource is due to the fact that Northwest District wineries use as a wine-making materials grapes of foreign growth, mainly imported from abroad that does not contradict the regulatory requirements of the Russian sparkling wine production.

The most successful Russian sparkling wine production is carried out in the winemaking enterprises of the largest metropolises of St. Petersburg and Moscow (Fig. 4, 2011) [5]. These two federal subjects jointly provide about half of the national production of sparkling wine (27.5% and 16.3%, respectively).

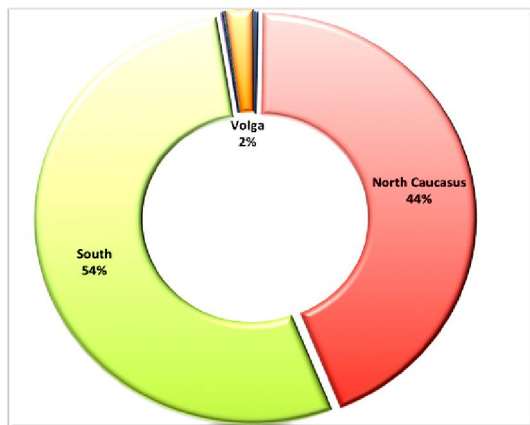


Fig. 3. Proportion of the Russian Federation districts in the grape harvest

Wineries of the traditional wine-growing regions of the country, such as the Krasnodar Territory, the Republic of Dagestan and Kabardino-Balkaria play a less important role (13.9%, 12.2% and 7.1%, respectively) in the sparkling wine production ranking.

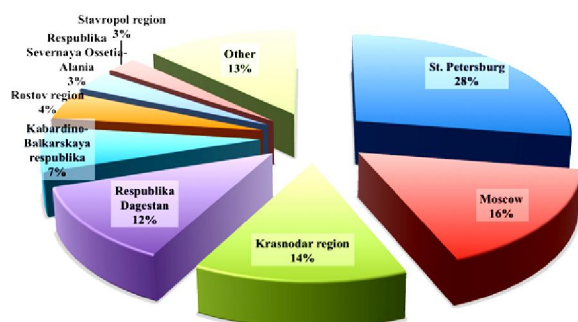


Fig. 4. Sparkling wines production of in Russia

The above winemakers as a whole provide $\frac{3}{4}$ (77%) of the total volume of Russian sparkling wine production. Information given is fully compliant with the data presented in the diagram (Fig. 2) ($r = 0.91$), and thus confirms the hypothesis of secondary winemaking methodology, which is based on use of imported wine-making materials to reduce logistical costs [10].

In Russia, the production of sparkling wine is carried out by about 50 wineries, whose contribution to the total production varies from year to year. The leading wineries are the following: JSC "Istok" (Republic of North Ossetia-Alania), CJSC "Sparkling wine" (St. Petersburg), "Sparkling Wine Plant" (Derbent, Republic of Dagestan), JSC "Moscow Sparkling Wine Plant" and LLC "RISP" (Moscow), CJSC "Vilash" (St. Petersburg), CJSC "Abrau-Durso" (Novorossiysk, Krasnodar Territory), JSC "Kornet"

(Moscow), and LLC "Rostov Sparkling Wine Plant" (Rostov-on-Don). Other numerous companies produce sparkling wine in small volumes, and thus scope of their activities is of local character.

The second most important market segment of sparkling wine in Russia, as noted above, is the imported wines segment. The diagram in Fig. 5 shows the structure of sparkling wine imports to the consumer market of the Russian Federation, expressed in physical quantity (2011) [5].

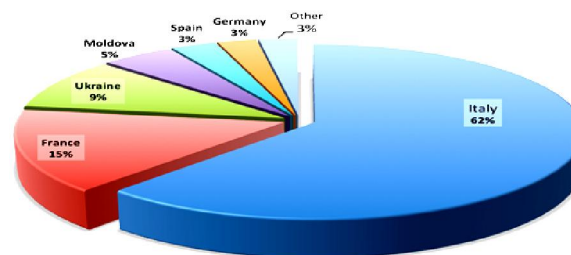


Fig. 5. Exporters of sparkling wine in the Russian Federation (in litres)

As shown in the diagram, $\frac{3}{4}$ of the total volume of imported sparkling wine (28.4 million liters in kind), traded on the Russian consumer market, is produced in two of the most famous wine-growing regions of the world: Italy and France (60.4% and 15%, respectively).

As noted above, sparkling wine imported from France, is predominantly champagne, whereas wines of this commodity group, imported from Italy, are varieties of sparkling wine. Purchase volumes in kind meet the logic of purchasing prices for these wines: \$6 per bottle of Italian wine and \$10 per bottle of French wine (2011) [5], though these prices do not agree with their image and quality. Nevertheless, the absolute value of the champagne purchase price is inconsistent with official data of Interprofessional Committee of Champagne Wines (CIVC); according to this source, average price for the period under review amounted to €14.44 per bottle [11].

Above mentioned differences can be explained by the delicacies of the negotiation process in the procurement of import-export, including accounting and manipulation of numerous attributes of purchased wine, such as trademark image and warranty of winemakers, buyers and sellers; harvest and wine production year; terms and conditions of their product distribution through trade channels; and many other circumstances, as reported previously [12]. Given these circumstances, above-noted discrepancy in absolute selling and purchase prices is quite admissible.

Among sparkling wine exporters to the Russian consumer market one should specify: Ukraine

(3.5 million liters), Moldova (1.8 million liters), Spain (1.1 million liters), and Germany (1.0 million liters); countries are listed in descending order of deliveries in terms of natural indices. Together, these regions deliver 22% of the total volume of sparkling wine imported to the Russian Federation. The list of other regions, making and exporting sparkling wine to Russia, includes 20 countries, both from Old World (Portugal, Greece, and Hungary) and a New World (USA, Australia, Chile, Argentina, and South Africa). We note in particular Abkhazia, which is present in the list of countries exporting produced sparkling wine to Russia [5], as well as importing various sparkling wines of Russian origin. However, shipments of sparkling wine from these countries are small and constitute together just 3% of the total volume of deliveries.

The level of purchase prices surely serves the basis to form retail sale prices. When characterizing this market parameter, the author used statistics of retail sales of the most important market players of the Russian consumer market, including supermarkets belonging to the major retail chains. This research phase was carried out based on materials of the Siberian Federal District (SFD), in particular, those of its network sellers, who have branched shopping channels in the format of supermarkets operating simultaneously in different subjects of the region.

To eliminate regional differences in purchasing power, the absolute values of sparkling wine volumes, sold in supermarkets, were reduced to relative values, characterized by a weighted average, representing the average market price of sparkling wine taken as a conventional price unit.

All other retail prices of sparkling wine are referred to the weighted average for Siberian Federal District (SFD) and are expressed as a fraction of unit. Such calculations made it possible to characterize the price levels of sparkling wine selling proposition to the consumer market of the Russian Federation as exemplified by SFD (December 2013). This structure fully reflects price preferences of the buyers of these wines.

The diagram, presented in Fig. 6, shows the structure of realized consumer demand, corresponding to an active part of sparkling wine selling proposition in the Russian consumer market. This part is defined as active as a counter to another part, which is defined as passive, meaning the portion of product, which was not purchased by customers and remains on the shelves of retailers.

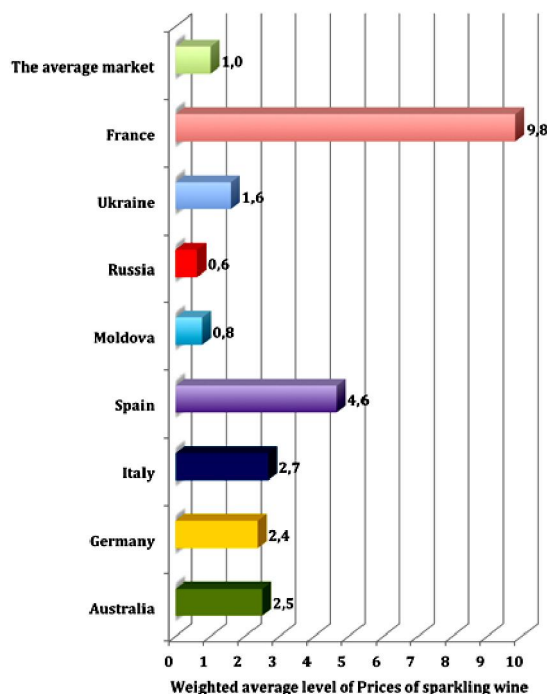


Fig. 6. Weighted average level of sparkling wine in the Siberian Federal District

The diagram indicates the range of retail prices on sparkling wine for different regions of origin. Lowest price customers paid for wines of Russian origin (40% below the average), whereas the highest price, exceeding the average market price 10-fold, was paid for the champagne from France. As previously described, for customers, the level of sparkling wine price is perceived as an external attribute of their quality [12]. Following the logic of presented diagram, one can affirm that the selling proposition of sparkling wine has five price levels (hereinafter called p.l.), significantly differing in terms of their perception by customers:

1. wines of Russian origin (the lowest p.l.= 0.6);
2. wines produced in the regions of CIS countries (former Soviet Union), which are conventional for Russian customers (p.l. = 0.8 ÷ 1.6);
3. new winemaking regions (in newly emerged winemaking countries p.l.= 2.5);
4. traditional winemaking regions (in traditional winemaking countries p.l. = 2.7 ÷ 4.6);
5. Champagne from France (the highest p.l.= 9.8).

Wine segment of Russian origin is not uniform as well. The diagram, presented in Fig.7, shows the price differentiation underlying the consumer preferences when choosing varieties of sparkling wine produced domestically.

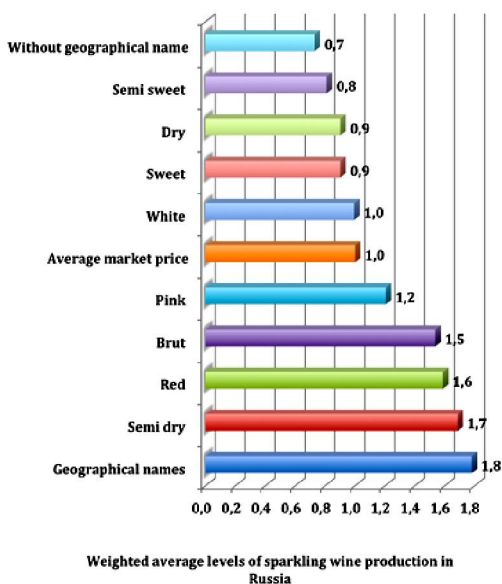


Fig. 7. Weighted average levels of sparkling wine production in Russia

As is obvious from the diagram, when making a choice, customers consider these levels to be significantly different: price differentiation ranges from 20 to 150%.

Each of the product varieties, significant for customers, involves at least two price levels: the conventional level and emotion-based level. Thus, the wine color-based variety suggests price level for the traditional white wines (p.l.=1.0) and non-traditional (pink and red wines, p.l.=1.2–1.6); taste-based variety offers traditional dry, semi-sweet and sweet wines (p.l.=0.8–0.9), as well as non-traditional brut wine (p.l.=1.5); variety based on geographical appellation of origin usually lacks such a parameter (p.l.= 0.7) or sometimes includes it (p.l.=1.8) that, however, is not conventional.

Research findings on the volatility of retail prices on Russian champagne in SFD have shown that during the period from December 2012 to December 2013 the price per bottle of this type wine with average market parameters, (such as white, semi-sweet, without geographical appellation of origin) has increased by 5.6%, i.e. from 159±33 to 168±22 rubles; here product item “Nadezhda” of the Kornet Moscow Sparkling Wine Plant was chosen as a reference for pricing market research. Market maximum of retail price, on the contrary, dropped from 265 to 220 rubles, whereas minimum increased from 115 to 129 rubles. This reduced the volatility of retail prices virtually by ½. In general, these results characterize the analyzed market as mature and dynamically growing in accordance with the macroeconomic processes of the consumer market of the Russian Federation as a whole.

Above we have assessed the proportion of sparkling wine exports in the total volume of their market offer. Currently this indicator is 7.7% of the total market volume in kind. However, this assessment was based on indicators of trade deals, while from a practical point of view it seems appropriate to use this parameter for assessment of realized consumer demand. To solve this problem we have analyzed sales statistics of chain supermarkets in SFD, employing the above technique.

The structure of realized demand in terms of geographical appellation of origin for sold sparkling wine is shown in the diagrams presented in Fig. 8.

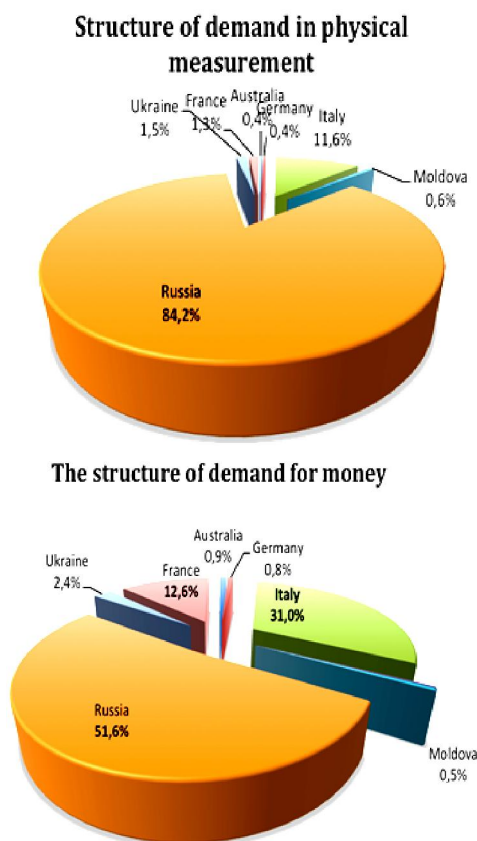


Fig. 8. The structure of realized demand in terms of geographical appellation of origin for sold sparkling wine

The survey showed that in Siberian supermarkets customers prefer sparkling wine of Russian origin. The proportion of Russian wines in the total volume of sold sparkling wine is 84%, while in monetary terms this figure amounts to just 52%. Differences in these proportions are due to differences in retail prices of domestic and imported sparkling wine, as reported above. Present data demonstrate a new characterization of the analyzed market and the depth of its uncertainty. There is no point to trust numerous expert assessments of complex processes

taking place in Russian market that lead to variability in conventional figures, which are shown in the numerous expensive publications of this kind.

Based on the data presented, it is necessary to clarify the segment proportion of imported sparkling wine in the total volume of the products sold in the Siberian consumer market: it is 16% in kind and 48% in monetary terms. Among the variety of countries, producing and exporting sparkling wine, most popular products are of Italian origin, whose proportion in the total sales of this wine group is 12% in kind and 31% in monetary terms. Champagne of French origin takes a small fraction (1%) in the physical volume of sparkling wine sales, however in monetary terms this product occupies a significant proportion (12%).

Another market variable that has been studied in the structure of realized consumer demand, was buying preference when choosing sparkling wine, differing in taste. This performance of the analyzed market is reflected in the diagrams shown in Figure 9.

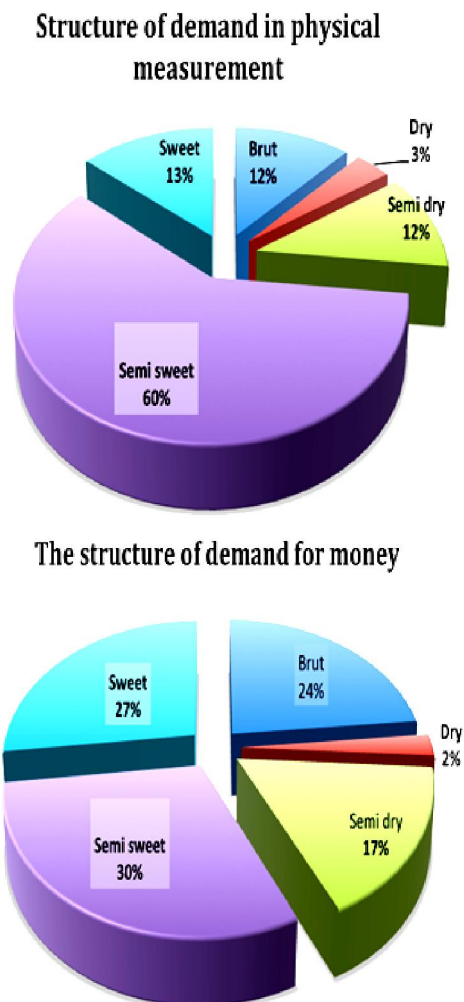


Fig. 9. The structure of realized demand in terms of sparkling wine taste

The results of investigation showed that consumers of sparkling wine in the Siberian supermarkets prefer to buy mainly semi-sweet wines. Proportion of this kind of wines is 60% in physical quantity of sales and 31% in monetary terms. Such difference in proportions is due to differences in prices of sparkling wine with different taste, as indicated above. Variety in taste is peculiar mainly to wines of domestic origin having a substantially lower retail price in comparison with imported wines, for which the particular taste is not very important.

Wines, imported from France, Italy and Germany, usually have other types of taste, such as brut (most dry), semi-dry or sweet. This influences the level of retail prices of such wine varieties. Classification (both in physical and monetary terms) of the remaining volume of sparkling wine sales depending on these taste types is uniform.

Evaluation of sparkling wine classification by color does not deserve graphical illustration since the preference of white wine is quite obvious. The proportion of the white wine sales volume reaches 98% in kind and 94% in monetary terms. In monetary terms quite noticeable is a fraction of pink wine (5%), which is peculiar to French champagne.

And finally, the fourth parameter of realized demand for sparkling wine, considered in this study, is a geographical appellation of wine production. This parameter is of particular interest in the wine segment of Russian origin. The results of this study are presented in the diagrams of Fig.10.

Buyers of sparkling wine in the Siberian supermarkets prefer wines without a price premium for the designation of geographical appellation of origin. The proportion of this type of wine in total sales is 26% in kind and 45% in monetary terms. As for the previous parameters, such a large difference in proportion values expressed in kind and in monetary terms is explained by significant differences in their retail prices, as noted above.

The low popularity of the sparkling wine produced domestically and having no geographical appellation of origin, expressed in the wholesale volume, can be explained not only by their low cost. As it was mentioned previously [13], significant difference in consumer merits of wines, proudly bearing the geographical appellation of their origin, statistically is not validated, and, due to this fact, the buyers do not have an objective reason to pay for sparkling wine much larger money.

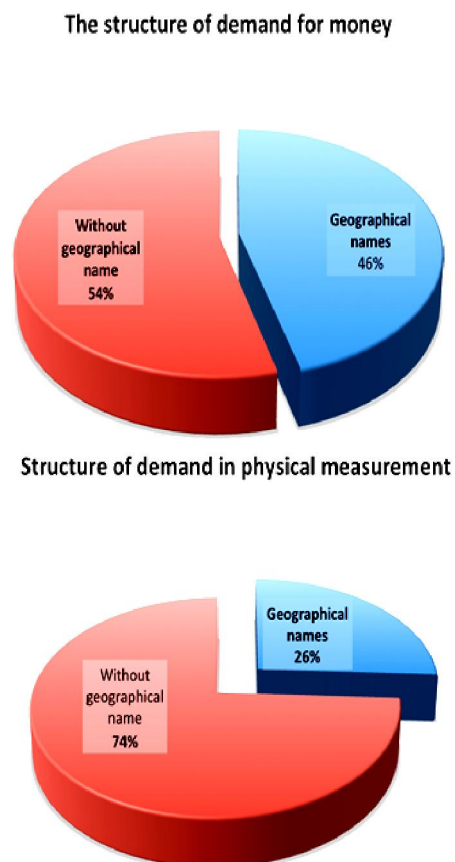


Fig.10. The structure illustrating availability of geographical appellation of wine production for sparkling wine of Russian origin

Conclusion

Summarizing the conducted study, it should be noted that the sparkling wine market in the Russian Federation is a multisegment, competitive, and dynamically growing; it offers mainly goods produced domestically and having various price levels. The proportion of imported products currently is 16% in kind of wholesales and 48% in monetary terms. The proportion in the physical volume of sales in the next period of time will increase up to 20-25%, whereas the value of the whole sales volume will somewhat decline.

As for consumer preferences in sparkling wine, we note the tradition, consisting in conservative approach to the selection of wine varieties in terms of color (white) and taste (sweet). However, there is a trend that consists in preference of sparkling wine, famous by geographical appellation of origin. This applies to Italian and French wines, as well as Russian wines, specifying geographical appellation of origin

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and having internationally recognized flavor characteristics, such as Rose Brut.

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