Abstract—The article presents the trends in Georgian wine market development and evaluates the competitive advantages of Georgia to enter the wine market based on its customs, traditions and historical practices combined with modern technologies.

In order to analyze the supply of wine, dynamics of vineyard land area and grape varieties are discussed, trends in wine production are presented, trends in export and import are evaluated, local wine market, its micro and macro environments are studied and analyzed based on the interviews with experts and analysis of initial recording materials.

For strengthening its position on the international market, the level of competitiveness of Georgian wine is defined, which is evaluated by “ex-ante” and “ex-post” methods, as well as by four basic and two additional factors of the Porter’s diamond method; potential advantages and disadvantages of Georgian wine are revealed.

Conclusions are made by identifying the factors that hinder the development of Georgian wine market. Based on the conclusions, relevant recommendations are developed.

Keywords—Georgian wine market, competitive advantage, bio wine, export-import, Porter's diamond model.

I. INTRODUCTION

PRODUCTION of national agricultural products plays an important role in social and economic development of Georgia. Development of the competitive sectors, which will be able to ensure food security as well as increase export potential and make profit in short term is especially important. From this perspective, development of viticulture and winemaking industry is of crucial importance to Georgia.

Viticulture and winemaking is the oldest and most important branches of agriculture in Georgia. As for Georgian wine, it's one of the oldest in Europe. The studies confirm that the culture of winemaking has a history of about seven thousand years in Georgia [1]. There are nearly 450 native varieties of grapes in Georgia, out of these 62 species are included in standard assortment, among them 29 species are wine grapes and 9 are table grapes [2].

Viticulture and winemaking are the sectors for Georgia to enter the international market successfully based on its customs, traditions and historical practices combined with modern technologies.

The interest in this product is conditioned by competitive advantages of Georgian wine, namely:

- The unique diversity of endemic grape varieties;
- Long history and traditions of wine production;
- Local and unique technology of wine making;
- Favorable natural conditions and resource potential, especially micro zones;
- High quality raw materials;
- Favorable quality-price ratio.

Formation of demand and supply on wine market in Georgia has already begun, but this segment is still significantly less developed than the European models, namely:
- Viticulture and winemaking sector requires development of a restructuring program;
- The level of competitiveness of Georgian wine is low;
- Awareness of the product on international market is low;
- Assessment of competitiveness of wine products isn’t done;
- The research of target market of producers and consumers isn’t complete;
- The analysis of competitive micro and macro environments isn’t complete;
- The barriers to entry into a market aren’t studied perfectly;
- Demand to supply optimum ratio isn’t determined;
- The impact of viticulture and winemaking on economic well-being of the country and its population needs to be confirmed.

Therefore, study of the development trends in Georgian wine market and determination of priorities for its development is very urgent for Georgia.

The objective of the research is to identify the development trends for wine market in terms of producing competitive Georgian wine and by identifying the causes of hindering factors to develop recommendations for perspective directions of development.

II. METHODOLOGY

General and specific research methods are used in the paper, namely, analysis, synthesis, comparison, expert evaluation, “ex-post” and “ex-ante”, Porter’s diamond method, statistical (selection, grouping, monitoring, trend, etc.), static methods, SWOT analysis. Reports of National Statistics Office of Georgia are also used.
III. DISCUSSION

According to the Georgian legislation, there are six viticultural areas in Georgia: 1. Kakheti (sub-areas - Inner and Outer Kakheti); 2. Kartli (sub-areas - Lower, Inner and Upper Kartli); 3. Meskheti; 4. Imereti (sub-areas – Lower, Inner and Upper Imereti); 5. Racha-Lechkhumi (sub-areas Racha and Lechkhumi); 6. The Black Sea Coastal Area (sub-areas – Adjara, Guria, Samegrelo and Abkhazia [3]. However, taking into consideration the history, traditions, grape varieties and wine making technology, in fact there are ten viticultural areas in Georgia: Kakheti, Kartli, Imereti, Racha, Lechkhumi, Guria, Samegrelo, Abkhazia and Adjara. In each of the above regions there are different local grape varieties, in addition, winemaking technologies are also different. Standard assortment is mainly presented by Georgian indigenous varieties, such as: Rkatsiteli, Kakhuri Mtsvane (Kakhetian Green), Guruli Mtsvane, Khikhvi, Kisi, Saperavi, Chinuri, Aleksandrouli, Aladasturi, Usakhelaouri, Tsolikauri, Tsitska, Krakhana, Otshkanuri Sapere, Ojaleshi, Chkhaveri, Tavkveri, Shavkapito and others.

In order to analyze supply of wine in Georgia, first of all, we have studied the dynamics of vineyard area. In 2004, total area of vineyards was 48.0 thousand hectares; in 1960, the corresponding figure was 77.9 thousand hectares; in 1970 – 68.3 thousand hectares and in 1984 – 87.9 thousand hectares. Fig. 1 shows the distribution of vineyard areas within the regions of Georgia according to the data of 2004 (see Fig. 1) [4].

Most of vineyard areas in Georgia are situated in the eastern part of the country. Specifically, Kakheti region covers 67% of total vineyard areas of the country, Imereti is leading region in viticulture in western part of Georgia, which covers 18% of the country’s total vineyard areas, the corresponding figure for Kartli is 9% and other regions cover 2 or 3 percent of the total vineyard area. As of 2004, the total vineyard area had reduced by 75.4 thousand hectares compared to 1990 [5]. Changes in vineyard areas should be focused on replacement of lower quality grape varieties with higher quality varieties [6].

Currently, there are 18 types of wine of native origin registered in Georgia. These are: Tsinandali, Teliani, Napareuli, Vazisubani, Mukuzani, Akhasheni, Gurjaani, Kardenakhhi, Tibaani, Kindzmarauli, Manavi, Khvanchkara, Tvishi, Kvareli, Atenuri, Sviris, Kotekhi, Kakheti (Kakhuri).

The mostly spread variety of grape in Kakheti region is white grape Rkatsiteli. Well-known types of wine such as Tsinandali, Napareuli White, Gurjaani and others are made from Rkatsiteli. In recent years, supply of white grapes can’t meet the market demand. Mtsvane, Kisi and Khikhvi have become especially scarce.

In recent years, Chardonnay and Sauvignon Blanc, French varieties of grapes, have spread in Kakheti region, though in small quantity. Among red grapes, Saperavi is most widely spread. Most types of red wine in Georgia are made from this grape variety [7].

Increasing trend has been observed in grape production in Georgia in recent period (see Fig. 2) [8].

![Fig. 1: Distribution of vineyard areas in Georgia](image1)

![Fig. 2: Grape production (thousand tons)](image2)

In 2012, grape production in Georgia amounted to 144.5 thousand tons. 49.2% of the total grapes produced in the country were harvested in Kakheti region, 25.1% - in Imereti, 9.4% - in Inner Kartli and 16.3% - in other regions.

In Georgia grape is mainly used for producing wine. According to the data of 2013, 40 tons of grapes will be processed by wine companies both for export and for local market, around 15 thousand tons of grapes will be used as table grapes, in addition, over 100 thousand tons will be processed by unregistered individual households and around 50 to 80 million liters of wine will be consumed without registration. According to IWSR, in 2010, 99% of wine consumed in Georgia was locally produced and only less than 1% was imported. About 1.5 million bottles of wine are sold. The rest of wine is presented in wineskins, plastic bottles or just as bulk wine. Wine is competed by beer (around 65 million liters consumed per year), vodka (around 13 million liters per year) and brandy (around 2 million liters) [9]. Wine consumption per capita per year is about 15 to 20 liters.

SWOT analysis of viticulture and winemaking in Georgia has identified potential advantages and disadvantages of this sector. Some of the potential advantages are as follows:

- Traditionally experienced labor force;
- Cheap labor;
- Growing domestic and international markets;
- Increasing demand for high-quality wine;
- Low taxes;
- Special support for the wine industry, etc.
Some of the potential disadvantages should be also mentioned here as well:
- Poor infrastructure;
- Underdeveloped market structures;
- Unfavorable structure of companies;
- Low purchasing power on the domestic market;
- Little focus on strategic objectives;
- Imperfect laws (legislation);
- Low expenditures on research, etc.

For Georgian wine to strengthen its position on international market, it’s essential to evaluate the level of competitiveness of this product. Evaluation of competitiveness by “ex-post” and “ex-ante” methods revealed [10] that Georgian wine is competitive [11]. For many years, the index of relative export advantage (RXA) for wine export has been high. Namely, the index was 26.4 in 1992 and 42.4 in 2011. Relative trade advantage index was respectively 26.3 and 42.2 [12].

As for the scales of wine production, Georgia belongs to the category of small-scale producers. The following companies have been studied for the wine market research: Akhasheni, D. Sarajishvili & Eniseli, Vaziani, Eniselli-Bagrationi, Manavi Wine Cellar, Teliani Valley, Tbilvino, Chateau Mukhrani, Twins Wine House in Napareuli, Biiwine, Darchiaishvili Bio Wine, and GWS [13].

For assessing the competitive environment, we have measured the shares of wine companies according to their market power and concentration index. Average concentration index was 0.5 [14]. This indicator didn’t cover real size of the companies, which weren’t studied. In addition, the index can’t show the comparative indicators, thus, we have calculated Herfindahl-Hirschman Index, which was 0.012. Accordingly, the type of wine market in Georgia is monopolistic competition. We have calculated entropy index for the companies operating in Georgian wine market, which is 2.53. Therefore, the influence of suppliers on market price is low.

The degree of unevenness of size of wine companies has been measured by dispersion index of market shares. The result was that (sigma squared) = 0.004, which indicates that unevenness of market shares is quite insignificant.

One of the pressing issues considered is diversification of Georgian wine. The study conducted to explain the dependence between specialization index and the size of a company revealed that diversification doesn’t depend on the size of a company. Small companies mainly use diversification to reduce bankruptcy risk or the impact of exogenous factors. As for large companies, they use diversification strategies to invest financial resources in profitable sectors.

Microenvironment analysis of the wine market revealed that households own over 90% of the total vineyard areas of the country and only 10% of the area belongs to large companies. 70% of the total wine produced in the country is for domestic consumption and the rest is exported (see Fig. 3).

The study of micro environment of the wine market in Georgia revealed that the key factors hindering the development of wine market are small size of the companies, shortage of sapling, unregulated price mechanism, low level of brand awareness in the market, unexplored situation of wine grape demand and supply and others. It should be noted as well that profit from growing grapes in Georgia is rather low and Georgian vine-growers, compared with their foreign farmers, can’t achieve profitability in reasonable period [15].

The export volume of Georgian wine has been increasing in recent years (see Fig. 4) [16].

Average volume of wine export in 1990s was 5 million liters per year; by 2013, this figure has risen to 35.9 million liters. Since 2006, demand for grapes has decreased due to Russian embargo on Georgian wine and there was a surplus in...
the grape market. The state tried to solve the problem with subsidies. Georgian wine is exported to 43 countries. Most of the exported wine is sold in traditional markets, such as Belarus, Kazakhstan, Ukraine and the Baltic countries. However, export of Georgian wine in Europe is also increasing by about 20% per year. 10% of the total wine export is exported to the United States each year. 

Geostat informs that in January-February 2014 wines of natural grapes with $32 million value have been exported from Georgia. It is 4 times more than in the same period of the last year. According to the data of National Wine Agency, in 2 months of the year 9 990 387 bottles of wine have been exported. Top-5 list of export markets for Georgian wine is the following: Russia, Ukraine, Kazakhstan, Poland and Latvia. Russia is a leader with 68% share [17]. 

Comparison of export of the first quarters of 2012-2013 proves that the export of Georgian wine in five strategically important countries is increasing. For instance, growth in Belarus is over 167%. Analysis of other countries also showed that demand for Georgian wine is rapidly increasing [18]. 

The opportunity to enter the Chinese market seems prospective as well. Over one million bottles of wine were exported to China in 2013. Export Market Development Action Plan was created by the Ministry of Agriculture of Georgia, Georgian Wine Association and Georgian National Investment Agency. This action plan will contribute to the growth of high quality wine in competitive global wine sector [19]. This will have a significant positive economic impact on the well-being in the country. 

The analysis of domestic and export demand for Georgian wine showed that there are two main principles to be taken into consideration – 1. Strengthening of fair competition in the domestic market; 2. Meeting the requirements of international market structures aren’t developed; 

By developing appropriate institutional systems, Georgia can become one of the strategic priorities of the country in future. 

Underdeveloped infrastructure. 

Four certified companies producing bio wine in Georgia. Their certificates meet the European standards. Production of organic products, as a quality-oriented, growing and promising rural and agricultural system, should become one of the strategic priorities of the country in future. 

IV. CONCLUSION AND RECOMMENDATIONS

The study showed that the reforms carried out in wine sector in Georgia aren’t sufficient for wine market development. 

The following key issues have been identified:

- The size of the wine producing companies and vineyard areas is small;
- Most of the vineyard areas is covered with low quality grape varieties;
- Wine companies don’t have much experience in exporting (sales);
- Low awareness of Georgian wine in international markets;
- Lack of market information is a limiting factor for the research and analysis;
- Georgian wine companies have almost equal shares of the market and therefore, they have equal opportunities to influence the conditions of monopolistic competition; market structures aren’t developed;
- Insufficient focus on strategic goals;
- Insufficient state support of export;
- Significant gaps in the legislation;
- Underdeveloped infrastructure.

Based on the analysis and the conclusions, we have developed the following recommendations:

- It’s advisable to replace the vineyards with lower quality grape varieties with higher quality varieties;
- It’s necessary to develop an action plan for the development of export markets;
- It’s important to make “Georgian wine” a brand and to make professional advertisements describing Georgian wine, viticulture regions and grape varieties;
- Well-founded strategies for wine market diversification should be developed;
- More information should be obtained and analyzed about priority markets;
- Optimal balance should be maintained between the vineyard areas covered with white and red grape varieties in accordance with demand conditions in international market;
- It’s preferable that annually, governmental agencies determine the level of competitiveness of Georgian wine in cooperation with scientific and research centers based on approved methodology;
- Wine tourism should be encouraged and promoted;
- It’s important for Georgian wine to participate in international festivals, expositions, conferences and other events;
✓ Production of bio wine should be encouraged. Georgia has good perspectives in wine export in this field;
✓ The Law of Georgia “on Vine and Wine” needs to be improved; a new law (on farms, etc.) should be adopted.

REFERENCES

[14] Reports regarding wine produced by the companies and the number of employees: www.geostat.ge.