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The Impacts of the Free Trade Agreement with the European Union on the Georgian Wine Industry: the Competitiveness Analysis

Content

1. Introduction

Competitiveness is the ability of a nation to gain a big market shares at both export and domestic markets. The worldwide experience suggest that the prosperity and development of nations, especially this is true for small developing economies, depends not so much on country's initial natural endowments as on nation's ability to gain competitive advantage through continuous innovation and upgrading of domestic industries[1].The gaining of competitive advantage is the crucial task for Georgia on the path to economic development.

Georgia, a former Soviet Union Republic is strategically located in the Caucasus. Geography continues to define outside and inside interests in this region to this day. Georgia continues its centuries old tradition as a trade and transit corridor between Europe and Asia. In Soviet times the economic development of Georgia was relatively prosperous and rather unremarkable. Georgia was a typical Soviet republic whose economy had neither outstanding results nor significant shortcomings. Georgia was a typical post-Soviet country with an average level of development among other FSU economies. In 1990, Georgian GDP was USD 10,000,000 and GDP per capita was USD 2,000. Not remarkable, but generally acceptable by international standards. Georgia was in the bottom ranks of the middle tier of economic development.

During the period following independence and the break up of the former Soviet Union (FSU) in 1991, Georgia faced severe shocks from disruptions in its trade and payments relations, and substantial trade shock for energy imports. The disruption of traditional linkages between trade partners and lost of cheap sources of energy and raw material source significantly lowered the competitiveness of Georgian export. After liberalization of trade at most of the FSU markets Georgian products were replaced by more competitive items from the rest of the world. The same time the ability of Georgian producers to compete in foreign markets also was diminished. These difficulties were compounded by civil conflicts, which created serious refugee problems, and closure or blockage of its trade routes. As a result social situation in Georgia have deteriorated significantly. In the mid of 90's, Georgian authorities achieved macroeconomic stability through implementation of stabilization program. This stability lasted till the end of 1998, when the situation in Russia adversely affected the macroeconomic situation in Georgia resulting in higher levels of inflation and depreciation of GEL. By adopting a strict monetary policy and allowing GEL to depreciate, Georgian authorities handled the crisis. This crisis, however, revealed the fact that despite all achievements in macroeconomic stabilization process, Georgian economic system remained fragile and vulnerable in the face of external shocks and new stimulus for its enhancement were badly needed. The Georgian economy received such a stimulus following the rose revolution in 2003. Recent period the Government undertook a very ambitious reform program which allowed enhancing macroeconomic stability and ensured stable rates of real GDP growth. However, the huge trade deficit (almost 30% of GDP in 2007)[2] indicates on low competitiveness of Georgian economy.

The main problem under the study is the assessment of the competitiveness of Georgian wine industry on European Union (EU) market. The main objective of the study is to assess the impacts of the Free Trade Agreement (FTA) between EU and Georgia on the Georgian wine industry. In particular, we are going to study the short-term effects (compliance cost and benefits from integration) and long-term effects (sustainability of the industry at European Single Market in the long-run perspective). We focus here on the competitiveness issue as it is the main determinant of the long–term sustainability of Georgian companies at the European Single Market.

[1] Porter, M.E. (1990), The Competitive Advantage of Nations, The Free Press, New York, NY.
[2] Source: data from National Bank of Georgia.

Winemaking is one of the ancient fields of agriculture and farming in Georgia. The history of Georgian winemaking has a tight connection with the entire history and religion of the country. The wine industry represents a very important export oriented sector of Georgian economy. This industry is more important in Georgia than in EU countries and it determines the well-being of a large number of households involved in wine-growing. Recent ban on Georgian wine in Russia (the main export market for Georgian wine) has substantially reduced exports of this product and deteriorated social condition of households involved in this industry. With the loss of the Russian export market, the survivability of Georgian wine industry heavily depends on the access to other large markets, including European single market. In this context the FTA between EU and Georgia could potentially facilitate such access. The same time this process is not without difficulties. To expand on European wine market, Georgian must gain competitive advantage in the first place. The access to European single market requires also harmonization of product standards, technical regulations and certification systems. The costs of compliance with these norms may inhibit international trade. Thus the detailed competitiveness and impact assessment study is of very importance here.

To get the answers on the questions of interest the research methodology in this study is based on the following instruments and methods:

- the description of industry will involve the following kind of activities: secondary data research (statistical department data) and personal interviews with companies' managers, representatives of business associations, government officials;
- the benchmarking approach will be used to assess the industry at both national and international level;
- the assessment of the impact of FTA is based on: personal interviews with companies' managers and other stakeholders; review of existing Single market studies; examining experience of other countries;
- the industry's competitiveness aspects will be studied with the cluster competitiveness methodology.

The structure of the paper is as follows. Section 2 analyzes recent developments in Georgian wine industry and provides international benchmarking analysis of Georgian wine industry Section 3 discusses the short-term impacts of FTA on Georgian wine industry, including assessment of compliance costs and potential trade benefits. Section 4 assesses long-term competitiveness of Georgian wine industry on the base of Porter's "diamond" model. Section 5 concludes with strategic implications and recommendations.

2. Analysis of Georgian Wine Industry: National and International Perspectives.

2.1. Description and Analysis of the Industry: National Level.

The wine industry is one of the most important and competitive sectors of the Georgian economy. Generally the following classification of wines produced in Georgia is established by the Law of Georgia on Vine and Wine:

- ***According to quality***: table wines; regional wines; highest quality wines with denominations of origin (DO) produced in specific zones; controlled highest quality wines with denominations of origin (DO) produced in specific zones
- ***According to the types***: dry wines; semi-dry wines; semi-sweet wines; sweet wines; sparkling wines; carbonated wines; fortified wines; aromatized wines.
- ***According to color***: white wines; rose wines; red wines.

The most popular alcoholic beverages produced in Georgia are: wine, sparkling wine, vodka, liqueur, brandy, and different spirit drinks. The main segment of this industry, however, is wine, which in turn is subdivided into two main segments: semisweet wine – representing about 65%, and dry wine – about 35%.

Totally there are 218 registered enterprises in alcoholic beverage branch in Georgia, though less than 70% of them are currently operating[3]. All this companies are untied under the aegis of "Samtrest"- the wine institution that is responsible for certification of the quality of wine and place of its origin. According to the Law of Georgia on Vine and Wine, "Samtrest" supervises protection of specific conditions stipulated by the legislation of Georgia and requirements of other relevant normative acts governing viticulture and winemaking sector, and in case of their violation enforces measures according to the legislation of Georgia; supervises production and cultivation of mother plantations of vine, grafting material and engrafted seedlings; creates and maintains a database (information bank) of scale of vineyards and production flow in wine-companies.

According to the data from table 1, the number of operating wine companies in Georgia decreased significantly (by almost 32% from 2006 to 2007) after the Russian ban. Moreover, there was a substantial downsizing within the companies as the shares of large and medium enterprises in total number of operating wine companies reduced remarkably during the period under review. In 2007 the small enterprises accounted for almost 60% of total enterprises, while large and medium companies for 15 and 25 percent correspondingly.

Table1. The number of operating wine companies in Georgia, 2003-2007.

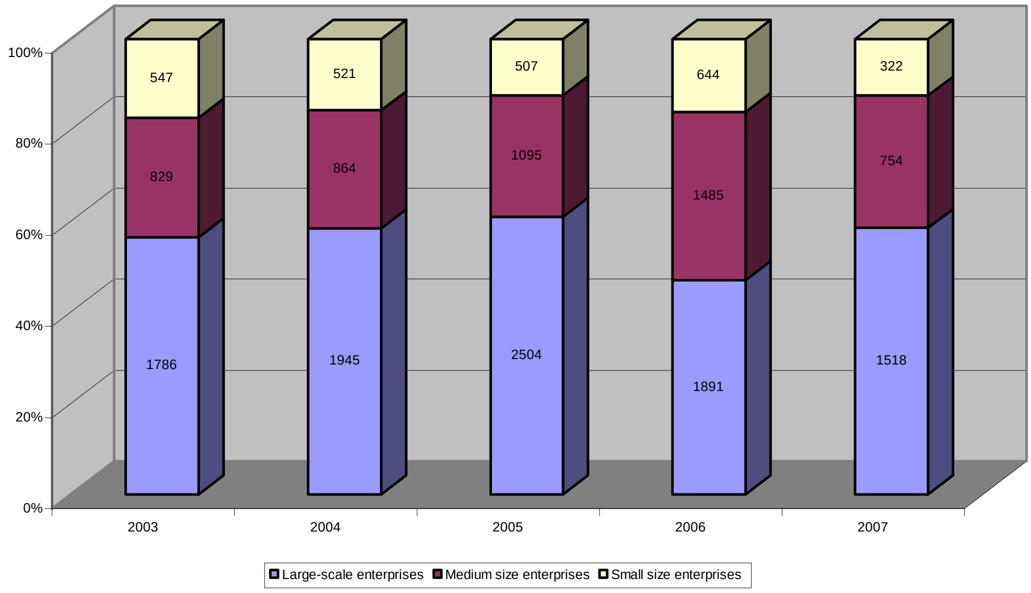
№	Type of enterprise	2003	2004	2005	2006	2007
1	Large	14 (12.4%)	17 (15.4%)	25 (17.5%)	14 (9.4 %)	15 (14.7 %)
2	Medium	32 (28.3%)	30 (27.3 %)	42 (29.4%)	56 (37.6 %)	26 (25.5 %)
3	Small	67 (59.3%)	63 (57.3%)	76 (53.1%)	79 (53 %)	61 (59.8 %)
4	***Total***	***113 (100%)***	***110 (100%)***	***143 (100%)***	***149 (100%)***	***102 (100%)***

Source: calculations based on data from Department for Statistics, Ministry of Economic Development of Georgia

However, small and medium enterprises were harmed by the Russian ban most severely. According to figure 1, the number of employment at small and medium enterprises reduced almost twice. The number of employees at large companies also declined though not so drastically. Totally in Georgian wine industry there was almost 40 percent decrease in number of employees after the ban. Similarly the production level reduced almost three times during the

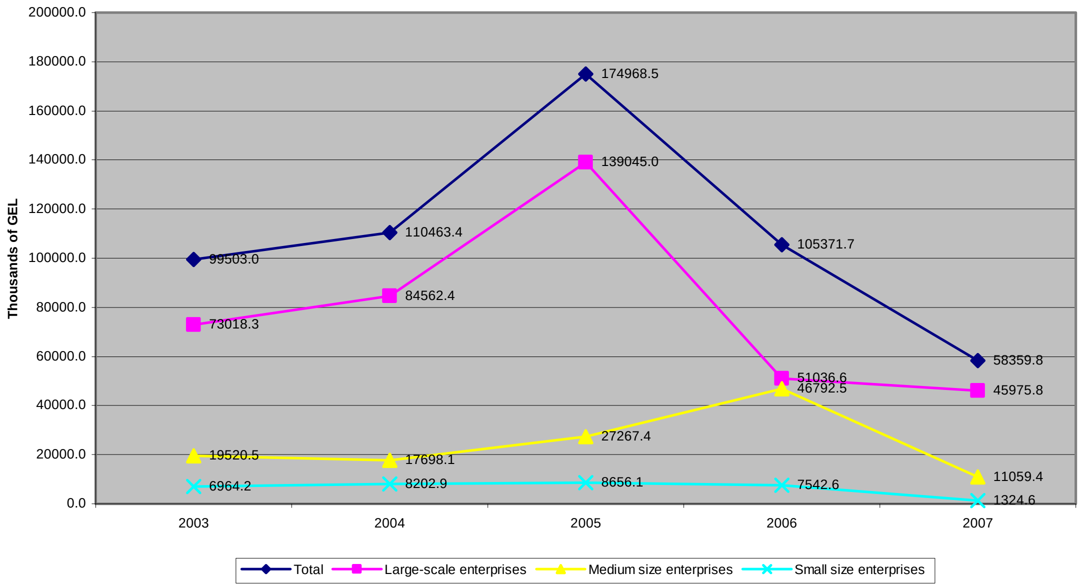
[3] Source: Department for Statistics, Ministry of Economic Development of Georgia

period of 2005-2007, whiles the output of small enterprises decreased by more than six times (figure 2).



Source: calculations based on data from Department for Statistics, Ministry of Economic Development of Georgia

Figure 1. Number of employees in the Georgian wine industry, 2003-2007.



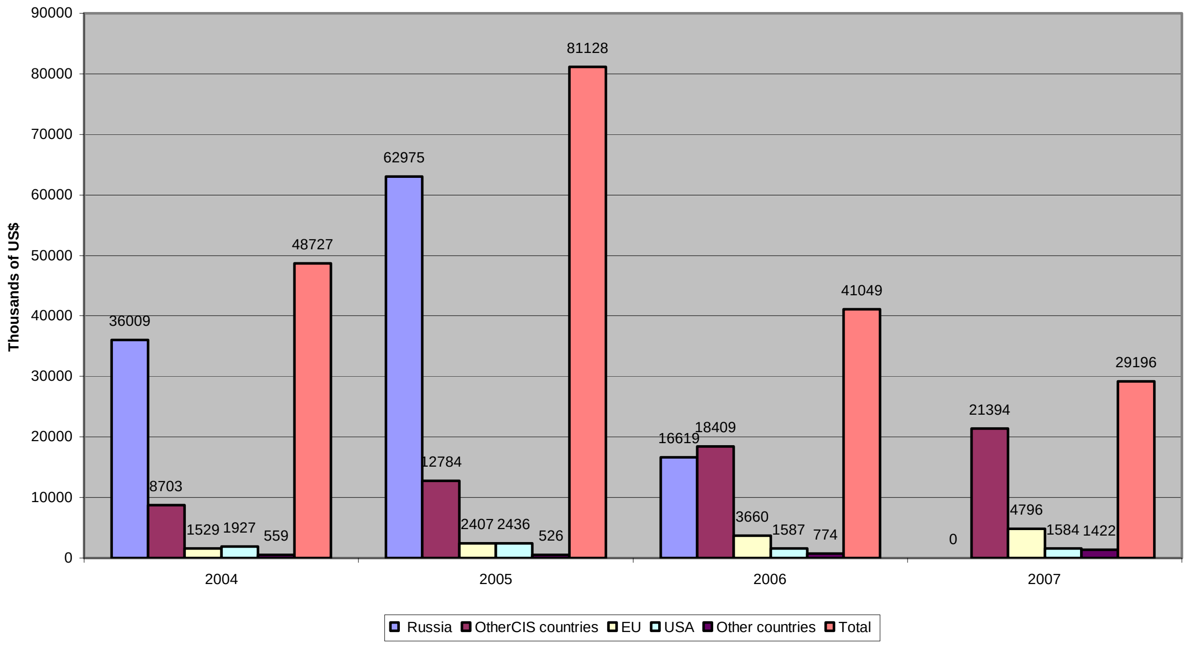
Source: calculations based on data from Department for Statistics, Ministry of Economic Development of Georgia

Figure 2. Production level in the Georgian wine industry, 2003-2007.

The above analysis suggest that large-scale companies suffered less severely in terms of employment reduction from the Russian ban than small and medium size enterprises. Such disproportional effect can be explained by the fact that large-scale companies were involved in export activities in non-Russia markets much more intensively comparatively to small and medium companies.

The key large-scale companies in the wine segment are: Teliani Valley JSC, Tiflis Marani Ltd, Tbilvino JSC, Tiflis Wine Celler Ltd, Telavi Wine Celler Ltd, Badagoni Ltd, Georgian Wines & Spirits Company Ltd, Taro BZI Investment Incorporation in Georgia, Mildiani Family Ltd, Shumi JSC, Vaziani JSC, Hareba Ltd, Corporation Kindzmarauli, JSC, Tbilvazi Ltd, and others. These companies are equipped with modern production facilities and are mainly export oriented.

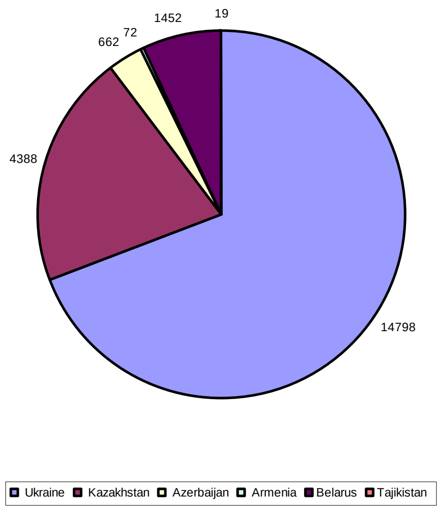
The total export volume of wine industry amounts to 90-92% of total production of wines, while local demand on wine does not exceed 10%. The recent trends in wine export activities are illustrated in Figure 3.



Source: calculations based on data from Department for Statistics, Ministry of Economic Development

Figure 3. Wine export volumes, 2004-2007.

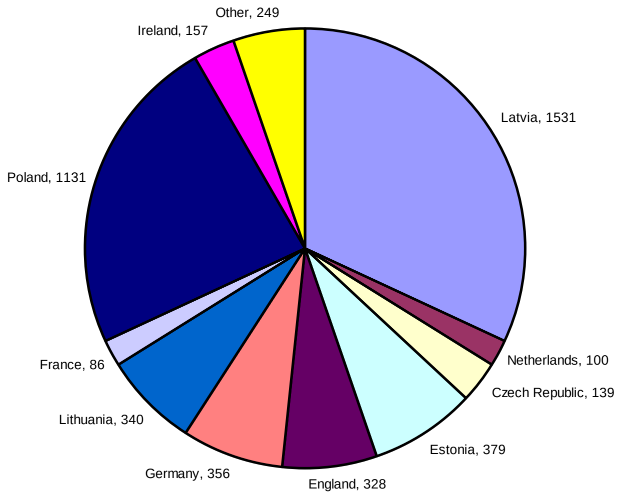
According to figure 3, there was almost a hundred percent increase in the wine export in 2005 as compared to the previous year. Such a rapid growth was driven mainly by penetration to Russian market, where the Georgian wine export volumes almost doubled. Generally in 2005 Russian wine market accounted for almost 78% and of the total Georgian wine export. The rest of the wine export was divided by other CIS countries (15%), EU (3%), USA (3%) and other countries. By 2006 Russia was the main market for Georgian wine. Thus it was not surprising that the ban of Georgian wines on the territory of Russia caused a substantial drop of total wine export to 41 US$ mln. in 2006 and further to 29 US$ mln. in 2007. The increase of exports to CIS countries (mainly Ukraine) and EU (mainly Poland) only barely compensated the loss of Russian market. As a result the Georgian wine export volume in 2007 comprised only 36 % of its sales in 2005. After the ban the major export markets for Georgian wine become other CIS countries (73%), EU (16%) and USA (5%). According to figure 4, the three major CIS export markets for Georgian wine were Ukraine, Kazakhstan, and Belarus.



Source: calculations based on data from Department for Statistics, Ministry of Economic Development

Figure 4. Wine export volumes to CIS countries, mln. US$, 2007.

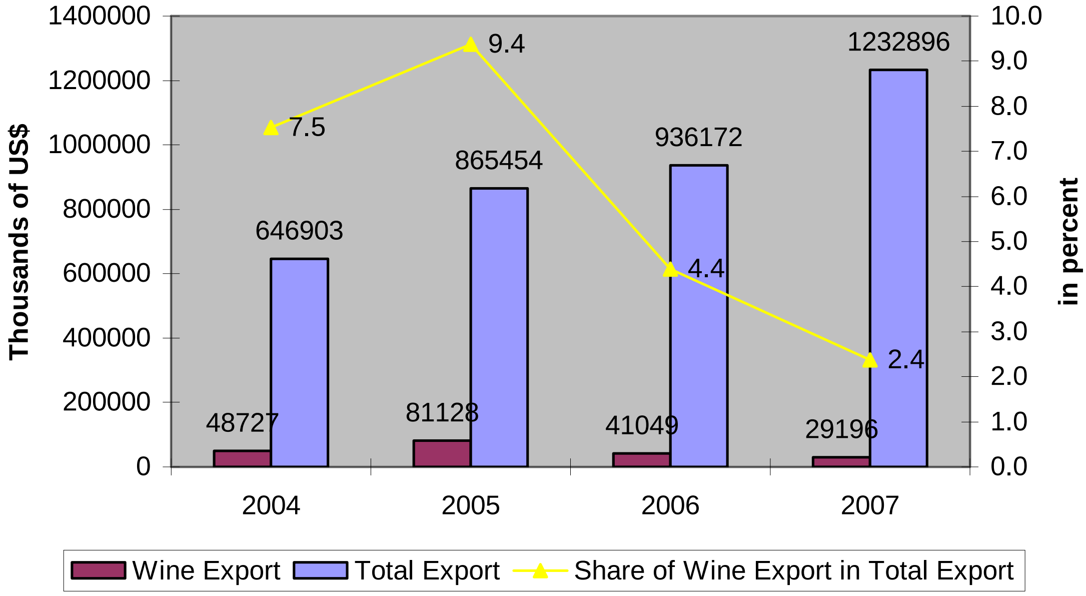
Among EU countries Latvia and Poland had the biggest share in Georgian wine export in 2007 (figure 5).



Source: calculations based on data from Department for Statistics, Ministry of Economic Development

Figure 5. Wine export volumes to EU, mln. US$, 2007.

There was also a significant drop of the share of wine export in total exports. In 2005 this indicator peaked at 9.4%, however, after the ban it reduced more than twice in 2006 and further went down to 2.4% in 2007. Still wine remained among top ten exported Georgian goods during 2004-2007 with more than 2 % share of the Georgian export in value terms (Figure 6).



Source: calculations based on data from Department for Statistics, Ministry of Economic Development

Figure 6. Wine export, total export and share of wine export in total export, 2004-2007.

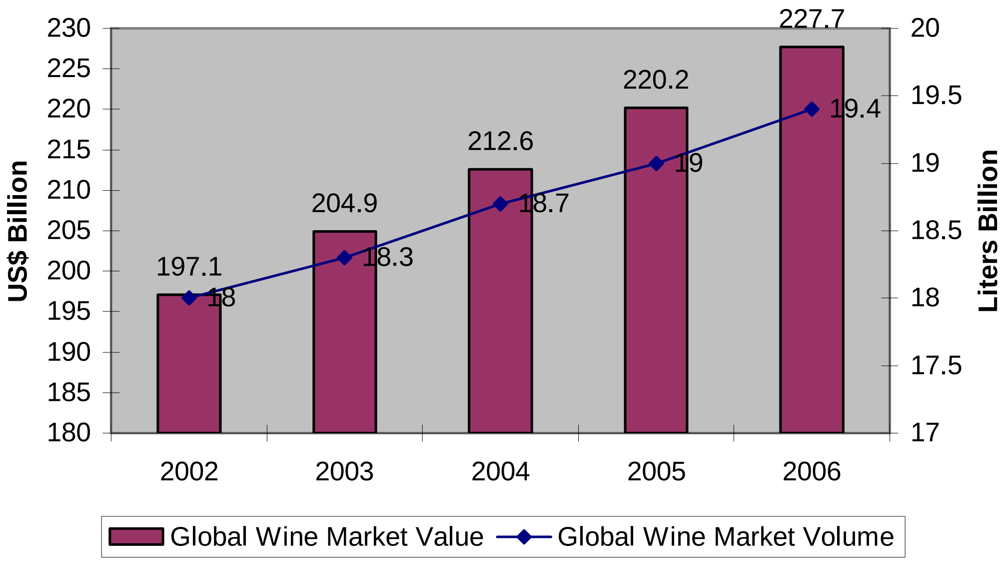
The analysis of recent developments in Georgian wine industry reveals the serious negative impact Russian ban on the performance of this sector. There are substantial grounds to consider this decision of Russian authorities as politically motivated one. Still some problems with the quality of Georgian wine existed that time. Two main forms of falsification that took place in Georgian wine usually were distinguished. The first type of producing of false wine assumed blending of a grape powder with spirit. It was very difficult to detect such false wine through taste only. Another source of falsification is the question of the origin of grapes, or to say distinctly, when blended bulk wine from different regions is positioned as a product of a specific micro-zone.

Recent period, however, serious attempts were undertaken to deal with this problems. To improve the quality of wine special laboratories for testing of wine quality were established. One example of the measures toward increasing of quality control is laboratory testing project supported by the German donor GTZ (Gesellschaft für Technische Zusammenarbeit).

To combat with the second type of falsification special measures were implemented to formalize the micro-zone system of production through state-sanctioned certificates that guarantee the authenticity of origin. Georgian government has recently passed a series of laws that lay the foundation for an AOC-type appellation quality control system. Also there was an appellation to the international community to support and recognize these attempts on the international market. It should be mentioned that Georgia and EU in the near future will sign agreement on reciprocal recognition and protection of names based on geographical origin.

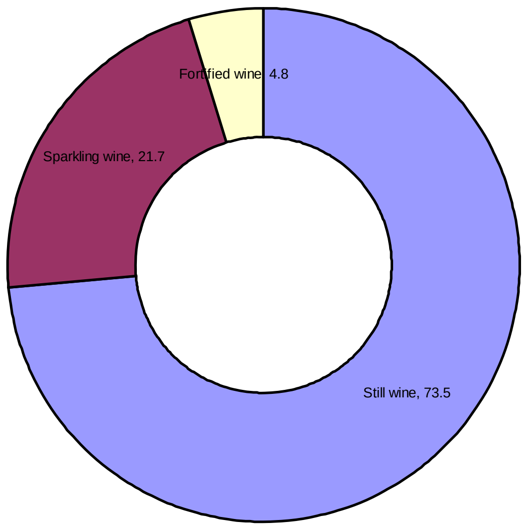
2.2. Global Perspectives and International Benchmarking of Georgian Wine Industry.

Grapes have been cultivated for wine production in Europe and Asia for thousands of years. Today, wine production occurs throughout the world, and wine is expanding at global markets. According to Datamonitor, in 2006 total revenues of the global wine market were 227.7 billions of US$ with a compound annual rate of growth (CAGR) of 3.7% for the period of 2002-2006. For the same period market consumption volumes increased with a CAGR of 1.8% and amounted to a total of 19.4 billion liters in 2006. The dynamics of both world wine production and consumption is depicted in figure 7.



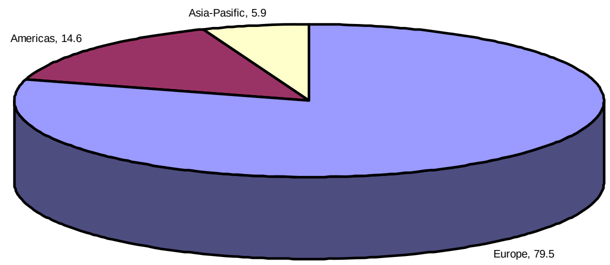
Source: Datamonitor
Figure 7. Global wine market value and volume, 2002-2006

Still wine accounts for 73.5% of the global wine market's value, while sparkling wine generates 21.7% of the market's sales (figure 8).



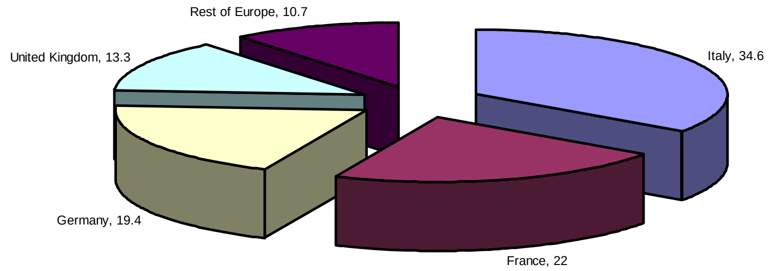
Source: Datamonitor
Figure 8. Global wine market segmentation by types: % share, 2006

According to figure 9, Europe has the biggest share in global wine markets value which accounts for 79.5%. The Americas share is 14.6% in global wine market's revenues.



Source: Datamonitor
Figure 9. Global wine market segmentation by regions: % share, 2006[4]

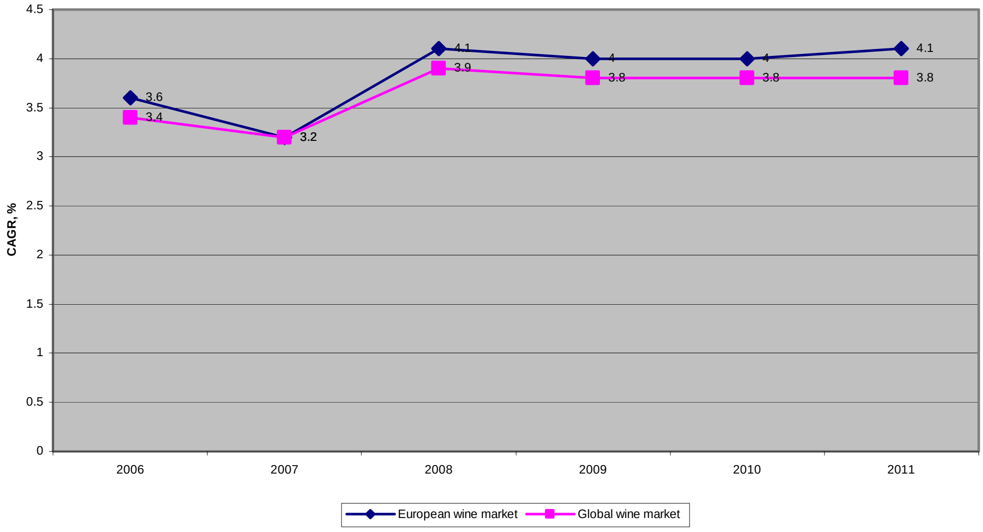
In Europe the Italy, France, Germany and United Kingdom have the biggest share of wine market's value (figure10).



Source: Datamonitor
Figure 10. European wine market segmentation: % share, 2006

According to Datamonitor the global wine market is expected to grow to a value of $273.1 billion, while by the European wine market is forecast to have a value of $218.9 billion by the end of 2011. Still the European market is anticipated to grow faster than the global one (figure11).

[4] Americas: Brazil, Canada, Mexico and the US.
Europe: Belgium, the Czech Republic, Denmark, France, Germany, Hungary, Italy, Netherlands, Norway, Poland, Russia, Spain, Sweden and the UK.
Asia-Pacific: Australia, China, Japan, India, Singapore, South Korea and Taiwan.



Source: Datamonitor

Figure 11. Global and European wine market growth (CAGR) forecast, 2006-2011

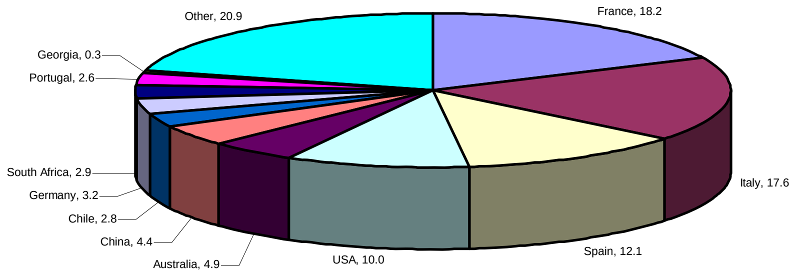
The analysis above suggests that the expansion to European wine market presents attracting market opportunities for Georgian winemakers.

The four biggest wine producers in the world are France with an average annual production of around 52 million hectoliters (around 18.2 % of the world annual production), then Italy with an average annual production of 50.5 million hectoliters (17.6%), Spain with 34.8 million hectoliters (12.6%), and USA with an average annual production of 28.7 million hectoliters (10.6%). Georgia annually produces 1.0 million hectoliters or only 0.3% of the world annual production (see table 2 and figure 12).

Table 2. World wine production by country, million of hectoliters, 2005

№	Country	Volume
1	France	52
2	Italy	50.5
3	Spain	34.7
4	USA	28.7
5	Australia	14
6	China	12.7
7	Chile	7.9
8	Germany	9.1
9	South Africa	8.4
10	Portugal	7.3
11	Georgia	1
12	Other	59.9
	Total	286.2

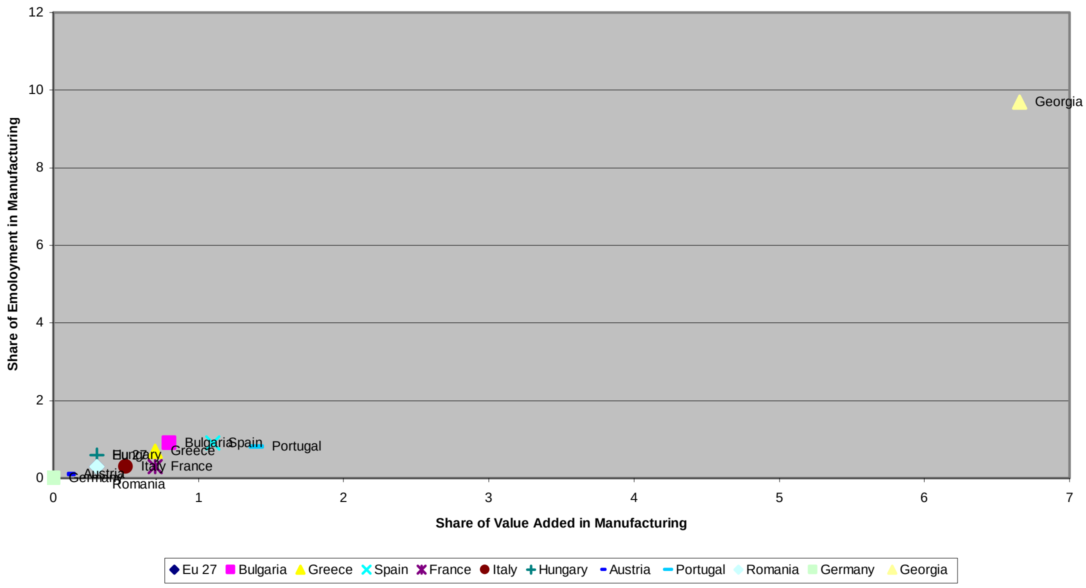
Source: Wine Institute (http://www.wineinstitute.org/resources/worldstatistics/article87)



Source: Wine Institute (http://www.wineinstitute.org/resources/worldstatistics/article87)

Figure 12. World wine production by country, percent, 2005

Despite its small share in the world's wine production, the wine industry is of very importance for Georgian economy. In previous section it was shown that the wine industry is a key generator of export incomes in Georgia and accounted for almost 10% of total exports (before the Russian ban). The international benchmarking reveals the importance of the Georgian wine industry as compared to EU countries. Figure 13 shows that the contribution of the wine industry in Georgian economy is much more significant (more then ten times) in terms of its shares of total manufacturing value added and employment than wine industries play in selected EU countries.



Source: own calculations based on Eurostat data.

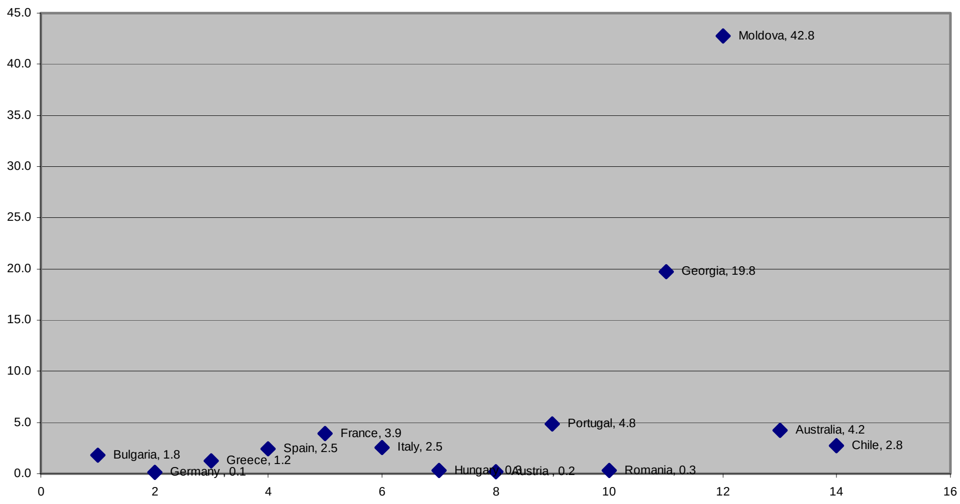
Figure 13. Relative importance of wine industry, percent, 2005

Another important benchmarking indicator is Revealed Competitive Advantage (RCA) index or Balassa index (BI). This index shows county's specialization in product exports and is calculated as follows:

$$RCA_{ij}(BI_{ij}) = \frac{\dfrac{X_{ij}}{\sum_{j} X_{ij}}}{\dfrac{\sum_{i} X_{ij}}{\sum_{i}\sum_{j} X_{ij}}} \qquad (1),$$

where X_{ij} is the exports of the product *i* from the country *j*, $\sum_{j} X_{ij}$ - is the total export of country *j*, $\sum_{i} X_{ij}$ - is export of product *i* from the reference group countries, and $\sum_{i}\sum_{j} X_{ij}$ - is total export from the reference group countries.

Given a group of reference countries RCA or Balassa index measures normalized export shares, where the normalization is with respect to the exports of the same industry in the group of reference countries. If the RCA exceeds one, than it is said that the country has a comparative advantage in the industry, since this industry is more important for this country's exports than for the exports of the compared countries. Usually the rest of the world or OECD countries are used as the reference group. In this study the EU-15 were used a reference group[5]. Figure 14 shows that Georgian wine industry's RCA index is 19.8, thus Georgia has a revealed comparative advantage in the production of wine. Moreover, this index says that Georgia is almost 20 times more specialized to export wine than average EU-15 country. Georgia significantly outperforms with regard to this index such important wine producer countries as France, Italy, Spain, Australia and others. Only Moldova performs better than Georgia.



Source: own calculations based on Eurostat data

Figure 14. Revealed Competitive Advantage (Balassa) Index of wine industry, selected countries

Competitive edge in foreign markets is another indicator of the competitiveness of the country with respect to a particular industry. The following indicators are used to measure competitive edge of the country.

[5] EU-15- France, Italy, Spain, Portugal, Greece, Belgium, Austria, Luxemburg, Netherlands, Denmark, Germany, Ireland, United Kingdom, Sweden, Finland.

Trade Surplus (TS)

$$TS_i = X_i - M_i, \qquad (2)$$

where *Xi* is an export of product *i* and M_i is an import of product *i*.
Calculations of trade surplus for Georgia with respect wine is presented in table 3, reflects a huge positive difference between export and import of wine.

Table 3. Georgian wine trade surplus, million US$, 2007

№	**Variable**	**Volume**
1	Export	29.2
2	Imports	2.1
3	Trade Surplus	27.1

Source: own calculations based on Eurostat data

Export Market Share (EMS)

$$EMS_{ij} = \frac{X_{ij}}{\sum_j X_{ij}} \qquad (3),$$

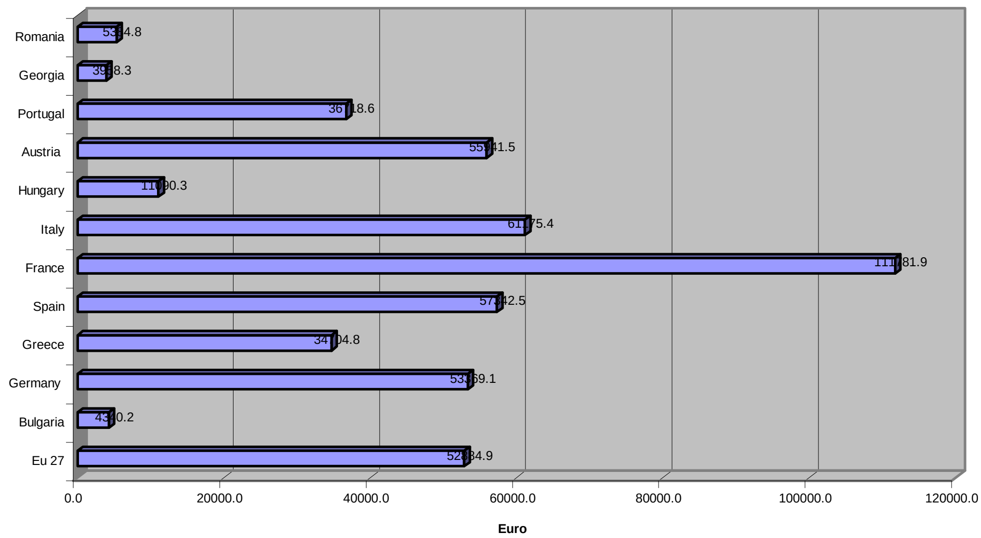
Where X*ij* is an export of the product *i* from the country *j*. The nominator calculates the sum of the reference group countries total exports of product *i*. In this study the EU-15 were used a reference group. Using equation (3), the wine and total export market shares for Georgia were calculated. In particular, $EMS^{Wine} = 0.57\%$ and $EMS^{Total} = 0.03\%$.

Rating of Competitive Edge (RCE)
RCE ratings are as follows:
AA = and (TSi>0; EMSij>EMSj)
-A = and (TSi<0; EMSij=EMSj)
A- = and (TSi>0; EMSij<EMSj),
where **'and'** is a logical function determining that both conditions must be in force at the same time[6].

As in our case $TS_{wine} > 0$ and $EMS^{Wine} > EMS^{Total}$, Georgian wine industry has ***AA*** RCE rating, which reflects high rate of competitive edge.

The core element of a competitiveness analysis is the analysis of resources use efficiency. In this study the value added per employee variable was used to measure the productivity of the wine industries across selected countries. As figure 15 suggests, the productivity of Georgian wine industry is lowest among selected countries. Though the productivity of Georgian wine industry is more or less comparable to productivity in other Eastern European countries like Bulgaria or Romania, it is substantially lower as compared to advanced wine producer countries as France, Italy, Spain and etc.

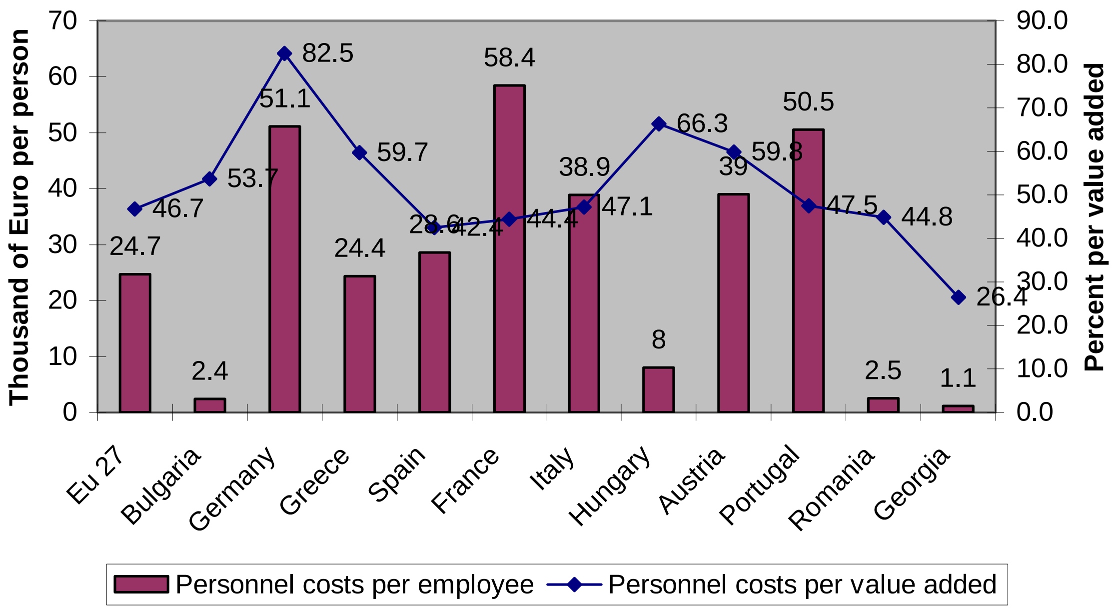
[6] Hannu Hernesniemi and Pekka Lindroos (2000) "Socio-Economic Impact of European Single Market on Lithuanian Companies," methodological manual, Support to European integration in Lithuania, SEIL Phare project.



Source: own calculations based on Eurostat data

Figure 15. Value added per employee in wine industry, selected countries, 2005.

Other indicators of productivity used in this study are: the personnel costs per person employed, which is estimated by dividing the total labour costs in the industry by the number of people employed and the personnel costs per value added produced, which can be considered as a proxy for the unit labour cost, i.e. it is the ratio between the total labour cost and the value added (figure 16).



Source: own calculations based on Eurostat data

Figure 16. Personnel costs per person employed and personnel costs per value added produced in Wine Industry, selected countries, 2005.

According to figure 16, France, Germany, Portugal, Italy are characterized by high levels of personnel costs per person employed, which are higher than average EU-27 level. In Georgia, Romania, Hungary and Bulgaria personnel expenses are much lover than on average for EU. The comparison data from figures 15 and 16 reveals a positive correlation between levels of personnel costs and productivity levels. This can be explained by the following fact: companies faced with high salary and/or social security costs have more strong incentives to invest in productivity-enhancing equipment in order to ensure their competitiveness with regard to low cost producers. In our case this correlation is quite strong for France, Italy, Portugal, Georgia, Romania, Hungary and Bulgaria.

Another series depicted at figure 16 is the personnel costs per value added produced. This variable provides a more accurate view of how countries are able to compete on the basis of their personnel costs. This variable, which is actually a gross indicator of profitability, allows assessing to which extent productivity does in fact offset the differences in personnel costs. As shown in figure 16 above, Georgia performs much better than EU countries presented here. Thus low level of productivity of the Georgian wine industry is compensated by even lower level of personnel costs as compared to advanced wine producers in Europe.

3. The Assement of the Impacts of the Free Trade Agreement with the European Union on the Georgian Wine Industry: Short-Term Perspective

The primarily goal of this study is to assess the potential impact of FTA between EU and Georgia on the competitiveness of Georgian wine industry. The EU market is a big market area, which represents an attractive opportunity to Georgian wine industry (especially after the Russian ban). Actually the two kinds of impacts on the Georgian wine industry associated with Georgia-EU FTA can be distinguished:

- Short-term impacts are those costs and benefits that are directly related to the immediate change from a introducing of FTA.
- Long-term effects are highly dependent on Georgian wine industry's capacity to cope with competitive pressures and market forces within the EU.

In this section the first issue is emphasized, while the long term effects will be discussed in the next chapter. Let's briefly discuss the history of Georgia-EU trade relationships.

3.1. Georgia and EU: Brief History of Economic and Trade Relationships.

The legal basis for EU-Georgia relations was laid by the Partnership and Cooperation Agreement (PCA), which was signed in 1996 and became effective from July 1, 1999. PCA defines bi-lateral most-favored-nations (MFN) treatment regime.

Another important step in enhancing of EU-Georgia relationship was introducing of Georgia to General System of Preference (GSP) scheme. The first GSP scheme valid until 2006 was applied to approximately 6,900 types of commodities. Out of them, 3 300 types of commodities (insensitive ones) fell under customs-free regime. Sensitive goods were taxed at 3.5% less than MFN tariff rate. Further, the new GSP+ scheme significantly increases Georgia's export opportunities. According to the status of "GSP+" beneficiary, Georgia has the right to import 7 200 types of products into the EC free of customs duties. Tariff *specific duties* on those same products have been entirely suspended, except for products for which Common Customs Tariff duties also include *ad valorem* duties. Nevertheless, the GSP application ratio is still low and the export products remain non-diversified. It should also be taken into consideration that the products that reach the EC market should meet high requirements, which hinders penetration of Georgian production. Thus, it is very important to improve system of standardization in Georgia so that its local production meets the EC market requirements.

Besides the GSP scheme, the European Community initiated in 2003 a new policy towards its new neighbors. Georgia joined European Neighborhood Policy (ENP) in 2004. ENP is an important support instrument to the integration process and promotes democracy, stability and welfare in EC neighboring countries. In 2006 European Neighborhood Policy Action Plan Implementation Plan (ENP APIP) was signed. APIP defines strategic cooperation goals and focuses on prospects of cooperation for the next five years, including strengthening of bi-lateral trade relations and discussing the possibility of placing free trade agreements.

Though Georgia enjoys tariff preferences granted by EU, it should be mentioned that GSP does not apply to such important export products for the country as fruits and vegetables, both fresh and tinned, certain alcoholic and non-alcoholic drinks, wine, others. Moreover, after some period of time, Georgia might not meet the criteria of a vulnerable country and will, thus, no longer enjoy GSP system concessions.

In this context possible establishment of a free trade agreement (FTA) between the EU and Georgia could be considered as a way for further enhancing of bilateral trade relations. Free trade agreement with EU is very important for Georgia, as it will facilitate attraction of investments and free access of Georgian products to the EU market (including products not covered by GSP+, such as wine).

3.2. The Regulatory Impact Assessment of Georgia-EU FTA.

The main focus of this chapter is the short-term implications of FTA between EU and Georgia for the Georgian wine industry. It should be mentioned that the FTA means not only tariff dismantling but also fulfillment of some provisions.

1) Title of the Regulatory Legal Act. All wine sold in EU must comply with the system of control that is laid down in Council Regulation (EC) 1493/99 of 17 May 1999 on the common organization of the market in wine[7]. The general rules of this regulation fall under the following headings:

- Production potential, including planting of vines;
- Oenological practices and processes, Description, Designation,
- Presentation and Protection;
- Market Mechanisms, including storage and distillation;
- Trade with Third Countries;
- Free circulation and release to the market.

The regulation also sets out the framework of labeling requirements for still and sparkling wines, semi sparkling wines and liqueur wines. The specific aspects of the wine regime are regulated by the following general rules:

- Commission Regulation 1607/00 - Quality Wines
- Commission Regulation 2729/00 - Controls in the Wine Sector
- Council Regulation 2392/86 - Community Vineyard Register
- Commission Regulation 1227/00 – Vines classification, production inventory
- Commission Regulation 884/01 - Accompanying Documents and Records
- Commission Regulation 1622/00 – Oenological practices
- Commission Regulation 753/02 – Labelling

2) Purpose and intended results of the legal act. Though all these rules and regulations must be fulfilled, two important provisions are usually emphasized during wine trade agreements with EU. These are: the reciprocal protection of names used for wine labeling and the mutual recognition of specific oenological practices.

Reciprocal protection of names. European wines have a long tradition of labeling based on geographic origin. In EU wine is identified by its geographic indication, and further the quality of wines is defined as being produced in specified regions. The specified region is designated by its geographical name, and wine produced in that region strictly adheres to well-defined quality parameters. The geographical indications are defined as indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin. The EU adopted wine labeling regulations which prohibits or requires strict regulation of the use of common terms on imported wine labels.

Oenological Practices. The EU, has also strict rules governing the fabrication and marketing of wine. The EU's rules on oenological practices deal not only with safety concerns, but also with process-based quality standards and fair treatment of growers in different regions. The EU's

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[7] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1999:179:0001:0084:EN:PDF

regulation sets out extensive rules on allowed practices, along with a complex set of derogations from those same rules based on weather or growing conditions in different wine-growing areas.

Thus to assess the short-term impact of Georgia-EU FTA one should take into account not only the effects of tariff abolishing but also cost of compliance with these specific provisions.

It should be mentioned that Georgia is already a member of International Organisation of Vine and Wine (OIV) and Georgian legislation, in particular the Law of Georgia on Vine and Wine (LGVW) has already all necessary provisions on the protection of geographical origins of names, labeling and oenological practices. These provisions of the LGVW generally comply with EU regulatory requirements. According the LGVW protection of specific conditions stipulated by the legislation of Georgia and requirements of other relevant normative acts governing viticulture and winemaking sector is supervised and enforced by the legal entity "Samtresti."

According to current agreement, to enter the EU wine market Georgian wine companies must have the corresponding VI-1 certificates from "Samtresti", which certifies the relevance of quality and characteristics of wine to geographical names used on the label; and proves the quality standards of the wine products. The tests required are: total alcoholic strength by volume; actual alcoholic strength by volume; total dry extract; total acidity; volatile acid content; citric acid content; total sulphur dioxide content. Actually this kind of tests are performed at wine laboratories that have recently been established in Georgia (Ltd. "Wine Laboratory" that was established under the German donor GTZ project; laboratory LLC "Multitest" and others). The certificates awarded by these laboratories are accepted by European partners. By the LGVW "Samtresti" has power to punish the companies who falsify their products, including withdrawal of licenses. Actually, certified Georgian wine products are accepted at EU market without any obstacles.

3) Options. The two regulatory options available for this situation are:

1. ***Deregulation of the wine industry*** through making relevant amendments in LGVW. These amendments will provide Georgian wine producers with greater flexibility at the costs of losing perspectives of FTA and expansion at EU wine market.
2. ***Do nothing*** – maintaining current regulatory framework and preserving perspectives of FTA.

We propose to take advantage of the ***second option*** to preserve current regulatory framework and opportunities of FTA. The benefits and costs of this option are discussed below.

4)Benefits. The main beneficiaries of the FTA adoption in Georgia will be wine producers, vine growers, and local customers.

First, the quality of wine produced in Georgia would enhance substantially under the regulation regime.

Second, by our estimations, based on experts' opinions, in short-term under the deep FTA (abolishing of tariffs and dismasting of non-tariff barriers like quotas) export volumes to EU will increase by 10 - 15% (other things being equal). Taking into account that the current annual exports value to EU wine market is approximately 3,000,000 EURO per annum, the extra export revenues from introducing FTA is supposed to range from 300,000 to 450,000 EURO per year. Obviously such increase in wine exports could hardly compensate the loss of Russian market. However, the long-term impact could be much more significant. If Georgian wine industry utilizes all its potential sources of competitive advantage (see next section for a detailed analysis of long-term impact) the export volume of wine to EU would increase several times and that will more or less compensate the loss of Russian market.

Third, the export expansion will in turn increase demand for grapes and raises incomes of farms involved in winegrowing.

Fourth, local customers will benefit from enhanced quality of domestic wine products and reduced prices of imported wines.

5) Costs. Main costs of compliance with EU wine market regulation are related to the functioning of "Samtresti" and costs of testing at the wine laboratory. These costs are already assumed by both Government and business sector and thereby the signing of FTA will cause no extra costs for them. In particular, in terms of compliance with EU regulations the Government mainly bears the costs of "Samtresti" maintenance – approximately 150,000 Euro per annum (only administrative expenses).

The business sector covers the costs for quality testing. The cost of testing at the wine laboratory ranges from 50 to 100 Euro per a sample from a consignment of wine, depending on the type of wine. As long as the number of consignments and types o wines could vary from time to time, it is very hard to give an exact estimate of such costs. However, by rough estimates the amount that Georgian wine producers spend totally on required tests could range from 200,000 to 300,000 EURO per annum. Also the amount of 1,400,000 EURO was spent by international donor to establish wine quality testing system in Georgia.

The main non-recurring costs of FTA are the lost opportunity for Georgian wine producers to use well known brand names as cognac and champagne. The amendments made in LGVW in compliance with EU regulations prohibits to use this names on the products produced in Georgia. The marketing losses for Georgian wine companies from this prohibition could hardly be estimated quantitatively. However, taking into account that the main market for these products was Russia and taking into account the recent ban of Georgian products at this market, one could conclude that these losses would not be significant.

6) Consultations with experts. In this study we took as a target not only to quantify the effects but to outline qualitative measures of the possible impacts of FTA and compliance with specific provisions on Georgian wine industry as well.

To get such estimations the interviews with wine industry experts and business leaders were conducted (see list of experts in Appendix I). The experts were asked to evaluate the possible impacts on the output and export levels, cost structure, unit costs of inputs, price level of products and etc. (see questionnaire in Appendix II). The results of this study are summarized in table 4.

According to expert opinions summarized in table 4, introducing of FTA will have negligible economic effect. This act practically will have no impact on price levels, level of innovations, and number of employees. Only small impacts are predicted for changes in output, export and import levels. The investment will increase moderately as more foreigners will be apt to invest in Georgian wine industry under FTA regime.

Table 4. The Assessment of the Short-Term Impacts of Georgia-EU FTA on Georgian Wine Industry.[8]

№	Question	Score
Economic impacts		
1	Changes in output level	2
2	Impact on price level (inflation rates)	1
3	Number of employees	1
4	Changes in export level	2
5	Opportunities to import	2
6	Innovations in wine industry sector	1
7	Investments level	3
Impact on enterprises		
8	Additional non-recuring costs	2
9	Changes in current expenses (costs)	2
10	Impact on production quality	3
11	Impact on the level of competitiveness	3
12	Opportunities to export	3
13	Opportunities for modernization	3
Societal Impact		
14	General level of life quality	1
15	Social differentiation	1
16	Uneven cost (benefits) for specific groups	1
17	Uneven cost (benefits) for specific regions	1
18	Impact on environment	1
19	Imapct on cultural environment	2
20	Impact on consumers' rights, health and protection	3
Institutional impact		
21	Need to establish new institutions	3
22	Need to reorganize institutional structure	3
23	Need for training of public servants	3
24	Need for additional expenditures at public institutions	3

Source: Expert opinions.

The FTA will have medium effects on individual enterprises. Additional non-recurring costs will be required to comply with oenological practices. Current expenses will rise, though not very drastically, mainly because of higher quality of inputs that will be required. FTA is assumed to have a positive impact on product quality, level of competitiveness, and opportunities to export, invest and opportunities for modernization.

The societal impact of FTA will be expressed mainly in improvement of consumers' rights, health and protection as wine producers would comply with specific provisions required by EU.

Introduction of FTA will demand medium changes in institutional structure. Here will be a need for expansion of operations of the institutions that ensure compliance with EU regulations ("Samtresti" and test laboratories). Need for training of public servants and additional expenses will also be present though at moderate level.

[8] Impact estimation: 5 [particularly strong impact]; 4 [strong impact]; 3 [medium impact]; 2 [weak impact]; 1 [no impact expected].

7) Summary. To summarize, in the short-term the direct impact of FTA will not be very strong according to expert opinions. The introduction of FTA does not assume any substantial extra costs for Georgian wine producers or the Government. Though the value of exports will increase after the introduction of FTA, this increase will not be enough to compensate the loss of Russian wine market in the short-run. The matter is that the major inhibiting factors for the expansion at EU wine market are not tariff or non-tariff barriers, or cost of compliance with specific regulations, but the factors that determine the competitiveness at the global markets. However, in the long-run the impact of FTA could be substantial. To capitalize on an FTA, Georgian wine industry must carefully identify and enhance factors that influence the long-term competitiveness of the industry at global market place. These factors will be discussed on the base of Porter's "diamond" model in the next section.

4. Competitiveness Analysis of the Georgian Wine Industry: Long-Term Perspective.

4.1. Porter's Competitiveness Model: Theoretical Perspective.

To get a clear understanding of the determinants of competitive advantage in particular industries some systematic approach is required. Porter's theory of the competitive advantage of nations provides a good theoretical framework for dealing with this issue. According to Porter the role of the nation in creating of competitive industries is in provision of "home base" for the businesses[9]. "The home base is the nation in which the essential competitive advantage of the enterprise are created and sustained…The home base will be the location of many of the most productive jobs, the core technologies, and the most advanced skills."[10] In the core of Porter's theory of national competitive advantage lies so-called "diamond model". This model incorporates the set of interrelated variables which determine ability of firms or industries to achieve sustainable competitive advantage globally. The four main determinants of the diamond are: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure and rivalry. Besides these factors there are also outside forces that shape the environment namely government, and chance (see figure 17). These competitive advantage factors are summarized below.

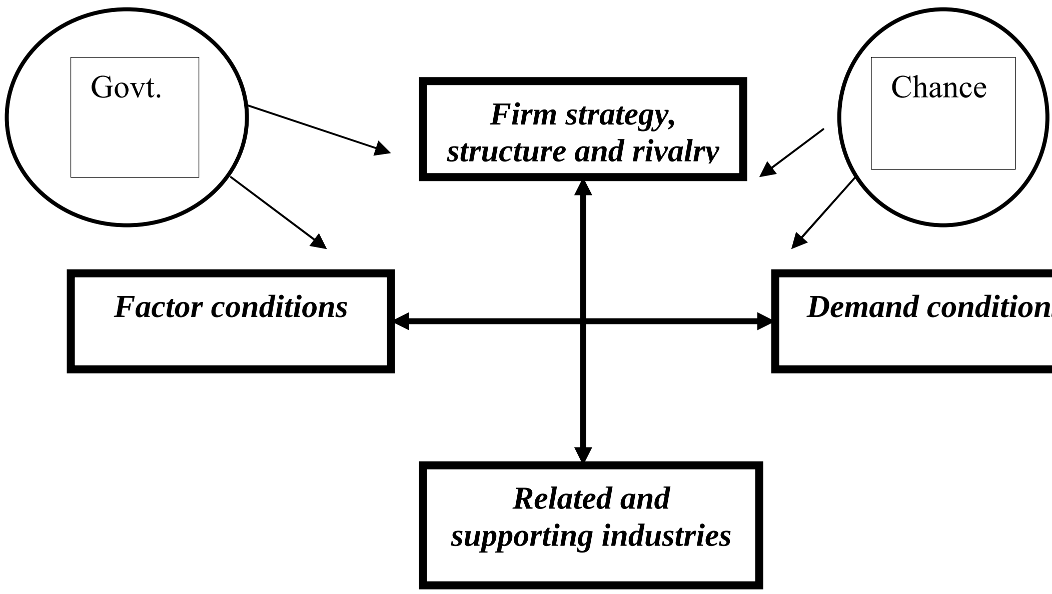

Figure 17. The Diamond model
Source: Porter, M.E. (1990), The Competitive Advantage of Nations, The Free Press, New York, NY, (p.127)

Factor conditions. Factor conditions represent the central concept of the traditional theory of international comparative advantage. However, Porter' contribution is that he analyzes "... in much greater detail the characteristics of factor production, the processes by which they are created, and their relationship to firm's competitiveness."[11] He groups factors into a number of broad categories: basic factors, which are inherited, and advanced factors, which have to be created by the country in question. *Basic factors* comprise physical resources (the abundance, quality, accessibility and cost of the nation's land, water and other resources, the climatic

[9] Porter, M.E. (1990), The Competitive Advantage of Nations, The Free Press, New York, NY.
[10] Porter, M.E. (1990), The Competitive Advantage of Nations, The Free Press, New York, NY, (p.19)
[11] Grant, R.M. (1991), "Porter's 'Competitive Advantage of Nations': An Assessment", *Strategic Management Journal*, vol. (12), №7 (October), (p.537)

conditions, nation's location and geographic size) and human resources (the quantity, skills and cost of personnel). *Advanced factors* are necessary to achieve higher order competitive advantage, and creating differentiated products and appropriate production technology. They comprise communications, infrastructure, sophisticated skills acquired through higher education, and advanced research facilities.

Demand conditions. "National diamond" model places particular emphasis on the role of "home base" demand as a driving force behind innovation and technological development. According to the model the impetus for individual firm to "upgrade" their competitive advantage is more when domestic buyers are sophisticated or demanding buyers for products or services and when the needs of home buyers anticipate those of other nations. Some other determinants of the "home base" demand that impact the competitive advantage of the nation are the size of the home demand, the number of independent buyers, and availability of buyers that are mobile or a multinational companies.

Related and supporting industries. The key concept in Porter's theory of national competitive advantage is the concept of cluster. Cluster represents industrial network of producers, customers, and competitors that increases specialization and promotes efficiency and competitiveness. According to Porter cluster has better chance to succeed in the global market place than the individual firm. In particular, the availability internationally competitive suppliers and related industries within a nation provides spillover benefits such as innovation, upgrading, information flow, and shared technology development for downstream industries. By having internationally competitive related industries and suppliers, individual company in a cluster can focus on its core competencies and rely on its suppliers for other activities and thus can achieve and sustain competitive advantage. Thus any particular industry can gain competitive advantage only if the has a competitive advantage in a number of related industries.

Firm strategy, structure and rivalry. This determinant of competitive advantage of the nation refers to "the conditions in the nation governing how companies are created, organized, and managed, as well as the nature of domestic rivalry."[12] The goals, strategies, and ways of organizing firms in industries vary widely among nations. According to Porter different management systems suit different industries. Thus national competitive advantage results from a good match between these choices and the sources of competitive advantage in a particular industry. The particular emphasis is placed on the rivalry among domestic companies which creates stimulus for them to improve and innovate and thus promotes the upgrading of competitive advantage.

Additional variables that can influence the national competitive advantage and represent in very important aspects that complete the "diamond" model are: government and chance.

Government. The government can influence the competitiveness and the national advantage at all levels in a number of ways: provide a sufficient supply of resources and especially of advanced factors needed for growth (investments in education or health); create pressure for upgrading and innovation (strict environmental restrictions, rigorous safety standards, etc.); promote competition and efficient functioning of the market system through implementing of antitrust policy and etc.

Chance. Chance events are usually outside control of the firms and include: pure inventions, breakthroughs in the basic technologies, wars, external political developments, and major shifts

[12] Porter, M.E. (1990), The Competitive Advantage of Nations, The Free Press, New York, NY, (p.107)

in foreign market demand. According to Porter chance has played an important role in shifting competitive advantage in many industries.

In the next section of this study we employ Porter's Diamond Model for analyzing the competitiveness of the Georgian wine industry cluster.

4.2. Competitiveness of Georgian Wine Industry: Porter Analysis.

The goal of this study is to determine the key success factors that provide a competitive advantage or that impact negatively on the competitiveness of the Georgian wine industry. In this paper the Porter's diamond model, described earlier, was used to explore the effect of the determinants of competitiveness on the competitive performance of the Georgian wine industry. According to Porter these determinants are: factor and demand conditions, supporting industries, industrial structure, rivalry and strategy, government and chance.[13]

To collect the information on the issue of interest, the series of in-depth interviews with business executives, government officials, representatives of business associations and international organizations, and independent wine experts were conducted (Appendix I). The responses on interviews reflect perceptions and informed judgments on competitiveness and situation in the wine industry by business executives, government officials, independent experts who are dealing with this issue.

The results of the study are presented in the table 5. In this table the ratings provided by decision-makers that were averaged and that reflect the impact of main determinants on the competitiveness of Georgian wine industry[14]

Table 5. Determinants of Competitiveness for the Georgian Wine Industry

Factor conditions	Rate	Demand conditions	Rate
Terroir	(2)	Information on local markets consumer orientations:	(1)
- Natural and Climatic Conditions	3	- Knowledgeable and demanding and buy innovative products	1
- Technology and vineyard management	1	- Actively seek out the latest products, technologies and processes	1
Labour	(1-2)	- In pace with rest of the world	1
- Cost of low-level skilled labour	3	- Concern over ethics and production methods	1
- Quality of low-level skilled labour	2	- Importance of environmental friendly products	1
- Availability of low-level skilled labour	3	Information on export markets consumer orientations:	(3)
- Cost of skilled labour	1	- Knowledgeable and demanding and buy innovative products	3
- Quality of skilled labour	1	- Actively seek out the latest products, technologies and processes	3
- Availability of skilled labour	1	- Concern over ethics and production methods	2-3
Capital	2	- Importance of environmental friendly products	3
Cost of doing business in Georgia	3	Local market size	1
Infrastructure	(2)	Export market size	3
- Cost	2	Local market growth	1

[13] Porter, M.E. (1990), The Competitive Advantage of Nations, The Free Press, New York, NY.
[14] The ratings was 1 for the factors that constraints competitiveness, 2 if the impact is moderate, and 3 if the determinant enhances competitiveness.

- Quality and availability	2	Export market growth	2
Location in terms of international trade	2		
Average score for factor conditions	**2**	***Average score for demand conditions***	**2**
Firm strategy, Industry structure and rivalry	**Rate**	**Supporting Industries**	**Rate**
Industry structure	(2)	International suppliers of materials, components, equipment and services	3
- Regulatory structure and standards in industry	2	Local suppliers of materials, components, equipment and services	1
- Flow of information from customer to company	(1-2)	Scientific research institutions	1
• Local	1	Educational institutions	1
• International	2	Training and skills development facilities	1
- Supply chain collaboration in product and process development	2	Grape suppliers	1
- Information flow from primary suppliers	2	Financial support	2
- Bargaining power of customers	2	Electricity supplies	2
Rivalry	(3)	Telecommunication firms	2
- Intense competition in the local market	3	Internet service providers	1
- Entry of new competitors	3	Specialised information technology services	1
- Substitutes of products and services	3	Technical information flow	1
Firm strategy	(1-2)	Road transport companies	2
- Unique products, services and processes	3	Air transport companies	2
- Production of affordable high quality products	1		
- Production of environmental friendly products	2		
- Strategy to employ quality technology	2		
- Investment in human resources	1		
- Continuous innovation	1		
- R&D spending	1		
Average score for firm strategy, industry structure and rivalry	**2**	***Average score for supporting industries***	**(1-2)**
Government	**Rate**	**Chance**	**Rate**
Administrative regulations	3	Cost of crime	1
Competence of the bureaucracy in the public sector	2	Developments in Caucasus	1
The tax system's impact on investment and risk-taking	3	Biotechnology	2
Impact of legal changes the past five years	3	Strong GEL	1
Environmental and biodiversity regulations	3	Fluctuations in the exchange rate	1
Trade policy	3		
Clarity on land reform policy	2		
Labour policy	3		
Macro-economic policy	2		

Clarity on business policy and codes	2		
Trust in the political support system	2		
The current political climate in Georgia	2		
Average score for government	**(2-3)**	***Average score for chance***	**1**

Factor Conditions

Each country possesses specific factor conditions that provide its comparative advantages. The interrelation among these factor conditions determines the competitiveness of the industry.

Among the factors influencing the competitiveness of the wine industry the terroir is considered as an important one. The concept of terroir reflects "…a definite and homogeneous territory endowed with a strong identity which is characterized by the whole of natural (soil and climate) and cultural (historical and social) resources."[15] The physical dimensions of Georgian terroir such as altitude, inclination, exposition towards the sun, geology, soil type and soil depth, and climate of a piece of land on which grapes are grown are excellent. Georgian wine grapes are unique to the region and the country of Georgia. These wine grapes are: Aleksandrouli, Chinuri, Chkhaveri, Dzvelshavi, Khikhvi, Kisi, Mtsvane, Mujuretuli, Oljaleshi, Tavkveri, Tsitska, Tsolikauri, Usaxelauri. Georgian wine producers are involved in the production of a specific terroir wine that could be the finest in the world with a distinctive and unique taste. However, this important source of competitive advantage is not utilized fully by Georgian wine industry. The matter is that terroir-wines are distinguished not only by the location where a wine has been produced but also by the process and the inputs used in its production. For instance, with the respect to the practices employed in wine and vineyard management, such as the choice of varieties and clones, spacing and directions of rows, use of fertilizers, pesticides and irrigation, pruning, defoliation, harvesting techniques, and some other production details Georgian wine industry lacks significantly[16]. These deficiencies limit the ability of the industry to obtain competitive advantage at global markets despite favorable natural conditions. Taking this into account the terroir factor receives the score of (2), which reflects its moderate impact on the industry's competitiveness.

Another factor of the wine industry's competitiveness to consider is the labour. In this study two types of labour are distinguished. Theses are: low-skilled and skilled labor force. While Georgia apparently has advantage in low-skilled labour both in terms of cost and availability, there is a substantial disadvantage with regard to availability, quality and cost of skilled labour. First of all there is a big lack of high-qualified wine technologists, vineyard managers, marketing specialists and etc. Actually the deficiency in skilled labour force is highly interrelated with poor vineyard management and inability to fully exploit Georgian terroir advantages. The average score of the impact of labour factor on the industry's competitiveness is (1-2), which assumes constrained or moderate effect.

Since November 2003 when the new government came to the power, considerable efforts have been made to combat corruption, enhance governance and improve the business environment in Georgia. These reforms received high assessments from international organizations. In particular, according to World Bank's Doing Business 2007, Georgia moved from 112 to 35-th position in 178-country ranking, receiving the status of the most improved country of the

[15] Ditter, Jean-Guillaume.(2005) "Reforming the French wine industry: Could clusters work?" Cahiers du CEREN, 13, pp. 39-54. (p.48)

[16] It should be mentioned that some Georgian wine companies employ advanced wine and vineyard management practices.

world[17]. Next year, according to World Bank's Doing Business 2008, Georgia has advanced to 18-th position. Georgian business environment during the last two years improved its position in the following areas: starting a business, dealing with licenses, employing workers, getting credit, protecting investors, enforcing contracts. Thus in terms of enhancing of competitiveness the cost of doing business in Georgia has significant positive effect.

Other factor conditions such as cost, quality and availability of infrastructure and capital, and location in terms of international trade according experts' opinion has only moderate impact on Georgian wine industry competitiveness.

Summarizing, Georgia has significant advantage in basic factors such as the climatic and soil conditions, availability of water and other resources, abundance and low cost of unskilled labour force and etc. Still, Georgia fails to achieve higher order competitive advantage due to serious lack in advanced factors: skilled labour force, advanced technologies and vineyard management practices, infrastructure. Therefore the factor conditions have only moderate impact on Georgian wine Industry's competitiveness (average score of 2).

Demand Conditions.
The local market consumer orientations have significant constraining effect on Georgian wine industry competitiveness as domestic consumers:

- are not knowledgeable and demanding and don't buy innovative products;
- don't actively seek out the latest products, technologies and processes;
- aren't in pace with rest of the world;
- don't concern over ethics and production methods;
- environmental friendly products are of little importance for them.

The local market size and growth in the local market are also constraining the competitiveness of the wine industry in Georgia. On the contrary, export market size and growth as well as export market consumers orientations have enhancing effect on the competitiveness of Georgian wine industry. Thus the average score of demand factors is 2.

Industry Structure, Rivalry, and Firm Strategy.
The Georgian wine industry structure defined by regulatory structure and standards in industry, flow of information from customer to company, supply chain collaboration in product and process development, information flow from primary suppliers, and bargaining power of customers has only moderate impact on the competitiveness.

The rivalry determined by intensity of competition in the local market, entry of new competitors, and the availability of substitutes of products and services enhances the competitiveness of Georgian wine industry.

Georgian wine companies' strategies generally (with some exceptions) don't rely on high investment level in human resources, the production of affordable high quality products, employment of quality technology, services and processes, the production of environmental friendly products, high expenses on R&D and continuous innovation. Still some companies implement strategy of the production of unique products. However, on average the strategy component constraints competitiveness of the industry.

[17] Doing Business 2007. How to reform. **www.doingbusiness.org** . This is recalculated value, initially Georgian rank was 37.

Supporting Industries.

The important source of competitive advantage, according to Porter, is the cooperation of producers from any particular industry with companies from supporting industries. Such network of cooperation is defined as cluster, which allows for increase of specialization and promotion of efficiency. The cluster is considered as an environment that enhances the competitiveness of the firms that belong to the cluster and that is not available to firms outside the cluster due to:

- increasing the productivity of constituent firms or industries;
- increasing their capacity for innovation and thus for productivity growth;
- stimulating new business formation that supports innovation and expands the cluster[18].

In this context the wine cluster usually represents a network of wine processing facilities (wineries), vine growers (vineyards), producers of fertilizers, pesticides, herbicides, grape harvesting and winemaking equipment, suppliers of irrigation technology, barrels, bottles, caps and corks, labels, providers of scientific research, education and training services, transport and communication service providers, governmental agencies.

The study revealed the fact not like wine cluster in other countries (Chile, Australia, California and etc.) Georgian wine industry relies heavily on the international suppliers of materials and components. For instance, such inputs as fertilizers, pesticides, herbicides, grape harvesting and winemaking equipment, irrigation technology, barrels, bottles, caps and corks, labels, are not produced domestically and are imported from abroad. Moreover, though there are special research institutes like the Institute of Winemaking and Winegrowing, and some educational institutions in Georgia, there impact on the efficiency of wine industry is very low, according to expert opinions. The more advanced companies prefer to train specialist and to get advanced knowledge and technologies from abroad. This partially explains the lack of Georgian wine industry in such advanced factors as skilled labour force, advanced technologies and vineyard management practices.

There is also a big problem in winegrowing industry. As a result of land privatization process, which started in the middle of 90-th approximately 4 million land parcels were distributed to 1 million households. The average size of agricultural holdings varied form 0.3 ha to 1.25 ha. The aim of this policy was to provide a basic safety net for the small farmers, ensuring food security to poor households with low incomes. However, efficiency of agricultural production of these households reduced substantially as the usage of fertilizers, special vehicles and equipment by small farms was negligible. So the typical grape suppliers in Georgia are small individual farms that are very inefficient and usually don't keep technologies of winegrowing. To secure the quality of gapes the winemaking companies have to integrate winegrowing facilities, and thus losing benefits of specialization and efficiency.

To summarize, the supporting industries have constraining effect on the competitiveness of Georgian wine industry.

Government.

The success of Georgia wine industry heavily relies on the Government's support and policy. According to expert opinions administrative regulations, tax system's impact on investment and risk taking, the impact of legal and political change the past five years, environmental and biodiversity regulations, trade policy, labour policy enhance Georgian wine industry competitiveness. The same time the competence of personnel in the public sector, clarity on business policy and codes, clarity on land reform and policy, macroeconomic policy, trust in the

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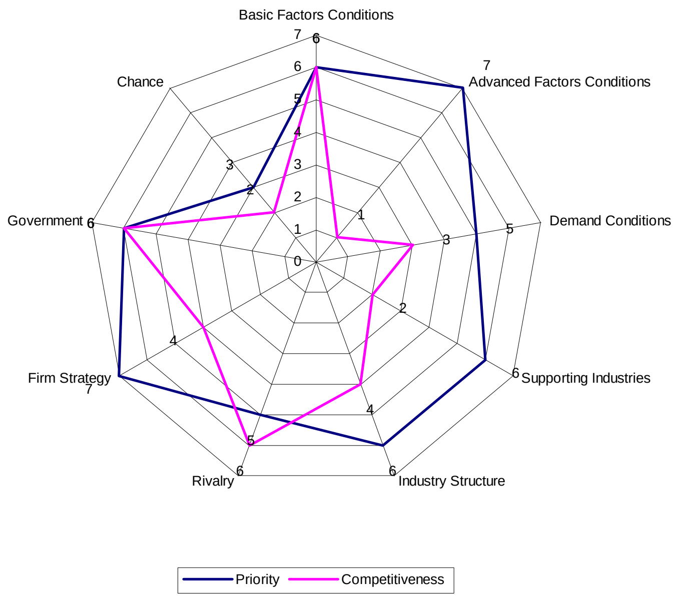
[18] Porter, Michael E. (2000) "Clusters and competition," in Gordon E. Clark, eds., *Oxford handbook of economic geography.* Oxford: Oxford University Press, pp. 197-220

political support systems, the current political climate have only moderate effect. Thus the average score for Government is (2-3).

<u>Chance</u>.

The cost of crime, development in Caucasus, the strong GEL and fluctuations in the exchange rate are considered to have a constraining impact on competitiveness of the Georgian wine industry. The same time developments in biotechnology are assumed to provide only moderate enhancement. Thus the wine industry is not well positioned yet to benefit from the chance factors.

Figure 18 summarizes the analysis of the competitiveness of Georgian wine industry through comparison of the determinants of competitiveness and priorities given to them by experts.



Source: own calculations based on the results of interviews

Figure 18. The priorities and determinants of competitiveness of the Georgian wine industry[19]

According to this figure, advanced factor conditions, firm's strategy and supporting industries are those high priority factors that must be improved in order to enhance Georgian wine industry competitiveness.

<u>4.3. Georgian wine industry: SWOT analysis</u>.

The Porter's "diamond" framework was employed in this study to assess the global competitiveness of the Georgian wine industry. Despite the advantages of this method in understanding of the overall competitiveness of the industry it lacks an analytical tool to evaluate the impact of each determinant on industry's competitive position[20]. To make the results of Porter's "diamond" framework suitable for systematic analysis of the effects of various

[19] The data in this figure represent the averaged estimation given by experts, where determinants of competitiveness and their priority are measured by 7 point interval scale.
Determinants of competitiveness: 1=negative impact; 7=positive impact on competitiveness.
Priority: 1=low priority; 7=high priority.

[20] Rugman A.M. and A. Verbeke (1993). "How to Operationalize Porter's Diamond of International Competitiveness," *The International Executive*, July/August., 35, 4, pp.283-299.

determinants on the industry's competitiveness and for elaboration of strategic recommendations we extended the framework to the well known SWOT model. The results of SWOT analysis of the Georgian wine industry are summarized in table 7.

Table 7. SWOT analysis: Georgian wine industry.

Strengths	**Weaknesses**
- Natural and climatic conditions - Cost and availability of low-level skilled labour - Low cost of doing business in Georgia - Ability to produce unique brands - Trade and labour policy - Attractiveness for foreign investors - High awareness and preferences for Georgian wines in CIS countries	- Poor technology and vineyard management - Lack of skilled labour - Non-demanding local customers - Lack of innovation - Small investments in R&D and human capital - Inefficiencies of grape suppliers - Humble performance of scientific and research institutions, and educational facilities - Low awareness on Georgian brands on EU and Global markets - Lowly marketing skills and capabilities - Poor firms' strategies

Opportunities	**Threats**
- Huge size and growth of export markets (EU, USA) - Deeper penetration to CIS markets - Introducing innovative products - Producing and promotion of unique brands - Producing and promotion of affordable high quality products	- Small local market size and growth - Falsification of known brands in CIS markets - Developments in Caucasus - Strong GEL -Fluctuations of exchange rates

Source: own estimations

The SWOT analysis of Georgian wine industry provides a good base for strategic implications and recommendations, which are discussed in the next section.

5. Policy Recommendations.

The possible FTA arrangement with the European Union opens wide and very attractive opportunities for Georgian wine producers at European markets. The exploitation of this opportunity gives a chance for Georgian wine industry to overcome the negative impact of the Russian ban and survive in the long-term. Still to exploit this opportunities wine producers must in short-term comply with EU regulatory requirements imposed on wine, and in the long-term ensure global competitiveness of the industry.

However, the direct or short-term impact of FTA will not be very strong according to expert opinions. The introduction of FTA does not assume any substantial extra costs for Georgian wine producers or the Government. Though the value of exports will increase after the introduction of FTA, this increase will not be enough to compensate the loss of Russian wine market. The matter is that the major inhibiting factors for the expansion at EU wine market are not tariff or non-tariff barriers, or cost of compliance with specific regulations, but the factors that determine the competitiveness at the global markets. To capitalize on an FTA, Georgian wine industry must carefully identify and enhance factors that influence the long-term competitiveness of the industry at global market place. Based on the Porter's "diamond" model and SWOT analysis, the following recommendations are elaborated to enhance global competitiveness of the Georgian wine industry in the long-run.

Factor conditions. To fully capitalize the excellent soil and climate conditions and take advantage from producing of terroir wines the practices employed in wine and vineyard management must be improved substantially. In this context the following measures are of very importance:

- Identification and registration of existing facilities, vineyards, types and clones of vines, composition of vineyard maps.
- Planning of vine planting across the country.
- Performing clone selection work.
- Introducing advanced of wine and vineyard technologies.

The success of the implementation of this strategy heavily relies on the availability of high-qualified specialist, such as wine and vineyard technologists; oenology experts, marketing specialist and on the knowledge gained from scientific research and experiments. As it was mentioned earlier Georgian wine industry lacks substantially such kind of specialists and adequate scientific knowledge. Thus other important measures that must be implemented in order to enhance factor conditions are:

- Training of high-qualified wine and vine specialists;
- Improving educational capacities.
- Supporting scientific and research activities.

Demand conditions. To ensure sustainable competitive advantage Georgian wine producers must invest heavily into establishment of market information and intelligence system. This system must provide firms with information on consumer perceptions, choices, preferences and their dynamics at global wine markets. Such knowledge would facilitate elaboration of successful marketing strategies and would help penetration of Georgian firms to EU and other global wine markets.

Industry Structure, Rivalry, and Firm Strategy. There are several important strategic directions for attaining sustainable competitive advantage at global wine market.

First, Georgian wine producers must provide world-class quality of the wine including key features as perceived by the target market, conformance to standards, consistency. Different types of wine falsification must be prevented.

Second, the differentiation strategy focused on creation of strong brand awareness, positive attitudes and preferences for Georgian wine must be implemented. The first stage of this strategy realization requires establishing of the identity of Georgian wine brand and making them recognizable at global markets.

Third, the productivity of wine producing must be increased substantially, through utilizing better, technologies, equipment, management processes as well, employing high-qualified specialists.

Fourth, implementation of above mentioned must be supported by continuous innovations, substantial investments in R&D, marketing activities and human capital, improved performance of scientific and research institutions.

Fifth, intense rivalry at domestic market must be ensured, to enhance competitive abilities of Georgian wine producers at global markets.

Supporting Industries. The inefficiency of grape suppliers is one of the key weaknesses that hamper implementation of high-quality strategy at global wine markets. To overcome this weakness, special support program with the aim to enhance efficiency of winegrowing farms must be elaborated. This program should involve support in such areas as mechanization, use of fertilizers and irrigation, vineyard management practices, organization and etc.

Government. The role of Government in promoting competitiveness of Georgian wine industry is crucial. The matter is that much of the activities mentioned above and required for successful performance of Georgian wine producers at global market have a spillover effect. Due to market failure problem, these necessary for the competitiveness of Georgian wine industry activities will be undersupplied. Thus the Government, besides its major role in setting of rules, regulations, policies and establishing of stable macroeconomic environment for the industry, must refrain from “laissez-faire”’ principle and pursue active industrial policy oriented on dynamic transformation of production structures. Implementation of such policy requires:

- Supporting for winegrowing farms in increasing their efficiency.
- Promotion of scientific and research activities;
- Supporting specialized educational capacities and knowledge development systems.
- Identification and registration of existing facilities, vineyards, types and clones of vines, composition of vineyard maps; planning of vine planting across the country; performing clone selection work; promoting advanced of wine and vineyard technologies[21].
- Providing quality and safety controls for wine production.
- Protection of Georgian wine names at global markets.
- Elaborate industrial strategy focused on stimulating and attracting investments in wine industry.
- Ensure sound implementation of industrial policy, which means providing strict monitoring of the performance of encouraged enterprises and imposition of discipline.

Implementation of above mentioned strategies will create necessary preconditions for the sustainable competitive advantage of Georgian wine industry at global markets in the long-run.

[21] Actually Ministry of Agriculture finances selection works aimed to replace low quality clone of vine by high quality one.

APPENDIX I. LIST OF EXPERTS

№	Name	Institution, Position	Contact
1	Samanishvili Giorgi	State Department of Vine and Wine "Samtrest", Oenologue Deputy Chaiman	378053
2	Mgaloblishvili Tornike	Ministry of Agriculture, Head of Department Cooperation with International Organizations and Projects Management	378005
3	Karaulashvili Archil	State Minister Office of European and Euro-Atlantic Integration, Head of Euro Integration Coordination Unit	923055
4	Eteria Emir	State Minister Office of European and Euro-Atlantic Integration, Chief Specialist	8-99-33-72-67
5	Japaridze Merab	Wine-expert, Member of Georgian Wine Producer Union	8-99-500566
6	Khetsuriani Shalva	Georgian Sommelier Association, Chairman	990693
7	Datiashvili Tengiz	Wine technologist, expert	386406
8	Ksovreli Nugzar	Ltd. Wine Laboratory, Director	540772
9	Salakaya Giorgi	"Badagoni", Commercial Director	936243
10	Kobelia Shota	"Teliani Group", Commercial Director	313246
11	Nachkebia Kristina	"Teliani Group", Sales and Marketing Manager	313246
12	Vardiashvili Amiran	"Tbilvino", Sales and Marketing Manager	653382

APPENDIX II. QUESTIONNAIRE

I. Impacts of FTA with EU

1.1. What are the main barriers now enter EU wine market?

1.2. Are there some advantages not to have FTA with the EU?

1.3. What are your expectations concerning effects to the exports of the industry?

1.4. What other advantages you expect?

1.5. What happens to the import competition?

1.6. What requirements (standards, rules etc.) must be satisfied in order to comply with deep FTA with the EU (harmonization effect)?

1.7. What are the costs of compliance with deep FTA requirements?

1.8. Specify recurring costs of harmonization?

1.9. Specify non-recurring costs of harmonization?

1.10. What are the benefits?

1.11. Please, assess the impact associated with compliance with FTA-related regulations. Please fill in a form (impact estimation: 5 [particularly strong impact]; 3 [medium impact]; 1 [no impact expected]):

№	Question	Score
Economic impacts		
1	Changes in output level	5-------3------1
2	Impact on price level (inflation rates)	5-------3------1
3	Number of employees	5-------3------1
4	Changes in export level	5-------3------1
5	Opportunities to import	5-------3------1
6	Innovations in wine industry sector	5-------3------1
7	Investments level	5-------3------1
Impact on enterprises		
8	Additional non-recuring costs	5-------3------1
9	Changes in current expenses (costs)	5-------3------1
10	Impact on production quality	5-------3------1
11	Impact on the level of competitiveness	5-------3------1
12	Opportunities to export	5-------3------1
13	Opportunities for modernization	5-------3------1
Societal Impact		
14	General level of life quality	5-------3------1
15	Social differentiation	5-------3------1
16	Uneven cost (benefits) for specific groups	5-------3------1
17	Uneven cost (benefits) for specific regions	5-------3------1
18	Impact on environment	5-------3------1
19	Imapct on cultural environment	5-------3------1

20	Impact on consumers' rights, health and protection	5-------3------1
Institutional impact		
21	Need to establish new institutions	5-------3------1
22	Need to reorganize institutional structure	5-------3------1
23	Need for training of public servants	5-------3------1
24	Need for additional expenditures at public institutions	5-------3------1

II. Role of public sector

2.1. Please, what should be the role of government and governmental bodies and local officials and institution in improving the competitiveness of your industry?

2.2.How should the government and governmental bodies and EU prepare your industry for the FTA?

III. Ratings

1. Please, rate the impact of the following variables on the competitiveness status of the wine industry in Georgia. These items should be rated in the following way: enhancing **(3)**, constraining **(1)** or a moderate **(2)** impact on competitiveness.

Factors	Rate
Factor conditions	
Labour	
- Cost of low-level skilled labour	
- Quality of low-level skilled labour	
- Availability of low-level skilled labour	
- Cost of skilled labour	
- Quality of skilled labour	
- Availability of skilled labour	
Cost of doing business in Georgia	
Availability of water	
Capital	
- Cost	
- Availability	
Climatic conditions the past three years	
Location in terms of international trade	
Technology	
- Cost	
- Quality	
- Availability	
Infrastructure	
- Cost	
- Quality and	
- Availability	
Average score for factor conditions	
Demand conditions	
Information on local markets consumer orientations:	
- Knowledgeable and demanding and buy innovative products	
- Actively seek out the latest products, technologies and processes	

- In pace with rest of the world	
- Concern over ethics and production methods	
- Importance of environmental friendly products	
Information on export markets consumer orientations:	
- Knowledgeable and demanding and buy innovative products	
- Actively seek out the latest products, technologies and processes	
- Concern over ethics and production methods	
- Importance of environmental friendly	
Products:	
-Local market size	
-Export market size	
-Local market growth	
-Export market growth	
Average score for demand conditions	
Industry structure	
- Regulatory structure and standards in industry	
- Flow of information from customer to company	
- Supply chain collaboration in product and process development	
- Information flow from primary suppliers	
- Bargaining power of customers	
Rivalry	
- Intense competition in the local market	
- Entry of new competitors	
- Substitutes of products and services	
- Difficulty to start a new business	
Firm strategy	
- Unique products, services and processes	
- Production of affordable high quality products	
- Production of environmental friendly products	
- Strategy to employ quality technology	
- Investment in human resources	
- Continuous innovation	
- R&D spending	
Average score for firm strategy, structure and rivalry	
Supporting industries	
International suppliers of materials, components, equipment and services	
- Availability	
- Quality	
- Sustainability	
Local suppliers of materials, components, equipment and services	
- Availability	
- Quality	
- Sustainability	
Financial support	
Scientific research institutions	
- Availability	
- Collaboration	
Electricity supplies	

Telecommunication firms	
Internet service providers	
Specialised information technology services	
Technical information flow	
Glassware suppliers	
Packaging material suppliers	
Road transport companies	
Air transport companies	
Training and skills development facilities	
Average score for supporting industries	
Government	
Administrative regulations	
Competence of the bureaucracy in the public sector	
The tax system's impact on investment and risk-taking	
Impact of legal changes the past five years	
Environmental and biodiversity regulations	
Trade policy	
Clarity on land reform policy	
Labour policy	
Macro-economic policy	
Clarity on business policy and codes	
Trust in the political support system	
The current political climate in Georgia	
Average score for government	

2. Please, rate the impact of the following determinants on the competitiveness and evaluate their priority for the wine industry in Georgia. These items should be rated in the following way: for the impact of determinants on competitiveness (1=negative impact on competitiveness;7=Positive impact on competitiveness); for priority (1=low priority; 7=high priority).

№	Factor	Impact	Priority
1	Factor conditions		
2	Demand conditions		
3	Supporting industries		
4	Firm strategy		
5	Rivalry		
6	Industry structure		
7	Government		
8	Chance		