‘A structural analysis of the Armenian Wine Industry: Elaboration of strategies for the domestic market’

Reviewer: Prof. Dr. habil. Jon H. Hanf  
Department of Wine and Beverage Business, Geisenheim University

Co-Reviewer: Prof. Dr. Rainer Kühl  
Institute for Agribusiness and Food Economics, Justus-Liebig-University Gießen

Written by: B.Sc. Linda Bitsch

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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD</td>
<td>Armenian Dram</td>
</tr>
<tr>
<td>CARD</td>
<td>Center for Agribusiness and Rural Development</td>
</tr>
<tr>
<td>CBI</td>
<td>Centre for the Promotion of Imports from developing countries</td>
</tr>
<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für internationale Zusammenarbeit</td>
</tr>
<tr>
<td>HA</td>
<td>Hectare</td>
</tr>
<tr>
<td>ICARE</td>
<td>International Center for Agribusiness Research and Education</td>
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<tr>
<td>MBV</td>
<td>Market Based View</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Objective

As many Caucasian countries, Armenia has a long-lasting history in wine making which was heavily influenced by the country’s membership within the Soviet Union until 1991. After the collapse of the Soviet Union, tremendous changes took place regarding land rights, privatization, new evolving markets due to the free market regulations and others. The wine industry still plays a major role within the Armenian agricultural sector. Until today, most of the studies analyzed the development of the brandy industry and to a lesser extent the development of the wine industry since the collapse of the Soviet Union. Most studies were in terms of production and (export) market potential with a focus on the competition in international brandy markets and not on the competition within the domestic wine market (KHACHATRAYAN, 2011; KHACHATRYAN and OPPEN, 1999). SCANNELL et al. (2002) showed the current state of the wine producing sector affecting the agricultural sector of Armenia leaving out the competition. The International Center for Agribusiness Research and Education (ICARE, 2014) recently surveyed about the situation of wine producing firms and grape growers taking into consideration the governmental influences and the educational system. They analyzed some minor parts of the domestic market, but not the industry competition, due to excluded parts of the industry supply chain. An additional agricultural survey from ICARE for AGRICISTRADE in 2015 gave small insights about the wine industry with focusing on production. The latest article of MARQRADT and HANF (2012) focused on foreign direct investments in the Armenian wine industry deriving in management concepts, but without analyzing the impacts on the competition within the industry.

As above-mentioned, within the last years there was no research that analyzed the competition within the domestic wine market of Armenia. It was either about the production state or about deriving implications for export and management strategies without considering impacts for the competitiveness of the domestic market. The purpose of this study is to fill this knowledge gap by conducting an explorative study about the Armenian wine industry, by using a qualitative research approach to make implications about the competition intensity, and to derive strategic implications for the domestic wine market.
The size of the empirical research enables to make strategic implications as the number of participants strives in the direction of a representative study, but as it is a qualitative research approach, a representative status is not completely given.

Table 1 Overview of selected interview partners

<table>
<thead>
<tr>
<th>Groups of the supply chain</th>
<th>Subgroups</th>
<th>Number of active companies</th>
<th>Numbers of attended companies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine producers</td>
<td></td>
<td>35¹</td>
<td>15</td>
<td>46 %</td>
</tr>
<tr>
<td></td>
<td>Barrel producer</td>
<td>3</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td></td>
<td>Bottle producer</td>
<td>2²</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td></td>
<td>Machinery/Agents</td>
<td>4</td>
<td>2</td>
<td>50 %</td>
</tr>
<tr>
<td>Suppliers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buyers</td>
<td>Restaurants / Hotels</td>
<td>Not obtainable</td>
<td>8</td>
<td>Not obtainable</td>
</tr>
<tr>
<td></td>
<td>Supermarkets</td>
<td>5</td>
<td>2</td>
<td>40 %</td>
</tr>
<tr>
<td></td>
<td>Wine Bars / shops</td>
<td>13</td>
<td>7</td>
<td>69 %</td>
</tr>
<tr>
<td>Other experts</td>
<td>Education</td>
<td>/</td>
<td>4</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>Politics</td>
<td>/</td>
<td>1</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>Foreign/related companies</td>
<td>/</td>
<td>2</td>
<td>/</td>
</tr>
</tbody>
</table>

(Based on own research)

1.2 Approach and Structure

At first, the overall situation of the Armenian agricultural sector up to the wine industry is presented including developments since the collapse of the Soviet Union. Based on Porter’s five forces concept, a new framework is developed. The empirical research substantiates for strategic implications on the competition intensity of the industry, taking into account the influence of all parts of the supply chain. Further deductions based on the strategic implications lead to concrete strategic recommendations for the domestic

¹ According to www.minagro.am and FARIA and VANNERON (2016) around 50 wine producing companies are active in the market. For both numbers no date or source was stated. The survey of ICARE in October 2014 and my own research for this study showed that around 35 companies are actively engaged in the market.

² One of the two producers has just ceased operation in early 2016.
market. The research ends up with a conclusion. For a clear understanding, the outline of this work is graphically presented in Figure 1.

**Figure 1 Structure of the study**
2 Armenia

Armenia’s long-lasting history of wine making is still present in the country. The wine industry always played a major role, as one of the most developed industries in the agricultural sector. The following section shortly displays the current state of the agricultural sector which is still of great importance. Within this part the transformation process after the collapse of the Soviet Union in 1991 until today is presented, as the consequences are still visible. This serves as a framework to depict the role of the wine industry within the sector. The last part is a detailed presentation of the wine industry which serves as the basis of the structural analysis.

2.1 Agricultural Sector and the Transformation Process

During the Soviet Union, Armenia’s focus on wine production was shifted from still wine to brandy production, eventuating in 80–90 % of grape production used for brandy. Other countries such as Georgia and Moldova specialized on still wine but not on fortified wines (KHACHTRYAN and OPPEN, 1999).

The combination of the earthquake in 1988 and the Nagorno-Karabakh conflict together with the collapse of the Soviet Union in 1991 caused a sharp rise in the level of poverty. In the early years after independence, people faced a high inflation, a decrease in incomes, a cut of social services and commodities such as energy and food supply (SCANNELL, 2002). With the newly formed family farms in the land privatization, a substantial number of work force shifted to the agricultural sector in order to ensure their subsistence and the food supply. This was the main coping strategy with post-transition for many families and households. Resulting in a doubling of employment in agriculture compared to pre-land reform (FAO 2012).

Today, the agricultural sector still plays a major role for the country. In 2007, 46.0 % of all employees worked in the agricultural field, whereas in 2015 only 35.8 % (379,000 people) did. The GDP was US$ 10,529 billion (2015) whereof agriculture constituted 19.2 % of value. This share fluctuates throughout the years due to unstable and seasonal variations of crops. Agriculture and food processing generate around one third of the
country’s GDP. These numbers impressively show the importance of agriculture for the country. For a better understanding of the agricultural structures, the transformation process is summarized in the ensuing paragraphs.

Gaining independence in 1991, further privatization was triggered by the land reform which was one of most comprehensive land reform programs in all former Soviet Union states. The majority of the 886 state-owned agricultural plants which accounted for 66% of the gross agricultural output, were divided and redistributed to farmers. Previously, farmers could decide to stick with the collective state enterprises or to join individual farming. Most of the farmers have chosen individual farming; therefore, most of the collective and state farms were dismantled (SCANNELL, 2002).

Until mid-1994 most of the agricultural land has been privatized. However, there were still some larger supply, storage, processing, and marketing firms remaining under state control which hampered the development of the sector for the three years following land privatization. By the end of 1995, many state-owned agricultural enterprises were privatized (FAO, 2012).

Problems occurred at the beginning of the transformation process and after land privatization, caused by the liberalization of prices and trade. Many farmers gained land – some in difficult accessible mountainous regions – they had no knowledge about farming and technology, and no or limited access to financial support. They neither had suitable, but oversized and outdated machinery and equipment nor water irrigation systems (FAO, 2012). Furthermore, the market structures and standards had been set up for big agricultural plants. All these factors forced the market to collapse, as they did not have the needed structure. Farmers were not able to use the potentials of the arable land thus average yields remained low.

The major institutional and privatization reforms, as well as trade and price liberalization had short and medium term effects, e.g. reductions in livestock numbers and in planting areas of cereals, fruits and vegetables or a cut in crop yields per hectare and fluctuations in the usage and efficiency of agricultural land (COCKS, 2003). Together, these problems

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3 In chapter 2.1 farmer means all the people cultivating any type of crops. From chapter 2.2 farmer is a synonym for grape grower.
induced a large reduction in agricultural production before starting recovery from 1993 onwards,

**Current situation**

Today, the total area of privatized agricultural area is 534,000 ha with almost 1.4 million land parcels. Almost 70% of Armenia’s area is agricultural land half of which are pastures. The arable land accounts for 22% of the agriculture land, but only one third can be used due to various factors such as irrigation problems, being not profitable or being too far located from populated areas (NSS, 2016). The Agricultural Census in 2014 showed, that around 360,000 farms with half of the farms are mixed agriculture. More than 60% of farms own only up to one hectare of land. Respectively, 39% own between one and ten hectares and only 1% of the farms own more than 10 hectares, resulting in an average farm size of 1.48 ha. The averagely largest farms are located in Shirak Marz (2.54 hectares/farm), while the smallest are found in the fertile, but over-populated Ararat Valley (0.72 hectares/farm) (NSS, 2014). Every farm has three to four parcels of land in different locations and for different uses: arable land; orchards; berry-fields; vineyards; hay fields; grassland; perennial; irrigated and non-irrigated. Since the privatization, farm structures remained small and medium sized as more subsistence farming (97%) then commercialized farming (3% of gross domestic product) in all parts of agriculture (ibid.). The small structures bear a huge disadvantage. Small and medium sized enterprises lose economies of scale and cannot compete with imports from other countries.

The structure of gross agricultural output in 2015 of main fields in descending orders are meat (20.4%), potatoes (11.5%), vegetables (11.2%), milk (11.0%), grain (9.0%) with grapes only having a share of 5.0%. Plant growing accounts for 61% of the gross agricultural output and animal breeding respectively for 39%. The gross crop output in thousand tons have more than doubled since 1990 due to higher yield per hectare (NSS, 2016; AVETISYAN, 2010). In detail, all crops increased in production volumes over the last three years, except for fruit berries which had a lower gross production in 2014. In 2015, the production has risen again. The higher yields are triggered by an improvement of cultivation methods by giving farmers access to fertilizers, getting more knowledge and the use of technology. The plantation areas of all crops grew since 1990 – for potatoes, vegetables, and melons it grew slightly, while production for vineyards, as well as fruit
and berries orchards, were stable over the last few years (NSS 2016, AVETISYAN, 2010). All types of agricultural machinery (tractors, harvesters, ploughs, cultivators etc.) are slowly increasing in available numbers of machines (NSS, 2016).

During the time of the Soviet Union, Armenia had large food processing plants which produced canned fruits, vegetables, and alcoholic beverages, including vodka and brandy. The volumes were big enough to reach self-sufficiency level and export to other Soviet members. After the independence, the food-processing industry declined heavily, but is booming again nowadays. Today agro-processing is the main employer in rural areas (WORLDBANK, 2016). Especially the export of agro-processed food has grown since 2004 until the financial crisis in Armenia in 2009. Starting from 2010 the exports recovered strongly, resulting in nearly US$ 69 million in 2013. Increasing categories are tobacco, alcoholic beverages, fruit, and vegetables. The share of alcoholic beverages has been the highest over ten years (2003-2013) (AGRICISTR, 2015). Statistics that are more recent are expected to be lower, due to the Russian ruble depreciation, as Russia still is the major export market (80 %) for Armenian agro-processed food. Most important trading partners are Russia, Ukraine, Belarus, Iran, Georgia, and the European Union (EU). On the one hand, agro-food exports are growing, while on the other hand agro-food imports are still more than double as high as the exports (ibid.).

The production and manufacturing of alcoholic beverages create the highest revenues compared to all the other agricultural production and processing. Sales of vodka, brandy, beer, and wine are contributing greatly to Armenia’s agro-food GDP.

2.2 Armenian Wine Industry

Armenia as one of the oldest wine producing countries in the world has a long history of wine making which is summarized in chapter 2.2.1. It offers a great variety of indigenous varieties, different soil compositions, and outstanding cultivation conditions for the grapes (chapter 2.2.2). In terms of wine trade, chapter 2.2.3 gives an insight on import and export of wine, brandy, and fruit wine. The last part analyzes the consumption which is important for the domestic market. Therefore, the import statistics are emphasized compared with the export figures.
2.2.1 History

The entire Caucasus region is known for the long history in grape growing and wine making – sometimes referred to as ‘the cradle of wine making’. In early times, Armenia was much larger than today. The old Armenia covered parts of east Turkey, Azerbaijan, and Georgia. According to National Geographic (OWEN, 2011), the world’s oldest winery, dating back 6,100 years, was found in 2011 within Armenian territory near the village Areni which lies in the heart of the Areni wine-growing area. Other archeological discoveries of the 7th century before Christ (B.C.) showed the use of sulfur. This seems to indicate a well-developed and popular wine production in early times. Another evidence dating back to the 10th century B.C. of irrigation systems, production tools, karas, as well as wine cellars were found during some cravings in the south-west of Yerevan. In these days wine was not only consumed, but also used for religious purposes. In conclusion, these findings lead to the suggestion that the Armenian wine production is as old as the country itself. Findings of the wild vines of Vitis Silvestris support the theory of the very old history (ROBINSON, 2007, p. 261).

Until the end of the 19th century, wide variations took place in Armenia’s grape growing and wine production, due to wars with Arabs, Turks, and Persians. Before World War I, the area of vines covered 9,200 ha. During the 1920s, private wineries were taken over by a newly founded cooperation called Ararat Wine Trust which established later as a grape processing network all over Russia and the Ukraine (ibid.). Slowly, the Armenian viticulture recovered. In 1940, already 16,300 ha were planted with vines again. The expansion of vineyards continued after World War II, especially state controlled specialized collectively used abandoned agricultural lands (ibid.).

During the Soviet and the communist era, the satellite countries were divided in order to focus on the production of some products. Therefore, Armenian wine production was shifted mainly to brandy production which led to a deep change in the Armenian wine culture. Other countries, such as Georgia and Moldova were focusing on wine production which preserved the wine culture within these countries.
The production area has gone through a tremendous decline after a very peak in 1985 with 35,000 ha. Especially the anti-alcohol campaign in 1985 initiated by Michail Gor-batschow had an enormous influence on the area until the collapse of the Soviet Union in 1991 (HUGH and ROBINSON, 2013, p. 45pp.). His goal was to improve the Soviet morale and to reduce the expenses and deaths due to harm of high consumption of alcohol. Many old vineyards were cut off or removed to reduce the production of alcoholic bever-ages (SCANNELL, 2002). During the Soviet-times, Armenia processed more than 200,000 tons of grapes mostly for brandy, wine, and sparkling wine. The major part of the production was consumed in Russia and the empire of the Soviet Union. In the post-Soviet time, the grape growing industry declined heavily and so did the wine sector (Figure 2). This was mainly caused by the anti-alcohol campaign and changes in land privatization. Other influencing factors were no replantation and a shifting to other crops. Problems of adaption to new emerging markets occurred, triggered by a lack of productivity, outdated machinery, and problems in bulk purchasing systems. Combined, these led to a sharp rise in terms of costs for wine cultivation (GASPARYAN, 2003; HUGH and ROBIN-SON, 2013, p. 48). Some producers discontinued their production completely or shifted to new industries. Since the early 1990s and 2000s, the wine sector slowly has recovered again in terms of production numbers, mainly because of an upswing in the brandy sector. Further information is given in chapter 2.2.2.
A huge range of different climatic conditions and various soil compositions shapes the Armenian landscape. The country is greatly diversified, with dry sub-tropic, Mediterranean, desert, semi-desert, mountain steppes, mixed forest, sub-alpine, and alpine vegetation zones. Only 28% of land is below 1,500 m altitude which states that Armenia is a mountainous land (SCANNELL, 2002). According to the mountainous topography and the weather conditions, the yields and the cultivation of crops and grapes are heavily dependent on water accessibility, fertile soils, and extreme weather conditions, such as droughts, hail, and frost in late spring and autumn. These climatic conditions lead to high amplitudes between day and night temperatures as well as between summer and winter. Peculiarly the extremely cold temperatures during wintertime endanger the vines, hence the producers use the ‘burying’ technique – they cover the stems to protect the vines from deadly frost damages. This technique is still often used (around 80%) (ibid.).

Various indigenous grape varieties are cultivated. The Armenian Scientific Research Institute of Viticulture Wine Making and Fruit claimed that over 800 indigenous and foreign varieties were existing. As a result of the land privatization many disappeared. HUGH
and ROBINSON (2013, p. 44) state that more than 400 different varieties for wine and table grapes are cultivated in Armenia today. Whereas SCANNELL (2002) says that around 40 varieties are used. Most important species for the red wine production are Areni, Hightonak, Kakhet, and Karmarahyut. For the white wine production the varieties Voskehat, Kangun, and Rkatsiteli are important.

The most common pruning systems are old-fashioned four-wired vertical trellis with high trunks (75 %), hedge systems (10 %), and middle stemmed fan system with a stem height of around 50 cm (10 %). There are still many outdated materials, such as cement posts, old wires and machinery, used which makes it impossible to use the cheaper option of machine harvest. Almost 90 % of all vines are still ungrafted Vitis Vinifera vines. A huge problem for Vitis Vinifera can be found in the Tavush region and starting in Armavir. Phylloxera sp. a small insect sucks on parts of this vine and destroys it (FARIA and VANNERON, 2016). The potential of a fast spreading damage is high, due to the perfect living conditions for the insects. Today, around 10 % of the Vitis Vinifera scions are grafted on to phylloxera-resistant rootstocks, mainly in the northern winegrowing regions (ibid.). The used grape growing equipment, technologies for spraying, irrigation, cultivation, fertilizers etc. are mainly traditional.

The main viticulture areas are located in the South of the country mainly in mountainous regions. The planted area of vineyards started slowly to grow after the collapse of the Soviet Union. Since 1996, the area declined to 15,700 ha in 2006. Afterwards, it has been slightly growing until 2008. In 2009, Armenia was hit by the financial crisis which slowed down the expanding process. From 2010 until today, the vineyard territory is relatively stable. Whereas the productivity was sharply increasing from 1990 to 2006 by more than 2.5 times. Due to the financial crisis, it slowed down as well. However, after recovering it steadily grew until 2015 (Figure 3).
In 2015 the total vineyard area (brandy + wine + table grapes) was about 17,300 ha, of which about 2,500 ha are used for wine making (OE2, 35-35). More than 70 % of the whole vine area are located in two regions: Aravir (41 % - 7,120 ha) and Ararat (30 % - 5,113 ha). Smaller ones are Aragatsotn (10 %), Tavush (8 %), Vayots Dzor (6 %), Yerevan (4 %), Syunik (1 %), Kotayk (1 %), and Lori (0.4 %) (NSS, 2016). The five first named regions have expanded in the last three years. Only the Kotayk region diminished and the loss was more than half of the area.

The average size of plots lies between 0.5 and 0.8 ha and is cultivated by thousands of small rural households. There are a few bigger plants with 30–40 ha which belong to business persons who are not working in the wine industry or are not producing wine (FARIA and VANNERON, 2016). The grapes are mainly sold to specialized wine making plants. The sizes in wine making plants differ widely. An increasing number of these plants set up their own vineyards to assure high quality grapes and stable quantity cultivating the self-chosen varieties which is not guaranteed by the supply of small farmers on the market. Some plants only purchase grapes without possessing a vineyard area of their own. Generally, grape growers and wine producers are still not able to deliver a stable quality and quantity (HANF et al., 2016).

Producer plants mostly purchase the grapes of small rural households with small average sizes of grape growing units. The dependency on grape sale for small-scale farmers is still high, as it is the main source of rural income. According to HANF et al. (2016), grape
buying agreements are mainly based on quantity and trust, not including quality criteria. The current state are mostly informal, oral one-year agreements usually before harvest, but mostly repetitive during the years. The case of not observed contracts was also found in Armenia and lead to mistrust (MARQUARDT and HANF, 2012). Training of farmers is not common, but financial aid and checks of the vineyard before harvest are common practice.

The Yerevan Brandy Company – bought by Pernod Ricard in 1998 shortly after the collapse of the Soviet Union – was the first company introducing control contracts. These contracts included taking samples of grapes to meet certain defined quality criteria, dictating time of harvest, sugar level, ripeness levels, setting standards e.g. for pesticides, fertilizer and implementing trainings e.g. how to prune for farmers fostering overall the quality production. If farmers do not meet the quality criteria or if they are found to be cheating, the grapes are returned (MARQUARDT and HANF, 2012). A few companies followed the role model of Yerevan Brandy Company establishing contractual agreements as well.

Prices for a kilogram of grapes fluctuate from year to year depending on the national harvest quantity, grape variety and to a lower extent on quality. The two leading wine producing companies Vedi Alco and Armenia Wine set prices right before harvest (HANF et al., 2016). Price decision is focused on the volume, not on quality. There are no payments of higher prices for high quality produce. In 2015, the prices for Areni grapes ranged between 190 up to 250 Armenian Dram (AMD) per kilogram (0,48 €) and for other varieties between 120 to 150 AMD per kilogram (0,23 to 0,29 €) (FARIA and VAN-NERON, 2016).

In general, the production costs of producing grapes are relatively high due to high costs of setting up vineyards and the production itself. According to the FAO (2009), planting a new vineyard in Armenia costs almost the same as in Europe. On the one hand, all the materials have to be imported and the soils have to be freed from stones manually. Every work step has to be done by hand and the high irrigation costs are reasons for that. Planting one hectare of vineyards is estimated to cost US$ 28,000–32,000 in Armenia, US$ 28,000–32,000.

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4 Calculated with the exchange rate from the 30.03.2017 – one euro corresponds to 519,2600 AMD according to http://finanzen.handelsblatt.com/devisen.
28,000–35,000 in Europe and US$ 7,800–10,000 in Georgia. Due to these high production costs, grape growers, to earn as much as possible, favor high yields (HANF et al, 2016).

The production in 2015 was about 6.6 million liters of wine. ROBINSON (1999, p. 98) determined that only 10% of the production was for grape wine and 90% respectively was used for brandy. FARIA and VANNERON (2016) on the contrary, stated that almost 15 to 20% are used for grape wine nowadays. An ongoing trend since 1990 is the increasing productivity which especially grew within the last ten years by 40% to an average productivity of 17.9 tons/ha (NSS, 2016).

The entire wine industry incorporates over 35 companies; therefrom 30 were founded in the last 10 years. 50% of these in the last 5 years. There is a good case to suggest that more wine making companies will be founded (FARIA and VANNERON, 2016). In general, there were many investments from within and outside of the country (diaspora mainly) into new companies. Hence, also into new technology and the modernization of processes to improve wine quality and profitability.

Additionally to wine, most companies produce other alcoholic products such as cider, fruit wines, sparkling wine or brandy. In 2015 wine production was distributed 60% grape wine, 30% cider and fruit wine, and 10% sparkling wine. Grape wine production included around 80% white wine and only 20% red wine divided into 90% still wine and 10% sparkling wine.

### 2.2.3 Trade and Consumption

In Armenia 2012, the per capita consumption of vodka (5.6 liters) exceeds easily the capita consumption of wine (2.1 liters) and beer (4.4 liters) (AVENUE CONSULTING GROUP, 2015).

The consumption in Armenia was unstable in the last few years. A peak in 2005 with 3.0 liters per capita was followed by the financial crisis and a drop to 1.5 liters per capita. Until 2012, the consumption rose to 2.1 liters per capita again. Comparing the Armenian per capita consumption with other former Soviet countries with a similar history, the volume of wine drunk per capita is clearly smaller (Figure 4). Considering the influence of
the Soviet Union to Armenia’s wine production structure, changing it from wine production to brandy production, the wine drinking culture was tremendously changed. Nevertheless, the consumption patterns are marginally positive, due to a change in consumption culture. Since 2011, several wine bars and specialized retailers have started business. Further the range of wines available – imported and domestic wines – have increased remarkably in supermarkets and restaurants. More recent and reliable data for changes in trading and consumption patterns could not be found, as there is a lack of available data on the domestic market.

Figure 4 Annual per capita consumption of wine in various countries in 2012.  
(Based upon OIV, 2016)

In the last eight years, the total share of exported grape wine increased drastically by almost 10 %, taking into consideration that during the same period the production volume also increased by 40 %. In 2009, around 31 % of the production was exported, whereas in 2015 almost half (47 %) of the production has left the country.

The main share in 2015 in exports referred to grape wine with 56 % (including 6 % sparkling wine). 44 % referred to cider and fruit wines. The positively developed export numbers are triggered by both categories. On the contrary, the monetary situation in exports is different. Ciders and fruit wines increased more slowly over the years in terms of values than grape wine exports. In 2015, both categories lost in export share in terms of quantity.
(-26 %) and value (-34 %) due to the Russian ruble depreciation\(^5\) which caused a sharp decline in demand on the Russian market (Figure 5).

![Figure 5 Export quantity of grape wine and cider and fruit wines in millions of liters from 2006 to 2015.](image)

(Based upon UN COMTRADE, 2015)

The main export countries in 2015 for grape wine, in descending order: Russia (74 %), United States of America (USA) (5 %), EU (6 %), and others (11 %). Over the last decade, the Russian and American share slowly decreased. Therefore, exports to the EU especially Germany and Lithuania are increasing, even doubling in value terms. Exports to other countries such as China and Israel are marginally increasing. A change in export pattern is noticeably in the shares of red and white wine. In 2006, only 7 % of white wine was exported, accounting for 9 % in value. The trend totally changed and in 2015 it shifted to one-third (31 %) of export share causing 26 % of value (NSS, 2016).

The export prices were steadily increasing until 2012 except for 2007. Since 2012, the average price for one liter of exported Armenian wine declined to US$ 2.7 per liter in 2015 (Figure 6). The import quantity had a strong increase (3.6 times) from 170,000 liters in 2006 to 626,000 liters in 2011.

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\(^5\) Main factors for the Russian ruble depreciation were decline of global oil prices, changes in gold and gas prices, Russian interest rate, development of stock market and development of the USD exchange rate. Additionally, influenced by global political occurrences such as the Crimea conflict.
After 2011, the import quantity was strongly shrinking to 292,000 liters, probably caused by developments on the local market (Figure 7). The newly established wineries improved the quality and reputation of local wines. Additionally, the newly founded wine bars were supporting the local producers and creating awareness of domestically produced good quality wines. In 2015, imported wines had a share of the domestic market of 9%. Main import countries are France and Italy covering 60% of imports followed by Spain, Chile, USA, and some others. Imported wines are in general more expensive (~50%) with 9.00 € than locally produced wines with 6.20 €. This works for red wine, while white wines have a price difference from only 30% most of the times.

In conclusion, the positive consumption and export figures combined with a decreasing quantity of import wine creates a market potential on the domestic market for local producers.
3 Conceptualization of a Framework based on Porter’s five forces

In the following chapter, the theoretical background of the study is outlined. Porter’s five forces concept provides the possibility to analyze the industry conditions based on external factors, deducing the intensity of competition and creating strategic implications for established or future companies within the industry. His concept is mostly used to analyze the position of a single firm in the industry to find suitable strategies. The aim is to find and gain a competitive advantage to be successful in this industry. In this research, the analysis is focused on the entire industry and not on a single firm, leaving out the three generic strategies developed by PORTER (2004) which are used to find a suitable position for single firms within the industry. A framework based on the five forces is developed – each force is applied to the Armenian wine industry based on chapter 2. Defining an industry is a broadly discussed topic. For PORTER (2004) it is not relevant where to draw the boundaries of an industry, it is more important to cover all sources of (potential) competition. Nevertheless, in the focus of the analysis are the wine producing companies in Armenia. In the following paragraphs, the expected peculiarity of influence of each of the five forces – based on the secondary research of the Armenian wine industry – is worked out. This allows concluding research expectations which will be analyzed in the empirical part of this study. The last chapter serves as a summary of the research expectations.

3.1 Research Framework of 5 Forces in Armenia

The empirical research of this work is not able to analyze the competition intensity directly. Out of this purpose a framework based upon Porter’s five forces is developed. The first level are the external influencing factors of each force. These factors and their peculiarity are the object of the empirical study of the research. The second level of the framework are implications about the strengths of each force grounded on the empirical findings in level one. These five derived implications together will allow further implications about the competition intensity of the entire Armenian wine industry. The whole framework forms the basis for strategic implications for the domestic market.
The ensuing paragraphs present the research expectations about the external factors. Each force with its associated factors – based on the literature discussed earlier – are applied to the Armenian wine industry. It is important to state that not every influencing factor named by Porter can be applied for every industry analysis. If some factors do not apply to the Armenian wine industry, these factors will be left out. For every factor the expected degree of influence on the respective force is given. The abbreviation before the research expectation is explained in the chapter 3.4 further down.

**Threat of new entrants**

In the Armenian wine industry, the influence of governmental or market regulations is small. Until today, no official wine law is executed. Only some basic safety and health regulations – ‘Code of Good Practices’ – are obtained, but without examination and enforcement, with one exception. The import of *Vitis Vinifera* is restricted, due to high risks of *phylloxera* spread (NSS, 2016; MARQUARDT and HANF, 2016). Property rights do exist, some wine producers use trademark productions. In summary:

*NE1: Legal/administrative entry barriers do not exist.*

Structural entry barriers can occur from the supply or demand side. At first, the entry barriers regarding the supply-side are presented, followed by the demand side.

To enter the Armenian wine industry capital requirement, e.g. sunk costs are necessary. Costs arise to buy machinery and equipment. However, there is the opportunity to rent facilities and equipment of existing producers which lowers the sunk costs. In a short time, many wineries entered the industry which indicates that the capital requirements are not too high (FARIA and VANNERON, 2016; ICARE, 2014). The costs will increase if additional vineyards are bought or newly planted. The cost for setting up a vineyard are high and it needs at least three years until the first harvest takes place to generate profits.

*NE2: New entrants face small necessary sunk costs creating a low entry barrier.*

Switching costs in the Armenian wine industry can occur by switching to other grape growers which can induce new costs for new contracting, new potential trainings, investments for other varieties, new potential machinery, and higher transportation costs if dis-
tance is longer. A switch to other grape suppliers can lead to different qualities than before. Overall, the costs to change the grape supplier is relatively small. Many grape growers have similar and small production structures (small land parcels leading to small harvest quantities) originating from the privatization after the Soviet Union. Mainly oral agreements are used (MARQUARDT and HANF, 2012) and no new contracting costs arise.

*NE3: New entrants face small switching costs to other grape suppliers creating a low entry barrier.*

A switch to other suppliers such as producers of glass bottles, fining and additive agents, barrels, machinery, cork suppliers, etc. is more difficult, since only a small number of suppliers operate on the market and each of them with their own brands (products with different characteristics, prices and maintenance services).

*NE4: New entrants face medium switching costs to other suppliers creating a medium entry barrier.*

Switching costs to the production of other products, such as raisins, brandy, or juice are high, because a different equipment and different varieties are needed.

*NE5: New entrants face high switching costs to other productions creating a high exit barrier.*

Economies of scale apply to the Armenian wine industry as to every other wine industry. An increase in production volume can utilize technology and machinery, and it is possible to deliver to distribution channels which require larger scales (e.g. supermarkets or big retailers in export). Furthermore, a larger production decreases marketing costs and can generate specialization advantages.

*NE6: New entrants face a small threat of economies of scale creating a low entry barrier.*

During the Soviet era, large-scale machinery was used. This machinery is still used performing at very low costs, as capital allowances are finished (FARIA and VANNERON, 2016; WORLD BANK, 2015). New investment costs are limited as long as the machine runs, resulting in low production costs, enabling low, but still profitable market prices for
these producers. For new entrants and progressive producers these low production costs destroy the market prices, since they cannot compete with this low production costs to generate profits. On the contrary, the last years showed that many new producers managed to enter (FARIA and VANNERON, 2016; ICARE, 2014).

**NE7: New entrants face a small threat of not matching the production costs creating a low entry barrier.**

Economies of scope can be used for tangible assets as machinery and equipment and for intangible assets such as brand names, expertise, and distribution channels. In Armenia, the utilization of the wine technology and storage is partly possible by producing wine, fruit wine, fruit vodka, brandy, or table grapes together. The impact is stronger for work force and machinery in viticulture which could be utilized by an increasing area of vines useful for all wine-related products. Up to now, the joint production of brandy, grape and fruit wine, and to a lower extent of fruit vodka is very common.

**NE8: New entrants face a medium threat of economies of scope creating a medium entry barrier.**

Economies of vertical integration can occur when wine producers integrate backwards into the grape production to secure grape quality and grape varieties. Another possibility can be to integrate into the import of supplies such as machinery, fining agents, etc. FARIA and VANNERON (2016) show that more and more wineries plant their own vineyards.

**NE9: New entrants face a medium threat of economies of vertical integration creating a medium barrier of entry.**

Cost disadvantages independent of scale are true for established and protected brands in the wine industry. Established firms have advantages in (learning) experience to market and distributing wine. An advantage could be that they already have contact with high quality grape producers securing their supply. It is expected that new producers can still manage to overcome the experience, especially with the rising market demand. Recently, many companies successfully entered the market.
NE10: New entrants face a small threat of cost disadvantages independent of scale creating a low entry barrier.

Access to distribution channels in Armenia is completely open. The rising consumption is taking new entrants in exchange for mainly imported wines (NSS, 2016; FARIA and VANNERON, 2016).

NE11: New entrants face a low threat of not accessing distribution channels, creating no entry barrier.

To put it concisely, the structural supply side entry barriers for new entrants remain low. Now the influencing factors on entry barriers of the demand side are checked.

Product differentiation in the Armenian wine industry is still possible regarding quality stability and branding. Other product characteristics such as wine color, variety, sugar level, region, styles, etc. are imitable.

NE12: New entrants face a threat of product differentiation, in terms of quality stability creating a low entry barrier.

Customer loyalty has increased, but until today it is of no importance. Wine culture has started to develop and the group of wine drinkers is growing. There is a rising need for new products to explore which the established firms cannot satisfy.

NE13: New entrants face no threat of customer loyalty creating low entry barrier.

In short, the structural entry barriers for the demand side remain very low or almost do not exist. A summarized assessment states in general low entry barriers for newly entering firms. This together with the growing market potential of Armenian wine in the domestic market creates an attractive and profitable profile of the industry for new entrants.

Industry rivalry

The Armenian wine industry has around 35⁶ or 50⁷ wine producing companies, of which only six large-scale wine producers dominate the industry (ICARE, 2014; FARIA and

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⁶ According to the survey of ICARE in October 2014, around 35 companies actively participate in the market.
⁷ According to www.minagro.am and FARIA and VANNERON (2016), around 50 companies are participating in the market. For both numbers no date and source was stated.
VANNERON, 2016). Every firm is acting transparently for the others on the market, except for the many small-scale producers (households) in rural areas, producing generally one or two barrels. For this study, these small-scale producers are excluded from the analysis, due to their very limited quantities and small influence on the market. Their production is mainly consumed in private.

IR1: Industry rivalry is low, because the industry is small and a few large companies are leading the market.

The positive market developments of a growing quantity of producers imply a steady growth of the industry. This generally leads to low competition, because expansion striving firms gain easily market share. Many Armenian wine producers have high strategic stakes, but there is no need to sacrifice profitability.

IR2: Industry rivalry is low, because the fast growth of the industry satisfies expanding firms.

Wine is a product which can have high storage costs depending on the market demand. The crisis with the biggest export market for Armenian producers – the Russian market – triggered by the Russian ruble depreciation, resulted in lower sales for the producers. Firms had still full capacities right before the following harvest, resulting in a surplus which was solved by price-cuttings. These tremendous price-cuttings were an exception, but they can still occur.

IR3: Industry rivalry is medium, because external factors (e.g. crisis) can induce high storage costs and lead to price cuttings.

A differentiation is possible by branding. Other characteristics, such as variety, origin and vintage are important for the customers, but imitable (HOFFMANN and STUMM, 2007). In Armenia, differences between qualities are still huge with consumers perceiving it. Switching costs for consumers do not exist. This is similar to companies which have very low costs to strive for new wine consumers.

IR4: Industry rivalry is low, because brands can be established and quality still differentiates.
Switching costs for customers do almost not exist. Companies who strive for new wine customers have low costs as the wine consumption is growing and reach of customers is focused on Yerevan (FARIA and VANNERON, 2016).

IR5: Industry rivalry is high, because switching costs for customers are low.

Different kind of exit barriers appear in the wine industry. The specialized technology and equipment cannot easily be liquidized and they bear high sunk costs.

IR6: Established firms face a threat of high sunk costs creating a high exit barrier.

Many grape growers (small-scale farming) want to leave the industry, but their fear losing time and money in between the uprooting of the vines and the planting and harvesting of a new crop, prevent the exit. For many families, grapes are still the main source of rural income, resulting in the fact that inappropriate farmers do not/cannot leave the industry. Some farmers cannot leave the industry, as there are limited job alternatives to secure income. Social restrictions are a huge impacting factor. Out of this reason, the supply of grapes stays on a level of excess capacity, leading to low prices for all farmers.

IR7: Established grape growers face a threat of income lack creating a high exit barrier.

Capacity augmented in large increments is not yet a topic in the Armenian wine industry, because such tremendous changes in scale in a wine industry would need at least three to four years to grow the vines and grapes. Diversification of competitors within the industry is also not a huge rivalry-influencing factor. Many firms have different products in their portfolio. The majority of the mother firms are related to the alcoholic beverage sector.

In brief, the exit barriers for companies and farmers are high. The lack of alternatives for both parties force established players to stay in the market, even if it is unprofitable. In the Armenian wine industry, the entry barriers are low and the exit barriers are high, resulting in a low and risky profitability based on these expectations. The expected industry rivalry is low.

Threat of substitutes

In wine industries, strong substitutes are other alcoholic beverages, with a low to medium alcohol content such as beer, wine related drinks and cocktails. In Armenia, beer can be
a substitute for wine, while beer consumption is overall declining. Other substitutes of alcoholic beverages are spirits and brandy which are decreasing as well. Imported wines are considered a substitute for locally produced wines. The market share of imported wine declined (NSS, 2016).

*SUB1: The threat of substitutes of all alcoholic categories is low.*

The switching costs for consumers are very low, as the substitutes are available in all distribution channels to similar prices.

*SUB2: The threat of consumers switching to substitutes is high*

New product developments of substitute products in alcoholic beverages are very likely. According to JERNIGAN (2008), globalization leads to a fast spread of innovations and product developments in the alcoholic sector. Good examples are the ‘ready-to-drink’ flavored alcoholic beverages which spread globally in a very short time.

*SUB3: The threat of substitutes concerning new product development is high.*

In short, the threat of substitutes is medium. New developments and the low switching costs create attractive alternatives for consumers.

**Bargaining powers of buyers**

In a wine industry, there are three different buyer groups. Firstly, the wineries/cooperatives buying grapes/juice/wine, bottles, corks, labels, machinery, technology, etc. Secondly, retailers exist buying wine and/or final products. Thirdly, final consumers who purchase only final products for consumption. The group of wineries in Armenia is slightly growing from year to year (FARIA and VANNREON, 2016) improving their bargaining situation. Grape growers are numerous and mainly small-scale farmers with small producing units. This implies that the purchased quantities of the producers in relation to the entire production of the farmers is large.

*B1: The bargaining power for producers buying grapes is high, because many grape growers exist and the purchased volume is – in relation to the production quantity of the grape supplier – large.*
The input factor grapes represent almost one fifth of the whole production costs for wineries. The grapes are a substantial part of costs which induce intensive negotiations (ibid.).

**B2: The bargaining power of producers is high, because grapes are a substantial part of the costs and negotiations are intensive.**

Two companies set prices without transparency, focusing on quantity not quality. Rural farmers and grape growers lack the information of grape prices paid to other farmers. Additionally, they do not live in cities, lacking the knowledge of final prices. To a certain extent, they can follow-up bottle prices sold in Armenia. In contrast, they cannot retrace bottle prices for export. In the end, most of the grape growers do not know how much value is generated until the final product is sold. It results in high information asymmetries for grape growers.

**B3: The bargaining power for producers is high, because grape suppliers have high information asymmetries.**

Furthermore, larger wine producers (in volume) have the financial resources to threat the grape growers with a backward integration increasing the bargain power.

**B4: The bargaining power for producers is high, because they can threat grape suppliers with a backward integration.**

Discussing the situation of suppliers except for grapes, only a few concentrated companies are operating on the market, changing the situation for the wine producers.

**B5: The bargaining power for wine producers buying equipment and inputs for producing final products is low, because not many suppliers are in the market.**

There is no price transparency. In addition, they do not use collusive behavior respectively implicit arrangements in terms of margins and delivery terms. No active industry organizations could be found.

**B6: The bargaining power for all retailers is high, because wine producers have high information asymmetries.**
If it comes to wine producers selling to retailers, the number of buyers is small. Retailers can be wholesalers, supermarkets, specialized retailers, hotels, restaurants, cafés (from now on shortly Ho-Re-Ca) and wine bars. With regard to the supermarkets, there are only five big players on the market at the moment with Carrefour, Yerevan City, SAS, Parma and Nor Zovq. Other retailers are numerous and increasing. The number of wine producers is medium according to FARIA and VANNERON (2016). 35 companies operate on the market, but they do not collaborate.

*B7: The bargaining power for all retailers is high, because many wine producers are on the market.*

The switching costs to other wine producers is easy and cheap, as transportation costs and contracting costs are nearly the same for all wine producers.

*B8: The bargaining power for all retailers is high, because switching costs to other products are low.*

Final consumers can switch easily between products, since all wines imported and domestic wines are offered at similar prices in all ranges using the same distribution channels.

*B9: The bargaining power for final consumers is high, because switching costs are low.*

In brief, the bargaining power for grape buyers and retailers is high. On the contrary, only wine producing companies have a low bargaining power when dealing with suppliers except for grape suppliers.

**Bargaining powers of suppliers**

The wine industry has different suppliers, such as glass bottles, barrels, tanks, corks, screw caps, labels, cardboards, fining, and additives, technology and machinery producers. The Armenian wine industry is relatively small with almost 1,500 ha of vines used by around 35 companies for wine making. The equipment for brandy is partly useful for wine making. The produced quantity in relation to established wine countries in Europe is very small. Therefore, supplier for wine industries do not see the need to set up sales force in Armenia, as sales numbers are too small. For that reason, almost all the equipment
has to be imported to Armenia. Some bigger wineries import on their own. Only three registered companies organize the import at the moment. Substitutes are not available.

**S1:** *The bargaining power for all suppliers (except grape growers) is high, because the number of suppliers is small.*

**S2:** *The bargaining power for all suppliers (except grape growers) is high, because they are almost no substitutes available.*

Within the country a single bottle producer, some smaller barrel producers, and printing companies exist with limited product portfolio compared to other established wine countries. These firms are too small to threat with a forward integration. As stated many grape farmers are very small and do not have the financial resources to threat with a forward integration. Overall, all supplier groups cannot threat with a forward integration.

**S3:** *The bargaining power for suppliers is low, because they cannot threat with a forward integration.*

Instead, the threat of buyers to integrate backward is believably, as they can manage the import themselves.

**S4:** *The bargaining power for all suppliers is medium, because buyers can threat with a backward integration.*

All suppliers, except for grape suppliers have the option for high margins due to lack of competition, arising switching costs, differentiation, relevance to wine producers.

**S5:** *The bargaining power for suppliers of technology and machinery is high, because the products are highly differentiated, relevant and represent an important resource.*

The situation for grape growers is the opposite of other suppliers in the market. Many grape growers, but only a few buyers exist. That fact makes a switch to other buyers difficult.

**S6:** *The bargaining power for the grape suppliers is low, because only a few grape buyers exist in the market.*
The switching costs for wine producing companies are low, because grape suppliers are mainly not protected by contracts. Normally, agreements are made orally for one year only (HANF et al., 2016). Additionally, high transactions costs arise, as a frequent business relationship is missing.

**S7:** *The bargaining power for grape suppliers is low, because they do not have protection by a contract.*

The prices are not bargained – the wine producers set them. Grape growers are dependent on sale as this is the main rural income source.

**S8:** *The bargaining power for grape suppliers is low, because wine producing firms set the prices.*

Wine producing firms are big and work with many small-scale farmers, having low switching costs due to the huge number of available grape suppliers and their small supplied quantities. The produced excess capacity lowers the bargain power for grape suppliers.

**S9:** *The bargaining power for grape suppliers is low, because the selling quantities are low.*

There is no collaboration to make wine producers bargain about prices. Grape growers are price takers. A huge problem is the asymmetric information. Grape growers do not know the prices (no price transparency) as transactions are not visible and they do not collaborate.

**S10:** *The bargaining power for grape suppliers is low, because they do not collaborate and there is no price transparency (high asymmetric information).*

If farmers liked to earn more money, they would have to wait until a contract with the leading and progressive firms is signed. If this is not possible, the only chance to increase profit is by cheating on quantity. A way of cheating would be, for example, adding water to the harvest or irrigating before the harvest to achieve more weight, even though it is not allowed by agreement. This behavior is called *ex post opportunism.*
S11: The bargaining power for grape suppliers is low, forcing farmers to behave opportunistically to achieve more income.

Wine producers have transaction costs to prepare, conclude, monitor, enforce, and establish contracts. Due to the expected opportunist behavior, the companies have to give incentives or have to control more often, increasing the agency costs.

S12: The bargaining power is medium, because wine producers need higher agency costs.

For a few grape growers cultivating and selling international or rare varieties is an advantage. On the one hand, they can offer small capacities of highly demanded inputs. On the other hand, the special varieties can be seen as a kind of asset specificity. These varieties are only useful in wine making. If these grape growers have no fixed relationships with buyer, they fear a huge risk of not selling their grapes.

S13: The bargaining power of some grape suppliers is medium, because the grape varieties are differentiated, relevant, and represent an important resource.

The situation for wine producers supplying the retailers is difficult. There are no official or implicit margins – every producer has the margins, he/she is able to negotiate. Wine producers have no knowledge about margins of competitors. Asymmetric information is the case.

S14: The bargaining power for wine suppliers is low, because they do not collaborate and there is no price transparency.

In short, all suppliers except for grape growers, have a high bargaining power.

3.2 Research Expectations

Porter’s five forces have been applied to the Armenian wine industry, based on the secondary research. It revealed a huge number of expectations which will be part of the empirical analysis. Table 2 to Table 6 summarize each force and the underlying factors which are influence the manifestation. The tables show the abbreviation consisting of the type of force and a consecutive number. The second column shows the key words, which are followed by the expected peculiarity in the third column.
Threat of new entrants

Table 2 Research expectations – New entrants

<table>
<thead>
<tr>
<th>Factor abbreviation</th>
<th>Key words</th>
<th>Peculiarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE1</td>
<td>Legal/administrative regulations</td>
<td>No entry barrier</td>
</tr>
<tr>
<td>NE2</td>
<td>Sunk costs</td>
<td>Low entry barrier</td>
</tr>
<tr>
<td>NE3</td>
<td>Switching costs grape suppliers</td>
<td>Low entry barrier</td>
</tr>
<tr>
<td>NE4</td>
<td>Switching costs other suppliers</td>
<td>Medium entry barrier</td>
</tr>
<tr>
<td>NE5</td>
<td>Switching costs other productions</td>
<td>High exit barrier</td>
</tr>
<tr>
<td>NE6</td>
<td>Economies in scale</td>
<td>Low entry barrier</td>
</tr>
<tr>
<td>NE7</td>
<td>Soviet machinery</td>
<td>Low entry barrier</td>
</tr>
<tr>
<td>NE8</td>
<td>Economies of scope</td>
<td>Medium entry barrier</td>
</tr>
<tr>
<td>NE9</td>
<td>Economies of vertical integration</td>
<td>Medium entry barrier</td>
</tr>
<tr>
<td>NE10</td>
<td>cost disadvantages independent of scale</td>
<td>Low entry barrier</td>
</tr>
<tr>
<td>NE11</td>
<td>distribution channels</td>
<td>no entry barrier</td>
</tr>
<tr>
<td>NE12</td>
<td>product differentiation</td>
<td>Low entry barrier</td>
</tr>
<tr>
<td>NE13</td>
<td>customer loyalty</td>
<td>Low entry barrier</td>
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</tbody>
</table>

(Based on own research)

Industry rivalry

Table 3 Research expectations – Industry rivalry

<table>
<thead>
<tr>
<th>Factor abbreviation</th>
<th>Key words</th>
<th>Peculiarity</th>
</tr>
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<tbody>
<tr>
<td>IR1</td>
<td>Few large companies</td>
<td>Low rivalry</td>
</tr>
<tr>
<td>IR2</td>
<td>Industry growth</td>
<td>Low rivalry</td>
</tr>
<tr>
<td>IR3</td>
<td>Storage costs</td>
<td>High rivalry</td>
</tr>
<tr>
<td>IR4</td>
<td>Differentiation</td>
<td>Low rivalry</td>
</tr>
<tr>
<td>IR5</td>
<td>Switching costs</td>
<td>Low rivalry</td>
</tr>
<tr>
<td>IR6</td>
<td>Sunk costs</td>
<td>High exit barrier</td>
</tr>
<tr>
<td>IR7</td>
<td>Lack of income</td>
<td>High exit barrier</td>
</tr>
</tbody>
</table>

(Based on own research)

Pressure of substitutes

Table 4 Research expectations – Substitutes

<table>
<thead>
<tr>
<th>Factor abbreviation</th>
<th>Key words</th>
<th>Peculiarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUB1</td>
<td>Alcoholic categories</td>
<td>Low threat</td>
</tr>
<tr>
<td>SUB2</td>
<td>Switching costs</td>
<td>High threat</td>
</tr>
<tr>
<td>SUB3</td>
<td>New product development</td>
<td>High threat</td>
</tr>
</tbody>
</table>

(Based on own research)
**Bargaining power of buyers**

Table 5 Research expectations – Buyers

<table>
<thead>
<tr>
<th>Factor abbreviation</th>
<th>Key words</th>
<th>Peculiarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1 wine producers</td>
<td>Many grape growers and purchased volume</td>
<td>High power</td>
</tr>
<tr>
<td>B2 wine producers</td>
<td>Substantial part of costs</td>
<td>High power</td>
</tr>
<tr>
<td>B3 wine producers</td>
<td>Information asymmetries</td>
<td>High power</td>
</tr>
<tr>
<td>B4 wine producers</td>
<td>Backward integration</td>
<td>High power</td>
</tr>
<tr>
<td>B5 wine producers</td>
<td>Few other suppliers</td>
<td>Low power</td>
</tr>
<tr>
<td>B6 retailers</td>
<td>Many wine producers</td>
<td>High power</td>
</tr>
<tr>
<td>B7 retailers</td>
<td>Information asymmetries</td>
<td>High power</td>
</tr>
<tr>
<td>B8 retailers</td>
<td>Switching costs</td>
<td>High power</td>
</tr>
<tr>
<td>B9 final consumers</td>
<td>Switching costs</td>
<td>High power</td>
</tr>
</tbody>
</table>

(Based on own research)

**Bargaining power of suppliers**

Table 6 Research expectations – Suppliers

<table>
<thead>
<tr>
<th>Factor abbreviation</th>
<th>Key words</th>
<th>Peculiarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1 all suppliers except grapes</td>
<td>Number of suppliers</td>
<td>High power</td>
</tr>
<tr>
<td>S2 all suppliers except grapes</td>
<td>No substitutes</td>
<td>High power</td>
</tr>
<tr>
<td>S3 all suppliers except grapes</td>
<td>Forward integration</td>
<td>Low power</td>
</tr>
<tr>
<td>S4 all suppliers except grapes</td>
<td>Backward integration</td>
<td>Medium power</td>
</tr>
<tr>
<td>S5 all suppliers except grapes</td>
<td>Differentiation</td>
<td>High power</td>
</tr>
<tr>
<td>S6 grape supplier</td>
<td>Few buyers</td>
<td>Low power</td>
</tr>
<tr>
<td>S7 grape supplier</td>
<td>Switching costs</td>
<td>Low power</td>
</tr>
<tr>
<td>S8 grape supplier</td>
<td>Set prices</td>
<td>Low power</td>
</tr>
<tr>
<td>S9 grape supplier</td>
<td>Quantities are low</td>
<td>Low power</td>
</tr>
<tr>
<td>S10 grape supplier</td>
<td>Asymmetric information</td>
<td>Low power</td>
</tr>
<tr>
<td>S11 grape supplier</td>
<td><em>Opportunism</em></td>
<td>Low power</td>
</tr>
<tr>
<td>S12 grape supplier</td>
<td>Higher agency costs</td>
<td>Medium power</td>
</tr>
<tr>
<td>S13 grape supplier</td>
<td>Special varieties</td>
<td>Medium power</td>
</tr>
<tr>
<td>S14 final consumer</td>
<td>Switching costs</td>
<td>High power</td>
</tr>
</tbody>
</table>

(Based on own research)
4 Research Methodology

The chosen research design and methods are presented and justified with regard to the aim of the structural analysis of the Armenian wine industry in the following chapter. The applied research methodology is used to analyze the first level of the developed framework in chapter 3.1 as the basis for further implications. The collection of the secondary surveys, presented in chapter 2.2, is taken into account for the deductions within the developed framework to work out the competitiveness of the industry.

4.1 Research Design

There are three main research approaches available: explorative studies, descriptive studies, and causal studies. As presented in chapter 2 there is limited knowledge about the Armenian wine industry. Therefore, an exploratory nature for research approach is fitting. An explorative analysis is aiming for first deep insights into a specified research problem, if there is no possibility to formulate precise hypotheses (ALTOBELLI, 2007). Typical survey procedures are field research, such as qualitative observations, and interview techniques, or a case study analysis together with benchmarking. Secondary surveys are always included. Further on, the focus of this research is on field research using a qualitative approach by carrying out expert interviews.

Quantitative research targets for data collection which can be statistically analyzed. Qualitative research on the contrary is mostly done by face-to-face interviews with the goal of collecting data which cannot or can only partly captured by quantitative research. Nevertheless, quantitative and qualitative research are no contradictions; they are both part of the research process (MAYRING, 2002, p. 19). Field research as part of qualitative research, tries to understand and analyze the research topic by participating and interacting within the research environment. For this purpose some conditions have to be fulfilled which are all fulfilled for this research (FRIEDRICHS, 1973 in MAYRING, 2002):

- The field has to be accessible for the researcher.
- The researcher needs a function within the field.
• The researcher has to be prepared to be part of the process and at the same time to maintain distance for objective research.
• The research topic has to be ethically justified, as the researcher’s aim should be to help and not to observe, spy, and voyeur.

4.1.1 Research Methods

There are several types of interview methods which can be used in a field research. According to ALTOBELLI (2007, p. 35 pp.), the different types are characterized by:

• kind of the communication: personal face-to-face, telephone survey, online;
• degree of structure (structured, semi-structured, unstructured);
• individual or group interviews;
• interview frequency;
• research topic contains one or several research fields.

For this study, the approach of a face-to-face, semi-structured individual interview was conducted. The advantages of a face-to-face interview were having the possibility of making use of comprehension questions as not all interviewees were native English speakers. The answers were longer and more detailed, since the interview atmosphere was relaxed and trustful. Additionally, a better recording of interviews and inquiries of the researcher for in-depth knowledge were possible. Furthermore, the cost and time were not an issue. Individual interviews had the advantage to avoid socially desired answers in front of other group members. Every interviewee had the same chance to speak up, there was no group pressure or dynamic and every opinion was considered. The semi-structured approach ensured to ask about the same topics to have different opinions on the same topic, to adapt the questions to the different fields of expert knowledge related to the interviewees and to guide and remind the interviewer of important topics.

In general, the classification of interviews is difficult, as many forms and variants exist which sometimes share the same name but expressing different meanings or vice versa. In methodological interview approaches the degree of listening and structuring the interview by the researcher are the distinctive features of interview forms (e.g. problem-centered interview; narrative interview, etc.). This research was carried out with expert interviews. Expert interviews are not seen as a methodological approach of interviews,
since only the target group of ‘interviewees’ is the main distinctive feature (KRUSE, 2015; BOGNER et al., 2014). Regarding to BOGNER and MENZ (2005), there are three different types of expert interviews: exploratory expert interviews, systematic expert interviews, and theory-gaining expert interviews. The experts themselves are not the object of the investigation – they act more like informants delivering information about the investigated topic (BOGNER et al., 2009). For this approach, the exploratory expert interview was suitable. The following aspects are important and were realized: gaining empirical information; using a semi-structured interview guide as a framework; focusing on the interviewee’s knowledge; the researcher listens more; only interrupts to ask more in depth.

BRITANNICA ENCYCLOPEDIA (2011) defines an expert as ‘[...] strictly, skilled, or one who has special knowledge [...]’. In the qualitative research literature many varying definitions for experts are given. In this research, the definition follows BOGNER et al. (2009, p. 54 pp.): ‘An expert has technical, process and interpretative knowledge that refers to a specific field of action, by virtue of the fact that the expert acts in a relevant way (for example, in a particular organisational field or the expert’s own professional area). In this respect, expert knowledge consists not only of systematised, reflexively accessible knowledge relating to a specialised subject or field, but also has to a considerable extent the character of practical or action knowledge, which incorporates a range of quite disparate maxims for action, individual rules of decision, collective orientations, and patterns of social interpretation. [...] As the expert’s knowledge has an effect on practice, it structures the conditions of action of other actors in the expert’s field in a relevant way.’

Experts are people with specific knowledge and experience in a clearly delimited professional field. For this study, the interviewees are actively working within the wine industry, such as grape or wine producers, suppliers for wine making process, distributors (restaurants, wine bars, special retailers, supermarkets), or in closely related fields which can heavily influence the industry, e.g. politics, education, actively involved foreign help organizations like the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ), Center for Agribusiness and Rural Development (CARD), Centre for the Promotion of Imports from developing countries (CBI) etc.
The interviewees were not chosen randomly, but on purpose, due to time and travel costs. Not every single wine-growing area have been covered. It was deliberately chosen in the sense of taking into account different business models, including all parts of the supply chain, regarding language skills, by selecting all the big producers, because they have big influence on the grape procurement market. By a totally random sampling, only some big producers, some business models or not many English-speaking interviews could have been captured.

4.1.2 Interview Guide

Every group, such as wine producers, buyers, suppliers, and the experts from other functions within the industry have their own adapted guidelines focusing on the specific knowledge of each expert. In general, the structure is always the same referring to the five forces. As an example, the questions for wine producers are presented in detail below. The guidelines for all groups are presented in the appendix (A1 to A4). The guidelines for the single experts are left out due to anonymity reasons. It is clearly stated that these questions were guidelines. For deeper understanding, the interviewer used the option for queries and detail questions.

Every interview was opened up with a general and non-emotional question, to get the conversation started, to ease the atmosphere, to take away the inhibition, and to give self-confidence to the interviewee (ALTOBELLI, 2007, p. 87). The first bundle of questions asked the interviewees about their position in the company and the business model. This was followed by questions about the product portfolio, prices, and how business operations such as contracts, delivery terms, etc. are organized. Production size, varieties, regions and the scope of products were important for wine producers. The next question referred to whether wine producers cultivate their own grapes or if they buy. If they buy-in, the grape buying process was surveyed more in detail, regarding the type of agreement, durations, prices, quantities, grape qualities, special requirements, regulations etc. Additionally, details about multiple location strategies as a distribution of risk were questioned. This can play a role for wine producers related to extreme weather conditions such as hail, frost, droughts, or to the fact that some varieties do only grow in some regions.
The second bundle of questions aimed at the relationships with suppliers focusing on the organization of the acquisition process, origin of input, differences in quality, prices, etc. compared to Europe. In general, the intention was to check on the current situation of competition between the suppliers. The group of grape buyers was not particularly surveyed. The questions referred to the origin of the products (local or import) and the number of suppliers. If the wine producers organized their own import, the reasons were asked for.

The third part dealt with the relation between producers and buyers. The goal was to find out more about typical clients and wine drinkers. Different client groups such as final consumers, retailers, or export businesses were covered. It included questions about different distribution channels, prices, margins, delivery terms, etc. of each buyer group. Additionally, the stakes for each distribution channel ascertained. The characteristics covering the final consumers was part of the questions.

In the fourth section, the trends and developments for substitutes were investigated in combination with prices and availability in different distribution channels. For wine producers substitutes are all kinds of products which serve the same function as wine, like brandy, imported wine, beer, vodka, and other spirits.

The last part included questions about the current state of policy in the industry, how the government is supporting the industry and about the future expectations in terms of development of the industry. For wine producers, the questions were about wine laws, regulations, and the support for the industry (all activities e.g. subsidies, loans, education, training, etc.). Furthermore, the existence of institutions and their role in the wine industry were examined.

### 4.1.3 Conduct of Interviews

The researcher conducted the interviews, starting from September 28, 2016 until the October 18, 2016. Overall, 41 interviews were conducted. Almost every interview was recorded with the oral approval of the interviewees. On average, one interview lasted about 32 minutes. The recording gadget was a Sony ICD-BX140. Recording was not allowed in two interviews, but notes were taken afterwards.
The native language of the researcher and the interview partners mostly differed, so some problems occurred. The literature on multilingualism for interviews is limited (TEMPLE and YOUNG, 2004; FILEP, 2009; BOGNER et al., 2014). The literature on expert interviews is limited even more, although international research is becoming more important (KRUSE et al., 2012; BOGNER et al., 2014; LITTIG and PÖCHHACKER, 2014). The researchers agree that interviews carried out in the native language are ideal (KRUSE et al., 2012). Professional interpreters are another option. Disadvantages can be the missing knowledge about the context of the research field and its technical vocabulary (TEMPLE and YOUNG, 2004; BOGNER et al., 2014). That is why the best option would be to engage professional interpreters in the entire research process (EDWARDS and TEMPLE, 2002). On the other hand, they argue that the involvement of the interpreter within the research can lead to an interview atmosphere with missing openness and trust, since they influence the interview too much. The results improved, if the interpreters have social and cultural background related to the spoken language (FILEP, 2009). The same happened, when the interpreters were briefed in advance (KRUSE et al., 2012). BOGNER et al. (2014) assume that English is widely used as the lingua franca in many organizations and companies, due to globalization in many fields.

Interviews were conducted in German, English, and Armenian. Only two interviews were in German, as both experts were fluent in German. Most of the interviews were in English (27 interviews), as the interview partners spoke English on a good level. They use English in their daily business life. Two native English-speaking students from the Yerevan Wine Academy translated eleven (11) interviews from Armenian into English. Budget limitations prevented the employment of a professional interpreter. Nevertheless, the interpreters were actively engaged in the wine industry, knowing the context and technical vocabulary. Furthermore, both have social and cultural Armenian background securing the content of information. In advance, both students were briefed in conducting the interview without distorting the information. Table 7 shortly presents an overview of the experts; the number, and their industry section.
### Table 7 Overview of selected interview partners

<table>
<thead>
<tr>
<th>Groups of the supply chain</th>
<th>Subgroups</th>
<th>Number of active companies</th>
<th>Numbers of attended companies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine producers</td>
<td>Barrel producer</td>
<td>3</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td></td>
<td>Bottle producer</td>
<td>2⁹</td>
<td>0</td>
<td>0 %</td>
</tr>
<tr>
<td></td>
<td>Machinery/Agents</td>
<td>4</td>
<td>2</td>
<td>50 %</td>
</tr>
<tr>
<td>Suppliers</td>
<td>Restaurants / Hotels</td>
<td>Not obtainable</td>
<td>8</td>
<td>Not obtainable</td>
</tr>
<tr>
<td></td>
<td>Supermarkets</td>
<td>5</td>
<td>2</td>
<td>40 %</td>
</tr>
<tr>
<td></td>
<td>Wine Bars / shops</td>
<td>13</td>
<td>7</td>
<td>69 %</td>
</tr>
<tr>
<td>Buyers</td>
<td>Education</td>
<td>/</td>
<td>4</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>Politics</td>
<td>/</td>
<td>1</td>
<td>/</td>
</tr>
<tr>
<td>Other experts</td>
<td>Foreign/related companies</td>
<td>/</td>
<td>2</td>
<td>/</td>
</tr>
</tbody>
</table>

(Based on own research)

The first contact was mainly organized via telephone by Mrs. Zaruhi Muradyan, professor for wine making at Armenian National Agrarian University, Associate Director of Yerevan Wine Academy, and head of Armenia Young Winemaker Federation to inform about the research topic and to ask for approval of participation due to language barriers. The interviewer arranged the follow-up contact for the appointment with place and time via telephone. The interviews were mostly conducted on the company sites reached by car all over Armenia or in the office of the Yerevan Wine Academy. A summary table displays in short the interview reports, giving insights about the atmosphere before and after the interviews, about disturbances and how the first contact was made (left out due to anonymity reasons).

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⁸ According to www.minagro.am and FARIA and VANNERON (2016) around 50 wine producing companies are active in the market. For both numbers no date or source was stated. The survey of ICARE in October 2014 and my own research for this study showed that around 35 companies are actively engaged in the market.

⁹ One of the two producers has just ceased operation in early 2016.
4.1.4 Transcription

Every interview was transcribed in the style of a selective transcription, due to language barriers and time restraints. Each transcript includes a transcript header to give information about the interviewee’s name and job position, the name of the company, the interview date, place, time and duration as well as the interviewer’s and transcriptor’s name.

Following KRUSE (2015), transcriptions should not be selective, as a first interpretation takes place which is not replicable. On the other hand, he states that even an intensive and detailed transcription is not objective, since, e.g. some researchers hear an intonation, and others do not. This refutes his own argument, resulting in that transcripts are in the end not a fact, they are subjective constructs influenced by the researcher. However, BOGNER et al. (2014) states that in an explorative expert interview approach, the information content is much more important than a word-by-word analysis. The content has priority for the analysis and not the background and the choice of words by the interviewee, as experts serve as informants being not part of the investigation.

There are no common rules of transcription. They are determined and communicated by the researcher (ALTOBELLI, 2007; KRUSE, 2015; GLÄSER and LAUDEL, 2010; BOGNER et al. 2014; KAIER, 2014). As GLÄSER and LAUDEL (2010) and KAIER (2014) make clear, it is not necessary to transcribe in detail, if your research approach is reconstructing. In addition, they say that these kinds of transcriptions do not get much attention in literature. It is more important to have clear, consistent and documented rules.

For this study the transcriptions rules are the following. (1) Not research-related information and redundant paragraphs were cut out. (2) For a better understanding, standard spelling was used without non-verbal expressions. This means sentences were finished by adding words and, if necessary, tenses were shifted. (3) Breaks, disturbances and intonations were not mentioned. (4) The same person transcribed every transcript, supporting an equal treatment of each interview. (5) The original content structure is kept for all interviews, no passages were shifted. (6) Complementary the transcriptions were divided into structured paragraphs, related to each research topic, creating meaningful analysis units for the further analysis process. In this case, the answer of one question was mostly
one analysis unit. For translated interviews, only the English speaking passages are transcribed. These rules can lead to a loss of information, but KAISER (2014) says the use of a transcription software combines the written interview passages with the audio file. This creates the advantage of always referring back to the recording and lowers the risk of a total loss of information.

Every literature emphasizes the importance of ensuring the anonymity for the interviewees (ALTOBELLI, 2007; KRUSE, 2015; GLÄSER and LAUDEL, 2010; BOGNER et al. 2014; KAISER, 2014). To guarantee the anonymity for each interview partner an abbreviation was created before the transcription, which is not retraceable to the interviewee. Stated places or names are changed to ‘place X’ or ‘the name of the partner/product etc.’ Each interviewee has one or two letters with a consecutive number. Table 8 presents the different abbreviations belonging to the different interview groups.

Table 8 Abbreviation index

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Interview Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>OE1-9</td>
<td>Other experts</td>
</tr>
<tr>
<td>P1-15</td>
<td>Wine Producers</td>
</tr>
<tr>
<td>R1-8</td>
<td>Restaurants</td>
</tr>
<tr>
<td>S1-2</td>
<td>Supermarkets</td>
</tr>
<tr>
<td>WB1-7</td>
<td>Wine Bars</td>
</tr>
</tbody>
</table>

(Based on own research)

4.2 Approaches to Qualitative Data Analysis

Every method of qualitative data analysis aims for taking information out of texts, changing the format to further process this information – separately from the original text (GLÄSER and LAUDEL, 2009, p. 197). MAYRING’S (2002) approach is a further development of the quantitative content analysis. He claims his approach to be theory-oriented and rule-governed, while understanding and using complex information. The difference between Mayring’s approach and the quantitative data analysis is the now available opportunity to use theory-derived categories which are checked on the data material (GLÄSER and LAUDEL, 2009, p. 198). This enables the researcher to exploit the potential of openness analysis.
This study does not follow the widely used approach of Mayring – for this study, the approach of GLÄSER and LAUDEL (2009) is used. The authors claim to evolve and modify the approach of Mayring (ibid., p. 193). The criticism and main differences are:

- The approach is still too quantitative and the potential of information exploitation is not completely exhausted.
- The category system is open in the beginning, but then it is fixed and not changeable again.
- Problems occur, if information is available which is not covered by the categories, this cannot be included due to unchangeable categories.
- The category system is checked on at least 50% of the material, although it is not sure if the category system fits at all.
- In the end, closed category systems and standardization are useful to analyze frequencies, in contrast to complex information.
- It is not possible to analyze complex information to detect causal mechanisms.

Therefore, GLÄSER and LAUDEL changed the method based on the structuring technique to extract complex information during the whole process which is completely open for new and unexpected information. The following paragraphs shortly describe the procedure, focusing on the method of GLÄSER and LAUDEL (2009, p. 199 pp.). In general, information is extracted from the text material, then the information is processed and analyzed (Figure 8). Their approach is divided into four basic steps. They are composed of preparation of extraction, implementation of extraction, preparation of extracted data, and the analysis of the data (ibid., p. 196). Every step is discussed in detail later on while compiling the categories to secure a high transparency of the empirical steps which have been undertaken.
The content analysis takes information (extraction) from the original text material to create an information basis. This basis only contains information which is helpful to answer the research question or problem (ibid. p. 200). The structured basis is created by using a search raster based on the theoretical preliminary considerations in chapter 3.

Extraction means to read and decide which information are relevant for the research aim. This information is structured by being allocated to the categories within the search raster. The categories are theory-driven by the prior developed research expectations and their peculiarity. Nevertheless, the category system is open influencing the information structure, because new categories can be added or the dimension of others can be changed. Additionally, the peculiarity of the variables can be freely selected and changed during the extraction process. This secures that the information structure is connected with the theory and unexpected information can be easily added (ibid. p. 201). Furthermore, there is no pre-analysis necessary, as the categories are flexible from the beginning. This is the major change compared to Mayring’s approach.

The first interpretation takes place in the extraction process, when decisions are made which passages/information are relevant. The same applies for the allocation to categories and the verbal description of information content (ibid., p. 201). This means that the extraction is individually coined and influenced by the researcher despite naming the extraction rules.
In the following steps of the extraction, it is important to state the original source throughout the entire analysis. On the one hand, this enables controls during the analysis within the original source. On the other hand, content-related decisions can be followed up in the whole process.

The preparation of the information based on relevant criteria means – to summarize information, to delete redundant information, and to check for contradictions – which is another interpretation. The results summarize the empirical information now to reconstruct the causal mechanisms.

The advantage of this approach is the early-reduced information basis, leaving out unimportant information. In addition, the retractable sources have the possibility to find the data in the original source. Besides the allocation of information to categories is never random which makes the process transparent. The influence is caused by the researcher, but it is intersubjective replicable.

For qualitative data analysis, methodological principles such as openness to include all empirical findings have to be considered. The approach should be theory-driven, systematic and rule-governed to secure another principle – the inclusion of all the information material. Supplemental, the complete data material has to be handled in the same manner (ibid. p. 204). For the approach of GLÄSER and LAUDEL (2009, p. 206), the theory is included by using the theory-derived categories. The openness is given through the changeable and expandable category system, as well as through the freely selectable variables and their description. The inclusion of the whole data set takes place, when all the material is filtered with the search raster. The rules have to be declared throughout the analysis to make it replicable.

### 4.2.1 Preparation of Extraction

The preparation of extraction includes three different parts. First of all, a content-related preparation is necessary. Based on the theoretically developed framework in chapter 3 the search raster is organized. Table 9 gives an overview of the research dimensions which are the five forces influenced by many factors. The five forces are the dependent factors determining the competitive intensity. In the first step the research dimensions are clearly
defined, indicators are named to show how the analysis units are allocated to each research dimension. The last column presents a typical example of one of the interviews for each dimension to give a first impression.

Table 9 Display of research dimensions

<table>
<thead>
<tr>
<th>Research dimensions</th>
<th>Definition</th>
<th>Typical example</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD1: Threat of new entrants</td>
<td>=all categories giving information about the possibility of new firms entering the industry and lowering profitability of the industry</td>
<td>‘The competition is getting higher. Every year we have a few new producers and importers.’ (P15; 32–32)</td>
</tr>
<tr>
<td>RD2: Industry rivalry</td>
<td>= all categories giving information about the competition between existing firms</td>
<td>‘Everyday Armenian companies fight with each other. It is a very competitive market.’ (P4; 32–32)</td>
</tr>
<tr>
<td>RD3: Substitutes</td>
<td>= all categories giving information about products which serve the same function as wine</td>
<td>‘Yes, brandy not as much as vodka. Vodka is very competitive with wine and beer. Brandy stays stable; the vodka consumption is changing in the near area of Yerevan and in wine bars, but this is a very small step.’ (P15; 22–22)</td>
</tr>
<tr>
<td>RD4: Bargaining power of buyers</td>
<td>= all categories giving information about negotiating dis-/advantages of all buyer groups</td>
<td>‘Wine Bars take margins from 20-30%, then if people drink on the site the wine bar adds another 20% margin. In supermarkets the margins depends on the shelf places. In restaurants which sell wines; they take a margin of 50%.’ (OE1; 23–23)</td>
</tr>
<tr>
<td>RD5: Bargaining power of suppliers</td>
<td>= all categories giving information about negotiating dis-/advantages of all supplier groups</td>
<td>‘Farmers cannot argue or bargain and in that sense farmers cannot do anything. Because they do not have a control opportunity. They cannot check and processors have a dictating power. They pay and they decide about the quality of the grapes. They say you do not have a good quality, I have to downgrade the sugar content it is not this and now we are paying less.’ (OE8; 6–6)</td>
</tr>
</tbody>
</table>

(Based on own research)

Secondly, a methodological preparation in terms of the transcription process follows. The transcription process is described in chapter 4.1.4.
The last part of the extraction preparation deals with the technical preparation. GLÄSER and LAUDEL (2009, p. 202) recommend their developed software program for the preparation of the data. In this study, the software for qualitative and quantitative research methods MaxQDA was used. The recording files were uploaded and with the transcription tool transcribed. This has the advantage that the analysis units are directly linked with the positions in the recorded file. Time marks allow a fast and easy allocation of each analysis unit. In the next steps, the analysis units were associated with the related categories. Then every analysis unit was affiliated with the related category by color-coding. The coded segments for each category have been exported into excel-files showing the source.

4.2.2 Extraction

Based on the classification into the five research dimensions the categories are developed to have a detailed extraction. This means a clear and retractable allocation of all relevant information regarding the research dimensions and the research question. These categories are theory-related which guarantees a transparent analysis. It should be added that the category system is open as stated earlier. Openness means the possibility to correct and add dimensions or categories, while cancelling of these is not allowed. The peculiarity of the categories is verbally describable as well underlining the openness of the approach.

The use of the qualitative software allows an exact naming of the source for every reduced data, creating an anonymized and transparent analysis in spite of coding the text passages. For this reason, it is important to show transparency in the process of category development. This makes the analysis reviewable and justifiable at every stage (GLÄSER and LAUDEL, 2004, p. 195).

In the following, every category is displayed and defined in combination with a typical example. For the extraction some categories are used multiple times, but for different groups in each force. For instance, the category ‘Type of business relationships’ has to be used to extract the information about business relations between wine producers and grape growers; between retailers and wine producers and between wine producers and suppliers. The information is extracted into the same table and organized by the groups of interview partners. Not every category can be used to extract information from all interviews.
The extraction itself is a process of interpretation. The researcher has to read and decide to which category the information is assigned. For a replicable extraction it is always necessary to be able to reason the decision of the allocation.

Table 10 Display of categories.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Definition</th>
<th>Typical example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of business relationship</strong></td>
<td>Information about frequency, timeframe and the legal aspects of business relationships.</td>
<td>‘Overall the relationship is ad hoc; it is not that there are contracting or contractual relationships. Most of the time it is based on customary rearrangements. In that area very well developed relationship only one company has.’ (OE8; 4–4)</td>
</tr>
<tr>
<td><strong>Price criteria</strong></td>
<td>Information about prices and influencing factors related to final products and input products.</td>
<td>‘Yeah, we are having test before the harvest and we check if they don't fit to our standards, we are just giving it back. We check on sugar level, titer and health appearance.’ (P4; 12–12)</td>
</tr>
<tr>
<td><strong>Margins</strong></td>
<td>Information about discount percentages business partners give to their clients to provide the possibility to add on a profit margin.</td>
<td>‘For supermarkets it is around 20%. For Restaurants/Bars the margin is less more about 10%.’ (P7; 46–46)</td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>Information about regulations between business partners in the industry.</td>
<td>‘We give the farmers instructions how to grow the grapes. The sugar level should be at least 17 Brix other things are not important. The grapes should be healthy, have no diseases, ripe and useful for brandy making.’ (P1; 6–6)</td>
</tr>
<tr>
<td><strong>Purchase quantity</strong></td>
<td>Information about sale or buying quantities for all groups in the industry.</td>
<td>‘No minimum quantities, but sometimes we get discounts when we order at least 6 bottles.’ (R2; 18–18)</td>
</tr>
<tr>
<td><strong>Info asymmetries</strong></td>
<td>Information about lack of information or information which is not equally distributed among business partners.</td>
<td>‘After that the processors set their own prices deviating a few Drams from the price of “Name of Company”. Then farmers know and are aware, but the final prices they don't know.’ (OE8; 6–6)</td>
</tr>
<tr>
<td><strong>Behavior</strong></td>
<td>Information about deviant behavior of business partners.</td>
<td>‘Yes, irrigating in the night before is a common method. I haven't heard about stealing of grapes in Armenia.’ (OE4; 29–29)</td>
</tr>
<tr>
<td><strong>Product types</strong></td>
<td>Information about all product types producers or retailers have in their alcoholic product portfolio.</td>
<td>‘We produce wine, brandy and fruit spirits. Another business part will be dried fruit and jams in future.’ (P11; 2–2)</td>
</tr>
<tr>
<td><strong>Product prices</strong></td>
<td>Information about the range of prices producers or retailers have in their alcoholic product portfolio.</td>
<td>‘Armenian wines start from 2.800 up to 65.000 AMD. The rest of the world 1.200 up to 500.000 AMD.’ (R5; 6–6)</td>
</tr>
<tr>
<td><strong>Product origin</strong></td>
<td>Origin of all wines in the portfolios of retailers.</td>
<td>‘We serve different kind of wines. Our wines come from all over the world. We have Argentinean, French, Italian and also we have Armenian Wines.’ (R4; 4–4)</td>
</tr>
<tr>
<td><strong>Differentiation</strong></td>
<td>Information about the potential of product differentiation for wine.</td>
<td>‘We were one of the first who were producing rosé. We started the boom.’ (P6; 12–12)</td>
</tr>
<tr>
<td><strong>Investments vineyards</strong></td>
<td>Information about past, recent or future investments in vineyards.</td>
<td>‘No, we do not have own vineyards yet, but in future it is the goal to have vineyards and to have fruit orchards for a better quality and a control of quality as security.’ (P13; 4–4)</td>
</tr>
<tr>
<td><strong>Investments cellar</strong></td>
<td>Information about past, recent or future investments in cellars.</td>
<td>‘No, until now we are working with “Name of Company”. Therefore, they are providing all the services to produce wine. We are making our wine there.’ (P7; 26–26)</td>
</tr>
<tr>
<td><strong>Investments machinery</strong></td>
<td>Information about past, recent or future investments in machinery.</td>
<td>‘This includes a world-class winery and distillery we can process 1000 t of grapes according to 1 Mio. liters of wine storage with own bottling. We can decide how much we bottle for brandy or wine. The capacity is expandable to 3 Mio. liters. We just need to add tanks, hoppers, press everything else is equipped for 3 million liters.’ (P11; 2–2)</td>
</tr>
<tr>
<td><strong>Investments others</strong></td>
<td>Information about investments which are not related to vineyards, cellars, and machinery.</td>
<td>‘Now we produce around 16.000 bottle in our own winery and we have some tourist facilities - a tasting room in the Areni region.’ (P6; 2–2)</td>
</tr>
<tr>
<td><strong>Diaspora</strong></td>
<td>Information related to the diaspora.</td>
<td>‘The investments come mainly from abroad. Foreign Armenians, they live abroad and they started to invest in Armenia, they started around 15 companies.’ (OE1; 5–5)</td>
</tr>
<tr>
<td><strong>Substitutes Trends</strong></td>
<td>Information about historical and recent changes in consumption pattern as well as about prices.</td>
<td>‘It is seasonal. In summer, many people drink beer in bars, pubs and cafés. In autumn, winter and spring people drink more wine. For celebrations, people drink more vodka and brandy. Brandy in general is more exported and it is still for presents and special occasions.’ (OE1; 30–30)</td>
</tr>
<tr>
<td><strong>Supply occupation</strong></td>
<td>Information about the occupation process of input supplies.</td>
<td>‘Everything is imported on our own, because it is much cheaper.’ (P5; 8–8)</td>
</tr>
<tr>
<td><strong>Supply prices</strong></td>
<td>Information about prices of input supplies.</td>
<td>‘We don't have equipment here. “Name of Compa” imports equipment. The prices are high; I bought in 2011. I compared the prices to European prices. The prices in Europe are much lower. The prices are higher because of transportation and import tax. And also the supplier is making good money; they put some profit margin on top (30–40 %).’ (P13; 17–17)</td>
</tr>
<tr>
<td><strong>Government support</strong></td>
<td>Information about support of the government not related to wine laws or institutions for the industry.</td>
<td>‘They are helping us with funding for expos in Russia and China. They pay half of the fees. But loans are very, very high with 12%, it is too high for investments. Companies struggle to survive, they have very big loans. I hope the vice president will help because he knows the situation.’ (P4; 34–34)</td>
</tr>
<tr>
<td><strong>Wine law</strong></td>
<td>Information about wine laws, Code of Practice and other regulations influencing the industry.</td>
<td>‘Yes, of course we have a wine law. Sorry. They are standards. You can't produce in the market if you do not meet the requirements of the standards.’ (P7; 56–56)</td>
</tr>
<tr>
<td><strong>Institutions</strong></td>
<td>Information about local organizations or associations supporting the industry.</td>
<td>‘Yes, we have the “Name of institution” but they are doing nothing. They are not working, because there is no money and big companies don’t want to come together, associations have no voice and are not heard in the industry and policy.’ (P4; 36–36)</td>
</tr>
<tr>
<td><strong>Cooperatives</strong></td>
<td>Information about cooperatives in Armenia.</td>
<td>‘Another thing that government is interested in to support is the development of the viticulture and wine making cooperatives so farmers can also create their capacities in terms of the processing and selling their own wines and also other non-wine products that you can receive</td>
</tr>
<tr>
<td><strong>Size of production</strong></td>
<td>Information about size of the wine industry and of the wine producers.</td>
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<td>------------------------</td>
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<td></td>
<td>‘For today, we have around three ha of vineyards under harvesting and this year we planted about half a hectare vineyards from which more than half is the white variety Voskehat.’ (P8; 6–6)</td>
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<tr>
<th><strong>Local distribution</strong></th>
<th>Information from producers regarding their sales on the domestic market.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>‘On the local market (20%) the wines are sold through 60% supermarkets, 40 % restaurants and small amount in the duty free area, but mainly pomegranate wine. We sell mainly in supermarkets and some restaurants and duty-free. We plan to sell in Wine bars/shops.’ (P3; 16–16)</td>
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<tr>
<th><strong>Export</strong></th>
<th>Information about the export.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>‘80 % of the production is exported to Russia, US, Germany, Lithuania, Estonia, Israel, China, Ukraine, Belarus, Poland.’ (P12; 18–18)</td>
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<tr>
<th><strong>Wine consumers</strong></th>
<th>Information about wine consumers.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘Around to 2% of the Armenians buy wine, it depends on the wines and the price levels. In general, it is the upper middle class with more money, because “Name of Company” has average and slightly above average prices. Generally people who are travelling and who are more open (-minded). I cannot specify in age. In the market there are more female drinkers which come from the historical development under the Soviet regime, where the country went from a wine drinking country to a vodka drinking country.’ (P10; 20–20)</td>
</tr>
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<thead>
<tr>
<th><strong>Income situation</strong></th>
<th>Information about the income situation of farmers.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘Some were throwing away their grapes. It is sad, especially, when you know the only income source this person has is from this grape and it is not so high.’ (P1; 22–22)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Past Developments</strong></th>
<th>Information about the historical development of the industry.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>‘Many activities and things happened in the last few years giving me the positive faith. The quality of Armenian wine during the last 5 years grew to a high level. A lot of small and medium sized wineries were established in the last years.’ (P8; 53–53)</td>
</tr>
</tbody>
</table>

(Based on own research)
4.2.3 Preparation of the data

The following shows the extraction of one category exemplarily. The table contains information about the interview abbreviation, the start and end number of the extracted paragraph, the marked paragraph itself and the summary column. Based on the exported table the summary column was added to summarize the text passages with short sentences or key words. This was done for every category. Redundantly, contradictory and deficient information is deleted to further condense the information basis (GLÄSER and LAUDEL, 2009, p. 229).

To give a transparent insight into the procedure how the results of the categories are prepared the category ‘wine law’ will be exemplarily outlined. All other results will be presented in the next chapter in combination with the research expectations to avoid double entries. The general opinion on wine laws was very unified. According to 16 interviewees, there is no wine law existing and executed in Armenia. There are some Russian and old Soviet standards related to health and safety regulations, but they are not enforced. Some restrictions about the import of *phyloxera*-resistant rootstocks and international varieties are strictly enforced. Half (8) of the 16 interviewees feel a strong need for a specialized wine law clarifying regional regulations, wine profiles, additives, etc. There is a legal framework for cooperatives since 2015. A small legal barrier for producing vodka, brandy, or other spirits exists. There is a distilling license which was 50 million AMD, but it changed to 50,000 AMD in 2016, simplifying the production of different product types which can lead to economies of scope.
OE1 11 11 No. Armenia became a member of the customs union with Russia. Everything is done with Russian standards, we don’t have an own law; everything is updated to Russian standards. Now recently we became a member of the OIV. We like to change when we know what we need to change to get closer to European standards.

OE2 5 5 Im Moment hat die Regierung entschieden vor 3 Monaten eine neue Stiftung zu gründen, die hauptsächlich mit allen Fragen um Wein- und Traubenproduktion sich beschäftigen soll. Dadurch werden auch Fragen wie Rebblausbekämpfung etc. angegangen. Laut Weingesetz dürfen Produzenten keine Phylloxeraresistente Sorten im Ararat, Armavir und Vayots Dzor anpflanzen. Das Gesetz wurde vor mehreren Jahren abgestimmt, als Phylloxera noch kein Thema war. In einigen Dörfern existiert Phylloxera schon, das gefährdet alle Produzenten.

OE3 30 30 Yes, we have some Russian standards coming from the Customs Union with Russia. We don't have a wine law. We have basic standards from the old days. All cleaned up a little bit, but really basic things. More related to health than to nomenclature or how should be done the label or if someone is cheating or someone is saying it is Areni but it is not etc. All of those are more that wine isn't vinegar, so you take analysis to show that it is under 1 and few other things like no heavy metals etc. but that's it. No one is saying this is too dark for this kind of style like e.g. in Chianti some people taste the wine and it has to be typical. We don't have that, there is no law if you buy grapes from Areni and you take it to Armavir you cannot name it Areni like in Burgundy or Brunello. There are non-regional regulations. I suspect the first to be done will be the whole Areni region. Where the vineyards are mapped and the villages a clearly distinctive. They can be grouped. That would be more like an appellation system. It should be a further goal to add value by giving the origin and the quality standards. In Georgia, they have it e.g. Kindzmarauli etc. They have a certain quality standard a certain sweetness etc. like a wine profile.

OE5 34 34 We have only one solution to graft, but it is not possible yet to buy grafted vines.

OE5 38 38 Yes, it is possible, if you have special documents from the phytosanitary then you can import.

OE8 16 16 As far as I know there are no barriers, because in the last couple of years there were some revisions. There are no legal barriers for wine making. The license fee for processing secondary raw materials for vodka making was reduced from 5 Million AMD to 50,000 AMD.
This was a very important move from the government. There are some protective measures on brandy and grape raw material, they don't have any issues.

<table>
<thead>
<tr>
<th>OE9</th>
<th>14</th>
<th>14</th>
<th>Basically I think we have passed the law on agricultural cooperatives last year in December 2015 we are implementing to support programs with the World Bank which is called Coca-Market which is targeting on cooperative development and one program we are implementing who is called En-Part it is an eastern partnership neighborhood program on agriculture and rural development founded by the European Union and co-founded by the Austrian development agency. Within this project this year we have managed to create alone 50 new cooperatives.</th>
<th>Law about cooperatives passed in 2015.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2</td>
<td>24</td>
<td>24</td>
<td>As far as I know there isn't a regulation. But I know we have a license fee if I am not mistaken it is 15,000 dollars for making spirits.</td>
<td>No wine law, but a distilling fee.</td>
</tr>
<tr>
<td>P3</td>
<td>20</td>
<td>20</td>
<td>The only problem is that there is a tax for producing brandy it is almost 50. Mio AMD per year which is set by the government. If you want to produce you need to pay the tax. That is the only problem.</td>
<td>No wine law, but a distilling fee.</td>
</tr>
<tr>
<td>P3</td>
<td>24</td>
<td>24</td>
<td>There are a lot of problems in the industry. Again the problem is with the tax/license for brandy (50 Mio. AMD per year) which is set by the government. Only big producers can produce brandy. In my opinion it is too high for small companies, which want to produce fruit brandies, because it is an interesting segment. There should be more help for grape growers. I hope for a better future.</td>
<td>Distilling fee.</td>
</tr>
<tr>
<td>P4</td>
<td>34</td>
<td>34</td>
<td>Yes, of course, because they are cheating. There is no control. They put inside everything.</td>
<td>No laws and no enforcement for additives etc.</td>
</tr>
<tr>
<td>P5</td>
<td>22</td>
<td>22</td>
<td>Most important for more laws and regulations is the possibility to recognize the regions abroad. This is possible with clear regional regulations.</td>
<td>Big need for laws, especially for regional regulations.</td>
</tr>
<tr>
<td>P6</td>
<td>20</td>
<td>20</td>
<td>Sure, step by step we need appellation laws to control what and where to plant. We need the help of the government for fighting phylloxera in certain regions of Armenia in order not to get a big disaster. There are kind of regulations, but no wine law. But the regulations are not good enough. And of course the most important thing is the excise stamp, we are a developing country the additional access stamp tax of 10 % has to be removed to let the industry become sustainable. We pay 20% VAT, 10 % access tax and we pay 20 % profit tax. For a developing country like Armenia it is a pretty heavy taxation. Maybe after some years when the country is in a good state we can do it.</td>
<td>Big need of a wine law. Appellation system to control what and where to plant. There is no wine law, but regulations or standards.</td>
</tr>
<tr>
<td>P7</td>
<td>56</td>
<td>56</td>
<td>Yes, of course we have. Sorry. They are standards. You can't produce in the market if you do not meet the requirements of the standards.</td>
<td>No wine law but standards.</td>
</tr>
<tr>
<td>P7</td>
<td>58</td>
<td>58</td>
<td>I think we have enough standards to have a sustainable and profitable wine market and grape growing conditions. They shouldn't be any changes.</td>
<td>These standards are enough.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>So far we were producing illegally, because the license was so expensive, but this year the government changed the price. It came down from 50 million AMD to 50,000 AMD.</td>
<td>Distilling fee.</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>P8</td>
<td>4</td>
<td>4</td>
<td>We have some laws about wine. We have the Winemaker Union and we have since 4 months a new organization called Vine and Wine Foundation which is supported by the government. They manage all this things, but they just started.</td>
<td>Some wine laws.</td>
</tr>
<tr>
<td>P8</td>
<td>49</td>
<td>49</td>
<td>Yes, of course. We have local farmers who are selling the wines in plastic bottles in not good conditions with not high standards. We need to have strong standards.</td>
<td>Big need for a wine law.</td>
</tr>
<tr>
<td>P8</td>
<td>51</td>
<td>51</td>
<td>We have nothing of these standards. There are no laws like in Europe. Compared to Georgia they worked on it and they have these laws. There are only some laws on paper for a needed certification, but there is no enforcement. I feel a strong need for laws, but the laws have to be created with a real association with people from the industry, which has seats in the parliament to represent the needs of producers and grape growers. At the moment no knowledge is present in the parliament about the industry. E.g. Suggestion for a law some years ago was almost passed: If wineries can’t sell the vintage for 10 years, they are not allowed to sell it anymore, because the government wouldn’t provide access stamps anymore. But what if you want to do ageing on purpose? This shows, that people dealing with these laws don't have knowledge about the topic.</td>
<td>No wine law. Some laws but they are not enforced. Big need for a wine law.</td>
</tr>
<tr>
<td>P12</td>
<td>30</td>
<td>30</td>
<td>Yes, we need more, good laws but they really have to work and not just stay on the paper. We have standards and norms. There are no regulations. There are some discussions going on to establish some laws.</td>
<td>Big need for a wine law. Up to now only standards and norms.</td>
</tr>
</tbody>
</table>

(Based on own research)
4.3 Findings – Study in Armenia

Now every single research expectation from chapter 3.2 is examined. The results of the respective categories for the examination of each expectations are discussed. The results of the categories are based on the interviews. Some of the before developed categories were not used for the examination. The reasons were: (1) they had no relevance, (2) the number of answers were too small or (3) the answers had no information content.

Threat of new entrants

NE1: Legal/administrative entry barriers do not exist.

As stated above in the example of the category ‘Wine law’, there are no legal administrative entry barriers for the industry. In general, two limitations exist. Firstly, the distilling law for brandy which was reduced to 50,000 AMD enabling a cheaper switch to a different product type, to generate economies of scope. Secondly, the import of grafted international varieties is restricted, but still possible. In summary, there are almost no legal or administrative entry barriers. At least, they play a minor role. The research expectation is confirmed.

NE2: New entrants face small necessary sunk costs creating a low entry barrier.

The investments were divided into three sub-categories: ‘Investments vineyards’, ‘Investments cellar’, ‘Investments machinery’. For ‘Investments vineyards’ two thirds (10) of the interviewed wine producers possess their own vineyards. This should secure consistent quality, desired quantity and the cultivation of special varieties. Some of the interviewees from the other experts stated that the quality of their own cultivated grapes is not necessarily better due to fold shortage of good viticulturists. One third (5) of the wine producers do not have their own vineyards, but three (3) out of the five (5) have near future plans to have their own vineyards. The other two companies do not want to invest, because they feel a social responsibility for the grape-producing farmers to secure their incomes. For a new competitor it is not necessary to invest immediately into vineyards, but most of the recently entered companies have their own vineyards. As to the aspect of ‘Cellar’ the situation is similar, eleven (11) interviewees out of 14 have their own cellar.
Three companies rent a winery. One supplier offers all the necessary machinery and inputs from the harvest until the final product. Again, there is no need for a new competitor to invest in an own cellar. Furthermore, some machinery and services can be rented from another supplier avoiding expensive investments for filtration, filling, sparkling wine production etc. In summary, there are only very small sunk costs to be paid, creating a low entry barrier. The research expectation is confirmed.

**NE3: New entrants face small switching costs to other grape suppliers creating a low entry barrier.**

The category ‘Type of business relationship’ shows that mainly oral agreements for grape procurement are practiced. Eight (8) of 15 producers use agreements and further two (2) wine producers rely on contracts and agreements. In combination with the clear statements of six (6) other experts oral agreements are still widely used. There is a recent tendency to change to contracts. In summary, these oral agreements make a switch to other grape suppliers very easy, as many grape producers exist and contractual enforcement is not possible, creating a low entry barrier. The research expectation is confirmed.

**NE4: New entrants face medium switching costs to other suppliers creating a medium entry barrier.**

The category ‘Supply occupation’ shows where the input supplies come from. Almost all products except for bottles (one producer on the market) and barrels (several producers on the market) have to be imported. Currently three (3) supplier companies are working with different product portfolios regarding brands. The switching costs are high, since a change of products (brands) can induce costs. For example, not every bottle brand would fit into the same filling machines. Not every single cork type goes with every bottle shape etc. Besides the prices differ and a direct comparison is difficult. Only six (6) wine producers work with these suppliers, whereof three (3) work with the suppliers regarding all products. Three (3) work with suppliers and do self-import at the same time. Nine (9) wine producers accounting for 60% of the wine producers do self-import. Overall, 80% of wine producers do self-import. The advantages are the following: cheaper prices, time saving, better quality than local products, favored products are not available from suppliers. In summary, the small number of suppliers with their differentiated product portfolios
make a change for wine producers difficult, creating a medium entry barrier. The research expectation is confirmed.

**NE5: New entrants face high switching costs to other productions creating a high exit barrier.**

Two thirds (10) of the interviewed wine producers produce some other products besides wine, mainly fruit wine and brandy (see ‘Product types’). The same technology for wine can be used for fruit wine. For brandy, a distillery machine has to be established and the distilling fee has to be paid. With the reduction of the distilling fee, the establishing costs of a brandy production are medium. For the grape juice production, only one machinery has to be bought. A switch to table grapes is more expensive, because different varieties are needed – these vines have to be grafted on top of the old vines or completely new planted. Furthermore, existing equipment for wine production is difficult to sell, resulting in higher sunk costs. The conditions to switch to a raisin production are good, as the country has enough sunshine to dry the grapes and only small investments are necessary, but the selling of existing machines and technology is difficult. In summary, a switch to all the wine related products such as fruit wine, brandy and juice is practicable with low investment costs. Existing tanks and machinery can be further used. A switch to table grapes or raisin production is more difficult because the equipment for wine production has to be sold, resulting in high sunk costs as not many buyers for the equipment are on the market. Overall, the switching costs to other productions create a medium exit barrier. The research expectation is not confirmed.

**NE6: New entrants face a small threat of economies of scale creating a low entry barrier.**

All companies except for one (1) are selling on the local market (see ‘Local distribution’). Two thirds (10) operate in all distribution channels. The local market and its distribution channels takes small quantities until now this is possible to be covered by all companies. Economies of scale do not play a significant role in the wine industry yet. The vineyard area used for wine making is estimated to be 2,500 hectares (OE2; 35-35). There are only six (6) big wine producers in the industry, but they are still small-scaled compared to wine producers from e.g. the New World or cooperatives in Europe. In summary, economies
of scale do not create an entry barrier for new entrants. The research expectation is confirmed.

**NE7: New entrants face a small threat of not matching the production costs creating a low entry barrier.**

The categories 'Investments vineyards', ‘Investments cellar’, and ‘Investments machinery’ showed that many wine producers invested somehow. The Soviet machinery is still in operation, but the current project of CARD supplying technology, machinery, services to wine producers with which the costs can be adapted, and the market prices achieved. The companies are not forced to buy the expensive machinery; they can rent it for a few days avoiding maintenance and repair costs as well as sunk costs. In summary, new entrants face a low entry barrier in not matching production costs. The research expectation is confirmed.

**NE8: New entrants face a medium threat of economies of scope creating a medium entry barrier.**

As above-mentioned 60 % of the wine producers produce at least one (1) or more product types besides wine. All ten (10) wine producers use the same distribution channels for their products, share brand concepts and most important they use advantages in the production process. The economies of scope mostly apply to workforce in the vineyards, because all products are made out of grapes and to a lesser extent to the used production equipment. (cf. ‘Product types’) In summary, economies of scope exist, creating a medium entry barrier. The research expectation is confirmed.

**NE9: New entrants face a medium threat of economies of vertical integration creating a medium barrier of entry.**

The majority of wine producers (80 %) plan to have or already have own vineyards of their own – they integrated backwards into the supply chain by growing their own grapes (see ‘Investments vineyards’). Furthermore, 80 % do self-import for other input supplies – they integrated into the supply sector (see ‘Supply occupation’). One company integrated into the barrel production completely. The category ‘Requirements’ underlines the importance of the vertical integration for wine producers in the Armenian wine industry.
Many wine producers – independent if they use contracts or agreements – give cultivation instructions to farmers. Contracts and agreements can be seen as a partly vertical integration. The following statement shows the strong position (P15; 4–4): ‘We are totally controlling the vineyards, even if they are not ours.’ In summary, economies of vertical integration exist, creating a medium barrier of entry. The research expectation is confirmed.

**NE10: New entrants face a small threat of cost disadvantages independent of scale creating a low entry barrier.**

Within the interviews no information was found to confirm the research expectation. For further implications, this research expectation is left out.

**NE11: New entrants face a low threat of not accessing distribution channels, creating no entry barrier.**

The distribution channels are easily accessible, 80% of wine producers operate in every channel. Even eleven (11) out of 15 wine producers work with supermarkets on the domestic market (see ‘Local distribution’). This is possible, because the quantities for supermarkets are lower than e.g. in Germany. Except for one (1) producer, every other producer sells on the domestic market. In summary, there is no entry barrier created by distribution channels for new entrants. The research expectation is confirmed.

**NE12: New entrants face a threat of product differentiation, in terms of quality stability creating a low entry barrier.**

A differentiation in the local wine market is still possible. According to OE2; 19–19, OE3; 10–10 and P13; 22–22, the entrance of a single company changed the domestic market. This company set a certain quality standard in a certain price range giving a benchmark to other producers. The young Armenian wine industry offers opportunities to differentiate with wine types such as sparkling or rosé wine which were not common until the last two (2) to three (3) years. This is different to fully matured wine industry in other countries where product types can be imitated immediately. Furthermore, currently alternative packaging in plastic bottles, international varieties, and souvenir bottles can be used to differentiate the products compared to competitors, but this differentiation can be imitated in the near future (see ‘Differentiation’). In summary, quality is still a product
characteristic to differentiate between the producers accompanied by some other easily imitable differentiations, creating a low entry barrier for new entrants. The research expectation is confirmed.

**NE13: New entrants face no threat of customer loyalty creating low entry barrier.**

There is no clear statement of the interviewees (see ‘Wine consumers’). Only one (1) interviewee S1; 9–9 says, their customers are loyal and know what they want to buy. Other retailers and wine producers speak about a growing group of wine drinkers with potential growth in future. Therefore, it is expected that many wine consumers are not yet settled. In combination with the potential new customers, there is the possibility for new entrants to strive for wine customers and change their drinking patterns. In summary, customer loyalty has a small influence in the industry and creates a low entry barrier.

**Industry rivalry**

**IR1: Industry rivalry is low, because the industry is small and a few large companies are leading the market.**

According to the OE1; 17–17, OE2; 7–7 and OE8 ;6–6, the leading company in terms of grape prices is one company. Overall around 35 to 40 companies are operating on the market (OE1; 36–36). The category ‘Size of production’ shows the wide variation. Bigger producers have 100 to 400 ha (P10; 4–4; P11; 2–2), smaller ones between 15 and 50 ha (P3; 4–4; P4; 2–2; P5; 4–4), and very small producers have 3 to 4.5 ha (P6, 2–2; P8; 6–6). It is the same in terms of bottle output. Some have up to 20,000 bottles, others produce around 100,000 and a few companies above 100,000 bottles per year. In summary, a few large companies lead the market, resulting in a low rivalry. The research expectation is confirmed.

**IR2: Industry rivalry is low, because the fast industry growth satisfies expanding firms.**

The category ‘Size of production’ shows the growth potential of the industry again, as almost every company has grown in terms of higher bottle output or more vineyard area for a bigger production over the years. In summary, the industry grows and the rivalry is low. The research expectation is confirmed.
IR3: *Industry rivalry is medium, because external factors (e.g. crisis) can induce high storage costs and lead to price cuttings.*

The category ‘Past Development’ shows that seven (7) interviewees noticed an external influence – in this case the Russian market changed. Due to the Russian ruble depreciation prices halved or even decreased to a third (WB2; 30–30). Russia is an export partner for almost all wine producers, except for one (1), Russia is the major market for around 80% of the 14 wine producers. This shows a great dependency on the Russian market (see ‘Export’). This sales problem affected the whole supply chain for wine. From every group participating in the market the problem with the Russian market was mentioned. ‘Some stopped the export to Russia. In this year they have the problem, that the brandy factories decreased the money, because they cannot take [grapes] so much. It seems they have problems in selling. They don’t have enough storages to store the wine.’ (WB2; 30–30)

This statement shows the huge influence on the prices and for the grape growers which could not sell their grapes in 2015, since many wine or cognac producers still had full storages or had no money. (OE2; 5–5). In summary, if problems occur, the dependency on the Russian market can tremendously affect the Armenian wine industry. The last two (2) years proved this. The research expectation is confirmed.

IR4: *Industry rivalry is low, because brands can be established and quality still differentiates.*

The result in this paragraph is the same as for new entrants. Differentiation is still possible with product characteristics; packaging and wine types in contrast to fully matured wine industries where the concepts of brands is needed to differentiate. In summary, quality is still a product characteristic to differentiate between the producers accompanied by some other easily imitable differentiations, resulting in a low industry rivalry (see OE2; 19–19, OE3; 10–10; P13; 22–22 and ‘Differentiation’). The research expectation is confirmed.

IR5: *Industry rivalry is high, because switching costs for customers are low.*

Two thirds (10) of the wine producers sell in all distribution channels which make the availability and price comparison for costumers – retailers and final consumers – very transparent (see ‘Local distribution’). For wine producers, the acquisition of these potential switching costumers is relatively easy, as the hub of wine consumption is concentrated
on one location: Yerevan. Retailers can easily switch between the producers, since enough domestic and international wine producers exist. The set-up costs for contracts are the same for domestic and international wines (via importers) (see ‘Type of business relationships’). In summary, the industry rivalry is high, because customers can easily switch to other products. The research expectation is confirmed.

**IR6: Established firms face a threat of high sunk costs creating a high exit barrier.**

The high share of wine producers owning vineyards (67 %) and wine making facilities (80 %) show that established firms have high sunk costs (see ‘Investments cellar’ and ‘Investments vineyards’). As above-mentioned, a switch to related products is possible. To leave the industry completely is difficult, as there are not many buyers for the equipment and vineyards on the market, resulting in a high exit barrier. In summary, established firms have sunk costs, creating an exit barrier. The research expectation is confirmed.

**IR7: Established grape growers face a threat of a decreased income or a lack of income, creating a high exit barrier.**

According to OE8; 30–30 ‘the farmers have small lands and a family to feed. Many have no other income sources and they know 130 [AMD] is the maximum they get.’ Statements of other experts underline the critical situation of grape growers, especially in the last two (2) years, since the declining sales to Russia due to the ruble depreciation. Less wine and brandy were sold and less grapes needed to be processed. Many farmers could not sell their grapes. Only three (3) of the wine producers feel the responsibility to secure the farmer’s only income source of the grape growers (P1; 10–10; P2; 22–22; P14; 3–3). It is difficult for farmers to leave the grape growing production, risking an income loss in conditions of poverty. They have to do investments into new plantings of another crop. Additionally, they fear to lose more income, because agricultural goods need time to grow, before they can be monetarized. Many producers install their own vineyards, taking away capacities grape growers could have covered. In summary, the living situation of grape growers creates a high exit barrier. The research expectation is confirmed.
Threat of substitutes

SUB1: The threat of substitutes of all alcoholic categories is low.

For the perceived trends on the domestic market by wine producers and retailers see the category ‘Substitutes trends’.

Fruit wines: The market for fruit wines is small and stable over the years, according to ten (10) interviewees. The taste profile is sweeter and it plays a role as souvenirs. Almost 30% of wine production belongs to cider and fruit wine. The share for export is even higher with 44% (in volume) (FARIA and VANNRON, 2016). This indicates that a big share of the fruit wine leaves the country.

Brandy: 21 interviewees state that the consumption of brandy is stable over the years. The interviewees do not see a competition with wine, as brandy is a beverage consumed on special occasions.

Vodka/Spirits: For vodka, the interviewees had the feeling of a stable or even declined consumption, but it is still the leading alcoholic beverage in the country. The prices are lower than for beer.

Beer: The beer consumption is rising or is stable at least. Many retailers see a strong seasonal influence for beer in the summer time.

Imported wine: The market share of imported wine is believed to be stable or it even declined over the last few years. Many interviewees have the feeling that domestic wine has replaced some of the market share for imported wines. Imported wine is the most competitive product, as it serves the exact same function as domestic wine.

In summary, there is a competition with fruit wines, but the market share of fruit wines is rather small. Wine does not compete with brandy, as the drinking occasion is different. Vodka and spirits can be competitive even in prices, but the high alcohol content makes the beverage not comparable with wine. A strong competitor is beer, but only in the summer season. The strongest competitor is imported wine. Over all the threat of substitutes is low, because in summer only beer and a little bit of fruit wines can compete with grape wine. The research expectation is confirmed.
SUB2: The threat of consumers switching to substitutes is high.

The prices for substitutes are in the same price range as for wines. 15 out of 17 retailers are selling imported wines in the same price range as domestic wines (see ‘Product prices’). Except for one (1) wine bar and one (1) restaurant, every retailer sells all categories of alcoholic beverages such as brandy, vodka/spirits and beer (see ‘Product types’). The switching costs for consumers are very low, because the products are available almost everywhere for the same prices. In summary, the threat of switching consumers to substitutes is high. The research expectation is confirmed.

SUB3: The threat of new product development of substitutes is high.

New product development of substitutes is very likely. ‘Since the Customs Union, we have new brands on the market and the prices are really cheap.’ (S1; 21–21) This shows that with the accession of the Russian Customs Union new products entered the market. Furthermore, the accession opened up the market and foreign new developments can now easily enter the market. The research expectation is confirmed.

Bargaining powers of buyers

B1: The bargaining power for producers buying grapes is high, because many grape growers exist and the purchased volume is - in relation to the production quantity of the grape supplier – large.

The group of other experts clearly show the difficult situation for grape suppliers (see ‘Income situation’). Expert OE8; 4–4 states that the influence of grape buyers is tremendously as ‘Most of the time it is based on customary rearrangements. In that area very well developed relationship only one company has. This is [Name of the company] working with 5000 farmers. Having written contracts with everyone.’ This example clearly shows the dependence of farmers. They sell their complete production to one (1) wine producer only. In summary, the bargaining power of wine producers is high, as they buy predominantly the whole production of the farmers. The research expectation is confirmed.
B2: The bargaining power of producers is high, because grapes are a substantial part of the costs and negotiations are intensive.

Answering this question, only one (1) expert agreed. ‘The grapes are the biggest share of the costs for wineries. For the wineries, the grape prices are good because all other things for wine making are too expensive. But for farmers, the prices are bad because they are too low.’ (OE1; 32–32) This statement shows that the negotiations with farmers are intensive to reduce the production costs. However, these negotiations put pressure on the farmers to get enough money to survive. In summary, the bargaining power of producers is high. The research expectation is confirmed.

B3: The bargaining power for producers is high, because grape suppliers have high information asymmetries.

‘Info asymmetries’ shows that the farmers are mainly not aware of final prices and the adding value of wine producers. They can see only some final prices on the domestic market. One (1) of the experts, however, stated the opposite. For him, wine producers give clear messages what they need and if the farmers would produce these requested quality the grape prices would increase. Out of his position, the statement has to be critically scrutinized. Therefore, the opinions of the other experts are evaluated of greater importance. There is no communication between the grape growers about grape prices to be paid. They do not collaborate for a better bargain situation. In summary, there is no collaboration and a high information asymmetry regarding prices and added value for grape growers, resulting in a low bargaining situation for grape suppliers. The research expectation is confirmed.

B4: The bargaining power for producers is high, because they can threaten grape suppliers with a backward integration.

For ‘Investments vineyards’ two thirds (10) of the interviewed wine producers possess their own vineyards. One third (5) of the wine producers do not have their own vineyards, but three (3) out of the five (5) have plans to have their own vineyards in the near future. In summary, these figures show the trustworthy threat of a backward integration of producers impressively. The research expectation is confirmed.
**B5:** *The bargaining power for wine producers buying equipment and inputs for producing final products is low, because not many suppliers are in the market.*

The category ‘Supply occupation’ shows where the input supplies come from. Almost all products except for bottles (one producer on the market) and barrels (several producers on the market) have to be imported. Currently three (3) supplier companies are working with different product portfolios regarding brands. Nevertheless, 80% of the wine producers do self-import. In summary, bargaining power for wine producers is medium, although there are only three (3) supply companies on the market, because they can threaten to do self-import. The research expectation is confirmed.

**B6:** *The bargaining power for all retailers is high, because wine producers have high information asymmetries.*

This information asymmetry is expressed in the wide variation of margins which are offered to the different retailer groups. The category ‘Margins’ show the percentages wine producers offer to retailers. At the same time, retailers were asked what margin they get. Interestingly, these figures are not matching. The following Table 11 Retail margins shows both margins, one named by wine producers and one named by retailers.

<table>
<thead>
<tr>
<th>Type of retailer</th>
<th>Producers margin offer</th>
<th>Retailers demanded margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td>Range: 3–20 %</td>
<td>Range: 5–15 %</td>
</tr>
<tr>
<td></td>
<td>Average: 9–10 %</td>
<td>Average: 10 %</td>
</tr>
<tr>
<td>Wine Bars</td>
<td>Range: 3–25 %</td>
<td>Range: 5–30 %</td>
</tr>
<tr>
<td></td>
<td>Average: 11–12 %</td>
<td>Average: 16–17 %</td>
</tr>
<tr>
<td>Restaurants</td>
<td>Range: 3–25 %</td>
<td>Range: 5–15 %</td>
</tr>
<tr>
<td></td>
<td>Average: 11–12 %</td>
<td>Average: 9–10 %</td>
</tr>
</tbody>
</table>

(Based on own research)

Primarily the table indicates that the margins which are given to retailers, differ widely. **WB3; 14-14 summarizes ‘there is no general agreement in the industry which would be much more profitable for the producer and the seller.’** Further influencing factors for the
margin are quantity discounts. Some wine producers use an exclusive distributor. In summary, these information are not shared between the wine producers, resulting in a low bargaining power. The research expectation is confirmed.

**B7: The bargaining power for all retailers is high, because many wine producers are on the market.**

35 to 40 wine producers operate on the market (OE1; 42–42). This is a small number compared to other matured wine industries, but if wine producers from abroad exporting to Armenia are taken additionally, the number of wine producers is huge. In summary, the bargaining power of retailers is high, as they can easily change the wine producers. The research expectation is confirmed.

**B8: The bargaining power for all retailers is high, because switching costs to other products are low.**

‘Type of business relationship’ shows that ten (10) retailers work with contracts. Only a single retailer uses agreements. Four (4) retailers work with contracts for importers and rely on agreements with domestic producers. The switch to other producers is easy and affordable. The contracting and delivery costs stay the same for domestic producers. A switch to imported wine is also possible as some importers are on the market. According to R4; 8–8 ten (10) importers are operating, whereof three (3) play a significant role. In summary, retailers have a high bargaining power, since a switch to other products is manageable. The research expectation is confirmed.

**B9: The bargaining power for final consumers is high, because switching costs are low.**

The switching costs within the wine segment are zero. Furthermore, are prices for substitutes in the same price range as for wines. 15 out of 17 retailers are selling imported wines in the same price range as domestic wines (see ‘Product prices’). The switching costs for consumers are very low, because the products are available almost everywhere for the same prices. In summary, the bargaining power of final consumers is high, because the switching costs are low. The research expectation is confirmed.
Bargaining powers of suppliers

S1: The bargaining power for all suppliers (except grape growers) is high, because the number of suppliers is small.

The category ‘Supply occupation’ shows where the input supplies come from. Almost all products except for bottles (one (1) producer on the market) and barrels (several producers on the market) have to be imported. Currently three (3) supplier companies are working with different product portfolios regarding brands. The bargaining power of the suppliers is high, since a switch to other products (brands) incurs costs. For example, not every bottle brand fits into the same filling machines. Not every cork type goes with every bottle shape etc. Additionally, various products make the prices not comparable directly. In summary, the small number create a high bargaining power of suppliers. The research expectation is confirmed.

S2: The bargaining power for all suppliers (except grape growers) is high, because there are almost no substitutes available.

As above-mentioned, the suppliers have different product portfolios, but the range of product types is rather limited, especially compared to other wine industries such as Italy, Spain, France, Germany etc. For some products, substitutes are available e.g. screw caps instead of cork. To use screw caps, an investment into a different bottling system has to be done. In summary, a switch to the few substitutes will probably be accompanied by further investments. This enables suppliers with a high bargaining power. The research expectation is confirmed.

S3: The bargaining power for all suppliers is low, because they cannot threat with a forward integration.

Taking into consideration the presented income situation of grape growers, a forward integration is not trustworthy (see ‘Income situation’). Other suppliers are more likely to integrate, due to a better financial situation. One supply company integrated into every supply chain part except for the business of a wine analysis laboratory and selling the wine to final consumers (OE3; 6–6). The other competitor has its core business in another field, not in the supply sector for the wine production. Therefore, an integration is unlikely.
to happen (OE4; 2–2). In summary, the bargaining power of grape suppliers and of other suppliers is low, because a threat of a forward integration is not trustworthy. The research expectation is confirmed.

**S4: The bargaining power for all suppliers is medium, because buyers can threat with a backward integration.**

The category ‘Supply occupation’ clearly shows that a threat of backward integration is trustworthy. Already 80 % of wine producers do self-import of supplies. In summary, the bargaining power of suppliers is not medium, it is low, regarding a backward integration. The research expectation is not confirmed.

**S5: The bargaining power for suppliers of technology and machinery is high, because the products are highly differentiated, relevant and represents an important resource.**

From all six (6) wine producers working with suppliers, three (3) do also self-import. Two (2) out of the three (3) producers only purchase machinery from the suppliers (see ‘Supply occupation’). This is a strong hint that the bargaining power for suppliers is high, as the wine producers do mistrust their self-import if it comes to machinery. In addition, the ‘Supply prices’ show that the prices for inputs are higher than in Europe. On the one hand, transportation costs, import tax, small quantities induce the higher costs. On the other hand, some wine producers and one of the experts doing self-import trace back the high prices to a high percentage of profit margin.10 The estimation is around 30 to 40 %. The suppliers can demand these margins, as options for a supplier change are very limited. In summary, the bargaining power for suppliers are medium, because producers can change to another supplier or self-import. The research expectation is not confirmed.

**S6: The bargaining power for the grape suppliers is low, because only a few grape buyers exist in the market.**

The group of other experts clearly show the difficult situation for grape suppliers. Expert OE8; 4-4 states, that the influence of grape buyers is tremendously as ‘Most of the time it

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10 The researcher could feel during the interviews that not every interviewee had the courage to name all the reasons for the high prices. It is believed that the interviewees did not say that suppliers have high profit margins, as the wine industry is small and they were afraid that the suppliers will hear about their answer.
is based on customary rearrangements. In that area, very well developed relationship, only one company has. This is [Name of the company] working with 5,000 farmers. Having written contracts with everyone. ‘. This example shows the dependence of farmers. The number of wine producing companies is around 35 to 40 (OE1; 42–42) compared with more than 5,000 grape growers. Another expert (OE7; 18–18) describes the market of grapes as a buyer’s market. The buyers can choose from whom they buy the grapes. The mainly used oral agreements unburden a fast and (almost) no costs causing switch (see ‘Type of business relationship’). In summary, the bargaining power for grape suppliers is low. The research expectation is confirmed.

S7: The bargaining power for grape suppliers is low, because they have no protection by a contract.

As above-mentioned, the main business relationships are based on short-term oral agreements. Only two (2) companies work with two (2) to five (5) year contracts. Other companies using agreements argue they work on a long-term basis with the grape suppliers, but there is still no possible legal protection or enforcement (see ‘Type of business relationship’). This shows there are many agreements negotiated each year – there is no frequency of business transaction causing high transaction costs. In summary, the bargaining power for grape suppliers is low. The research expectation is confirmed.

S8: The bargaining power for grape suppliers is low, because wine producing firms set the prices.

‘Price criteria’ shows that two (2) wine producers set the price and other producers follow these prices. They take the same prices or prices below. In general, the prices vary between grapes for brandy or wine making. For brandy making the price are ranges between 70 and 150 AMD. For wine making the prices are slightly higher, between 150 to 200 AMD. Brandy making relies on quantity and a minimum sugar level. For wine making the price criteria are not only relying on quantities, but also on sugar level, ripeness, healthiness of the grapes and other quality requirements. The price criteria for wine making grapes differ greatly between the producers. There are some wine producers with strict quality requirements; others have a similar mentality to brandy making. In summary, the
prices are set by the wine producers and the bargaining power for grape suppliers is low. The research expectation is confirmed.

S9: The bargaining power for grape suppliers is low, because the selling quantities are low.

The same argumentation as in research expectation 6 (on page 83) applies here. The number of wine producers is very low, in comparison with the number of grape growers. The average size of land plots used by the farmers for grape growing are very small. This is a result from the privatization process see chapter 2.1. The quantities of grapes each farmer provides to the whole production of wine producers is in relation very small. In summary, the bargaining power for grape suppliers is low. The research expectation is confirmed.

S10: The bargaining power for grape suppliers is low, because they do not collaborate and there is no price transparency (high asymmetric information).

‘Institutions’ represent a very under developed stage of organizations or associations within the industry. For grape growers, there is one association called Grape Grower Association, but it could not be obtained if the association is still working. Reasons are the mistrust between the members, no collaboration, only a few members participate and missing money to do projects. OE3; 8–8 identifies another historical development that ‘they are used to the government saying what to do.’ A clear leading role decided the steps for the industry in the past.

‘Info asymmetries’ shows that the farmers are mainly not aware of final prices and the adding value of wine producers. They can only see some final prices on the domestic market. One of the experts stated the opposite. For him wine producers give clear messages what they need and if the farmers would produce this requested quality the grape prices would increase. Out of his position, the statement has to be critically scrutinized. Therefore, the opinion of the other experts are evaluated higher. There is no communication between the grape growers related to paid grape prices. They do not collaborate for a better bargain situation. In summary, there is no collaboration and a high information asymmetry regarding prices and added value for grape growers, resulting in a low bargaining situation for grape suppliers. The research expectation is confirmed.
S11: The bargaining power for grape suppliers is low, forcing farmers to behave opportunistic to achieve more income.

One of the categories not included until now is the 'Behavior’. Most of the wine producers (11 producers), except for four (4), denied an opportunistic behavior of farmers such as irrigating in the night before the harvest or diluting the grapes after the harvest. Both methods can increase the weight of grapes and would increase the payment for the farmers, since the quantity is still the major price criteria. The reason of the denial is the strict control. Many wineries harvest the grapes in the vineyard themselves to see if the vines have been irrigated. Additionally, they think the higher prices do not force the farmers to do so. Some of the interviewees did not answer the question by changing the topic of the answer. These topics were about the deviant behavior of wine producers. Exemplarily, some do not state the right variety on the label; some do not age brandy long enough to save costs; others use different ingredients e.g. add other fruits or substances without stating it on the label. For instance, pomegranate is not always solely made out of pomegranate, other fruits are added to have more quantity or to save costs.

Coming back to the deviant behavior of farmers. Interestingly, five (5) out of six (6) other experts stated that cheating of farmers is still a big topic. In this special case, taking into account the difficult income and poverty situation of farmers, the opinions of the other experts are weighted more than the producers’ opinion\(^\text{11}\). In summary, the bargaining power of grape suppliers is low as many times shown above. In addition, opportunistic behavior does sometimes occur. The research expectation is confirmed.

S12: The bargaining power is medium, because wine producers need higher agency costs.

The same category, can deliver hints that the agency costs of wine producers are increasing. The wine producers give instructions which need to be controlled, they do checks on sugar levels and they harvest on their own to avoid irrigating shortly before harvest. Another solution would be to pay higher prices to the grape growers giving incentives to

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\(^{11}\) The interviewer had the feeling that some of the wine producers gave a social-desirable answer. One of the reason could be that they tried to prevent to give the researcher a deep insight to sustain a positive picture of Armenian people.
avoid opportunistic behavior. In summary, this results in higher agency costs. The research expectation is confirmed.

S13: The bargaining power of some grape suppliers is medium, because the grape varieties are differentiated, relevant, and represent an important resource.

Especially the demand for the red wine variety Areni gives the grape suppliers who grow this variety a high bargaining power. The prices are between 180 up to 350 AMD per kilogram. Other favored varieties are Voskehat around 180 AMD per kilogram and Muscat around 200 AMD per kilogram. (cf. ‘Price criteria’) The restriction of asset specificity for special varieties could not be confirmed. Now, international varieties and the above-mentioned varieties for wine making are in a high demand. Farmers do not face the risk of losing selling options. In summary, special highly demanded varieties give a high bargaining power to farmers. The research expectation is confirmed.

S14: The bargaining power for wine suppliers is low, because they do not collaborate and there is no price transparency

Between the wine producers there is no collaboration and price transparency as a general agreement on margins is absent (WB3; 12-12). In addition, ‘Institutions’ shows that there are four (4) organizations of wine producers in the wine industry: the Young Winemaker Union, Wines of Armenia, Vineyards of Armenia, and Vine and Wine Foundation. The statements illustrates that the organizations are not actively working. The Vine and Wine Foundation is funded by the Armenian government and it started to operate two (2) months before the interviews. The influence and aim of the foundation was not yet clear. Other attempts did not work, since producers have no trust, they are jealous of colleagues and personal issues which prevent collaboration. Different foreign organizations such as GIZ or CBI tried to initiate organizations or associations. In summary, there is no institutional body to represent the producers’ interest and support the collaboration. The research expectation is confirmed.
5 Strategic Implications for Armenia

At first, the analysis findings (chapter 4.3) regarding the research expectations are summarized. Secondly, the summarized results are used to make implications about the peculiarity of each of the five forces. Based on these derived implications further implications about the competition intensity of the Armenian wine industry are made. The last part derives strategic implications for the domestic wine industry in Armenia for each group – suppliers are differentiated into grape growers and others, buyers differentiated into final consumers and retailers, wine producers and potential new entrants – separately. From the derived strategic implications specific strategic recommendations are given for each participating group in the industry. This is possible, since the choice of the interviewees and the number of conducted interviews are almost representative for the whole industry. This study fills a gap in the research field on the Armenian wine industry, because there has not been any research study up to now dealing with the competition in the domestic market until now (see Introduction).

The first force threat of new entrants consists of 13 research expectations. Except for NE5 and NE10 every research expectation was confirmed. The peculiarity of NE5 was changed from a high to a medium exit barrier. This was a single identified exit barrier with a medium peculiarity. A change to a production of wine-related products is not as difficult as expected in advance and the costs of a switch vary between different products. For NE10 no information about the peculiarity was found.

Almost 62 % – eight research expectations – show a low or even no entry barrier for new entrants. Only three (23 %) expectations have medium entry barriers, concerning a switch to other suppliers, economies of scope, and economies of vertical integration. Overall, the peculiarity of entry barriers for new entrants can be assumed being low. In summary, this implicates a high threat of new entrants, since the entry barriers are low and the exit barriers are medium.

The second force which is industry rivalry consists of seven (7) research expectations. Every research expectation was confirmed. Four (4) out of seven (7; 57 %) expectations implicate a low industry rivalry. IR3 dealing with high storage costs which induce price cuttings to sell the storage could only be explained by the crisis with the Russian market.
due to the ruble depreciation in the last two (2) years. This indicates a high rivalry, as wine producers want to sell their stocks. Furthermore, two (2) research expectations implicate high exit barriers for established wine producers and grape growers. The high exit barrier for wine producers is caused by high sunk costs for vineyards and cellar equipment. Especially in combination with the high percentage of wine producers who invested in own vineyards (67%) and in own cellars (80%) – this gives more importance to this result. The same goes for the exit barrier for grape growers. It is high, because grape growers fear an income lack connected with a potential exit. Together with the fact that 30% of the entire Armenian population live in poverty\textsuperscript{12}, ascribing more importance to the result. In summary, the force industry rivalry can be described as low to medium.

The third force threat of substitutes consists of three (3) research expectations. All three (3) were confirmed. The pressure of substitutes is low, as vodka and spirits do not serve the same function and brandy is drunken at different occasions. Beer and fruit wines can compete to a certain extent, but for fruit wine the market share is rather small and beer is a seasonal competitor. Imported wine is the strongest competitor, but it possesses only a market share of around 30%. For every alcoholic beverage, the switching costs for consumers are low, since it is available everywhere and in comparable price ranges, creating a high threat of substitutes. It is similar with new product developments. The same likelihood goes for all alcoholic beverages, again creating a high threat of substitutes. In summary, the threat of substitutes is medium.

The fourth force bargaining power of buyers consists of nine (9) research expectations. For this force, every research expectation was confirmed. The bargaining power of wine producers is high, except if it comes to other suppliers (except grape suppliers). The bargaining power for all types of retailers is high. For consumers, the bargaining power is also high, because they can switch at low costs to other product or producers. In summary, the bargaining power is high for each group – wine producers, retailers and final consumers.

\textsuperscript{12} According to the World Bank definition, ‘poverty is the inability to ensure an acceptable minimum of certain living conditions.’ in Poverty Profile Armenia – Part I published by the World Bank and NSS in 2015.
The last force bargaining power of suppliers consists out of 14 research expectations. Except for S4 and S5 every research expectation was confirmed. For all suppliers, except grape growers the bargaining power is high. They can be threatened by backward integration of buyers, as many wine producers do self-import. Suppliers of machinery and technology have important input supplies, again the wine producers can do self-import lowering the bargain power. Grape growers have a low bargaining power. Some grape grower cultivating special and highly demanded varieties have a high bargaining power, but these growers represent a very small percentage. Other grape growers can get slightly more bargain power, if they can threaten wine producers trustworthy of not accepting the instructions. This causes higher agency costs for wine producers which they need to control or to pay higher prices. Wine suppliers have a low bargain power when they sell their product to retailers. In summary, all suppliers except for grapes have a high bargain power, while grape growers have a low bargain power. Wine suppliers have a low bargain power towards retailers.

Table 12 Implications of peculiarity of forces

<table>
<thead>
<tr>
<th>Force</th>
<th>Groups</th>
<th>Peculiarity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threat of new entrants</td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Industry rivalry</td>
<td></td>
<td>Low to medium</td>
</tr>
<tr>
<td>Threat of substitutes</td>
<td></td>
<td>Medium</td>
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<tr>
<td>Bargaining power of buy-</td>
<td>Wine producers</td>
<td>High</td>
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(Based on own research)

Table 12 summarizes the peculiarity of each force and if necessary for the different groups. These implications are the basis for the deduction of the competition intensity. With the result of Porter’s five forces analysis, it can be assumed that the competition intensity has slightly risen in the last few years. On the one hand, new wine producers
entered the wine industry, increasing the production volume of domestic wine. On the other hand, export sales dropped, because of the Russian ruble depreciation wherefore more wine stayed within the country. The rise of competition intensity can be considered small, as the domestic consumption increased and export to other countries increased as well. The threat of substitutes should not be overestimated, as sales of products with high alcoholic beverages are decreasing and products with lower alcohol content such as beer and wine gain market share. The analysis of the bargaining power of buyers showed a consistent high bargain power for all retailers – wine bars, wine shops, restaurants, cafés, hotels, distributors, and supermarkets. Bigger retailers can put pressure on the wine producers slightly more in terms of special delivery terms, quantity discounts, and margins. The bargaining power of suppliers is differentiated. All supplier groups except for grape growers have a high bargaining power. This power is undermined gradually by a forward integration of wine producers into the supply sector by doing self-import. On the contrary, the bargaining power for grape growers is low. The wine producers have a low bargaining power towards the retailers.

In summary, the competition intensity of the industry is low. The Armenian wine industry is interesting for new entrants. The entry barriers are low and the profitability still is on a good level. The high exit barriers can lead in future to a high excess capacity which will lower the prices.

In the following paragraphs, strategic implications and recommendations are made to improve the situation of the market participants in the Armenian wine industry. The succession of the groups follows the structure of the five forces: new entrants, established producers, suppliers, and buyers.

For companies who want to enter the industry two (2) strategies are possible. These depend on the financial situation of the new entrants. Firstly, they can enter the wine industry without making big investments and creating sunk costs. They can make contracts or agreements with grape growers to buy in some grapes. Additionally, for the production of wine they can rent a winery. This can be seen, as a pre-test if the market will accept / take the new products. If this is successful, the companies can start to invest gradually into the enlargement of the production, into own vineyards, and into a cellar. Not only
depending completely on private financial resources. If the production is accepted, the generated profits can be reinvested.

The second strategy for new entrants is based on investments from the beginning. The new companies invest from the scratch into vineyards and a cellar with the risk of high sunk costs, if the business is not successful. New entrants also have the possibility to start directly with additional products besides wine for economies of scope. For fruit wine or brandy, they can buy in fruits or grapes and rent the same production facility as for one. However, the production of brandy needs facility with a distillery and the license for spirit production which costs 50,000 AMD.

Overall, the entrance is easy, because no problematic or high entry barriers exist. With the first strategy, the risk of a high exit barrier would be avoided.

Wine producers are the central market participants in this study. For this group, various strategic implications can be made. Some of the wine producers demanded regional regulations, especially wine producers from the Areni wine region. These producers see a higher quality and value connected with the grapes and wines from this region. This is a possibility, but not necessary for the near future. It would be more important to find out where and how many of the vineyard area is used for wine making. With these numbers, the importance of the wine industry in the context of the agricultural sector could be clarified. Based on this, strategic decisions of the government can be more purposeful.

Furthermore, the results showed that the interviewed wine producers feel a huge need for wine laws and regulations in combination with enforcement of these. The analysis showed that a clear legal definition of product categories is missing. There have to be strict definitions which products are allowed to be labelled wine, fruit wine, brandy etc. In advance of the product sales, a legal analysis of the products has to take place. Therefore, an independent, certified laboratory is necessary. If the products do not match the regulations, sales have to be prevented. As many small-scale home producers exist, the regulations could only be applied to wine producers who sell in indirect sales channels.

A wine law and regulations should be based upon international standards to facilitate export in various countries. Export to different countries would be a strategy to diversify the risk to be not dependent on one country. Now, the dependency on the Russian market
shows its problems and consequences. Another option related to export, could be the involvement of the huge diasporas, e.g. in the USA, France, Germany etc. The category ‘Diaspora’ shows the potential, as many investments are foreign investments from the diaspora. Some of the experts even see a sales potential to the diaspora communities.

Another strategic implication recommends the formation of an organization which unites all the wine producers countrywide, or in sub-regions. Various role models can be found around the globe, e.g. *German Wine Institute, Wines of Chile, Californian Wine Institute, Comité Interprofessionnel du Vin de Champagne*, etc. Such an organization can be founded by the private sector or with the help of the government. The recently founded *Vine and Wine Foundation* tries to unite the different parts of the wine industry. Starting from viticulture, wine production until the support of export and the development of an umbrella brand and the wine culture within the country. The success or failure of this organization can be evaluated in the future, since they have started their work very recently. Based on this analysis the success of the foundation is seen critically, because many attempts of various organizations in the industry failed in the past. Overall, the attempt to create an umbrella brand and to share expenses for various activities is very positive.

Such an organization can represent the interests of wine producers towards the legislator, towards other industry participants, and towards the government. Furthermore, the organization could accomplish collaboration between the wine producers to improve the bargaining power towards suppliers and buyers. If it is possible to create collaboration and transparency between the producers, they could establish a more professional type of business relationship by using contracts. This applies for relationships with buyers and suppliers. Together the wine producers could pressure the retailers to accept lower margins if they have a general agreement and they could set minimum quantities for delivery to save time and costs which do not exist up to now (cf. ‘Purchase quantity’). If it comes to suppliers, commonly organized orders would make economies of scale possible. They could request special products easier or they could threat to organize self-import together etc. Additionally, the wine producers would be protected by a contract.

Overall, the situation of wine producers is good. They could put pressure on suppliers with a backward integration and have a dictating power if a grape supply happened. The
business relationship with buyers is not in favor of the wine producers, but this could be changed by collaboration among the wine producers.

The situation of retailers can be described as positive. They have a high bargain power and they benefit from their power. This is expressed as they determine delivery quantities, margins and other special delivery terms such as exclusivity. In the future, they could rely on further special delivery terms, e.g. they could demand exclusive wines or exclusive packaging. Overall, the business with wine for retailers and their bargain situation is good.

For final consumers, no strategic implications exist. They would benefit from established wine laws. This would guarantee a stable quality so that only ingredients are used which are allowed for the product category. For example for wine, only grapes are allowed in the production. This would build trust into domestic products which could lead to a higher domestic consumption, since many consumers rely on imported products. These products offer the security in terms of quality and ingredients, as the laws and regulations exist, and they are enforced. Overall, the situation of final consumers is good. They can choose between products and price segments, as a wide product portfolio of domestic and international wine and other substitutes is everywhere available.

For the suppliers – except for grape growers – the following strategic implications can be drawn. They should lower their profit margins to a reasoned range. Wine producers can threat trustworthy with a self-import. The only option for suppliers to bind wine producers to their services is an offer of something they cannot get by doing self-import. For instance, suppliers could offer a good maintenance services for machinery and technology.

Local suppliers as glass and barrel producers should check for the needs and quality standards the wine producers’ need. Both producer types have all the necessary resources available. Barrel producers should enlarge their product portfolio by adapting the production process of brandy barrels to wine barrels. The production process is the same, except for the staves which are thinner. The glass and bottles producers could check for standards and prices abroad, otherwise wine producers will change to do self-import. The monopoly of the glass producer has to be changed, as many producers have or will changed to other suppliers.
Suppliers should also form organizations to improve the import situation and bureaucracy process. The organization can represent the interests and needs of the suppliers towards the legislator, other industry participants and the government. Simplified import laws could lead to lower expenses and a better and greater offer of products. This could attract more clients. Overall, the situation of suppliers is positive, but the threat of self-imports should be taken into consideration for further strategic decisions.

The situation for grape suppliers is not comparable with the situation of other suppliers. The income position for grape suppliers is difficult. Many grape growers have no financial resources to invest or to change their occupation. The bargaining power is low and the farmers are depending on the wine producers. For farmers different strategies are possible.

Nowadays the business relationship with wine producers is mostly based on oral short-time agreements. An establishment of mid to long-term contracts would offer more protection for grape growers. Quality requirements and prices should be recorded. Then the dictating power of wine producers would be limited.

Secondly, they should try to set up organizations like the Grape Grower Association which officially exists without any active involvement. With this organization, the problems and interests of grape growers can be represented towards legislator, other industry participants, and the government. Furthermore, together they can act as a bigger supplier and the shared quantities can induce a better bargain power.

Another option would be the foundation of cooperatives. The category ‘Cooperatives’ shows that the legal framework for the foundation and for taxation is already established. The government is supporting the establishment with some funding. The big issue about cooperatives is that many farmers see cooperatives negatively due to the Soviet history or they do not know anything about the function. The government needs to promote cooperatives and show the benefits to the grape growers.

Cooperatives would offer the possibility of shared costs and knowledge for viticulture and oenological production processes. The produced grapes could be paid by a quality system, resulting in different qualities of wine that could be sold further to wine producers generating higher profits. Therefore, grape growers who can produce higher quality will
have an incentive to do so. This could add value which the cooperative members would gain.

Governmental support which already exists – the regional development centers where agronomists share their knowledge with the farmers, could be more target-oriented, reaching more farmers with the same effort (see ‘Government support’). Another governmental support could be to offer subsidies for loans. With lower loans, grape growers could invest into more demanded varieties, change to wine related products, or leave the wine industry completely. They gain the option of changing to other crops.

Overall, the grape growers are the weakest part of the wine industry. They need some changes for their future in other respects. Many grape growers will lose their occupation and income source if the situation stays the same.

6 Conclusion

The following chapter critically scrutinizes the applied methods and the results of the study. The strengths and the weaknesses, respectively the limitations of the study are shown. Some implications for further need for research are given. The last part includes a short summary.

The developed framework based on Porter’s five forces is – like every framework – a simplification of the reality. In that sense the framework only analyzed the external influencing factors for each force, leaving out other factors, e.g. internal factors related to the companies. Some of the results had to be excluded, although they showed that additional factors are important to be more precise in the result of the competition intensity. These factors could not be included, as they did not fit into the rigid framework. The framework limited therefore the inclusion of all gathered results.

Interviews are a useful tool to collect information, but the interviewer influences the results as the conversation is a personal dialogue depending on the interviewer as a person. The interviewer’s experience, interview style, foreknowledge and other factors affect the
results. This is typical of the qualitative research approach and cannot be prevented completely. It was tried to keep the influence as low as possible throughout the whole study. Positively was that only one researcher did the planning, implementation, and analyses.

For a replication of the analysis, the tool of conducting interviews would have been chosen again as the industry is small and personal relationships play an important role in Armenia. Additionally, the study was almost representative, since many market participants were reached. For a second study, more quantitative methods would be included to gain more numerical information about the wine industry as the information basis is rather small. In addition, as one of the major groups in the wine industry the grape growers would be included. With a quantitative approach the competition intensity could be examined.

Since budget limits did not allow the use of professional interpreters, two native English-speaking students from the Yerevan Wine Academy translated even though it is against the principle of using professional interpreters. Usually a professional back translation is necessary, but as the content is more important than the tone (BOGNER et al., 2014) and due to time and costs limits, a back translation did not take place. An advantage of the interpreters has been the involvement in the industry, as they knew the background and vocabulary.

Every interview was transcribed in the style of a selective transcription, due to language barriers and time restraints. The interviews could have been transcribed word-by-word also stressing pauses, intonations, the use of special words, etc. for a more precise analysis. With selective transcription, information can be distorted and the quality of the results of the analysis are limited (KRUSE, 2015, p. 341). Taking the knowledge into account that selective transcription influences the results, several transcription rules were developed to secure a high quality of the data.

During the conduct of the interviews some differences between the researcher and some of the interviewees impeded the amount of information. The differences in age, gender and status within the industry had an influence on the results of the interviews. Many of the interviewees were 20 to 30 years older than the researcher. The difference in gender
led to a paternal behavior of some of the interviewees. Especially in a culture like Armenia, where women still stick to classical role models the behavior can be present. The researcher had the status of a student which had sometimes a slightly negative impact. According to BOGNER et al. (2009, p. 243), the phenomenon on paternalism is not uncommon. If the researcher is not seen as an expert itself on the topic, some interviewees do not feel the need to fully participate which can influence the results. Having this in mind a further study using interviews the interviewer should be widely accepted to secure the results.

For the future, the following need for research has been identified: (1) A numerical survey is necessary for a classification of the entire Armenian wine industry. Until now, no particular and reliable information regarding the wine industry is available. At least, the information basis is rather small. (2) Another research field could check on the knowledge level, processes and methods of grape growers and wine producers to see if they are competitive with other wine industries. (3) Furthermore, the potential of the industry in terms of growth, varieties, work force, investments, etc. should be researched. (4) Another topic could research marketing strategies for Armenian wine industry on the global market. Either for the country on its own or with the inclusion of neighboring countries such as Georgia, Azerbaijan, Turkey, Iran, etc. which have a similar wine history.

Summarizing, this study fills a gap in the research field of the Armenian wine industry, because until now, there has been no research study dealing with the competition in the domestic market (cf. Introduction). The framework of the Market-Based-View served as the theoretical reference frame. The concept of Porter’s five forces was adapted to conceptualize an own framework with three levels referring to the research topic. Different research expectations were developed with secondary literature. These research expectations – the first level – were the object of the qualitative research methodology. With the tool of expert interviews 41 participants were interviewed. The analysis used the evaluation method of GLÄSER and LAUDEL. Based on the analysis of the research expectations, strategic implications about the peculiarity of the five forces – the second level of the framework – are drawn. Furthermore, the competition intensity – the third level – is derived, taking the peculiarity of the five forces into account. In the last step, strategic implications and recommendations have been made for each participating group in the
industry. This is possible, since the choice of the interviewees and the number of conducted interviews are almost representative for the whole industry.

The results show a low competition intensity on the domestic market. The situation of substitutes is not threatening for the domestic wine industry. The bargaining power of buyers on the domestic market is strong. For the supply sector related to the wine industry, the results have to be considered differentiated. On the one hand, suppliers have a high bargaining power, but recent developments such as the self-import are rising, challenging the suppliers. On the other hand, grape growers have a low bargain power. Strategic implications strongly recommend a change in the legal framework for the wine industry which is only successful if enforcement is warranted. The collaboration and establishment of organizations among the different groups in the industry should be addressed to enforce transparency and a better bargain situation. An important topic to deal with in the near future is the situation of farmers. The dependency on the Russian market, the overproduction and the development of wine producers establishing their own vineyards will tighten the situation for grape growers. Especially taking into account that for many families grape growing is the only income source and a change to other occupations is difficult.
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A1 – Interview guide for wine producers.

I) General information about own business
1. Please describe shortly your business model, business strategy and your position in the company.
2. How is the production size, what are varieties, which soils, which regions, how much is the portion of brandy/wine/fruit wine?
3. How does your grape buying process work? Do you use contractual agreements or oral agreements?
4. How does your quality and price system work? What are the prices for 1kg of grapes? What are your important quality characteristics? How many grape growers you work with in average?
5. Why do you have own vineyards? / Why you don’t have own vineyards?
6. In which regions are you active? Do you have multiple locations?

II) Supplier relationship
7. Where do you buy your input products (e.g. winery equipment/machinery, barrels, bottles, corks etc.)?
8. Do you have many suppliers to choose from?
9. How are quality and price? How is it in comparison with Europe?
10. If it is the case: Why do you do your own import?

III) Buyers relationship
11. Describe the importance of the domestic market or the export for your business.
12. Where do you sell the wines? Do you want to sell in other distribution channels?
13. How about margins for different distribution channels such as restaurants/wine bars/supermarkets?
14. What are the price segments you sell in?
15. Who is the final consumer of wine in Armenia? Please describe the buyer of your product!

IV) Substitutes
16. What are the substitutes for wine and why? How are market developments for substitutes?
17. How are prices and the availability of substitutes?

V) Future outlook
18. Do you feel support of the Government? (By laws, regulations or in other ways?)
19. Do you have institutions for collaborating? What do they do? (e.g. Wine of Armenia?)
20. How is your expectation about the future development of the market?
I) **General information about own business**
1. Please describe shortly your business model, business strategy and your position in the company.
2. How is the product portfolio?
3. What are the prices?
4. Do you want to grow or integrate?
5. Do your products match EU standards?

II) **Supplier relationship**
6. Where do you buy your products?
7. What are quantity restrictions?
8. How are the margins?
9. What are delivery terms?
10. How is the support of the government?

III) **Buyers relationship**
11. Who are the buyers of your products?

IV) **Substitutes**
12. What substitutes are produced in Armenia? How are market developments for substitutes?

V) **Future outlook**
13. How is your expectation about the future development of the market?
A3 – Interview guide for supermarkets.

I) General information about own business
   1. Please describe shortly your business model, business strategy and your position in the company.
   2. How big is the product portfolio?
   3. What are the prices/price ranges?
   4. Where are the wines from? (percentage)
   5. What are your bestsellers?
   6. How is your distribution organized?

II) Supplier relationship
    7. Where do you buy your products?
    8. What are quantity restrictions?
    9. How are the margins?
   10. What are the delivery terms?
   11. If it is the case: Why do you do your own import?

III) Buyers relationship
   12. Who is the final consumer of wine in Armenia? Please describe the buyer of your product!

IV) Substitutes
    13. What are the substitutes for wine and why? How are market developments for substitutes?

V) Future outlook
    14. How is your expectation about the future development of the market?
A4 – Interview guide for restaurants and bars.

I) General information about own business
   1. Please describe shortly your business model, business strategy and your position in the company.
   2. How big is the product portfolio?
   3. What are the prices?
   4. Where are the wines from? (percentage)
   5. What are your bestsellers?

II) Supplier relationship
   6. Where do you buy your products?
   7. What are quantity restrictions?
   8. How are the margins?
   9. What are the delivery terms?
   10. If it is the case: Why do you do your own import?

III) Buyers relationship
    11. Who is the final consumer of wine in Armenia? Please describe the buyer of your product!

IV) Substitutes
    12. What are the substitutes for wine and why? How are market developments for substitutes?

V) Future outlook
    13. How is your expectation about the future development of the market?