Vertical integration in the Azerbaijani Wine business

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Abstract

Today wine production in Azerbaijan totals to about two million decalitres a year. Yet, the yearly wine consumption is only one million decalitres resulting in a total surplus of about one million decalitres of wine. In consequence, export is gaining in importance resulting in an increase of importance to produce high quality wine. In this context the production of high quality grapes is very important. In this context the paper addresses the question why vertical integration is considered as a major importance for quality wine production.

Preliminary version for discussion

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INTRODUCTION
Azerbaijan, considered to be the birthplace of the vine, is very rich in grape varieties, not only for the production of table or technical grapes, but also wild ones. According to a study, more than 600 local and introduced grape varieties can be found Azerbaijan today. During the Soviet Union Azerbaijan was one of the major wine producers of the Soviet Union. Not only was the production area much larger than today but also yields were much higher so that produced wine was considered of low quality not matching today’s standards. After Mikhail Gorbachev’s “anti-alcoholism campaign” the majority of vineyards were cleared ruining the sector. In the beginning of the transformation process the wine sector was not revitalized. The revitalization of the wine sector has begun at the beginning of the new millennium when a number of new companies have been established. Right from the beginning these new companies started to work with European experiences and technologies.

Today about fifteen years later according to the State Statistics official statistics the number of wine producing companies in Azerbaijan is seventeen. As there are no dramatic changes the majority of them have been established since the year 2000. According results of the conducted interviews the recent wine production in Azerbaijan totals to about two million decalitres a year. Yet, the yearly wine consumption is only one million decalitres resulting in a total surplus of about one million decalitres of wine. In consequence, the majority of the interviewed companies stressed that the production of good quality is key for success.

According to the results of our interviews, which correspond to the view expressed in the EU report on value chains, the majority of wine makers prefer to grow their own grapes. In this context we want to analyze why vertical integration is considered as a major success factor for quality wine production.

THE AZERBAIJANI WINE SECTOR
Domestic grape and wine production
In Azerbaijan last year a total area of 16’115 ha of agricultural land was covered by vineyards, of which 13’128 ha actually produced grapes. The total grape production of Azerbaijan was of 154’123 tons (State Statistical Committee of the Republic of Azerbaijan 2014). In average the productivity of one hectare of vineyards in Azerbaijan was of 11.7 tons, but the average yield varied strongly according to regions. For instance, the yields obtained in the Sherur region of the exclave Nakhchivan was 19 tons per hectare whereas in the city of Sumgayit the average yield was under seven tons per hectare., About 40% of the total grape production, corresponding to approximately 65’000 tons of grapes, is transformed into wine. The bigger part of the production is consumed as table grapes (EU report on value chains in Azerbaijan 2014). There is no information or data on the amount of grapes processed into raisins or juice. The production of technical grapes is divided into approximately 80% of red wine grapes and 20% of white wine grapes. 10’000 – 15’000 tons of these grapes are used for the production of sparkling wine and brandy.

The producers of grapes can be divided into two categories: agricultural enterprises, who produced in 2012 13% of the total production of Azerbaijani grapes, and private owners, who produce at a higher yield per hectare the main part (87%) of the total amount of grapes grown in Azerbaijan. The agricultural enterprises usually have a lower yield than the private owners because agricultural enterprises grow grapes to process them into wine or other products, thus attaching more value to
the quality of the grapes, while the private owners sell grapes and thus want the highest possible yield in order to earn more money. According to the results of the interviews, which correspond to the view expressed in the EU report on value chains, five out of seven wine makers prefer to grow their own grapes. As a result, there is no information available on prices of technical grapes since the market for technical grapes is very limited. However information on general grape prices (mainly table grape prices) is available. According to the State Statistics Committee of Azerbaijan grape producers received between 0.42 AZN/kg to 0.35AZN/kg of grapes depending on whether the seller was an agricultural enterprise or a private farm owner. Further, prices varied according to years. The 2013 cost price of grape production was 0.22 AZN/kg for private farm owners and 0.29 AZN/kg for agricultural enterprises.

Four of the seven interviewed wine producers grow both local and international varieties. Only one grows solely international varieties. The reason for this decision is the aim to export to Europe and the assumption that those varieties are more compatible with the taste of European consumers. Another reason expressed by an interviewee was the greater sensitivity of local varieties to illnesses and pests. The European varieties cultivated by the companies in the sample are mainly Merlot, Cabernet Sauvignon, Shiraz, Chardonnay, Muscat and Petit Verdot. The main local varieties are Saperavi, Madrasa, Rkatsiteli and Bayan Shiraz. According to one of the interviewees, the choice of the varieties depends first of all on the philosophy of the winery, further on the popularity of the variety and lastly on consumer preferences.

The number of wine producing companies in Azerbaijan was seventeen in 2013 (State Statistics official statistics). The interviews revealed that total wine production in Azerbaijan is about two million decalitres a year, but the yearly consumption is only one million decalitres. The resulting surplus of about one million decalitres was confirmed by all interviewees. As a result the majority of the interviewed companies stated that they do not work with full capacity. As there is a lack of qualified suppliers all most all oenological inputs are imported including corks, labels, barrels, bottles etc. In order to enhance the quality of the production process the companies invested heavily in modern production technologies as well as stainless steel tanks so that high depreciations are resulting. Further, due to a lack of well-educated domestic oenologists foreign oenologists were hired.

In-between summary: production

A small number of domestic wine producers is producing about two million decaliters of wine. According to the official State Statistics Azerbaijan has seventeen wine producing companies.

Domestic demand

In Azerbaijan in total about one million decaliters of wine are consumed annually. The majority of wines consumed in Azerbaijan are domestically produced. A report of Euromonitor observed growth in both volume and value of wine sold in Azerbaijan. The increase in total volume of sales between 2012 and 2013 in still red wine amounted to 13%, while the increase in white still wine was of 5%. Over the same period, the value of sales of red still wine increased by 11% and the one of white still wine by 4%. The total value growth of wine in Azerbaijan over the corresponding period shown by Euromonitor was of 6.5%, while the total increase in volume was of 9%.
The weak wine consumption by Azerbaijanis can also be observed through data compiled by the World Health Organization (WHO) and the State Statistics Committee of Azerbaijan. This data also shows a different aspect of the low consumption, namely the preference for other alcoholic drinks. The Azerbaijani publication “Consulting & Business” cites WHO data showing that only 12% of the Azerbaijani alcohol consumers prefer to drink wine, while 87% enjoy beer more. Numbers presented by the State Statistics Committee of the Republic of Azerbaijan underline this fact. In 2013, 910’000 decaliters of wine have been sold in Azerbaijan, while 2’902’000 decaliters of vodka and liqueur and 4’630’000 decaliters of beer have been purchased. According to data published by the WHO, 38.7% of the Azerbaijani population over 15 years of age abstains completely from drinking alcohol.

Data compiled by the State Statistics Committee shows that wine was sold in 2013 with an average price of 2.6 AZN per 0.7l, a price that has been quite stable since 2010. From 2009 to 2010 a big leap in the sales price of wine from 1.7 AZN per unit to 2.6 AZN per unit was recorded. The slight decline in sales prices mentioned by Euromonitor is not reflected in this data. According to Euromonitor, sales prices of wine in Azerbaijan declined slightly during the last year due to the competition of domestic producers as well as between chains of super- and hypermarkets. On one hand, Euromonitor explains that the import of wines increased and imported wines became more and more popular among local consumers, which intensifies the competition in the Azerbaijani wine market. This fact pressured wine producers to lowering prices. On the other hand, the bigger quantity of imported wine satisfies the increasing demand for wine in the population, so that the local producers cannot really benefit from the development in consumer behavior.

In-between summary: Consumption

In Azerbaijan in total about one million decaliters of wine are consumed annually. The majority of wines consumed in Azerbaijan are domestically produced.

Azerbaijani wine trade

According to data compiled by the State Statistics Committee of Azerbaijan display imports of 151’100 decaliters of wine and a total value of 2’590’200 USD. The main part of the wine imports, that is to say 118’100 decaliters, originates from Moldova. Other countries listed by the State Statistics Committee in order of declining volume are France, Belgium, Italy, the United Kingdom and Germany. However, data provided by the United Nations Food and Agricultural Organization (FAO), imports of wine to Azerbaijan amounted in 2011 to 284 tons. According to data provided by the FAO, Azerbaijan exported in 2011 5’278 tons of wine. This amount exported according to the State Statistics Committee represents nearly 40% of the total wine production. 96% of the total amount exported leaves Azerbaijan in the direction of Russia. Our research confirmed that Russia is the main export destination as six of the companies in our sample export their products to Russia and the other one is planning to start exporting there very soon.

Due to the domestic overproduction of wine a general willingness to increase exports can be observed. For instance, various news articles about Azerbaijani wine producers participating in wine or food exhibitions and fairs indicate this. These articles mention fairs in Russia, Europe, Japan or the USA. In addition, officials of the Ministry of Agriculture have stated in front of the press that Azerbaijan plans to return to its production capacity of Soviet times and that the country wants to increase its wine exports after joining the OIV in 2013. But still Russia is considered the primary
export market for Azerbaijani wine, but as future destinations also China and Central Asian Countries were cited. European markets are not that prominently mentioned.

In-Between summary: Wine trade

As the domestic production is larger than the total domestic consumption, there is a need to increase the export of Azerbaijani wines. Today, Russia is the major export destination for Azeri wine. However, in order to diversify exporting risks exports in other countries besides of Russia should be increased. However, particularly for exports to the EU or the USA the quality of wine is key to success. As high quality grapes are the cornerstone for the overall wine quality the question arises how the (quality) grape production should be vertically organized.

VERTICAL COORDINATION

In general, vertical coordination refers to the synchronization of successive stages in the vertical marketing channel from producers to consumers to overcome problems of supply and quality. It does not include transactions on spot markets, where the commodity exchange is based on a price agreement only. It includes both productive partnerships (contracting) as well as vertical integration (Swinnen and Maertens, 2007). One can assume that the higher the priority to secure quality and/or quantity of raw materials is, the stronger is the shift from spot market transactions towards advanced vertical coordination mechanisms. Productive partnership is a kind of vertical integration, characterized by collaborations of independent firms, in which the partners share interests as well as knowledge and resources to improve the outcomes of the supply chain activity. It can take different organizational forms: from loose or tacit agreements to stable, long-term, and trust-based cooperation contract (World Bank 2005b). The design of partnership depends on the strategy of the contracting initiators. Structured finance instruments are contractual arrangements to provide farm assistance. They are utilized to achieve the (shared) objectives of vertical coordination (i.e., securing the quality and quantity). In general, structured finance instruments are applied to improve farmers’ access to basic production factors (capital, specific inputs) or know-how/information (knowledge and experience) (Götz et al 2009). Structured finance instruments can take three main forms: bilateral contracts, complex contract systems (e.g. triangular agreements), and vertical integration. Bilateral contracts are contracts between two partners, e.g. a farmer and a processor or a farmer and an input provider. Triangular agreements include three partners, e.g. a farmer, a processor and a bank. Vertical integration is regarded as both a particular kind of structured finance instruments and an organizational form aiming at overcoming the quality/quantity problems within a single firm (World Bank 2005b). Vertical integration combines different levels of the value chain within one firm, via replacement of various market transactions with internal, intra-firm transactions. This can be achieved either by forming a subsidiary or by merger or acquisition. In vertically integrated firms, management directives dictate the transfer of resources across stages (Swinnen, 2005).

The key for all types of vertical coordination is contracting. Marketing contracts only address the issue of supply disruptions by private contractual initiatives (Dries and Swinnen, 2005; Gow and Swinnen, 1998) whereas production contracts address quality concerns (Gorton et al. 2006). These contracts vary in control allocated and risk transferred across stages. In marketing contracts, the contractor and producer may negotiate delivery schedule, pricing method, and product characteristics. The contractor usually provides a market for the goods but engages in few of the
producer’s decisions. In production contracts (resource-providing contracts), the contractor provides a market for the goods, engages in many of the producer’s decisions, and retains ownership of important production inputs (Martinez and Reed, 1996). For both types of contracts Swinnen (2005:1) states that “these private contract initiatives can be quite substantial”. Empirical evidence indicates that they include farm management assistance, extension services, quality controls, farm input assistance programs, trade credit, and even bank loan guarantees. The programs generate important improvements in the credit situation of the farms, as they contribute directly to improved access to finance (e.g. through trade credit), and indirectly as they improve contracting farms’ access to loans from banks or external financial institutions (through loan guarantees, enhanced farm profitability, and improved future cash flows). Summing up, there are different factors influencing participants towards contract arrangements. The main motivating factors for farmers are the following, as reported by the USDA (1996): I) income stability (to reduce risk compared to other ways of selling on traditional marketing channels); II) improved efficiency (management decisions are transferred to the farmers); III) market security (entering the contract provides a certain security in that the product will be sold if it meets with the requirements); IV) access to capital (contractor often provides inputs for farmers, which reduces the usage of credits). Main reasons that processors enter into contracts include the control over input supply. Further, processors use contracts in order to achieve uniformity and predictability to suit consumers, but they also benefit from lower costs in processing, packing, and grading (Boland et al. 2002). However, two reasons for the breaching of contracts have been detected. First, producers mistrust their buyers and are afraid they will not be paid. Second, they may not be able to fulfill a contract because they cannot access basic production factors (Gow and Swinnen 1998).

Contract enforcement is still an important problem. In the World Bank study (2005) the enforcement problem was regarded as one of the most important barriers for successful vertical coordination. However, in some cases public enforcement institutions are not fully functioning. Furthermore, since transition countries are often described as having limited social capital, there is also an absence of societal enforcement mechanisms (e.g. peer or community pressure, a sense of mutual obligation, an overall sense of distrust). Thus, in order to improve the farmer’s access to basic production factors (capital, specific inputs) and know-how/information (knowledge and experience) means have to be worked out and put down in writing i.e. contracts have to be signed. Such means can be subsumed under farm assistance. Farm assistance can have many faces. Vertical Coordination aims to overcome the disruptions in supply and inferior-quality products. However, the key actors (retailers and processors) find themselves constrained not by their own capital capacity but by that of other participants along the chains on which they depend for critical inputs. This is because traditional lending institutions such as banks do not give credit to enhance the interfirm product flow. Overall, farm assistance can include input supply programs, investment assistance, trade credit, bank loan guarantees, extension and management advisory services, etc. (World Bank 2005). Thus, farm assistance programs must be accompanied by appropriate governance mechanisms. Vertical coordination favors (in theory) large scale farming. The change to modern procurement systems are one reason for initiating vertical coordination and therefore chain-based financing. The requirements set by these systems favor large scale production for two reasons: (1) significantly fewer large suppliers are needed, and hence the complexity of the system is lowered, which decreases transaction costs, and (2) it is more costly to provide assistance to small farms than larger farms.
Many studies show that as a result, many retailers and processors would like to see a growth in farm size. However, retailers and processors are (still) forced to include small farmers. Small farmers are essential for ensuring the required quantities in some transition countries. Particularly in labor intensive sectors, small scale farming has important cost advantages. If the (farm) suppliers get too large they begin to re-capture some power. Since larger farms have the feeling that they can survive just by themselves, it may be more likely that smaller farmers have a higher likelihood of joining horizontal collaborations and ultimately creating much larger units. The degree of market development is important for the degree of vertical coordination. The less a market and its institutional environment are developed, the less likely it is that a complex system of vertical coordination will emerge (where marketing contracts are dominant). The more developed a market (i.e. the greater the demand for higher quality products) the higher the degree of vertical coordination will be. When that is the case, production contracts are predominantly used. However, when the higher quality products become standardized (e.g. IFS or GlobalGAP certified) and there are no supply difficulties, then marketing contracts will be used. In that case, production contracts will only be used for markets that cater to consumer segments that have differentiated demands.

In-between summary: vertical coordination

In order to produce higher quality products vertical coordination producers have to overcome problems of uncertainty, of opportunistic behavior, and of contract enforcement. Thus, if these problems cannot be overcome vertical integration is most often used.

CONCLUSION: VERTICAL INTEGRATION IN THE AZERI WINE SECTOR

According to the EU report on value chains wine makers prefer to grow their own grapes. Reasons for this decision are varied, among others quality and price considerations are cited. One of the interviewees of a winery buying between five and ten percent of the grapes they process from farmers explained that they manage the whole growing process of the purchased grapes. They send specialists to the farmers in the beginning of, and during, the growing season to guide them in the correct treatment of the vines and grapes. The specialists supervise the growing process until the grapes are harvested. Like this, the winery can simultaneously sample the territory where the farmers grow their grapes to see whether it is worth renting or buying land for vineyards in a particular region. The cooperation between the farmers and the wineries is beneficial for both sides, since the farmer learns from the specialists how to produce higher quality grapes and the grape producer is relatively certain to be able to sell his grapes. The wineries benefit from more advantageous prices and from higher quality grapes in the future. According to the results of another interview, one of the companies decided not to grow their own grapes and instead purchase all of the processed fruits. According to this wine maker, the process of growing grapes is too complex since it requires a lot of additional investment, labor and very specialized knowledge. In his opinion, a lot of wine makers in Azerbaijan do not have the necessary information and no clear strategy when they decide to grow grapes.

The mentioned results of the interview show that because of the high importance which good grapes have for the quality of the wine all quality oriented wine producers rely on vertical integration. Additionally the above mentioned reasons such as problems related to contract enforcement are a further reason why vertical integration is the best option for producing quality wine in Azerbaijan. Further, the lack of good educated students in the field of viti- and vinification can be considered as an additional problem.
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