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## **The impact of foreign direct investment on the agribusiness of transition countries: the example of the Armenian wine business**

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**Abstract:** For over 7,000 years wine is produced in Armenia; hence as new discoveries show Armenia can be considered as the cradle of wine production. Despite of or because of this tradition nowadays Armenia is more recognised for its prime brandy production than for its wine. Starting to operate a brandy business Pernod-Richard started to introduce numerous innovations. They introduced new processing techniques but also they started a new system to procure grapes. Today, years after the market entry of this foreign company one has to notice that the whole brandy business has changed. As we have observed in our field study this development is not only limited to the brandy production but also is valid for the wine business. Hence, the aim of our article is to describe the development of the Armenian wine and brandy business and to discuss in this context the influence that foreign investors have taken in this development. We further try to give an outlook on the future role that foreign investors and their ideas will have for the Armenian wine and brandy business.

**Keywords:** caucasus; agri-food business; foreign direct investments; vertical coordination.

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## 1 Introduction

Armenia, as a transition country, has undergone tremendous structural changes since its independence. The move from a planned economy towards privatisation has affected every field of business. State controlled prices, trade and value chains in agriculture and in other commodity chains were removed, so that a transformation in all economical sectors is noticeable. Due to that, business environments changed greatly since independence and strong influences on markets in terms of modernisation and developments take place. The local economies, food markets as well as demographic structures were influenced by economic growth. It leads to a growth of wealth, new orientation of customers' needs (Swinnen, 2005) and an increased inflow of investment within the country and from abroad.

Impacts are mirrored in a transformed production environment. Producers in Armenia face new challenges, as market needs change. Still, the overall importance of the agricultural sector in Armenia remains high, so does the importance of grape production and processing. It is distinguished by a traditionally large number of small scale grape growers; while parallel to that a growth of new market participants, from Armenia as well as from other countries, occurs and effects overall business environment. Such as direct investments from Argentina, which were the first to introduce big scale grape produce focusing on international varieties and using machineries - or from France, which were the first to introduce control contracts, providing trainings for the grape growers and emphasising on quality produce? It is expected that the presence of these market participants will lead to spill over effects on the entire wine business. Thus, in a changing competitive environment wine business have to generate new strategic choices (Rossi et al., 2012)

The article aims to show in which way the Armenian wine business is influenced by foreign direct investments and how it responds. Therefore, we conducted a field survey in Armenia. In the course of the study we conducted fourteen in-depth interviews with different experts and managers of the Armenian wine business.

The structure of our article is as follows: We will start with a literature review on the topic of the impact of foreign direct investments on transition countries. As the development of vertical coordination and contractual relationships are of major relevance within this topic we will address these matters in chapter three. Starting with chapter four the empirical study begins. We first outline the Armenian wine business. Thereafter, the interviews are described and the results are presented. The article closes with a summary.

## **2 Development of business structures in transition countries with focus on FDI**

### *2.1 Transition process*

Since begin of transformation, coming from a planned economy towards privatisation, great changes took place in all economical sectors within the former Soviet Countries. Privatisation and liberalisation influenced not only business environment within the country, but also shows global effects so that the first steps of internationalisation could take place - as the 'newly opened markets' held attractiveness. [Swinnen, (2005), p.4 f.] Investments were decontrolled and the purchasing environment began a modernisation process. The noted changes are rooted in various aspects that effected transition countries. Dries et al. (2004) notes four main aspects that are of great influence throughout the transition period. Firstly, trade liberalisation: new trade partners are located, which not necessarily belong to former Soviet Union, which leads to a great overall new orientation within transformation countries. Secondly, liberalisation of investment 'regimes': The opening of investments paved the way for foreign businesses to enter the markets and to invest. This path is interlinked with actors along the distribution chains as new investment models need to be supplied and supplies need to be produced. The rise in number of international retail chains in transition countries is a result from the influence of FDI within this field. Thirdly, the worldwide traded products undergo structural changes and fourthly, a growth of product demands takes place. A rise in quantity needs on one side and a rise in quality requirements on the other side

occurred. It led to up new challenges for producers globally. Often quality standards are set by western markets, which influence producers worldwide (Scalera and Elezi, 2012). The resulting internationalisation can be differentiated in either a basic import/export relation between foreign and local companies, the founding of an associated company or a strong linkage between both through cooperatives in form of joint ventures or similar contractual bindings. (Stange, 2010)

Strong influences on markets in terms of modernisation and developments take place. Either new companies are founded or international companies 'export' already existing business models, which were successful in other operating countries, and try to implement their strategies in new target markets. These business models are adapted to a certain extend to new market needs, according to local demands on product categories and preferences of customers. As new models are implemented, food safety and quality requirements of international companies also are 'exported'. (Hanf and Pieniadz, 2007) Market developments and new market requirements bring major changes; according to Dries et al. (2004) to a move away from 'store by store' towards national operating procurements and a regionalisation of enforcement within a country takes place, to ease wide operating coordination for businesses. Also, wholesale dealers are preferable worked with instead of traditional sellers, which results in a favoured 'supplier system'. This way it is easier to ensure the maintenance of grown quality and safety standards, too. Also, common problems as of unreliable delivery, often due to the lack of infrastructure found, and other difficulties occurring while purchasing directly from small producers, are avoided. In addition to that global functioning logistic firms are frequently reverted to overcome supply shortages or overall delivery problems.

Overall it can be said that development of the agricultural sector in transition countries is distinguished by a structural change in different directions. In general a change is implemented in order to expand the company. Following different development strategies are found: horizontal expansion is the first kind. This type expansion takes place on the level of participants within the same stage of a value chain. Then, vertical expansions - as the second expansion strategy occurs, when a higher or lower-ranking stage in a value chain is added. The next level of expansion strategies is geographical, including FDI. The fourth form of an expansion strategy is not interlinked with the ones named above, as it is an independent level, a conglomerate that is added (Stange, 2010).

Business environment in Armenia was assessed by the World Bank 'doing business' Report. In 2011 Armenia was ranked number 48 in the list of 183 countries<sup>1</sup>. However, since 2010 it is possible to register a business electronically and the whole registration process (including issuing tax payer number) takes just a few hours. So it is expected to see improvement in Armenia's ranking. In terms of procedures (Starting a Business) Armenia is in the 6th place. On contrary, Armenia is ranked 159 in Paying Taxes, 93 in Protecting Investors and 63 in Enforcing Contracts. So it can be stated that it is fairly easy to start a new business in Armenia, but there are some challenges for operating that business.

The World Economic Forum's Global Competitiveness Report states that Armenia ranked 92 out of 142 in 2011. This ranking is stagnant during the last couple of years. Armenia has a quite low ranking in terms of Innovation (112). The business sophistication indicator ranked at 107 out of the 142 countries ranked. One important aspect explaining these low ranks on competitiveness and innovation is the quality of the educational system (ranked 97th) and quality of management schools in Armenia. The

rank of the quality of the management schools in Armenia is alarmingly low – 131 among the 142 countries<sup>2</sup>.

In general the transition process can be achieved either by a ‘big bang’ or more gradually (Lenger, 2008; Pusca, 2007; Tridico, 2013). The transition period in Armenia took a little longer because of conflict and closed borders with two neighbour countries. During that period issues of food security were main priority of the Government, so agricultural sector development was in the centre of donor and State programs’ consideration. After the land privatisation agricultural plots were fragmented into small pieces and achieving efficiency was very difficult. The situation became harder with deterioration of infrastructure (roads, irrigation, etc.) and with increasing levels of migration. It can be summarised that the problems agricultural sector faces today are the reflection of inadequate strategies selected for the transition period.

## 2.2 *Foreign direct investment in transition countries*

FDI plays a key role of economical development, especially throughout the transformation process, when former Soviet Countries were integrated in globalised trades and investment markets (Belaya and Hanf, 2010). Although, theoretically FDI is not needed to successfully close contracts and supplier assistance programs, it “has been the most important driving factor behind these programs” [Swinnen, (2005), p.44]. Swinnen (2005) adds that it is the initiator of change and institutional innovations. Also, Vertical Coordination in agri-food supply chains is often fostered by FDI, as it helps to overcome market weaknesses, such as access to input factors. (Swinnen and Vandeplass, 2007) In the beginning stages, when FDI flows in a country, strong differences between foreign companies and local companies exist. Though, spill over effects take place and throughout the time local companies adapt and close the previous gap. (Dana, 2010; Konings, 2001; Johnson et al., 1999)

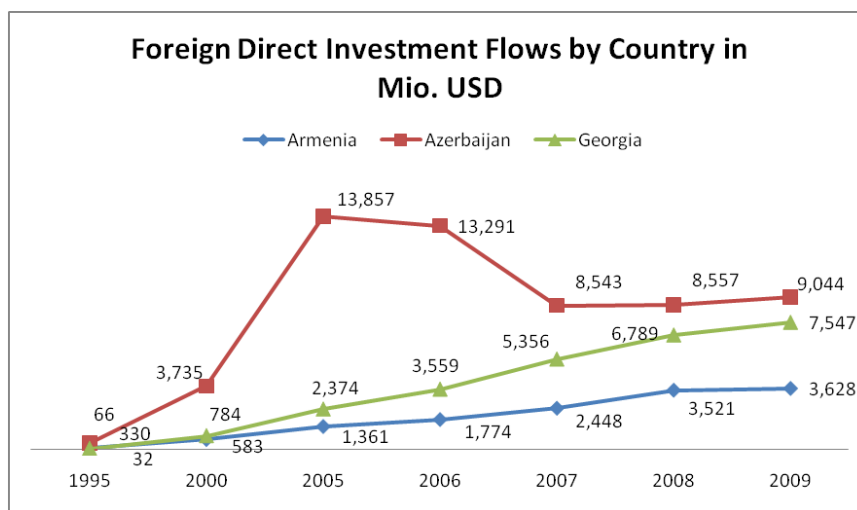
Various factors influence companies, when it comes to the question whether to invest in a foreign country or not. Two driving forces are essential throughout this decision making process. Kacker (1985) refers to them as ‘push’ and ‘pull’ factors. Both essentially linked to location factors, mainly from where the investor originates and where investments flow to. On one side push factors are found, when originating markets are oversaturated and companies face high limitations in terms of price, and expansion factors and high running expenses. Sometimes, legal boundaries are also limiting. The local market then appears unattractive, so that businesses experience a *push* away - towards new markets. Pull factors on the other side, are found within attractive markets environments. Often countries of growing economy and high consumer acceptance appear *pulling* to new foreign investments. Transition countries are of high attractiveness, as the downfall of the Soviet Union and the transformation towards privatisation had opened highly unsaturated markets that were ready to accommodate new forms of businesses in terms of foreign investments. The structures found in already existing big companies can be looked at as the ideal initial situation for investments.

The Central and Eastern European Countries (CEEC) vary greatly in the amount of FDI flown in the country since privatisation. High investments are found in nations that were comparably fast in establishing reforms and easing liberalisation. Hungary, Poland and the Czech Republic belong to this group. Where else in Russia and the Ukraine the process of Foreign Investments was relatively slow. In the Ukraine this was mainly the

case, because especially within the agricultural sector investment barriers and difficulties in the legal systems hindered or caused mal experiences. (Stange, 2010)

The Statistical Yearbook of Armenia (2010) shows that in Armenia in the period from 2008 to 2009 the total gross inflow of foreign direct investment grew from 2.132 to 2.710 Million USD. In comparison to this UNCTAD shows contrary figures that reveal an inflow in 2008 of 3.521 Million USD and in 2009 of 3.628 Million USD. In both, it shows a growing trend of receiving FDI within Armenia. A comparison to the neighbouring countries shows that in 2009 inflows to Georgia are more than twice as high and in Azerbaijan inflows almost three times as much.

**Figure 1** Inflow of FDI by countries (see online version for colours)



Source: based upon UNCTAD (2011)

The gross inflow of FDI in Armenia to the private sector took a share of 59% in 2008, though reduced to 35% in the following year. The share of 'agriculture, hunting and related – services' took 1% of foreign direct investments gross inflows, in 2009 it reduced to 0.25%. (Statistical Yearbook of Armenia, 2010) According to estimations of experts, the share of FDI within the wine and brandy sector takes a higher share, compared to the rest of agriculture and related – services industry, and can come up to around 30%–40% from foreigners, and about 4%–10% through Diaspora Armenians. (Babayan, 2011) It leads to the conclusion that the wine and brandy sector holds greater attractiveness to foreign investors in comparison to other agricultural and agro-processing sectors.

The Statistical Yearbook of Armenia (2010) also shows the inflow of FDI by countries. The gross inflow by 2009 was highest from Russia, with 399 Mio USD, followed by France with a share of 197 Mio USD and Argentina by 48 Mio USD, leaving fifth position for the United States with a gross inflow of 23 Mio USD in 2009. Therefore, Russia can be considered most important for the inflow of FDI from Russia to Armenia. The big inflows from France, Argentina and the United States might be due to big Diaspora communities within the countries.

### **3 Vertical coordination and contracting**

#### *3.1 Vertical coordination*

We have shown that in many transition countries quality and quantity supply is considered as a scarce factor. Due to a growth of local and foreign investments vertical coordination (VC) is a tool of local and international players and a driving force to overcome these problems. VC interlinks the stages of production, processing, and marketing of a commodity and vertically manages it, so that “decisions about what to produce, and how much, are communicated as efficiently as possible”. Nevertheless, VC was also a key factor in the former Soviet Union. (Swinnen and Maertens, 2006) The following section shows the developments of VC in transition countries.

Although, varying from country to country, to a certain extent, the structure and aims of (VC) can be generalised. VC in socialistic countries is distinguished by a maximum control from the state or ‘central planning authorities’ over all steps of value chains from businesses. The motives for VC vary, from political backgrounds, ensuring food security for local markets, creation and maintenance of jobs as well as the protection of rural people and the motivation of rural developments. Major difficulties appear in VC of planned economies due to central redistribution of production factors, which in many cases then lead to inefficiencies of processing and marketing of goods. The VC systems of the former Soviet Union collapsed as liberalisation of prices and trade was introduced. Also, privatisation of companies and farmers were a major cause for it. Existing value chains were no longer available and state controls did not exist or did not work properly, therefore a lack of production inputs occurred (such as feed, fertilizer and credits). Due to these factors, during transition, difficulties were faced on both sides for producers and suppliers. (Swinnen and Maertens, 2006)

VC begins, when relations between business partners are extended, going further than spot contracts and business partners begin to coordinate, interlinking processors and retailers. Also, multiple stages of vertical coordination are possible in which different levels of production linkages are coordinated. In the example of wine making it can include stages, in which rootstocks are grafted, then grape growing as well as wine processing. The most intense stage of VC can be the stage of full ownership, in which one company takes over a whole farm and incorporates it within the business. This maximum level of VC is also referred to as vertical integration. (Swinnen, 2005)

VC in transition countries often takes place at foreign and national companies. Due to globalisation international players try to implement their strategies in target markets by ‘exporting successful business models’. (Gagalyuk et al., 2010). Belaya and Hanf (2010) add that this mostly occurs in collaboration with local suppliers. Often this happens when companies follow brand management strategies. It mainly effects the supply chain management, and therefore VC takes places in type of buyer supplier coordination. Swinnen and Maertens (2006) note that there is no possibility to measure the direct efficiency effects of VC, but several parameters are influenced indirectly by it. Such as a better access of inputs and on time payments. New investments are another feature that indicates efficient VC and leads to improvement of productivity, because outputs and product quality are emphasised and improved. In addition to that they state that overall “vertical coordination can be an engine of economic growth, rural development and poverty reduction” (p.11). The coordination of value chains can either be based upon trust or upon contracts, depending on the reliability of existing structures (Lyashenko,

2010). In VC, contracting is of great importance in transformation countries. In CIS countries the share of contractual basis working partnerships grew from 1/3 in 1997 up to 3/4 in 2003. (Swinnen and Maertens, 2006) In addition to that a growth of farm ownership is noticeable from 6% to 26%, which is connected to growth of vertical ownership. Also, assistance programs are on a rise, such as physical inputs, monetary credits or prompt payments. In 2003 over 40% of producers offered farmers a type of credit support and 36% offered inputs. (Swinnen, 2005)

In Armenia VC occurs wither through full ownership or through formal or informal contracts. Farmers or farmer cooperatives do not own a winery or brandy factory and usually their relation is based on informal contracts. Very often wineries offer some contract support measures to farmers which take the form of prompt payments or agronomic services.

### 3.2 *Contracting*

The changes since transformation created a new market environment, therefore new models focussed on market based – points of views and concepts for successful strategies were needed, in contradiction to traditional methods. According to Shanoyan et al. (2010), “new agri-food systems require new models of governance structures and channel coordination and therefore need new models of facilitation of marketing linkages between producers and processors”. These constraints of input accessibility and trade can be overcome by contracting. In general it is a form of agreement between the farmers and the processing industries on quality, quantity and time of delivery. A variety of different forms of contracts are found, ranging from mouth to mouth agreements to written; short to long term. Depending on the increase of influences of the buyer on farmers produce, the intensity of (VC) increases. Therefore, all contractual agreements, right after the spot contract, are referred to as VC. The most ‘intense’ form of a relation between a producer and a buyer is referred to as Vertical Integration, in which all steps of production and processing are integrated within the leadership of one company (Drescher, 1993).

Often contractual breaches occur, when the benefit for breaching is higher than the capital costs for maintaining the contractual agreement (Cungu and Swinnen, 2003). Also, a change of surrounding conditions can cause breaches, otherwise rational acting partners would have not agreed upon a contract at all. Especially a weak institutional system creates additional challenges for business partners to establish a relation. A combination of factors makes enforcement through courts unattractive, such as the fact that through court enforcement the only potential suitable trading partner might be lost, contractual laws are found ineffective or the verifiability of the third party is considered poor. (Swinnen, 2005) Though, the higher the private capital is involved, the lesser likely it is for a contractor to breach the contract (Klein, 1996). A different set of key elements is therefore necessary to give contracts sustainability and a basis for good cooperation. Often so called ‘self-enforcing contracts’ are found, in which both partners have no reasons for contractual breaches. This is the case, when costs of a contract breach exceed its gains. These forms of contracts need to be highly flexible, as a quickly changing environment, often requires adjustments of agreements. (Hanf and Drescher, 1994)

In conclusion one can say that FDI in transition countries have several effects. One – if not the most important one – is the fostering of vertical coordination. Within vertical coordination contracting as a coordination mechanism is a key element. Hence, in



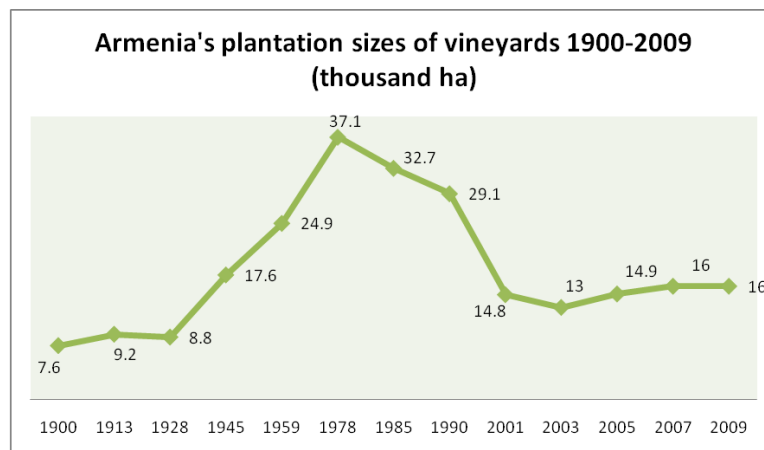
the forthcoming sections we will introduce an empirical study on the Armenian wine business analysing the described effects.

#### 4 FDI in Armenia: impact on the wine business

##### 4.1 Overview of the Armenian wine business

In times of the planned economy Armenia distributed most manufactured goods, such as: chemical products, textiles and others to the markets of the Soviet Union. Also great amounts of fruits and especially grapes were sold, fresh as well as dried for further processing purposes. In exchange Armenia received energy resources and raw materials as well as agricultural and food products. (Khachatryan and Oppen, 1999). During Soviet time focus was put on brandy production, where else in Georgia and Moldova wine production was emphasised. 80%–90% of all grapes produced were used for brandy production; still figures show same shares (Aramyan, 2011)

**Figure 2** Armenia's plantation sizes of vineyards (see online version for colours)



Source: based upon Armenian Wine Producers Association (2011)

As one of the earliest Soviet Republics in Armenia private farms were dissolved and integrated in the big 'ararat wine trust' starting around 1920. Later this trust established within Russia and the Ukraine a net of wine processing firms. The changes resulted in a growth of viticulture area to 16.300ha in 1940, 104.800hl of wine and 6.600hl of brandy were made at that time. (FAO, 2009; Robinson, 1999) The growth continued after the Second World War as vines were planted on fallow land and specialised collective farms were founded. In times of the Soviet Union Armenia had around 35.000ha of vineyards. During 1985 in Moscow, Mikhail Gorbachev started an anti-alcohol-campaign, which leads to wide destruction of vineyards (also fruit plantations that were used for spirit production) (Scannell et al., 2002). Also, a rise of cost for vine plantations and a wide disappearance of the 'bulk purchasing system' were cause to the decrease. (Gasparyan, 2003). At the time, when the Soviet Union fell, producers faced difficulties in adapting to privatisation and newly emerged markets. Many vineyards were replanted with wheat's,

many wine growers as well as wineries completely stopped production processes. This development in the wine growing sector is mirrored in the total plantation size of vineyards and the output of processed brandy and wine.

During early 2000-s the sector started to grow slowly. However the main driver of the sector was mainly brandy production. Around 90% of the grapes produced in Armenia are processed to brandy. The Armenian brandy is of world wide high reputation and has great shares of the exports that make 80% of the 'processed exports' (USAID, 2010). There is a noticeable increasing trend in brandy exports since 2001 (Figure A3) that was interrupted by 2008–2009 financial crisis consequences. This decline, however, had a limited duration. According to Aramyan (2011) for now, around 30 wine factories exist in Armenia in addition to many small home made producers. Thus the grape/wine and brandy sector is one of the vital segments for employment and economic development in Armenia.

Several factors are still limiting Armenian agriculture and grape production, such as a limited access to production knowledge and poorly trained workers (WorldBank, 2006; USAID, 2010). According to Mkrtchyan (2011), the difficulties within Armenia are located in several areas. Education as a key element still struggles with outdated books, little practical experiences and is distinguished by very theoretical approaches. The lack of specialists for key wine-making positions, such as wine maker or laboratory specialist, obsolete wine making equipment (some of it left from the Soviet times) and production and quality control systems that do not correspond to the international standards create additional obstacles for the sector development. Another not least important hindering factor is infrastructure.

Especially in Armenia's villages the infrastructure, such as poor road conditions, deteriorated telecommunication and run down water and canal systems are basic issues. Irrigation is deteriorated, too. It has great effects on overall outputs, so investments in this field are highly necessary to improve productivity (World Bank, 2006). In the field of grape production, cost competition for export markets is not possible, too. Armenia is on the same production-cost level as other New World Countries like Chile, still qualities are much lower. (USAID, 2010) In addition to that Mkrtchyan (2011) mentions that in many cases farmers sold their goods, without paying notice to input prices and ended up with profits lower than input costs. Quality wine production faces difficulties. It is a big issue that needs to be overcome on local markets as well as in terms of trade. Often it is rooted at farmer side, as focus still is put on high yields. (Harutyunyan, 2010; Keushguerian, 2011; Samvelyan, 2011) Another reason for this is that most of the grapes are purchased from farmers; therefore it is more difficult to set standards and to control them. (Keushguerian, 2011)

Therefore, most of the grapes grown are used for brandy produce. Viticulture is not set for wine grape growing; strong investments are needed in this sector. Wine production often is based upon a 'cheaper grape', which does not interest brandy makers. Also, because brandy sales are more profitable, producers are financially stronger and can pay higher prices. (Aramyan, 2011) In fact, many companies are distinguished by a diversified production, often keeping spirit production to ensure incomes and to be able to afford wine production as a sideline. (Alexanyan, 2011; Manaseryan, 2011) USAID (2010, p.13) summed up the issues of the Armenian wine industry and stated that its only hope is 'to complete an overhaul from top to bottom'. As far as producer's attitudes and will to implement changes exist, a period of 10–15 years to reach competitiveness is estimated. The World Bank (2006) states that investments can be a driving force to

implement changes. This can take place through an improvement of Vertical Coordination, insurance of well working services to farmers and producers and enhancement of technological use to strengthen productivity and eventually extend markets. Also food safety and quality need to be addressed.

## **5 In-depth interviews and empirical results**

### *5.1 Sample and interview description*

The interviews were conducted throughout a field research in Armenia from 18th of April to 2nd of May 2011. The methodology is based upon Gagalyuk and Hanf (2009). They were carried out in Armenian, and then translated into English and German, as well as in English and German directly<sup>3</sup>. In order to ensure a wide range of opinions and perspectives interviewees were chosen from different branches of the wine and brandy industry. Three sections of interviewees can be divided:

- Medium sized producers: two medium sized producers interviewed are located in the country side near Yerevan; they focus on wine and brandy production. Both businesses are set within a village community and are distinguished by close work with village farmers.
- Big scale producers: six big scale producers were interviewed. Two of the interviewees work for the biggest brandy producers of Armenia, the other four work within companies that diversified their production, not only focus on wine, brandy and sparkling wine production but also are active in other agro processing sectors. Their statements mirror the perspective of capital intensive investments.
- Experts: five experts were interviewed. They work in the field of consultancy, associations and international organisations that have experiences within the field of wine production and marketing.

The interviews were conducted mainly within Yerevan, as many producing companies as well as experts are located in the centre town. In addition to that interviews with the medium scale producers and two big scale producers were conducted in the regions around the capital, too. The interviewees were asked open questions. Depending on their profession and the field of work, focus was put on different aspects, to gain deeper insights within the subject. The questions were set in different sections:

- 1 they were asked about the role of FDI and its influences on the wine and brandy sector
- 2 they were asked to describe the extent of vertical coordination i.e., contractual agreements and lately developments of contractual relations.
- 3 focus was put on the role of external and internal facilities to overcome overall constraints within the sector.
- 4 interviewees were asked whether changes in demand are mirrored within the plantation of varieties planted and about their opinion on international varieties.

## 5.2 *Empirical results*

### 5.2.1 *FDI in the sector*

The inflow of FDI in the wine and brandy sector is, according to estimations, much higher than in other agricultural and agro-processing fields. This share leads to the expectation that influences must be recognisable within Armenia. Interviewees therefore were asked about local and international driving forces within the wine and brandy sector.

In general, Babayan (2011) sees only few examples of the influence of FDI on the entire agricultural sector - mainly in the processing sector, such as juice, wine and brandy. Many Diaspora are located in Russia and from there invest in Armenian businesses. A main reason for this sees Babayan (2011) in the good reputation of Armenian goods and the high prices they get, especially on the Russian market. Overall the level of FDI on Agro-businesses and the wine/brandy sector are difficult to measure. According to Babayan (2011) there are many ways to reallocate money. Especially when a company is founded through FDI, there is an option to repay VAT later on. Therefore, many Armenians are interested to invest and try to make use of this tool, by channelling investments through other countries, such as Russia, and from there sending money back to Armenia.

Melkoyan (2011) from Yerevan Brandy Company divides the influences from FDI in two sections. According to him investments from Russia and Diaspora Armenians are comparable to investments of Armenians in the country, as business methods are similar and overall there are only little differences. Investments from other countries, such as from Tierras de Armenia or Pernod Ricard exist but take only a small share in comparison to overall investments.

Babayan (2011) estimates the share overall share of foreign investors lower than the share of investments through Diaspora Armenians. Though, expects it to be higher in the wine and brandy sector.

Keushguerian (2011) underlines this, as he states that a great share of investments within Armenia is done by Armenian, either Diaspora or wealthy local ones or foreign development organisations. Armenians have a strong affinity to their country and their investments are often distinguished by emotional binding and the interest in receiving high reputations within the community. He believes that the most important Foreign Direct Investment was done by Tierras de Armenia, through Eduardo Eurnekian, whose family originates from Armenia. Esteva (2011) adds that they were the first to introduce big scale grape growing, introducing new standards, such as setting up vineyards that meet requirements in order to accomplish a mechanical harvest.

Apart from that a great share of foreign money comes from Russia. Keushguerian (2011) also names the example of Pernod Ricards investment from France to the Yerevan Brandy Company.

The investments through Armenian businessmen are also found in the example of Armenia Wine and Yerevan Ararat Wine Factory. Though, both owners have in addition to the beverage industry other businesses ranges of sectors. In case of Yerevan Brandy Company, the owner also owns a Brandy factory in France (Babayan, 2011). Also, Yerevan Ararat Wine Factory is 100% owned by an Armenian oligarch. Armenia Wine is the first company that started with such high investments in that field of wine making.

Their overall goal is to make wine according to European style and quality. (Alexanyan, 2011; Khachatryan, 2011)

Mkrtchyan (2011) sees high potential in these investments to overcome overall problems of the wine sector. Especially from Diaspora, since they bring an understanding of the language and the culture as well as financial aids to support a fast development.

Mkrtchyan (2011) describes the overall reaction of Armenians towards foreign investors as very positive. She believes this is because of the general focus on successful business making Armenians have. Another aspect, according to her, is the fact that positive experiences with foreign investors, such as Pernod Ricard, are widely known. Period's work can be looked at as a 'model project'. This supports the positive attitude of locals towards them. Mkrtchyan states that generally Armenians might be 'stubborn' towards something new and modern, but throughout generations this issue is overcome.

This leads to the conclusion that: Most of the inflow of FDI originates from Diaspora Armenians or from investors with personal linkages to Armenia. Also, due to the reason that companies can pay VAT later on, when founded through FDI, it is most likely that great amounts of it are channelled through Russia, too.

The overall effect of FDI is considered positive, within society and for overall developments. Constraints still exist, but examples show that interest of investors exists and function like a role model, introducing new standards and helping to overcome existing difficulties in the long run.

### *5.2.2 Vertical coordination and contracting*

The next questions are based upon the fact that grape purchases within Armenian wine and brandy making are very important. Interviewees were asked to describe the agreements between grape growers and processing companies. Further on, they were questioned whether they notice any changes within these agreements, if so in which way, and how far the presence of FDI has any influence.

Interviewees report a consistent contact with grape growers. Trainings are not common, but financial assistance is given in many cases. Also, checks in vineyards are undertaken right before harvest. Many producers report that they are satisfied with the grapes quality, so they do not see any need for further improvements or additional trainings. On the other hand, some report that trainings and controls are an essential tool; as well organised and done work eases the work load throughout harvest time and reduces basic problems. (Manaseryan, 2011; Samvelyan, 2011)

According to Keushguerian (2011) as far as most companies refer to contracting, it is all artificial and proper, contractual agreements hardly exist. The only exception is Yerevan Brandy Company (owned by Pernod Ricard).

Melkoyan (2011) states that Yerevan Brandy Company works with 5.200 contracted farmers. The contractual agreements are control contracts. Contracted farmers are offered inputs for free; they themselves have to follow set standards, for pesticide use etc. Also, time of harvest is set by them, especially to organise the time of grape delivery, so that only little waiting time for further processing takes place. The quality of the delivery is controlled, by taking samples. If standards are not met, or farmers are found cheating all grapes are returned to them. He adds that vineyards are controlled regularly from consultants, located in the different wine growing regions of Armenia. In addition to that, farmers are trained and advised by experts who received their knowledge abroad. As an additional appeal, annually the most successful farmers (10–15 people) receive a price,

usually a tour to the cognac region of France. The overall influence of Pernod Ricards is shown firstly in the ten times value growth, since the procurement. Secondly in the fact that they were the first to set standards in business collaboration, thirdly in the effect those competitors try to copy their models and entice partners away.

Also, Yerevan Champagne Wine Factory works with contractual agreements and provides farmers with prepayments after the contracts are signed, in order to support them financially in purchasing new inputs. They undertake controls of sugar content and colour, when purchasing grapes. Grapes are procured directly from farmers and are processed at processing branches, located around main grape growing areas of Armenia. Prices are not set prior to harvest. If the grapes do not meet the standards, they are sent back as well. In order to ensure fully ripened grapes, technologists are sent to the vineyards upon the ripening process. The contractual agreements are set annually and Martirosyan (2011) believes that the knowledge the farmers have about grape growing is already very high, so there is no need for additional trainings.

Yerevan Ararat Wine Factory uses contractual agreements, too. Since they do not have own vineyards, throughout contracts they can ensure the delivery. Contracts are reset annually. Also in this case contracts are not written, though farmers can be ensured (trust-based) that their produce is procured, as long as quality standards are met. Financial aid is given to farmers in order to improve production methods, but no special trainings are given through an agro-manager or a similar position. Khachatryan (2011) underlines, that in case quality standards are not met, the produce is returned to the farmer. Farmers are paid directly, without time delay.

Still, most agreements between farmers and producers are, long time established and trust based (Manaseryan, 2011; Samvelyan, 2011).

The issues of not obeyed contracts are also found in Armenia. Previously written contracts were set, but were not followed. Due to this great mistrust was built upon farmers. At the end of the Soviet Union new producers entered the market. The issue of quality, especially for many start-up companies was a big problem. Nowadays, the issue is about to be overcome and few companies, like the Yerevan Champagne Company, set positive examples for the industry. He sees in this form of contractual relation an overall positive effect on producers and from the total production, other companies try to adapt the methods. (Babayan, 2011)

Another factor that was overcome because of the support of foreign market participants was within grape purchasing, as prices are a major issue, too. Mkrtchyan (2011) reports of cases, when farmers lacked market knowledge, so they ended up selling their prices at prices that covered production costs only or even lower. In this case foreign market participants helped, as they raised prices. This way they ensure that contractual relations with farmers can be set on long term basis, without ruining them and losing contractual partners in the long run.

Often, companies find themselves cooperating with a huge number of small scale producers, since average sizes of grape producing units are still low. This complicates coordination between producers and grape growers strongly. The importance of cooperatives is very low. Cooperatives in the fruit growing sector and wine growing sector exist. They started to purchase inputs together, too. Though, economical crisis set their development on a hold. Apart from this cooperatives are lacking. Esteva (2011) states, that Tierras de Armenia (as the first big scale grape producer) approached processing companies and offered collaboration. Since small scale farming is a main source of rural income so not to neglect political pressure on small producers in this field

is high. Also, they experienced unwillingness of producers to enter compulsive contractual relations, not even for one year. (Mkrtchyan, 2011)

The market up to now is determined by grape purchases. Prices are set shortly before harvest by the two biggest companies acting on the wine market of Armenia: Vedi Alco and Armenia. Quality is not considered in this case, as focus is put on volumes. There is no existence of extra payments for high quality produce. In his opinion this is the foundation of the issue, as long as there is not rise in demand of high quality grapes and varieties, no change will occur. (Keushguerian, 2011)

This leads to the conclusion that: trust based – contracts are still most common in Armenia. Though, examples show the development towards more intense types of contractual cooperation between grape growers and processors. The market entry of Pernord Ricard, through Yerevan Brandy Company, can be considered as a stepping stone that introduced strong contractual relations to the country. They set standards and are the first to introduce trainings for farmers, emphasising in quality produce. Other contractual agreements found, can be considered to a certain extent, as a result of this.

### *5.2.3 The role of external and internal facilities*

The legal framework, in its current existence, does not really have an influence on quality of the wines. It does exist, but is hardly followed in reality. Keushguerian (2011) believes that quality insurance can more likely be maintained by forming private associations, which inner organs are in charge of quality controls. The role of certification is similar difficult to the role of the legal framework, as certifications exist, but can easily be falsified.

Manaseryan (2011) emphasises the importance of maintaining quality insurance internally, especially because his company has set as a family business. He himself or his father are personally present throughout all steps of production to control maintenance of hygiene. Also, wine quality is tested within the company, as they own a laboratory. In addition to that quality controls are undertaken right before harvest in the fields, to check whether grapes are ripe yet.

Armenia Wine even has own distribution networks, to overcome difficulties. In addition to that storage facilities are set at the company ground as well as in bigger cities, from where villages can be accessed more easily. (Alexanyan, 2011)

Yerevan Champagne Wine Factory follows ISO standards and has certified production lines. Internal labs exist for local markets, but to ensure neutrality external labs are used as well. Within the internal quality controls, also experts check the vineyards the quality and ripening grad of grapes, before harvest. Generally, states Gagik (2011) almost all processes are undertaken within the company. Already negative experience (within distribution), price saving, efficiency and the fact that it is easier to control are the reason for that. (Martirosjan, 2011)

Khachatryan (2011) from Yerevan Ararat Wine Factory adds in addition to the fact that they also have their own laboratory that new workers undergo several trainings in different departments of the company, as their own training method.

Simonyan (2011) from Areni mentions that government visits the winery annually, in order to keep up assurance of compliance. Other than that, everything is done by the owner's individual responsibility. He emphasises that through the state, the 'certificate of origin' is given, which is of importance to export to Russia.

Other than that Samvelyan (2011) adds, that in comparison to Georgia, where the state's interest is put on wine production, in Armenia, the state focuses on brandy production. Currently the state only controls certain amounts of production, though the greater control and quality control needs to be undertaken internally. In his opinion state controls are rather a side effect. Also, associations exist, but up to now are not of great importance. They still need to develop further.

Babayan (2011) points out that there are no real controls through the state on wine production. Controls only take place, when there is a complaint. Currently these controls only exist in written form, but through this corruption can easily be overcome. Another issue is the fact that many inspectors are poorly trained and lack knowledge. He sums up the issue of external services. Overall distribution and logistics is difficult and often, when a company is in its initial stages to start up production, at the same time they try to include a logistic unit. This is, because external companies exist rarely or are costly. In addition to that it is very common that big producers of beverages also have their own integrated lab, as again external ones are costly, time consuming or not very reliable.

This leads to the conclusion that: The external facilitations and services available in Armenia appear overall poor. Controls through the state exist, but do not play an essential role in quality assurance. Therefore, in order to ensure smooth quality controls as well as distribution, companies are forced to introduce internal facilities or vertically integrate existing systems (such as logistics) within their company.

#### *5.2.4 Grape varieties*

Armenia's markets are developing and besides traditional import and export partners from the former Soviet Union, new trade partners enter, too. Because of that, interviewees were asked whether these changes are mirrored within the plantation of varieties planted and about their opinion on international varieties.

Samvelyan (2011) emphasised, that in his opinion the future of Armenian wine is rooted in local varieties; especially because international varieties are found all around the world and are well established within global markets. He does not believe that Armenia has a chance to keep up with these developments, therefore should focus on current trends: the interest of customers in tradition and traditional varieties. He believes that also within the desert wine sector a niche is located. Harutyunyan (2011) approves this by underlining that these 'spiritual values' are a trend. Especially because of latest findings, that prove that Armenia is the birthplace of wine. Nevertheless the danger is located within neighbouring countries, as many of them claim the same. He believes that whoever manages to use this best will win the markets. Also, within former Soviet markets the traditional varieties are of great importance, as they are well established and recognised. Still, he agrees that within quality orientation of customers, international varieties do gain importance. Alexanyan (2011) describes the dilemma, as so far international varieties are not of great interest for most farmers, but of great interest for companies. So far, prices are high on this produce, but try outs were successfully undertaken already. To overcome this matter they plan to introduce contracts, to promote cultivation of international varieties.

Tierras de Armenia even started tryouts of 26 international varieties in addition to local ones and brandy varieties. Quality production and plant quality is their aim and therefore French varieties turned out to be very successful. During the interview Esteva (2011) also mentioned another major issue of local varieties: There is a non-existence of



local varieties with grafted rootstocks, as there is nobody available to do so within Armenia. The non existence of phyloxera resistant rootstocks is a subject that places Armenia behind other countries, even in Russia and Georgia one can find grafted plants. This lack, according to him, is rooted in overall out-dated, old fashioned technologies of Armenian wine making, and the lack of knowledge and certain stubbornness, towards new methods and techniques among people.

This leads to the conclusion that: The answers are quite contradicting and show the two sided bearings on that topic. On one side producers believe in the chances of international varieties to grow successfully in Armenia and open new markets as well as to meet the needs of Armenian wine drinkers, too. On the other side producers and experts believe that Armenia's chances are rooted in traditional varieties. They believe that these fill a niche, as Armenia would not be able to compete internationally with new world countries on quality and price level. Nevertheless, phyloxera is a present danger as Armenia's varieties are none grafted, so producers need to address this fact, when focusing on local varieties.

## **6 Summary**

International influences are of great importance in transition countries as they move from a planned economy towards privatisation. Challenges emerge, but also offer new chances for former market participants to overhaul previous economic activities as well as for foreign investors to enter new markets. Major constraints are widely spread within the Armenian wine and brandy sector; nevertheless it is at a turning point.

Many grape growers and wine producers still struggle to meet constant quality and quantity demands. Often it is rooted at farmer side, as focus still is put on high yields, as overall production costs are quite high. From consumer side prices are still an issue, too that increases the demand on low cost products. Also, standards are not existent or hardly maintained. Processors find themselves cooperating with a huge number of small scale producers, since average sizes of grape producing units are still low. This complicates coordination between producers and grape growers strongly and adds up to production costs. Nevertheless, Tierras de Armenia as a foreign owned company, by Eduardo Eurnekian, is the first to introduce big scale grape production, focusing on the use of machinery and growing international varieties. Though, quiet new to the market, they are expected to affect production environment greatly.

Overall, arrangements between farmers and producers are mostly based – upon volume agreements, often not including quality criteria. Mainly they are trust based, but few contractual relations exist, too. Pernod Ricard, through Yerevan Brandy Company, was the first to introduce control contracts. They set standards and introduce trainings for farmers, emphasising on quality produce. Other contractual agreements found, can be considered to a certain extent, as a result of this. It is expected that further spill over effects will take place. Most of the inflow of FDI originates from Diaspora Armenians or from investors with personal linkages towards Armenia, but other international investors are present, too. The overall effect of FDI is considered positive, within society and for overall developments. Constraints still exist, but examples show that interest of investors exists and difficulties can be overcome.

Some areas for future research have emerged as a result of this work:

- There is a clearly defined need for cooperatives developments in the country and the impact of this movement on the quality of grape and wine can be assessed and studied in future.
- Innovations on the scale of whole sectors are gaining in importance globally (Ndou et al., 2012); hence, the impact of joining a trade union on the wine sector can be analysed.
- As the idea of clusters is getting more important in the wine business (Dana et al., 2013), comparisons between similar wine-producing countries, such as Armenia and Georgia can be drawn. The comparison can be spiced out by differences in political developments in both countries.
- The effect of food safety certification requirements on the wine sector and export directions can be studied.
- Wine tourism is globally gaining in attention and is considered as an important success factor for the wine sectors (Mancino and Lo Presti, 2012). Thus, the importance of wine tourism has to be researched in Armenia as well.

## Acknowledgements

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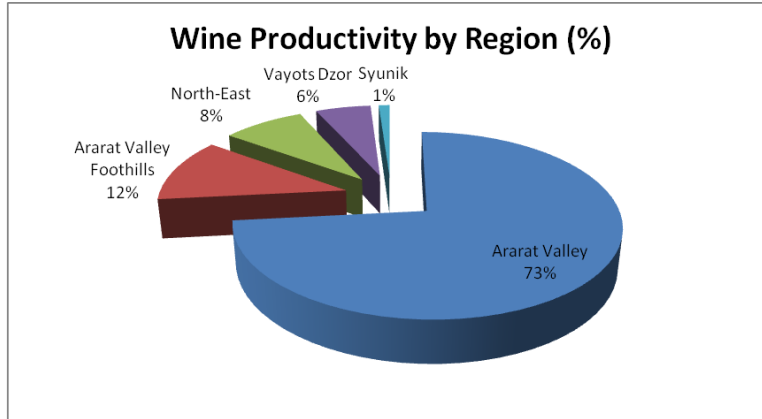
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## Notes

- 1 <http://www.doingbusiness.org/~media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB11-FullReport.pdf>.
- 2 [http://www3.weforum.org/docs/WEF\\_GCR\\_Report\\_2011-12.pdf](http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf).
- 3 Support was given through the International Center for Agribusiness and Education (ICARE) in Yerevan, Armenia and the Yerevan office of GIZ (Gesellschaft für Internationale Zusammenarbeit).

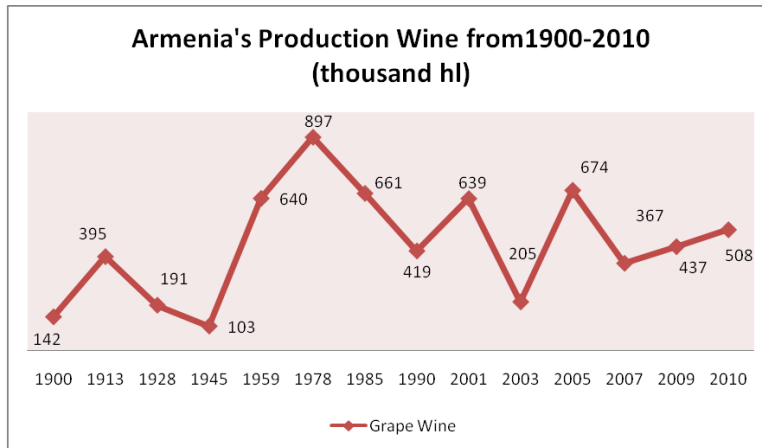
Appendix

Figure A1 Armenia’s wine productivity by region (see online version for colours)



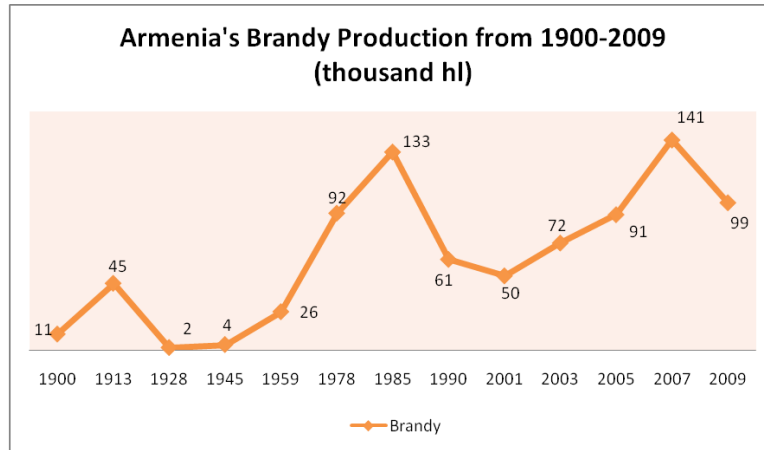
Source: based upon Hartutyunya (2010)

Figure A1 Armenia’s wine production from 1900–2010 (see online version for colours)



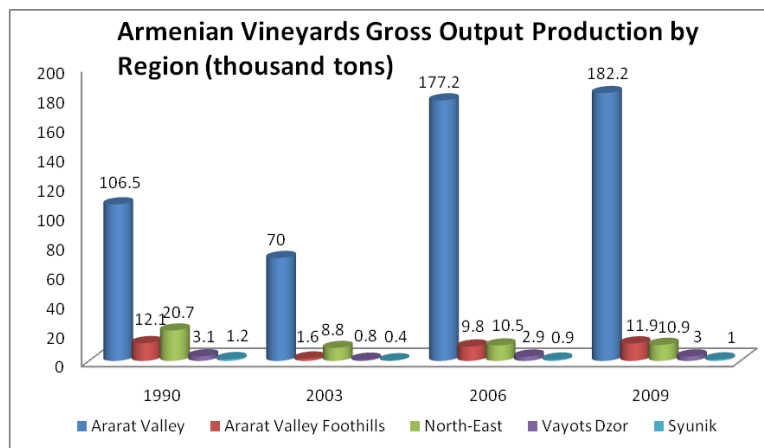
Source: based upon Armenian wine producers association (2011)

**Figure A2** Armenia’s brandy production from 1900–2009 (see online version for colours)



Source: based upon Armenian wine producers association (2011)

**FigureA3** Armenian vineyards gross output production by region (see online version for colours)



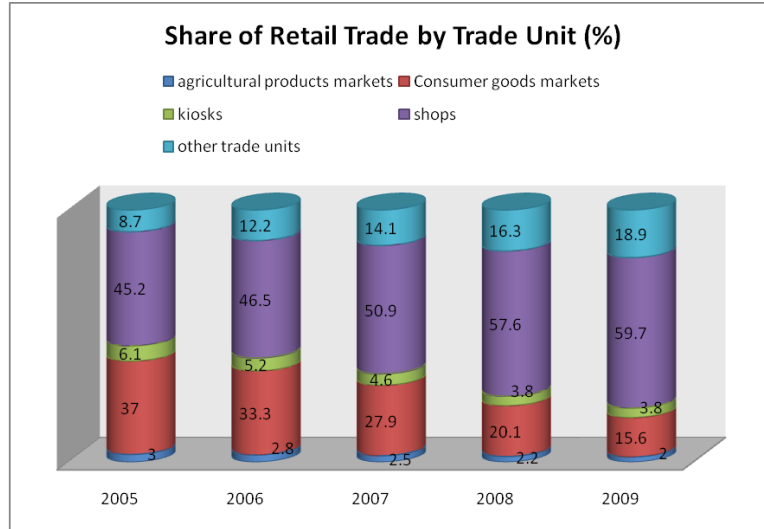
Source: based upon Armenian wine producers association (2011)

**Table A1** Average number of wineries in Armenia

<i>Period</i>	<i>Average number of wineries</i>
1998–1990	35
1991–1996	20
1997–2003	31

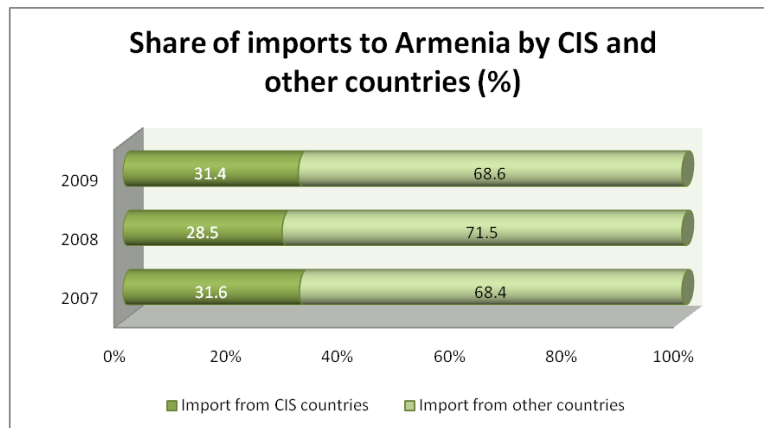
Source: base upon association of Armenian winemakers, 2003; in Engels et al. (2004).

**Figure A5** Share of retail trade in Armenia by trade unit (see online version for colours)



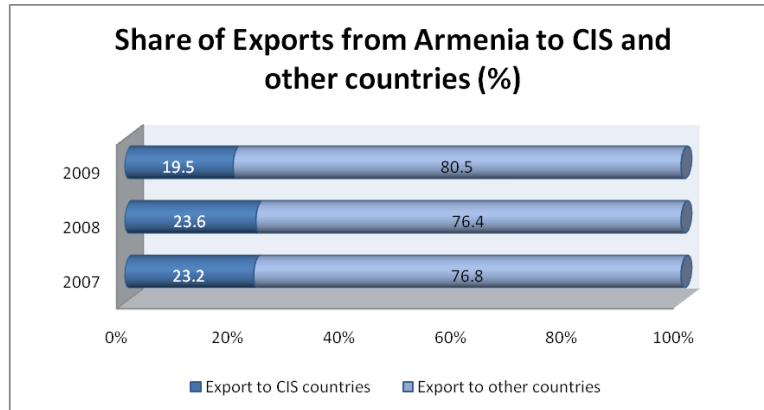
Source: based upon Statistical Yearbook of Armenia (2010)

**Figure A6** Share of imports to Armenia by CIS and other countries (see online version for colours)



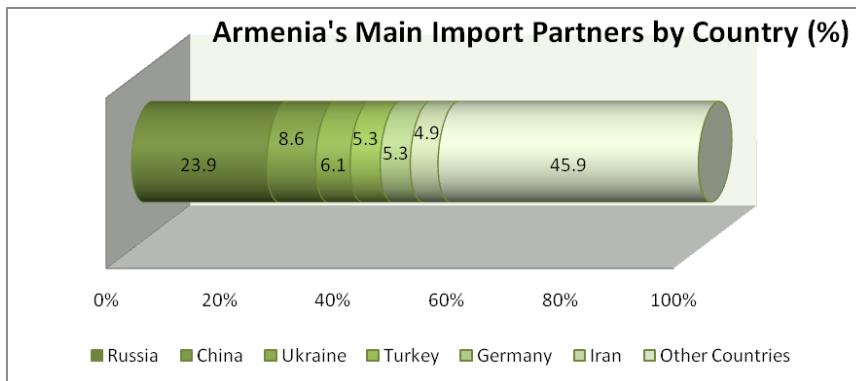
Source: based upon Statistical Yearbook of Armenia (2010)

**Figure A7** Share of exports from Armenia by CIS and other countries (see online version for colours)



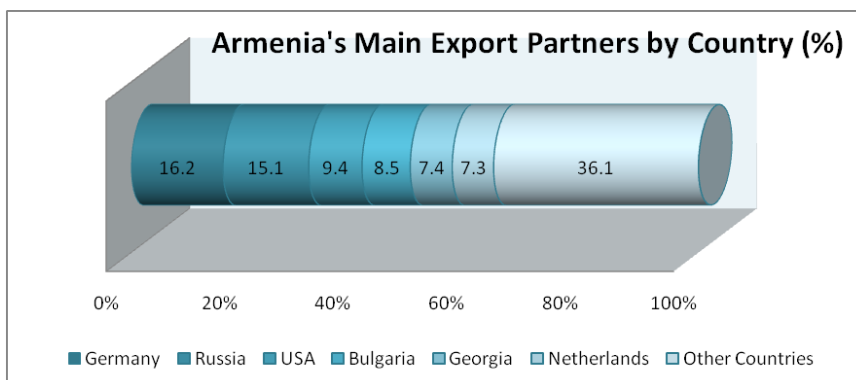
Source: based upon Statistical Yearbook of Armenia (2010)

**Figure A8** Armenia's main import partners by country (see online version for colours)



Source: based upon Statistical Yearbook of Armenia (2010)

**Figure A9** Armenia's main export partners by country (see online version for colours)



Source: based upon Statistical Yearbook of Armenia (2010)



**Figure A10** Armenia's export development of alcoholic beverages (see online version for colours)



Source: based upon Armenian Wine producers Association (2011)