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SUPPLIERS IN THE WINE SECTOR

R. Šperková, H. Hejmalová

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Abstract

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Suppliers are an important part of business because they supply the company with sources for production. If a company relies solely on one supplier, it may interrupt the flow of production due to failure to deliver material. Suppliers can demonstrate its strength mainly by increasing prices or reducing the quality of supplied materials. In the wine sector, there are the following major groups of suppliers: feedstock suppliers (wine grapes), suppliers of chemical additives and other substances necessary for the production of wine, suppliers of manufacturing technology, suppliers of packaging materials, energy suppliers and other vendors.
Highest bargaining power is currently available to suppliers of energy, because energy is an essential resource for the industry and there are few suppliers of this product. But their bargaining power gradually decreases depending on the liberalization of energy markets, supported by interest in this area. Overall, it can be stated that the bargaining effect is of medium importance.

wine-production industry, suppliers, packaging materials, bargaining effect, market

Successful management of an organization is dependent on the capabilities of management. Today, managers are in a constantly changing environment with a significant number of positive, but also negative factors. An important task is the proper identification, which enables assessing the current status of the company in the market, points to what should management focus on, what are the prerequisites for success, and what direction to focus on in the future (Šperková, Duda, 2009).

All organizations need resources such as capital, equipment, energy, services or material. Organizations that provide these resources needed to produce products and services are called suppliers. Suppliers are an important part of business, because they largely influence the quality of products the organization produces, by the cost of production (Donnelly, Gibson, Ivancevich, 2005). For this reason, the supplier may claim superiority over the other negotiating parties via the threat of raising prices or reducing quality of purchased goods and services (Porter, 1994). The negative result is that influential suppliers may increase prices for the goods and services to achieve a decrease in profitability in the sector, which is unable to compensate the cost increase. It is therefore necessary to assess their bargaining power within the industry and effectively respond to any change.

The goal is to evaluate the bargaining power of different groups of contractors working in the wine sector.

MATERIALS AND METHODS

To achieve the objective, there were used data from the situational and the forward-looking reports issued by the Ministry of Agriculture, the concepts of development of viticulture and winemaking in the Czech Republic, newspapers and magazines and literature. These data are characterized by significant theory and sometimes obsolescence, therefore it has been made to update with the latest materials from the internet. To zoom in practice much of the information was also obtained on the basis of structured interviews with winemakers, importers and suppliers of raw materials for wine production.

Bargaining power of suppliers in the wine sector was assessed according to the analysis based on Porter's model of the impetus of competition in the industry (Porter, 1994). This model is really important in terms of formulating the competitive strategy and putting the company into relation to its environment. It focuses on the analysis of competitive situation, the sources of competitive pressure, the intensity of competitive pressure, actions and reactions of competitive rivals and the current and future competitive situation (Sedláčková, 2000). The level of competition in the industry according to Porter (1994) depends on five basic competitive forces – the new entering firms, the risk of substitute products, bargaining affect of customers and suppliers and rivalry existing among competitors. The summarized effect of these five forces determines the final profit potential in the sector, which is measured in terms of long-term return on invested capital.

The size of their bargaining power according to Porter (1994) depends on a number of conditions which are subject to change and are often beyond the control of companies:

- menu is dominated by several firms and is more concentrated than the industry which is supplied,
- there are no substitute products for supply to industry,
- the industry is not an important customer group,
- supplier's product is an important input to business customers,
- group of suppliers has created a differentiated production and transition costs,
- suppliers create appreciable threat of forward integration.

Thompson and Strickland (1993) argue that the bargaining influence of suppliers is growing even if the supplier industry can produce a product (component) cheaper or in the quality required by the customer.

Some organizations can rely on other sources than physically tangible goods. Eg. For professional services such as management consulting, tax advice or instruction, is critical the availability of skilled workers. Among the suppliers, where supplier companies can be usually sorted, can also include a working force that has a considerable influence in many sectors. This influence is reinforced by the existence of trade unions, specialization of workers and government restrictions (eg. minimum wage) (Johnson, Scholes, 2000). Just as in the case of customers, the company can improve its position against suppliers with a quality strategy (Porter, 1994).

RESULTS

Suppliers are the most important part of the trade itself, because they are the source of the underlying assets sold. There work these major groups of suppliers in the wine industry:

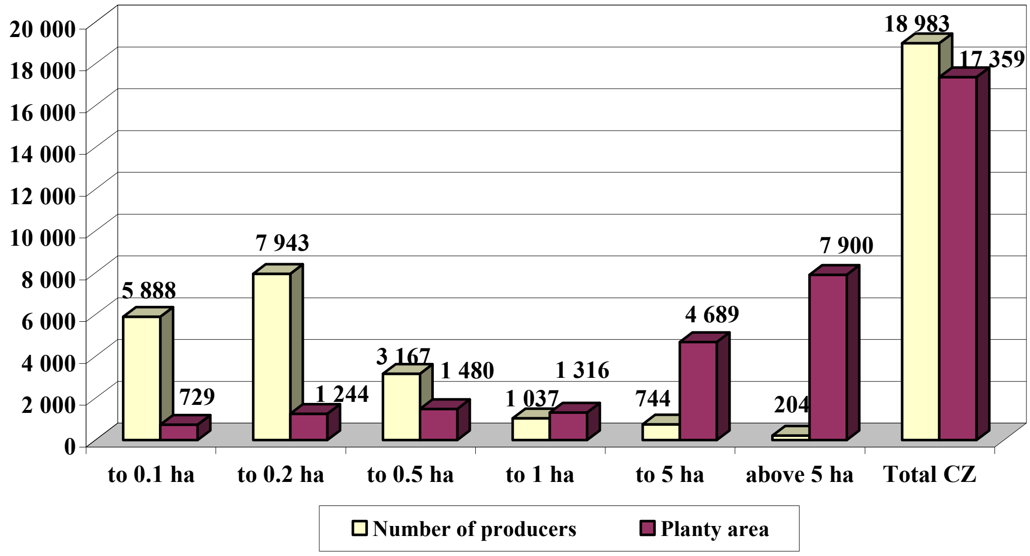
1. *Feedstock suppliers* – a key raw material for production of wine grapes are grapes.
2. *Suppliers of chemical additives and other substances necessary to produce wines* – such as bleaching agents (bentonite), deacidification plant (calcium carbonate), rennet (sulfur dioxide), beet sugar and yeast.
3. *Supplier of technology* – eg. production and bottling lines, presses, cooling systems, filters, tanks, barrels, centrifuge.
4. *Suppliers of packaging materials* – include suppliers of glass bottles, PET bottles or other containers (cardboard boxes, cans, BiB boxes, etc.), suppliers of corks and labels.
5. *Energy suppliers* – Here it comes an interesting development in connection with the gradual liberalization of the energy sector in the Czech Republic, thereby weakening the position of suppliers.
6. *Other suppliers* – marketing agencies, consulting and accounting firms, software companies, etc.

The main raw material for production of wine grapes are grapes. *Suppliers of this feedstock* are either fully integrated with existing companies or they are linked to these companies by contracts. The position of these suppliers is relatively strong, since their transition to another buyer would be a big threat for processing (wine) business (Žufan, 2009).

In the Czech Republic grapevine is grown on 17,358.52 hectares (data is valid to December 31st 2009) and the 2009 harvest was 68,737.00 t with an average yield 4.27 t / ha (this is the Czech Statistical Office data, which do not contain small grower and subsistence) and the average cost per 1 kg of grapes in the range of 9–15 CZK.kg^{-1}. Due to fluctuations in weather and subsequent crop failure there has been a change in industrial producer prices, which fell by 42.7% to 8,026 CZK.kg^{-1} in 2009, which is below the level of production costs. The purchase price is mainly determined by manufacturing companies at present. Therefore, growers are trying to organize to the sales teams and seeking to sell large quantities of grapes so that subsequently was able to influence the purchase price of grapes.

From the view of the structure of the vineyard, there is a large concentration of vineyards on a large area in a small number of "large" growers (own vineyard area of over 1 ha). Growers with vineyards above 5 ha planted area is only 1% of the total number of growers, but they cultivate area of 46% of the total area in the Czech Republic (see chart). The second important groups in the number of growers are the growers cultivating vineyards in the area to 0.1 ha, which constitutes 43% of the total number of growers. However, the total area of these small vineyards is only 4% of the total vineyard area in the CZ (Fig. 1).

In the Czech Republic the consumption of wine grape does not correspond with the production. Domestic production of wine grapes covers only about 45% of the demand and the shortage of raw materials is compensated by imports. Compared to the calendar year 2008, the import of grapes



1: *Size of vineyards structure, December 31st 2009*
Source: Central Institute for Supervising and Testing in Agriculture

in 2009 increased by 51.4%. Grapes are mainly imported from Hungary (2,390 tons), Italy (1,128 tons) and Slovakia (855 tons). In 2009, total exports of grape vine from the Czech Republic decreased by almost 99% compared to the previous calendar year (Bublíková, 2010), which was due to poor harvest grapes in the country.

Suppliers of chemical additives and other substances needed to produce wine is a large number. These products are sold either directly by the manufacturers or importers, or through shops with the needs of wineries, as well as among wine makers themselves. In terms of technological process of wine Bentonite is used. It is a sedimentary rock composed mainly of clay minerals in the wine sector used for the production of de-inking whitening agents. Moreover, the addition of bentonite to the cider before fermentation takes place is used to remove air pollutants (spraying substances) and improves the taste of cider. In the Czech Republic there is the major habitat of bentonite deposits in region Kadaň and Podbořany, Hroznětín and around Most. In these areas it is concentrated the vast majority of bentonite deposits and reserves in the country. Mining of bentonite in the Czech Republic cannot adequately cover the demand, therefore more than 98% of the total demand needs to be imported, mostly from Slovakia, Greece and Germany. Currently, the price of bentonite ranges in the CR from 3,000 CZK / t to 6,000 CZK / t. The largest exporter of bentonite is KERAMOST, Inc., which controls 89% market share. This implies a significant competitive advantage over other importers, mainly in the pricing policy of the company, where it tries to push prices down, to be attractive for the potential customers. The company owns several factories throughout the Czech Republic (Operation Kadaň, Establishment Obrnice and Establishment Brník) and for larger orders guarantees delivery within 3 working days by verbal communicate with Alena Šašková (head of sales department, Keramost, Inc., Žatecká 1899/25, Most) 7. 2. 2011. Major company selling bentonite mined in the Republic is the E-EKOS al. Ltd.

In wine making it is often carried deacidification. To do that, it is frequently used calcium carbonate ($CaCO_3$). The price of calcium carbonate in 2009 ranged from 170 CZK / kg of pure concentrated to 57 CZK / kg of the substance added directly to the reduction of acidity must. Major suppliers of this substance are Chevy, al. Ltd. and FEAST Chemistry, ltd., which are located in Ústi nad Labem, Staré Město na Moravě and in Blansko.

The quality and preservation of wine is subject to increasing customer demands. Wine should maintain its specific characteristics despite changes in temperature or light. Therefore the *technology of its production* is very important. There are many ways of wine production. The most important is technology of driven wine fermentation and gravity technology, and then it is for example integrated production, which is used mainly in Austria, in the Czech Republic it is used only in one third of production (Kraus, 2010).

In the Czech Republic there is a modernizing trend in the winery. There are new production procedures. There is also a change of use of materials on the wine making process itself, moving from wooden barrels to stainless steel, which offers greater ease of maintenance, sanitation, product capabilities, containers of any size and shape and longer shelf life (Sedláček, 2009). On the other hand in the Czech Republic the use of wooden barrels has a long tradition. And the general opinion of experts is that each wine, which means something in the world has spent a period of its life in a wooden barrel. Technological advantages of wooden casks are mainly hygienic environment for fermentation and aging of wine, natural preservation, breathing and wine maturation, wood tannins, which are important for the stability and structure of wine. The barrels are in volumes 112 liters – 10,000 l, the most frequently used drum with a capacity of 225 liters.

The Czech Republic has 21 companies, (Companies database, 2011), that are in the business field selling wine needs. All these firms are located in the South Moravian region. The most important in terms of size are BS WINE SUPPLIES Ltd. offering all the needs of the grower, which has stores in Znojmo, Velké Bílovice, Brno and Mikulov and Znojmo VINUM focused on selling wine needs.

Packaging materials have several functions. Not only they act as a protection, but also they are important from a marketing perspective, because they can persuade the customer to purchase the lower quality wine. According to Bublíková (2009) the most preferred are in the Czech market glass bottles (38%), slightly smaller number has wine in cardboard boxes (33%). With a large distance followed by wines from barrels (19%) and PET bottles (10%). Glass bottles usually have different colors. Transparent bottles are used for rosé wine, while white wine is bottled in green or yellow bottles. The dark glass bottles are filled with red wine and wine intended for archiving, because these bottles release less light, thus helping to preserve the quality and taste of wine after a long period of time. The bottle volume is between 0.375 l (for specialties such as wine and ice wine straw) to 1 liter. For promotional purposes may be used bottles of volume 0.187 l. Prices vary according to volume of the bottle and glass colors. Bottles of white glass in 2009 were on average about 24.90 CZK / piece of green glass around 14.28 CZK / piece of glass and dark around 10.22 CZK / piece. Bottles are also available atypical shapes and sizes, but they are more expensive. The number of suppliers of the bottles is much lower than the winery firms and they are much more concentrated. In the Czech Republic, the leading company engaged in the production of wine bottles for sale is BRICOL-M, Ltd. situated in Valtice and it has stores in Znojmo, Velké Bílovice, Brno and Mikulov.

Great and discussed issues are the stoppers. Currently in this area new trends begin to be promoted, such as synthetic corks with holes that allow the controlled oxidation of the wine. This type of plug eliminates the inconvenience associated with the use of corks or plastic stoppers. But it is not yet known how a new type of plugs will behave over a longer period of time. It is clear from the survey of the Czech Statistical Office, that the traditional cork stoppers are increasingly being replaced by synthetic stoppers. This is mainly because they are half the price. In 2001, the artificial caps were almost not used at all, in 2006 there was quarter bottles were already plugged by artificial stoppers, in 2009 it was already in half bottles (Horčicová, 2008). Although plastic cork does not allow oxygen to penetrate into the bottle, it has its benefits. It eliminates defects that can be caused by the classic cork (often because the wine smells after the cork or it can completely corrupt). In addition, existing stocks of cork cannot cover the world's production of wine. In addition to plastic and cork stoppers it is used glass or metal. Prices of plugs in 2009 ranged by cork plugs around 21.08 CZK / piece, cork - timber around 7.40 CZK / piece, plastic around CZK 1.70 / piece, cork – plastic around 5.90 to 7.14 CZK / piece, and glued cork stoppers from about 3.09 to 3.41 CZK / piece.

In terms of packaging materials labels are also important. It fulfills both the function of information – presents information about wine, its taste, the area from which it comes, but also a visual function where graphical processing can significantly affect how the wine will sell. Depending on the media labels we distinguish: paper labels, adhesive labels free and adhesive labels on the disc. Sale of tags in the Czech Republic is provided by companies as Purgina al. Ltd. and Eprin Ltd. The final look of the label is created according to specific customer requirements and fulfills all statutory standards.

The group of suppliers is strong under the following circumstances

The offer is dominated by several firms and is more concentrated than the supplied branch

Based on the previous characteristics of the contractors it can be said that there are many suppliers of grapes at the market – by December 31st 2009 there were 18,983 grapes suppliers (Bublíková, 2010), companies supplying the technology for wine companies and suppliers of chemical additives and other substances necessary for wine making, and it increases competition and weakens the group of suppliers.

The suppliers of packaging materials have higher bargaining power, particularly suppliers of bottles and corks, because such firms are there in smaller number than winery companies. A similar situation exists by energy suppliers whose bargaining power is limited by the statutory regulation of the energy market. Due to the gradual liberalization of the market power, power of these suppliers gradually decreases.

There are no substitution products for the industry supply

The main raw material for wine production are wine grapes that cannot be replaced by any other alternative products, thereby strengthening the bargaining power of producers and importers of these grapes. The situation is the same for energy supplies. On the other hand, the bargaining power is weaker in the group of suppliers of chemical additives, where there are many different chemicals with similar functions, and many suppliers of production technology. Manufacturing equipment is clearly specified for processing the grapes, but for example filter devices are suitable also for other sectors of the food and chemical industry, so they have their substitutes.

Bargaining power is the lowest in the group of suppliers of packaging materials. Wine companies can choose from different kinds of packaging materials (glass bottles, PET bottles, cans, paper boxes, etc.), stoppers (cork, synthetic, glass, etc.) and labels (paper, adhesive free, adhesive on the disc, etc.). The decline of bargaining power in this group of suppliers has also been enhanced by technological development, which created more opportunities such as new packaging as BiB (bag-in-box), synthetic corks with a hole used for the controlled oxidation of the wine, screw caps made of metal, etc.

The industry is not an important customer of the supplier groups

In the case of suppliers of chemical additives and other substances necessary for the production of wine and in the case of suppliers of feedstock (wine grapes) the wine branch is the only customer, which greatly reduces the power of suppliers. Large vine growers are also a fully dependent on the processors of wine, because mostly they do not have their own equipment for wine processing. In addition, the grapes cannot be stored for a long time. In the case of suppliers of packaging materials, their bargaining position is strengthened only partially, as customers of the wine sector are important for them, but their production goes to other sectors as well. Completely different situation is among energy suppliers, where the wine sector is not very important customer, so that the power of the suppliers in this context is great.

Supplier's product is an important input for customers business

As already mentioned; wine grapes, chemical additives, and energy production technologies are necessary for wine making. In addition, the grapes cannot be stored for long. These facts can largely enhance the bargaining power of all the above mentioned suppliers. The only exception are the suppliers of packaging materials, where it is true, that the packaging is very important input in the industry, but wine companies can accumulate stocks of these products, so the bargaining power of suppliers is enhanced only partially.

Suppliers group has a differentiated production or created transition costs

Wine grapes are a standardized product without the existence of transition costs. The only differences are the different varieties of grapes, but offers in assortment of individual producers usually varies little, so the customers can easily find alternative suppliers. In addition, there are almost no transition costs when changing supplier. There could be taken into account only transport costs, but these are minimal due to the concentration of viticulture. The situation is different for suppliers of packaging materials, where each producer has a certain type of packaging. For all other suppliers, production is also quite standardized, and there are significant transition costs. This means that this aspect does not increase the bargaining influence suppliers.

Suppliers produce appreciable threat of forward integration

Threat of forward integration is for winery significant only in the small vine-growers (own vineyard area up to 1 ha), who in most cases also own essential facility for processing grapes, the cellar and knowledge needed to produce wine. The intensity of this threat is high, because according to the Association of Vintners CR; 50% of must grapes are processed directly by the grower. The situation is different for large growers (own vineyard area of over 1 ha). They are usually addicted to one processor of wine, because they do not own the devices. Threat of forward integration with other vendors is not current, so again, bargaining power of suppliers is not getting stronger.

DISCUSSION

Overall, the bargaining effect of the suppliers is moderately significant. But it depends on the group of suppliers.

I: *Bargaining effect of different groups of suppliers towards wine producers*

Factor	Bargaining effect of suppliers				
	Raw material	Chemic. Additiv.	Product. Technol.	Packaging material	Energies
Suppliers are concentrated	low	low	low	high	high
There are no substitutes	high	medium	medium	low	high
Winery is not important customer	low	low	medium	medium	high
Suppliers product is important input for subscribers business	high	high	high	medium	high
Suppliers have different production, they create transition costs	low	low	medium	medium	low
Threat of forward integration	medium	low	low	low	low

As shown in the Tab I, in the wine sector has the greatest bargaining power the group of energy suppliers. But their bargaining power gradually decreases depending on the liberalization of energy markets, supported by interest in this area. In January 2011 the Czech government approved an amendment to the Energy Act, which is designed to give greater protection to consumers and to liberalize the energy market. Liberalization does not affect only the electricity market, where production of the Czech Republic is owned by the ČEZ and transmission system ČEPS and companies are owned by state (ČTK, 2010).

Very little bargaining power has suppliers of chemical additives and other substances necessary for the production of wine and grape suppliers. It has been mainly due nature of a product that cannot be stored for a long time, and its use is limited to the production of wine, then a high dependency on fluctuations in the weather, which can cause crop failures, and especially the low bargaining power in pricing, the purchase price grapes is currently well below production costs.

Other suppliers represent medium danger to wine makers. For technology suppliers, the bargaining power is strengthened especially by great significance of technology for the production of wine and weakened by low concentration of the sector and a low threat of forward integration. By suppliers of packaging materials there is a significant concentration in the supply of bottles and corks, which increases their bargaining power. On the other hand, the bargaining effect is significantly weakened by technological advances in the field.

SUMMARY

Suppliers are an important part of business because they supply the company with sources for production. If a company relies solely on one supplier, it may interrupt the flow of production due to failure to deliver material. Suppliers can demonstrate its strength mainly by increasing prices or reducing the quality of supplied materials. In the wine sector, there are the following major groups of suppliers: feedstock suppliers (wine grapes), suppliers of chemical additives and other substances necessary for the production of wine, suppliers of manufacturing technology, suppliers of packaging materials, energy suppliers and other vendors.

The position of suppliers of grapes, that is the main raw material being processed, is relatively weak, because in the terms of the nature of the delivered product (wine grapes) they already have a low bargaining power in pricing, the purchase price of grapes is currently well below production costs. In this case their integration with existing wineries or at least long term contract linked to the organization would help. Thereafter, any shift to other customers would be a major threat to the winery processing and thereby the bargaining power of suppliers would get greatly stronger. The situation is greatly complicated by the fact that the Czech Republic does not match the consumption of wine grape with its production, so the remainder must be imported.

A similar situation is also by suppliers of chemical additives and other substances needed to produce wine. Strengthening the bargaining power of suppliers of products for the wine is due to the fact that these products are an important input for the viticulture and their consumption due to the development of the sector is growing, which still prevents individual firms to greater competition and lower prices (Škorpíková, Černíková, 2004).

A little more bargaining power is available to suppliers of production technology and suppliers of packaging materials. Their production is partially differentiated, and also their customers come not only from the winery, but also from other sectors. Their bargaining position might be strengthened by increasing their concentration and development of new technologies for making wine.

Highest bargaining power is currently available to suppliers of energy, because energy is an essential resource for the industry and there are few suppliers of this product. But their bargaining power gradually decreases depending on the liberalization of energy markets, supported by interest in this area. Overall, it can be stated that the bargaining effect is of medium importance.

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Address

Ing. Radka Šperková, Ing. Helena Hejmalová, Ústav managementu, Mendelova univerzita v Brně, Zemědělská 1, 613 00 Brno, Česká republika, e-mail: radka.sperkova@mendelu.cz, helenahejmalova@seznam.cz