

BEER AND BEER INDUSTRY IN SLOVAKIA

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Summary

Tradition of beer industry in Slovakia takes origin in 19th century, when production of beer primarily appeared in this country. Slovaks love beer, which is confirmed by gradually increasing number of beer producing facilities. Production of beer has significant impact on development of Slovak economy, direct foreign investments, creation of new jobs, technology modernization etc. There are also many significant multinational corporations operating in Slovakia such as Heineken International, Topvar, Steiner and others. Significant revolution is going on also in the sector of small independent craft breweries in Slovakia. The objective of this paper is to emphasize the importance and impact of beer industry on Slovakian economy and to analyze advantages and disadvantages of the sector in this area.

Keywords: Beer, beer industry, investments, market.

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Introduction

Beer is almost as old as our civilization. The favorite drink over the whole world and according to some researches it has also medicinal properties due to medicinal substances which beer contains. It is a fermented beverage which is made from grains of cereals with the addition of hop. In the previous century and at the beginning of

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this century it was a common believe that beer originated from Egypt. This was due to the pictures saved on stone panels and texts found in pyramids in Sahara desert which originated from the fourth century and the beginning of third millennium BC.

The oldest brewery in Slovakia is situated in thy city of Vyhne, founded in 1473, while the second most important one is brewery of Trnava city - known as free royal city – founded in 1532. From geographical perspective, the most important centers of beer are in mining towns (Kremnica, Banska Bystrica, Banska Stiavnica), as well as: Spis region towns (Kezmarok, Levoca), and other cities such as: Bardejov, Presov, Kosice and south-western area of Slovakia (Trencin, Trnava and Bratislava) are well-known and famous for beer production.

Beer which is consumed today maintains its taste and flavor from the eighteenth century. The best beer was made in eighteenth and nineteenth century in towns of Trencin and Kezmarok. During that period beer industry was established and in the second half of the nineteenth century developed in a way to be focused on industrial production which led to decrease in craft production of beer (typical for small entrepreneurs who raised hop). However, consumption of beer during this period was very small in comparison with other beverages (Historia piva, 2017). Increase of beer consumption happened only during the fast, when people started to consume beer instead of milk. The largest changes came in the second half of XX century when modern breweries were founded and started their businesses. Furthermore, the quality of beer went up and the price of beer was also more attractive and affordable to people which led to higher consumption of beer.

The impact of beer industry on Slovakian economy

Beer production through the time has been very important source of revenues from the government perspective and was traditionally considered as a creator of new working places and a relevant factor in employment increase. In 2003 beer consumption has fallen down, while after 2010 it was stabilized on the earlier levels, which was confirmed by the Statistical Office of Slovakia data. Breweries in Slovakia recorded moderate growth in consumption by 6% last year. In 2015 in Slovakia the total consummation of beer amounted 372 million liters, meaning on average 73 liters of beer per citizen.

Government budget, recorded growth of approximately 110 million EUR last year on taxes from beer sale, Beer industry intends to invest approximately 130 million EUR each year for purchases of goods from its suppliers, mostly Slovakian agriculturists and in such way contributes to the incentives for development of domestic economy. Each Euro that is paid to suppliers in Slovakia by breweries means stimulus for economy and creates added value of 2.38 EUR.

Beer industry creates about 19,000 working places within the Republic of Slovakia. In breweries more than 1,500 employees are directly employed, while each of them creates another 12 working places in the supply chain, the catering and trade industry.

Breweries invest almost 2 million EUR per year in the sector of hotel management and catering (abbreviated: HoReCa). Multinational companies bring significant investment recovery into Slovakian beer industry, technological innovation, new management style and corporate culture.

Slovaks are great consumers of beer

Slovaks lead in beer consumption which is proved by continuous increase of number of breweries in Slovakia. Together beer producers produce almost 3 million hectoliters of beer per year in total. The largest quantity of beer Slovaks drink in summer, almost 60% of total year production.

The quality and popularity of Slovakian beer is showed by an average consumption of 73 liters per citizen each year, which classify Slovaks as nation with high culture of beer consumption with continuous increasing trend. Slovakian beer hides its secret not only in extremely high quality of its ingredients starting from quality water, grain, hop and beer yeast but also in a well-known mastery for cooking of craft beer. The quality and various flavors of Slovakian beers depend upon the way of cooking as well as adequate mixing of ingredients during cooking.

The most popular beer among Slovaks is “Lager”. The word “lager” has German origin and its meaning is “keep it safe” “store” or “protect”. After preparation phase, this beer is left to lie down on low temperatures around zero, several months. Lager beer is the “beer of low fermentation” meaning that for its preparation yeast cultures which are precipitated on the ground are used and fermentation is made at low temperatures (“cool fermentation”). Lager is the most popular type of beer in the world, due to various flavors inherent for it, from sweet to bitter, with various palettes of colors from dark to gold; it is highly carbonated drink, very full flavor, different smells, with a lot of additives of hop and stable foam. The most famous are German, Czech and Netherland types of Lager beer. The consumption of Lager beer is almost two thirds (64.3%) of total beer consumption. On the next place is the beer consumption with higher percentage of alcohol, with share of 18.5% of total beer consumption.

Very successful line of beer Radler has a 10% share in total beer market. Radler beer became trendy so its consummation rises, as one of the type of non-alcoholic beer. Apart from the fact that it is flavored and filtered it also became part of life style of active people as an alternative on their jobs, during driving or while they are actively engaged in sport.

Slovaks prefer mostly light beer (53.3%), dark beer (23.1%) but also Radler (15.3%). Data from Statistical Office of the Republic of Slovakia shows the trend of beer consummation preference of Slovaks at home, in weekend cottage, at different manifestation or in the friend circle. According to data from Trade Association, the beer consumption in restaurants and pubs is 37%, while the sale of beer in supermarkets is almost doubled and amounts 63%.

Type of beers in Slovakia

During the typical production phase of beer in Slovakia, 85% of raw materials which came from the territory of Republic of Slovakia is used.

Multinational companies, engaged in production and sale of beer, contributed by their investments in Republic of Slovakia to significant investment recovery, technological innovations, new management style, corporate culture and opening of new working places.

Slovakia has totally 60 breweries, while 4 of them are large breweries and 56 are small craft breweries.

Beer market in Slovakia is under the huge impact of domination of two largest companies, Heineken Slovakia and Topvar brewery. Both companies are in the majority ownership of foreign investors.

Heineken Slovakia is part of world group Heineken International and has portion on Slovakian market of 45% with following types of beer: Zlatý Bazant, Corgon, Kelt, Martinier and Gemer.

The second largest brewery in Slovakia is Topvar, part of the world known company SABMiller, with 28% share on the Slovakian beer market with following types of beer: „Saris“ and „Smadny Mnich“.

Third ranked brewery is also the oldest Slovakian beer producer - Pivovar Steiger (types of beer: Steiger, Stein, Grosak, Sitnan), which is in the majority ownership of British company Endemit and majority co-ownership of Czech company PMS.

On the fourth place according to its size is Banskobystrická pivara (types of beer: Urpiner, Kapral), in the ownership of entrepreneurs Lubomír Vančo and Branislav Čvík.

Remaining part of the beer market is made up of 30 small domestic breweries.

Against multinational breweries and their presence in the Republic of Slovakia, demonstrates the Association of small independent breweries of Slovakia, which founded “Pivobrání” initiative in order to advocate their beer and breweries which are not in the ownership of the large multinational companies.

Heineken Slovakia

Heineken Slovakia is a part of global group Heineken International, which operates in more than 70 countries and employs more than 70,000 people. This group is one of the largest breweries in the world (currently, third according to the size) and within Europe. Heineken Company has the most famous world brands of beer, such as: Heineken and Amstel, and also takes over production and sales of local and international brands with more than 200 brand names (214 million hectoliters produced by 140 different breweries worldwide). (Heineken Slovensko, 2017).

At the end of 1995, Heineken Company invested more than 200 million EUR in the Republic of Slovakia in the development and modernization of equipment and process of production. Heineken Slovakia is currently a leader on the beer market with beer brand called Zlatý Bazant, which is in their portfolio since 1996. Heineken Slovakia possesses three companies (with 750 employees) for production, distribution and sale of beer in Slovakia. Heineken Slovakia is in the 100% ownership of international beer group Heineken International which started operations and business on territory of Republic of Slovakia in 1998.

Revolution of small breweries

Republic of Slovakia experiences real revolution in the area of small breweries. Until 2009, the number of small breweries was relatively low and amounted to about 10, nowadays the

number of small breweries has increased to 70 with the possibility of further growing to 80 breweries on this territory until the end of 2017. Each year in Slovakia at least between 8 and 10 new small breweries is opened. Problems which small breweries face are usually of bureaucratic nature, such as administrative issues of obtaining certificates which can last even several months. In Slovakia, there is a modest fall in beer consumption inherent to the large breweries, but interest in small family craft breweries records continuous increase. Small independent breweries differ by type and the way of beer production. A lot of people are already tired from classic beer with same flavors so it is the reason for increasing demand and popularity of small breweries in Slovakia. Beside this, small breweries offer its consumers suitability during beer consummation such as: family atmosphere, tradition and new experiences related to beer and environment in which the beer is consumed. This is something what large beer industries cannot afford and offer to their consumers. Visitors of small breweries also can take insights into production, materials and whole production process, while some breweries offer some bonuses such as beer cosmetics or weekend packages to visit medicinal spa centers.

Conclusions

There are various kinds of beer and a wide palette of their flavors. The development of beer industry and its contribution to the economy development is very important. Multinational companies achieve huge profits but also small producers nowadays have a great chance to obtain consumers and improve its business in order to be in line with competition and large companies. The saturation of the market and similar taste of beer made by large companies are the advantage of small craft breweries, because their production and product finds the path to their customers. Raw materials and the production process are also very important, because they define the quality of beer, which is crucial for the competitiveness in terms of quality and price formation in relation to large companies as a prerequisite for profit achievement. In that sense, government should support and improve the development of those small entrepreneurs and to strengthen this economic area, due to the fact that new working places which are opened here could contribute to the general progress. Germans, which are leaders in the beer industry, can create a good example of how to use this field to help their economic development and to contribute and support of their economic sector.

Literature

1. Barat, P. (2001). *Sociológia*, Slovenská poľnohospodárska univerzita, Nitra, ISBN 80-7137-834-8, (151 pages).
2. Euromonitor Interanational (2017). (available at: <http://www.euromonitor.com/beer>)
3. Heineken Slovensko (2017). (available at: <http://www.heinekenslovensko.sk/>)
4. Historia piva (2017). (available at: <http://www.freezi.net/pivo/historia.htm>)
5. Kirin Holdings Company Limited (2017). (available at: <http://www.kirinholdings.co.jp/english/news/2017/index.html>)

6. Kotler, P. (2000). *Marketing podle Kotlera*, Management Press, Praha, ISBN 80-247-0016-6, (442 Pages).
7. OECD (2017). (available at: <http://www.oecd.org/health/health-data.htm>)
8. Statistics Portal (2017). (available at: <https://www.statista.com/statistics/444589/european-beer-consumption-per-capita-by-country/>)

PIVO I INDUSTRIJA PIVA U REPUBLICI SLOVAČKOJ

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Sažetak

Tradicija pivarske industrije u Republici Slovačkoj datira iz 19 veka, kada se i pojavljuje prva proizvodnja piva. Slovaci su veliki ljubitelji piva, što je primetno velikom konzumacijom istog ali i povećanjem broja pivara. Proizvodnja piva je veoma značajna za razvoj privrede u Republici Slovačkoj, jer time privlači strane direktne investicije, otvara nova radna mesta, modernizuje sam proces proizvodnje, uvode se nove mašine i oprema, modernizuju se preduzeća, podstiče se primena novih tehnologija, itd. Na teritoriji Republike Slovačke otvaraju svoje sedišta i fabrike i najveće multinacionalne korporacije iz pivarske industrije kao što je Heineken International, pivara Topvar, kao i Steiner ali i mnoge druge svetski poznate pivare. Velike promene Republika Slovačka beleži otvaranjem malih nezavisnih pivara. Cilj ovog rada je da prikaže na veliki značaj i uticaj koji ima pivarska industrija na ekonomiju Republike Slovačke, kao i da prikaže pozitivne uticaje na samu privredu ali i nedostatke koji se pojavljuju u ovoj oblasti.

Ključne reči: *Pivo, pivarska industrija, investicije, tržište.*

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