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BEER CONSUMPTION IN THE LIGHT OF CHANGES OF CONSUMER HABITS

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1. INTRODUCTION

Introduction of the research background, its relevance and importance

Further to the global trends, the financial crisis brought dynamic changes in all segments of the Hungarian economy and this applies to the market segment of the food and beverage industry chosen as the topic of my research, that is, the beer industry. Similar to the EU beer industry, the Hungarian beer market shows changes originating from **shifts in consumer behaviour**, taking into account the fact that the financial crisis impacted the discretionary income of the consumers. As a consequence, consumers are seeking more economical, less expensive means when purchasing beer.

The two most outstanding trends in the beer market are on the one hand, a **shift in demand** – affecting both quality and price – from mid end beer brands towards the lower quality, lower end beer products by commercial brands, on the other hand, a shift from consumption in restaurants and bars to home consumption of the product purchased via commercial channels. The sector's reaction to the consumer shift in the beer market resulted in the creation of a strategy built along the lines of the rapid and changing consumer needs: the strategy aimed at maintaining the position of the medium category brands, while enhanced manufacturer focus on products with low alcoholic content, many of which are flavoured products, as a means to support a healthier lifestyle.

Breweries in Hungary do not only need to fully satisfy consumer expectations and changed needs, they also need to face the **challenges of a dramatically changing market segment**, such as the recent challenges of privatization and mergers with multinational beer holdings, or currently, the global oligopoly and the growing influence of global consumer trends.

I have chosen to analyse beer consumption in Hungary as the topic of my research for **three reasons**. **First**, I intended to study a range of products that was strongly influenced by the changes in the market and the economy, and therefore is highly interested in benefitting from the competitive advantage based on the in-depth analysis of the consumer side. Beer is one of these products: for breweries in Hungary, potential survival strategies are largely determined by and limited by the deteriorating economic and financial conditions, such as the increasing raw material prices, as well as the negative impact of state tax and contribution liabilities on competitiveness. Breweries, in order to stabilize their market position, need to study and influence several elements, some of which are individual, while others are interconnected, within a complex market environment.

Besides the objective considerations, I have been driven by **goals of a personal nature**: being born and raised in Nagykanizsa, my home city, I have always been concerned with the thought of a potential way to restore brewery in my city to its former glory. The Nagykanizsa Brewery has a past the citizens can justly be proud of, while this is no longer valid talking about its present. Our brewery was first merged into the Dreher Group at the end of the 1990s, then closed down. Production was taken elsewhere, the machines were dismantled.

My choice of topic is further reinforced by the opinion and effort of the European Economic and Social Committee, which claims that the beer sector is of highlighted importance in the European Union mainly due to the state contributions, employment and raw material purchases made, and so it is the fundamental interest of the EU as well as the member countries to enhance its competitiveness.

"Beer is a drink that has been enjoyed in communities across Europe for several thousand years. While the beer cultures across Europe vary significantly, with differing beer styles and consumption habits, beer plays an important role in every European Union country and forms an integral part of the culture, heritage and alimentation. The European Economic and Social Committee highlights the constant evolution of the sector and its adaptation and resilience even in the present challenging circumstances. It notes how the sector conforms to the Europe 2020 objectives in the different priority areas of employment, sustainability, innovation, education and social inclusion." (The European Beer Industry – Incentivising the Growth Potential. Opinion by the European Economic and Social Committee, (Conclusions and recommendations 1.1.) 2013)

At the same time, while this direction is clearly shown in economic policies and decisions in the countries stereotypically considered "beer drinking" countries (such as the cut on beer duty in England), in Hungary, wine, often considered a replacement product for beer, or even spirits are at an advantage considering the support received, with a view on the available funds or looking at the harmonization or intensity of the communication of the sector.

The **third reason supporting my choice of topic** is based on this idea: beer products are seen as marginalized not only in economic policies, but also as a subject of research. While wine and wine consumption is frequently a topic of scientific research carried out through years or even decades, beer as a product is rarely the subject of independent study. Researchers tend to draw conclusions about beer together with its replacement products, mostly in research related to the effects of alcohol consumption, for instance, in studies on public health and epidemiology.

For the sector, it is of crucial importance to constantly follow-up on the market changes, to continuously innovate in harmony with the consumer needs and trends, because only these can ensure long-term, stable presence in the market for the players of the sector. My work, among other objectives, is aimed at filling in the gap created by the lack of empirical studies on beer consumption. This way we can provide a clearer picture on the reactions of the market that ensue from an economic shock, when food production companies search for ways to survive and to improve their competitiveness.

2. RESEARCH OBJECTIVES

2.1 Objectives of the research

In my dissertation, I analysed the demand side of the beer industry using descriptive methods as well as direct consumer surveys. Looking at the situation of the beer industry in Hungary, I was looking for answers in topics such as the frequency of Hungarian consumers to purchase beer products, the factors influencing consumer decisions, the Hungarian consumer's view on the beer brands, whether the consumers are drawn to specialty beer such as products of craft breweries, flavoured or non-alcoholic beer products. In my research I also wished to find out more about the degree of informed consumer behaviour when taking decisions, to see how deep of an impact advertisements have on the choices consumers make. All these contributed to my goal of creating a beer consumption map that would enable me to present consumer preferences in beer consumption with an integrated approach.

Besides the preferences of the specific consumer groups related to beer products, in my work I examined the entire sample with an eye on the specifics related to beer and its replacement products. The indicators called Product Preference and Commercial Product Preference permit to describe the willingness of consumers to consume or purchase a specific product category. Learning about the factors influencing consumer decisions, as well as comparing further characteristics of the consumer side may help the decision makers on the supply side plan an even better positioned product strategy in the future.

In accordance with the above stated, the following three points summarize the **objectives of my research:**

C1: Determining the specifics of consumer behaviour related to beer consumption

C2: By exploring the connections, drafting options that can help maintain the structure and volume of beer consumption

C3: Creation of a beer consumption map

In order to reach my research goals, I will examine the current economic situation and the role of the Hungarian beer sector (with an outlook on the European Union), furthermore I will analyse consumer behaviours, preferences and attitudes related to beer products.

2.2 Hypotheses of the research

H1: **Competitiveness of the players of the Hungarian beer sector are determined by the same elements as seen in global trends.**

I assume that the indicators of the sector are similar looking at the EU and Hungarian data.

H2: **Consumers, in situations related to purchase of beer products, can be considered informed consumers.**

Based on the findings detailed in the section Consumer decision and behaviour, related to the consumption of beer products I assume that the Hungarian consumers examined can be considered informed consumers, or are consumers with a growing level of consciousness when making a choice, based on the specifics of the products and other distinctive features of the consumption.

H3: **There is a link between brand loyalty (expressed by the consumer) and the advertisements and marketing campaigns aimed to popularize beer products (the impact of these assessed by the consumer).**

When testing my hypothesis, I was looking to see whether the Hungarian beer consumer remains loyal to a known brand even despite a higher price, or whether the price is the most important factor influencing consumer choice.

H4: **Consumers are attracted to new, innovative products in the beer sector as well.**

In order to remain competitive, any industrial sector needs to constantly renew itself and adapt effectively and dynamically to the factors affecting them. In my view, the relative saturation of the market gives way to new consumer behaviours that do not permit any production company, including breweries, to rely exclusively on their traditionally successful products.

H5: **Today's beer consumer profiles can be clearly defined with respect to the characteristics of beer consumption.**

As a consequence, the non statistical comparison of my two samples (taken 15 years apart) gives similar results in terms of their main trends and directions.

3. MATERIALS AND METHODS

3.1 Data collection methods

In the course of my research, further to presenting the beer industry in Hungary and the EU, I had the objective to gain knowledge about the behaviour of beer product consumers, as market players. The two methods applied to reach the objectives and to test the hypotheses were the following:

- Secondary research: applied to presenting the factors affecting the beer industry as well as for the analysis of the beer sector (H1)
- Primary research: applied when analysing the behaviour of beer drinkers (H2, H3, H4, H5)

Secondary research

Data collection for the secondary research carried out involved an overview and analysis of the current situation of the Hungarian beer industry, with a special consideration for the impact of and changes taking place in the years following the political transition; furthermore, I included an outlook on the beer industry in the European Union to determine the position of the Hungarian market within the EU. Discussion of the beer market is backed up principally by studies and reports of the Association of Hungarian Brewers and The Brewers of Europe, as well as data released by the Hungarian Central Statistical Office. The period of time examined is mostly the period from 2000 to 2015, with the exception of indications of long-term trends, or when the institutions mentioned previously did not offer up-to-date data as yet.

The analysis of the position of the beer industry was conducted in order to support the research objective in hypothesis H1, namely that the competiveness of the players of the Hungarian beer industry are determined by the same factors as seen in the global trends.

Primary research

I recurred to the means of **primary research** to survey the changes taking place in beer consumption and in consumer behaviour in Hungary (such as consumer and purchasing habits, attitudes, the principal factors influencing decisions, etc). Primary research serves to support my research hypotheses H2, H3, H4, and H5.

I chose to use *written* surveys for my research, and specifically used online surveys that are managed on the **internet**. Although the internet is gaining more and more of a hold in market research (Opperman,1995; Kottler, 1997; Eszes, 2001), my reasons for using this method was motivated by the fact that during the search and examination of the relevant literature I could not find any material that would have covered the topics of my research or at least a great part of my field of interest.

My research was conducted in two period of time: first, between the year 2002 and 2004, and second, between 2015 and 2016. Comparing the two sets of sample data does not in itself provide a basis to draw major conclusions with the help of comparative analysis, the two sets of samples, collected in two different points in time, have instead enabled me to present the trends and directions of the two periods next to each other.

3.2. The questionnaire

The survey by questionnaire was filled in online by nearly 1300 people. The questionnaire aimed to survey the consumer habits of beer consumers, to learn about specifics of different consumer groups, as well as to assess attitudes and brand preferences for individual brands. When conducting the survey, I did not aim to provide a representative survey in the statistical sense of the term, providing a comprehensive overview of the consumer behaviours of the entire Hungarian population. My main goal was to assess the main directions in the thinking of young students, women and men in higher education (ages 18-25), and those of the second group surveyed, middle-aged male and female graduates (ages 35-45).

The questions in the written survey referred to facts (advertisments, product information, purchasing habits, parameters of demand and supply), opinions (product specifics, spend and suppply culture), intentions (interest in a product, inclination to choose a product, intention to purchase), as well as the motives (factors influencing the decision of consumers, social and financial background). The questionnaire, with only a few exceptions, is based on mainly closed questions in order to improve the answer rates, facilitate processing of the data and facilitate quicker data analysis.

For questionnaire based surveys, there are four measurement scales available to be applied to the data: nominal, ordinal, interval and ratio scales. I used three out of the four for the data in my dissertation:

- nominal scale (to define preferred products, or well-known brands),
- ordinal scale (to establish raking among replacement products),
- interval scale (to measure attitudes, motivational factors, etc.).

In the case of the interval scale applied for part of the questions, I chose to apply the Likert scale with five levels of response. I would like to emphasize that although the Likert scale type of variables are generally not continuous, most marketing and management research still considers this scale continuous (Brown, 2011, Zerényi, 2016). The Likert scale makes interpretation easy for the respondent, while it also makes it easier for the researcher to perform mathematical or statistical evaluation.

In the questionnaires, the different subjects or strands of the questions were as:
Subject 1. General characteristics of the respondents' beer consumption
Subject 2. Brand choice and the related attitudes
Subject 3. Characteristics of beer purchase

Subject 4. Opinions on craft breweries and restaurants or pubs
Subject 5. Characteristics of special beer consumption (non-alcoholic, fruity, etc)
Subject 6. Factors influencing beer consumption and purchase, the importance of these
Subject 7. Unplanned purchases and brand loyalty
Subject 8. Marketing communication for beer products
Subject 9. The situation of beer and its replacement products
Subject 10. The reasons for rejecting beer, for those who do not consume beer products
Subject 11. Personal data

In line with the recommendation of the European Society for Opinion and Marketing Research (ESOMAR), the system collected the responses anonymously.

3.3 Methodology of the evaluation – the principal methods applied

- **Simple, descriptive statistics**: by calculation average values, or percentage ratios based on the responses collected
- **Segmentation**: since the market is not a homogeneous unit, I made analysis of the specific sets of consumer groups, based on their gender and age (for instance, when creating the consumption maps):
    - **Contingency tables**: I analyzed the relationships between the different variables as well as their relations to background variables. The relationship was provided by the values of Pearson's Chi-Square table, the strength measured by CramérV values. The confidence interval needs to be over 95% and the value 0.05 or lower for a significant relationship.
    - **Cluster analysis**: this method can provide more accurate information about the specific segments. Significant correlations can shed light on the factors influencing consumers, and so they can be divided into different groups.
- **Product Group Preference indicators:** they help elucidate the reception of the product among consumers. *Absolute Product Group Preference* = arithmetic mean of ″average value of Product Group Preference″, ″average value of Product Group Consumption Frequency″, and ″average value of Product Group Purchasing Frequency″. The calculation of the *Commercial Product Group Preference* is the weighted average of ″average value of Product Group Preference″, ″average value of Product Group Consumption Frequency″, and ″average value of Product Group Purchasing Frequency″, where the weights are as follows: 1x - ″Product Group Preference″, 2x - ″Product Group Consumption Frequency″, and 3x - ″Product Group Purchasing Frequency″

The software provided by Pécsi Sörfőzde Rt., MS Excel and SPSS 13.0 sofware were used for the coding, classification, conversion and evaluation of the data.

4. RESULTS AND DISCUSSION

4.1 The position of the beer industry in the European Union and in Hungary

To test my first hypothesis, I decided to review the situation of the beer sector in the European Union and in Hungary since the 2000's, based on official statistical data.

The review established that in the EU as well as in Hungary, there is a visible decline in the production and the consumption of beer. These countries all face high raw material costs besides heavy tax duty on the products. The market was furthermore impacted by the global financial crisis which resulted in a shift in demand: low-end beer products have gained prominence, out of home consumption was replaced by home consumption. This tendency is showing in the use of packaging materials, too. Employment in the beer industry shows a declining trend which impacts mainly the employees of the HoReCa (hotels, restaurants and cafés) sector.

Beer production however has a huge potential for growth and to generate jobs: this is recognized by more and more European member states that realise how the beer industry can contribute to economic growth and have a catalyst impact on several other sectors. This was the main message in the opinion issued by the European Economic and Social Committee, issued at the end of the year 2013, in which the beer sector was presented as one potential indicator industry to help emerge from the crisis.

4.2 Classification of breweries

Based on the articles, scientific or other national informational publications, I have established the following classification to best represent the situation in the Hungarian beer market.

- *Nano brewery:* previous taxonomy used the term of home brewery to include all breweries producing small quanities, mainly for a local market, sometimes producing special, or unique products (as a result of the limited production capacity), producing only limited quantities of beer. However, taking into account the revival of the home breweries (i.e. brewing in one's home), publications in Western Europe and mainly in the US distinguish between home brewery and craft brewery. The former is called nano brewery (one production supplying a maximum of 10 litres of beer, mainly 'ale' or 'raw beer' type), while the latter produce beer with a commercial goal in mind, but for some reason maintain a limited production capacity (and never using a licence).

- *home brewery:* breweries that only supply a selected number of bars or restaurants, since their capacity or technology does not allow them to enter the market with a more considerable quantity produced. Often these breweries also pursue another activity related to the HoReCa sector, such as providing accommodation or managing a pub or a restaurant and offer their own beer product as a speciality, building their own brand name to attract their own target audience.
- *micro brewer*y: some publications created a separate category for these units which show a transition between home breweries and the larger breweries. In this case, the small, home brewery is able to produce the same beer repeatedly, based on their inhouse recipe (or we can call it their own licence), however the quantity of product sold commercially is significantly smaller than in the case of the breweries. Micro breweries are also linked to a service provider in the HoReCa sector, however they also sell their bottled products on the market. The beer produced is often linked to old traditions, artisanal recipes, or to the distinctive features of the region, which can strengthen the brand. As for production capacity, 50,000 to 1,000,000 litres of beer are produced, mainly the ale type (there are virtually no micro breweries producing lager).
- *Regional brewery*: it is difficult to draw the line between regional breweries and the large brewing companies, mainly due to the fact that the area covered by brewing companies supplying for a country are of a different size: a company supplying one country as a regional brewery supplies for another country's entire area. Distinguishing regional breweries in Europe has also become redundant due to the changes in the market structure in the past 20 years. The breweries that once were active in a Socialist state based on specific plans to supply for the regional demand have all merged into one of the global oligopolistic companies and now supply one or more countries with globally recognized products.
- *"Large" brewing companies (corporates)*: with a large production capacity, they have the required technology and capital power, hold knowledge and apply complex production methods. Large breweries are able to produce and package the pilsener or lager type of beer products which require complex technology, and they are placing these products in the retail sale. As I have already indicated, current beer industry trends favour larger breweries, as well as the even larger global oligopolistic corporates that often acquire and merge these. According to the unanimous opinion of the experts in the field, in only a few years or decades, the entire beer production of the world could be supplied by the factories of only a few enormous brewery groups.

To accommodate this theory, we might in the future need to introduce the term Beer Oligopoly as a category for the beer moguls managing several large brewery clones in various points of the world.

4.3 Consumer behaviour – the results of the primary research

In order to fulfil my objectives, and to furthermore test my hypotheses H2, H3, H4 and H5, I conducted primary research. In 2015/2016, 505 out of the 665 respondents (76%) declared themselves beer drinkers, while with the answers provided by 160 respondents (24%) I was looking for the reasons for not consuming beer. At the time of the first survey, 460 out of the total 615 respondents (75%) declared being a beer consumer, which shows that the distribution of the sample in the two surveys was similar in this respect. The distribution of gender, marital status, place of residence or the distribution based on the actualized income figures also showed a similar pattern in the two surveys.

Beer drinking respondents provided answers of a similar distribution in both surveys to the group of questions related to frequency of consumption. In both periods of time, the ratio of the different answers is similar, however there was a slight shift in the survey of 2015/2016 from a weekly consumption towards monthly consumption, which can also be a consequence of the larger ratio of an older group of respondents. The gender based study shows a male dominance in the responses claiming daily or weekly consumption, with female respondents generally present as less frequent consumers, drinking beer on a monthly basis or only on special occasions.

Beer brands recognition: In the 2015/2016 survey, respondents named 89 beer brands among the most popular brands. I assumed to see a shift in the new survey as compared to this finding, when:

- no significant difference was found when comparing the results of the two surveys in terms of popularity, brand recognition, quality, consistency of quality, or related to the taste and appeal of beer products. The reason for this is the fact that respondents scored their brand of preference, which means there were no extremely low scores
- the views on the consistency of product quality gave results that showed absolutely no brand preference
- I paid special attention to the topics of price and availability: the more brands are included in a survey, the worse the results. In both cases, four out of the first five beer brands are traditional players in the Hungarian market, with highly functioning selling practices, well established, well received brand image, etc.
- *The final results: the two critical aspects to take into account for a beer brand to become the most popular, and as such, to be the number one choice for the consumer in their action as well as their thinking, are based on the price and the availability.*

The values received in the two studies conducted in two different periods of time gave the following results regarding the brands perceived most popular in both studies *(Dreher, Heineken and Soproni):*

- Dreher: even though the prices have definitely shifted to be seen as more favourable, this shift has had a negative impact on the quality and the long-term quality of the products.
- Heineken: those who like the brand gave feedback on a clear downward trend in quality, while the prices are seen as more favourable than at the first poll. The number of respondents specifying Heineken as their preferred brand of choice shows a dramatic decrease comparing the two surveys, which is probably a result of the increase of the competition and the presence of more and stronger alternative brand options.
- Soproni: its recognition has improved most over the years, mainly in the aspect of the brand reputation and the popularity of the brand. Regarding prices, the responses show no improvement as opposed to the previous two companies, while the results show an unexpected decline in the availability of the products. However the responses provide a very positive feedback to the company since the number of respondents giving Soproni as their first prerefence in beer products has almost doubled in the time elapsed between the two surveys.

Fruit flavoured beer products. In my survey of 2002 I did not examine this subtopic, however it could not be left out of the 2015/2016 survey being a subject that cannot be ignored nowayads.

- Over a two third of the respondents regularly buys fruit flavoured beer products, a 30% of respondents buys this type of products frequently, despite the fact that this product type is not yet backed up by the consumer awareness that can be established during several decades
- the distribution of the results based on gender helps get a clearer picture and brings the significant differences that I was expecting: nearly 50% of the answers by women were women who frequently drink beer, while those who do not drink fruit flavoured beer at all only add up to 10%, as opposed to the replies provided by men where a 40% firmly rejected fruit flavoured beer, while only a 20% responded by saying they buy this kind of product on a regular basis.
- for both genders, it was the unique taste of the beer, the atmosphere, and the company of friends that they specified as the main motives for consumption. Further positive notes are for men: the experience of novelty, the refreshment the products bring, while for women, consumption of the fruit flavoured beer products was mainly following trends, besides these beverages providing a less sour alternative to beer.

- based on the study, I identified three main reasons for rejecting this type of product that both genders specified: the unfavourable prices, the taste of the product itself, and potentially, a consequence of these: consumers find it impossible to identify with this kind of product or its consumption. For men, there is a notable preference for traditional beer, as well as a connotation of fruit flavoured beer consumption not being sufficiently masculine or manly in the eyes of the consumer.

Craft beer: in 2002-2004, these breweries and their products were seen as rare specialities, while today these breweries are an important alternative for the brands sold in retail units as well as for the beer consumption in restaurants and pubs. Furthermore, craft breweries have become the ambitious breweries (such as Monyó, Zipo's, the Original Csiki Beer, etc.) that have embarked on a journey to conquer the world and have found their way into the product range of commercial retail chains. The results of the survey show perfectly the growth in the popularity of craft breweries: there is a 20% increase in the visits to this kind of artesanal breweries, while the increase in male respondents is 50%. The direction of these small breweries is no doubt the right one, however they need to count with the fluctuation rate of the sector, while entering the market and establishing a stable position requires thorough planning and preparation, adaptive strategies as well as capital to provide a stable financial background.

- in 2002-2004, respondents in the survey justified their preferences in beer products by better, more reliable quality, more favourable prices and the familiarity with the head brewer, while the social or demographic factors were irrelevant in the responses
- in 2015-2016, once again independently from the social or demographic factors, both men and women justified their preference by the reliable quality (which for some respondents is guaranteed by being familiar with the head brewer), the unique taste, or the consumption taking place in the company of friends. For men, there is an emphasis on the atmosphere of the brewery, linked to the positive connotations and attitudes linked to craft breweries.
- reasons for the rejection of a product: the level of assuming quality issues has not changed, it is still under 5%. This is mainly typical for rejecting home breweries that are not known or an overall rejection of craft breweries. This is further completed or rather, explained by the fact that many find the regulations on the supply of or consumption of home made beer complicated or impractical.
- *My results: craft breweries or micro breweries could increase their popularity greatly by implementing local campaigns, as well as could grow their customer base, while a brewery intending to establish a*

franchise structure (such as Zip's) could benefit greatly from expansion in the counties' regional centers.

Non-alcoholic beers: at the time of my first research conducted, non-alcoholic beers were classified as a separate category in statistical publications on the beer industry, while in 2010 this distinction was eliminated, even the Annual Report prepared by the Association of Hungarian Brewers stopped to include statistical data on non-alcoholic beers.

- regarding male respondents, it is mainly men living in smaller cities outside of the capital that are the primary consumers of non-alcoholic beers, while in the case of female respondents, the place of residence was not relevant for this data
- the ratio of non-alcoholic beer drinkers is higher in the circle of respondents who are married or are in a long-term relationship, especially if they have children in the family
- I assumed to find a link between the consumption of non-alcoholic beers and frequent driving, however the results of the research showed no such relationship: I could not find any correlation between driving, or the frequency of driving and the consumption of non-alcoholic beers.
- *My results: the position of non-alcoholic beers is now not related to the possibility of drinking andd driving, which provides this type of product with its own position and relevance.*

The factors influencing the purchase of beers were examined along the directions of price, taste, campaigns related to a product, brand name, good reputation of the producer, packaging, product presentation, and recommendations by friends or acquaintances.

- The data analysis showed no significant difference between the purchases made by the respondent versus the supposed purchases their friends or acquaintances would make.
- at the time of the second survey, the importance of all influencing factors increased on average by 10-12% (0.8 points). The recommendation by friends, or acquaintances was the factor where the increase was the smallest, while the greatest increase took place in the importance of the producer's reputation.
- *My results are: factors related to pricing (price, discounts, product quantity) are of more importance for the younger set of respondents, as well as are important for the entire set of respondents, while the replies by the older group show a predominance of the factors related to taste, and quality.*

- *Characteristics of unplanned purchases:* the ratio of repeated unplanned purchases fell by 50% in the entire sample as well as with female respondents, while fell to two third of the previous values in male respondents. The influence of the customer's mood is dominant, the influence of price promotions has not changed, independently from social or demographic factors.

The preferred pricing of beer products:

- in the first research I had no possibility to conduct an analysis on the amount of money respondents spend or would spend on a bottle of beer. The price definitions reflected this realistically, with prices ranging from 99 HUF to the 5000 HUF beer available in popular clubs outside of Hungary.
- based on the replies by all respondents, the price range of 500 to 2000 HUF is the typical range of amount spent, while most respondents pay 1000 HUF at one purchase (2 to 4 bottles of beer), the average spend of the entire sample being the amount of 1305 HUF.
- women typically spend less on beer, between 400-1000 HUF, while men spend an average of 1000-2000 at each purchase
- regarding age groups, younger respondents typically spend 1000 HUF at one purchase, and the amount spent is gradually increasing proportionally with the age of the respondents. The replies by people aged 50 to 55 give a typical spend of 2500 HUF.
- based on the net income per capita, the group of respondents with a lower income typically spends between 500 to 1000 HUF on beer, while the group with the highest income has a spend of 1200-2000 HUF.
- *My results: the price range of 200-300 HUF is the typical range that respondents are willing to spend on a bottle of beer, the average price for bottle being 252 HUF. The planned purchases typically mean a spend of 1000 HUF, while unplanned, spontaneous purchases cost between 1500-2000 HUF. Those who make spontaneous purchases several times a month normally spend around 500-600 HUF on average, per purchase. There is a small group of respondents that is well defined by seeking the lowest prices and buys one bottle at each purchase. With the unit price option ranging from 210 HUF to 280 HUF, the total spend shown increases to the level of 1500 HUF which suggests that the average purchase is for 5 bottles of beer. This correlation is not seen above the price level of 350 HUF per bottle and above the total spend of 1500 HUF.*

Informed beer consumption: the attention respondents pay to and the openness they show to promotions, price offers.

- since the time of the first research, there is a slight increase in the attention consciously paid to marketing and other campaigns, while this still cannot be considered informed attention considering the lack of any difference in the values related to attention to marketing between the responses of those making planned purchases as compared to the entire sample.
- regarding sources of information that can be relevant to beer drinkers, beer buyers: surprisingly, the recommendation of friends and acquaintances is the most important and followed source of information, ending up higher than the price information issued by shops. The rest of the sources (television, radio, newspaper, recommendation by shop staff, city posters) reached the level of sources of information that respondents only decide to check rarely.

Both studies focused on three areas related to the ***consumption in restaurants and pubs****:*

- beer consumption in restaurants show that the size of the bottle or the price are the least important, and replies show this remains virtually unchanged over time
- draught beer is consumed by the entire group of respondents on a regular basis (as opposed to previous replies showing more frequent consumption in the sample), while the group that regularly eats in restaurants typically consumes draught beer (as opposed to the previous value of almost always choosing draught beer).
- as for the range of available beer products, the replies have shifted from an overall mostly positive opinion to a slightly worse evaluation, with an average, or below average response of consumer satisfaction
- *My results: the results related to the quality of the beer served was the most puzzling. Generally, the beer served in restaurants is reported to have the apppropriate quality, the correct temperature, there is only a slight decrease in the satisfaction shown in the replies. However, considering the shift in consumption from draught beer towards bottled products, where the the quality remains unchanged and we can assume that the cooling of the products is not an issue either, we can only ask the question what factors may impact the quality of these products then. Understanding and recognizing this issue is not only in the interest of restaurants and bars serving beer products, but on the long run, this is an important consideration for beer producers and retailers. Beer consumption in restaurants and pubs accounts for a large portion of the total turnover, these premises are an important point of sale where the products can be made more popular. The bottle of beer opened at home, in from of the television will hardly bring along the positive impact of the*

atmosphere and other similar unconscious positive connotations that influence the consumer in a restaurant.

Beer and its replacement products*:* In the survey, besides wine and spirits, I classified non-alcoholic beverages such as fruit juice, carbonated soft drinks, mineral water as well as alternative or replacement products for beer.

- in the research conducted in 2015-2016, spring water, tap water, fruit flavored beer, sparkling wine were added to the set of alternative beverage options (alcoholic and non-alcoholic)
- regarding alcoholic beverages, wine has remained on top in terms of popularity, while beer is nearly catching up to the same level as wine. *However beer is still the alcoholic beverage that is consumed and purchased more frequently.*
- mineral water is still in the absolute top position, compared to non-alcoholic as well as alcoholic beverages.
- one of the most considerable changes is related to fruit-based soft drinks and fruit juices. Their popularity has dramatically dropped, the same as their consumption and the frequency of the purchase of these products.
- sparkling wine is the least popular alcoholic beverage in all aspects
- *My results: when analysing the popularity of the products, as well as the data on their consumption and frequency of purchase, I intended to establish a popularity index to show the overall product preference. The analysis of these figures led to an exciting conclusion: for both surveys conducted at two different time periods, regardless the differences in the samples, the data on the popularity of products, average values of their consumption and purchase, and analysing these against the entire sample as well as the beer drinkers' data, the differences found have remained closely similar and of a similar nature.*

Rejection of beer products*: sociodemographic factors such as the gender as well as the age of the respondents show different reasons for the rejection of beer products.*

- the ratio of dissatisfaction with the taste of beer has doubled, while the rejection of alcoholic drinks has increased, too, compared to the data collected in 2002-2004. At the same time, motives for rejecting beer based on cost or due to the unfavourable effects of alcohol consumption show a declining trend.
- there are significant differences between the data of men and women: men do not drink beer due to the lack of company (actually company willing to drink beer), or because they drive frequently, while another reason for

the rejection is the fact that they have an intensive amount of intellectual work, while for women, the main reason for rejection is that they dislike the taste of beer.

- *My results: rejection of the taste of beer shows an inversely proportional increase with age.*

4.4. Definition of a beer consumption map

Relying on the collected data I intended to prepare beer consumer profiles. First, using the replies received to questions about beer consumption, beer purchase (based on reply options that enabled a high level of measurement) I started to form clusters and tested them with the ANOVA table. Considering the fact that the ANOVA test shows correlations between certain questions, I had to apply factor analysis as well to be able to proceed. In the first round, I tried forming 8 clusters since the available sample enabled me to work with 8 medium to large sized groups. Following the iterations, I reduced the number of clusters to 5 and later to 4, considering the fact that some of the questions did not prove to have real clustering effect.

Group 1 (122 persons) moderate beer drinkers: likes beer but is almost never making spontaneous purchases in shops or in restaurants. Has a few selected preferred products and consumes them in a consistent manner.

Group 2 (107 persons) beer enthusiasts: likes beer, consumes and purchases beer frequently. Tries several beer brands in a year, likes to buy for home consumption and also drinks a glass of beer in a restaurant.

Group 3. (142 persons) stay at home beer fans. They like beer, consume and purchase beer products frequently, however typically do not consume beer outside of their home.

Group 4 (88 persons) inhibited beer fans. Likes beer but rarely drinks or purchases beer products. Does not follow promotions, sometimes cannot resist the temptation to buy beer in restaurants or pubs.

During the second examination, I used the influencing factors when purchasing (such as taste, price, product size) to form clusters, taking into consideration the different behaviours present at the purchase intended for own consumption or for a larger family gathering. The method to form clusters was the same as earlier. The last 4 clusters created are as follows:

Group 1 (61 persons) passive taste obsessed fans: these respondents have a certain taste in mind, no other aspects affect them when making a choice, they are not influenced by the price or the brand

Group 2 (103 persons) beer enthusiasts with high standards. Taste is their first priority, however unlike the previous group, these enthusiasts pay special attention to the brand, the producer, the packaging as well as the size and presentation of the beer. The influence of prices or special offers or promotions are not relevant for this group.

Group 3. (196 persons) informed hunters. When purchasing, this group tries to evaluate all important influencing factors in their decision, such as the price, the taste, special prices or the brand name. The producer or the packaging and the presentation are less important for them

Group 4 (99 persons) beer snobs. They choose based on the brand name and the reputation of the producer, while when the brand is well-known, the taste also becomes a relevant factor. Still, it is the product identity that has the most weight for the group's purchases, independently from the elements related to price.

On the basis of the fact that the questionnaire greatly influenced the sample and limited the potential to explore general characteristics of beer consumer groups, I prepared beer profiles for the groups along the sociodemographic elements and will be presenting these in the following section.

Consumer and customer profile of beer drinker female students in higher education (aged 18-25)

Typically single, lives in a smaller city or town, in a household with low to medium level income. The household consists of 3-5 family members, typically parents and 1-2 siblings (under or over 18 years of age).

Regarding their beer drinking habits, they do not consider themselves regular beer drinkers, they try 2-5 beer brands per year on average, with a preference for Soproni that they consider good or excellent.

As for the purchases they make, they buy beer on a monthly basis or occasionally, buy draught beer very rarely, typically prefer bottled beer while they never purchase an entire rack and only choose canned beer once in a while. Normally they buy beer in a restaurant or pub, sometimes in a shopping centre, while they never choose a home brewery since they do not know any in their area of residence.

The members of this group normally do not drink non-alcoholic beer but they are open to trying new products. They do not tend to make unplanned purchases and when they do, it is normally justified by a special price offer or simply is an act of impulse buying. When their preferred beer product is out of stock in a shop, they normally choose another product of the same brewery, they would not normally go to another shop to find their preferred product.

Members of this group usually eat out a few times in the period of 6 months, but normally they do not drink beer in the restaurant. In their experience, the standard of the beer available in the restaurants they visit is a higher end of medium level.

When buying beer for home consumption, they decide based on taste, price and brand, while when buying for a family gathering, they are mainly influenced by price, taste and the size of the products. As for the information received, they are mostly taking into account for their purchases the information coming from friends or read on shop fliers or brochures, and while they normally keep up-to-date with marketing and advertisments of the producers, they do not normally follow marketing on a shop level. Special price offers only influence their purchases occasionally, while the preferred type of price offer they benefit from is the discounted price for a product. Members of this cluster have a favourable opinion about national beer marketing, the only detail they find of poorer quality is the information provided in the advertisments or publicity.

This group has a negligible preference for wine over beer, while spirits are considerably less popular. Regarding non-alcoholic beverages, there is a surprising picture: the popularity of mineral water is higher than the popularity of fruit juices. As for the frequency of consumption, there is a slight shift in their preferred beverages: beer is chosen slightly more often for consumption than wine, while spirits still remain much less popular. Non-alcoholic drinks also show a change compared to the popularity indicators: mineral water has the most frequency of consumption data and fruit juice based soft drinks are consumed with much less frequently.

The analysis of purchasing frequency does not bring any surprising turns, members of the group usually buy beer for their own consumption and in line with their young lifestyle. The consumption of wine is less frequent than that of beer, while spirit purchases are less frequent. Regarding non-alcoholic beverages, the purchasing frequency of mineral water and fruit juices are near equal, with a slightly pronounced weight of the mineral water products.

Consumer and customer profile of beer drinker male students in higher education (aged 18-25)

Typically single, lives in a smaller city, in a household with low to medium level income. The houshold comprises of 3-4 family members, typically parents and 1-2 siblings (usually under 18 years of age).

Members of this group consume beer on a daily basis and are regular beer drinkers since the age of 16. They normally try 5 or more new products per year. Members of the group typically report the quality of their preferred beer products excellent, the availabilty and taste very good, the price of the products average, and as for the rest of the indicators (reputation, personal experience, consistent product quality) they provide good feedback. They think advertisements in Hungary are of average quality, the only element they highlight as positive is humour or original ideas in the ads.

They purchase beer on a daily, sometimes weekly basis, normally buying draught or bottled beer and only rarely choosing canned beer. They never buy a larger amount at one purchase. Normally they buy beer in a restaurant or pub, sometimes in a supermarket, but do not usually choose a home brewery because they do not know any in their area. They rarey choose non-alcoholic beer products. This group has a strong preference for new or special products.

Regarding purchases made for their own consumption, they are mostly influenced by the taste, and only to a minor degree by the brand name or the reputation of the manufacturer. Purchases they make for family gatherings are mostly influenced by recommendations of friends as well as the taste of the products, while price is an element of much lower importance.

Members of this group usually make an unplanned purchase once or twice in a month, when they do, it is usually based on special price offers or are an act of impulse buying. They occasionally pay attention to the marketing of producers or shops. Price offers influence them only to a minor extent and normally they do have a preference for discounted prices, with regard to promotions. Decisions are mostly influenced by friends the most.

Typically they eat out on a monthly basis, when they normally do not drink beer or when they do, the most decisive factor is the size/presentation of the product. In their experience, the beer culture in the restaurants they visit is of medium standard.

This group has a preference of wine over beer, while spirits are far less popular. As for non-alcoholic beverages, this group likes fruit juices best while they also like to drink mineral water or carbonated soft drinks.

In terms of the frequency of consumption, the situation becomes balanced here since this group has a slight preference to drink beer over wine. As for non-alcoholic beverages, consumption does not go in line with preference data since the group chooses too drink mineral water the most often, while the rest of the drinks are consumed with nearly the same frequency.

Based on the collected data, members of this group buy wine less frequently than beer. As for non-alcoholic beverages, the frequency of purchasing mineral water or fruit based soft drinks are nearly at the same level with a slight prevalence of mineral water products.

Consumer and customer profile of beer drinker female graduates (aged 35-45)

They typically live with a spouse, and one or two underage children in Budapest or in another city in a high income household. This group includes a large number of women working in an intellectual job as a regular employee, often as a middle manager or in an executive role. There are self-employed members in this group as well as mothers staying at home with a child or on maternity leave.

Typically they drink beer on a weekly basis and started to drink beer in their thirties. They try 5 or more new beer products per year.

Usually they buy beer several times a week, choosing bottled products and rarely purchase larger quantities at a time. They make unplanned purchases a few times a month and they usually do so as an act of impulse purchase. They are very open to trying new beer products or specialities.

Members of this group sometimes follow advertisements of producers or shops. They have a positive view on the quality of beer marketing in Hungary, naming the use of humour and creative ideas in the ads, as well as the clear identification or producers as the main strength of advertisements. Special offers rarely influence them, but regarding promotions they typically have a preference for discounted prices. When making a decision about buying beer, they rely on the recommendation of friends or the sales staff.

This group usually chooses shopping centres or supermarkets to buy beer products while they rarely buy in home breweries since they do not know any in their area. They often drink non-alcoholic beer. Their reason for choosing non-alcoholic beers is that they drive a car on a daily basis which makes them go for a non-alcoholic beer instead of a regular one, provider that they think the taste of non-alcoholic products is nearly as good as the regular beers.

When making purchases for their own consumption, this group chooses based on the taste and any available offers. When buying beer for a family gathering, they choose based on the size of the product as well as the taste.

This consumer usually eats out once a month and often chooses to buy draught beer for their meals. In their experience, the beer culture in the restaurant they normally visit is a good average, but think that the pricing of the establishments is poor while the quality and the temperature of the beer served is very good.

This group has a preference of wine over beer and offers a surprising taste inn non-alcoholic beverages, since they report an undisputed preference for mineral water while all other non-alcoholic soft drink products are neglected.

In terms of consumption frequency, the data reflects their preferences: this group chooses to drink wine more frequently than beer. There is no difference in consumption compared to the preferences of the group, either, since they drink mineral water most while all other non-alcoholic options have a considerably lower consumption frequency.

It is somewhat surprising though to see the frequency of purchases where members of this group reported to purchase wine less frequently than beer. Among non-alcoholic products, this group tends to purchase mineral water while the frequency of purchasing fruit juices is higher than could be expected based on the preference data. This is probably explained by the role of the members of this group within the family, which assigns them the primary reponsibility of carrying out the family food shopping while taking into account the needs of the family. This role can modify the content of the shopping cart to a great extent.

Consumer and customer profile of beer drinker male graduates (aged 35-45)

Typically live with a spouse, and one or two underage children in Budapest in a high income household. As for their occupation, members of the group normally work in an intellectual job as a regular employee, often as a middle manager or in an executive role.

Typically they drink beer on a monthly basis and do not consider themselves regular beer drinkers. They try 2-5 or more new beer products per year.

Usually they buy beer monthly, usually choose bottled products and sometimes draught beer, while almost never purchase larger quantities at a time.

This group usually makes purchases in shopping centres or restaurants, while they rarely visit home breweries mainly due to the fact that they do not know any in their area or they think buying beer from a home brewery impractical. They like trying local beer specialities or craft beer abroad. This group typically does not consume non-alcoholic beers.

Purchases for their own consumption are definitely based on the taste of the product. This group does not make any unplanned purchases. Decisions are mainly influenced by friends' recommendations and these respondents firmly reject all other potential influencing factors. They never follow advertiment of producers or shops.

They eat out once a month. Based on their experience, the beer culture in the restaurants they usually visit is very poor which is especially true for prices as well as the beer related knowledge or experience of waiters, the only factors receiving an average scoring by this group are the quality and the temperature of the beer served.

This group makes decisions to purchase beer for both their own consumption as well as for family gatherings, based a specific set of criteria: decisions are most influenced by the taste, and lease influenced by the available special offers. The rest of the critera have a medium level influence on the choice. The fact that this group decides about their purchases for both themselves as well as for another group of people based on a special set of criteria and assume that their friends decide along the same lines of thought, and only assume minor differences in their thinking (which are free of all types of preconceptions, such as price sensitivity) could be the subject of in-depth research in the future.

This group has a strong preference of wine over beer. They have a strong preference for mineral waters and fruit juices among non-alcoholic beverages. They like and frequently drink wine while beer and spirits definitely take a back seat. As foor non-alcoholic drinks, the consumption is different as compared with the preference: mineral water is consumed the most frequently.

The pattern of buying frequency is not very varied which is probably explained by the group's sociodemographic characteristics and the resulting consumption and purchasing behaviours. They like to buy wine and do it frequently, while purchases for beer or spirits are considerably less significant. Regarding non-alcoholic drinks, there is no deviation from the previous data, mineral water is purchased the most frequently.

4.5 Study of the preferences of alcohol consumers

Besides examining the beer related preferences of the consumer groups, I also examined the entire sample in order to find typical patters linked to beer and its replacement products, and with the help of the first survey conducted I was able to explore characteristics on a medium term further to the conclusions valid today.

At the time of conducting the first research I created the indicators of Product Preference and Commercial Product Preference. With the help of these tools I saw a potential to describe the willingness of consumers to consume and purchase from a specific product group, while taking into consideration the popularity of the particular product group but filtering out any distorting effect.

In my second research I tested the same indicators again in order to identify medium term trends that could be of use for the players of the beer sector. The analysis and comparison of the values generated in the two studies in two different points in time produced an interesting link that in the future may be invaluable help in preference studies related to alcohol consumption.

Both sets of data collected gave similar values when comparing the entire sample with the partial sample provided by the target audience (in this case, for beer drinkers), while comparison of the product preference indicators for wine, beer and spirits showed a 5% variation. This figure is 19% for the targeted subject of alcoholic drinks. For sparkling wine, there is no variation, in other words, the product preference established based on the sparkling wine consumption of the sample is unchanged.

I was unable to test my theory related to non-alcoholic beverages since I recently included several new products in the study, however my theoretical definition is the following: in the case of tap water or spring water, we cannot interpret frequency of purchase but popularity and frequency of consumption gave identical values. Therefore I define this value at 1,3% which I suggest to use for mineral water as well. As a relevant indicator for fruit juice, I propose to use -1.5%, while for carbonated soft drinks a -2% and for syrups a value of -2.5%.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Final conclusions

In my analysis, based on the economic and commerical data, I obtained a realistic overview on the main trends emerging in the national market of alcoholic beverages and specifically, in the beer sector, as well as obtained information on the measures that could help the players of the industry in stabilizing their position and expanding their potential in the market.

Looking at the market trends in the past years I encountered data and consumption patterns that reinforce these further, which can be summarized as follows:

H1: Competitiveness of the players of the Hungarian beer sector are determined by the same elements as seen in global trends.

I accept the hypothesis, as the shifts in consumption patterns that are seen in the Hungarian beer market are identical to the directions observed in the EU, although they continue to adapt to local consumer behaviour.

According to my evaluation, there is a general direction in the EU as a result of which the number of breweries per country has significantly increased since the year 2008. In Hungary, the number of breweries has doubled, looking at the EU data, the number of beer producing companies has nearly tripled. Still, both the Hungarian as well as the EU beer sector are in a difficult position due to the decline in beer production as well as beer consumption. The contradiction - besides the role of increasing input cost and high tax duty on the sector - can be explained by the impact of the financial crisis which led to the reorganization of the beer industry in Europe and resulted in a dramatic increase of small breweries in all EU member states, including Hungary.

Based on statistical data we can state that even though Hungary is not a key country with respect to its influence on the European beer industry, still is an important factor in the beer industry. It is however an important consideration to highlight that while the European Economic and Social Committe has realized the importance of the beer industry regarding its role in the EU's economy, Hungary does not yet treat the beer industry as a top priority branch of the food and beverages industry for its potential for growth. The beer sector and beer production would be worth to receive more support as it could act as a catalyst for the growth and development of other industries, being a cross-sectoral industry itself.

H2: Consumers, in situations related to purchase of beer products, can be considered informed consumers.

I accept the hypothesis. According to the final results reveal that most consumers have a predominant intention for a rational decision. Their choices are influenced by the product quality and availability, and consumers also make an analysis of the prices for the right choice. However their decisions are not (exclusively) based on price related aspects: a well established brand, a brewery producing good quality beer make the breweries a good candidate to win the customers even if they do not yet have decades of experience.

Informed consumers also strive to obtain additional information on the products, so the motives for purchasing are influenced by advertisments and marketing promotions. Those who plan their purchases in advance and also buy beer in a planned manner, are more inclined to accept to be contacted and are mostly influenced by price related aspects in their purchases. The final results of my research in terms of informed consumers are identical with the results published by Szente et al (2011) and Brávácz (2014), namely that consumers are in most part ″informed″ and show an ″average level″ of awareness.

The awareness is probably influenced by patriotism as well provided that 3 out of the top 5 popular beer brands are Hungarian brands.

I would however would like to point out that this awareness does not equal an awareness in sustainability. Most of the respondents of the survey prefer canned beers which have a considerable environmental impact. Even so, recyclable PET bottles are not popular at all so we can safely conclude that although the consumers are informed regarding their own motives for the purchase, they do not show the same level of awareness looking at other (economic or environmental) impact of their choice of products. My primary research was reinforced by the findings of the secondary research conducted, with regards to this subject. My observations however differ from that of Kelemen (2012), according to which consumption may be influenced by an environmental consideration of the customers.

H3: There is a link between brand loyalty (expressed by the consumer) and the impact of advertisments and marketing campaigns aimed to popularize beer products (the effect of these assessed by the consumer).

A study conducted by the Hungarian Competition Authority between 2011 and 2015 states that Hungarian consumers show low levels of brand loyalty.

This is not confirmed by the findings of my research since most of the respondents report a strong preference for a few specific brands (consuming 2-5 brands over the year). These respondents report to be influenced most by the product brand besides the taste of the product, while price comes third in the line of priorities. This is confirmed by the finding in my survey that showed the principal role of the mood when making a spontaneous purchase, while the importance of the special price offers or shop promotions seem to play a less important role in these decisions.

I do not accept the hypothesis, because according to my results loyalty is not influenced by marketing campaigns.

We cannot disregard the impact of advertisements and special promotions on purchases. it is safe to say that regardless the sociodemographic characteristics, respondents' choices for purchase are typically influenced by beer related promotions. According to my view, those who follow the promotions of breweries reported a stronger impact of promotions, even if the difference in intensity is relatively small.

H4: Consumers are attracted to new, innovative products in the beer sector as well.

I accept the hypothesis. In my overview of the national beer sector I pointed out the difficult position of the industry, which is the main reason to emphasize that maintaining and further enhancing competiveness is essential to sustain the sector. Looking at the trends and connections in the beer market of the past 15 years we can safely presume that even with the transformation of the tax enviroment, the financial situation and behaviour of consumers, and a shift in preferences, the sector only can guarantee its long-term, stable market presence if the sector offers continuous innovation. The rise of the small and micro sized breweries is a clear sign of the potential for innovation in the beer industry.

My results confirm that consumers are open and welcome novelty in the beer market, too. Fruit flavoured, and to a lesser extent, non-alcoholic beers can be efficient tools to help in the market struggle of both alcoholic and non-alcoholic beverages. The appropriate marketing tools are already at the disposal of the players, while the taste and appeal of the products has not yet reached the level consumers would require.

As another observation, I would like to note that small, home breweries can act as an alternative to the large breweries since beyond their appeal as fresh and new players in the national beer market, these craft breweries also offer reliable quality and favourable prices. The unfamiliarity of the local target audience with the available points of sale of these small breweries can on the other hand act as a contraint to their expansion.

H5: Today's beer consumer profiles can be clearly defined with respect to the characteristics of beer consumption.

Partially I accept, that the profile of the current and the 2000s beer consumers do not show a significant difference, but I observed differences between the two samples in some cases.

This hypothesis was the most difficult to test since the time elapsed between the two surveys is almost 15 years. Further to the time of the data collections, there are differences between the two samples in terms of their methodology, population, demographic composition, classification based on income levels, as well as in the questionnaires used. The two different samples included responses by consumers who were providing their opinions in dramatically differing market supply.

Consequently I did not intend to compare the two samples using statistical indicators or conduct substantive comparisons. The data of the 2002-2004 surey was merely used to establish observations on a selected number of fundamental topics related to the main trends and directions by examining the data collected in the two surveys.

In light of this I can state that no substantional change has taken place with regards to the respondents who consider themselves beer drinkers since this group constituted a 75% of the total populations of the surveys. Responses reported the start of regular beer drinking towards the end of their youth or at the time they reached the age of majority.

Most of the respondents reported to consume beers from 3-5 brands. Taste played the most significant role in their decision, while the brand reputation was also a factor to consider. At the same time the size and the packaging of the products had less influence on the final decision. Price also played a role, however respondents of the survey in 2002-2004 were less open to price offers suggested by retailers. Promotions that best encourage purchase are the ones that offer discounted prices while potential giveaways attracted less customers.

Most respondents carry out their beer purchases in shopping centres or supermarkets, while the data collected in 2015-2016 also showed a numbers of responses reporting purchases made in restaurants or pubs. When eating in a restaurant, draught beers are a popular purchase, but the most important factor is the quality of the beer served. As replacement products for beer and its other alternatives, mineral water and fruit juices were reported in both studies.

A further similarity between the two sets of data is the fact that consumers explained spontaneous purchases as a product of their current mood, while home breweries were a less popular choice based on the unfamiliarity of respondents with any smaller brewery in their respective area.

There was a slight difference between the two collections regarding the frequency of beer purchases where apparently the previously found weekly consumption is shifting towards the direction of a monthly consumption and purchase. As for the popularity of the beer brands, there is a considerable change showing in the most recent set of data: Heineken's popularity has been taken over by the brand Soproni and other beer brands in the last 15 years.

In line with the above stated, my assumption that beer consumer profiles of the beginning of the 2000s and today show no significant differences can only be justified partly, since I observed a few discrepancies of different volume in the patterns found in the two samples.

5.2 Recommendations and proposals

The analysis of the frequency of consumption and the popularity of beers, fruit flavoured beers, wines, spirits, sparkling wines, as well as tap water and spring water, mineral water, fruit juices, carbonated soft drinks and syrups, we have the opportunity to establish forecasts on beverage consumption and purchase in Hungary. The conclusions and recommendations I have made based on the primer and secunder research are as follows:

- in the national beverage market, alcoholic beverages are at a clear disadvantage in terms of popularity, consumption and purchase of the products. As a consequence, breweries and wineries must not ignore the role of non-alcoholic beverages as competitive products, when creating their product and communication strategies.
- a transformation is taking place in consumer lifestyle: the pursuit of a healthy lifestyle has become more prominent and this does not allow the consumption of alcoholic beverages in the earlier volumes. Companies producing non-alcoholic beverages can lean on this trend in their market expansion and can enter new markets, while companies producing alcoholic beverages face more challenges.

I have to point out that my reserach was not representative to the whole Hungarian market.

The popularity of beer products remains stable, but we must not forget the 23-24% of respondents who do not like or drink beer. Surveying the reasons for rejection is particularly important in our case since this can help explore a few reasons that may be eliminated. The reasons for rejecting beer and the ways I suggest to mitigate the rejection are as follows:

- a considerable part of the respondents does not like alcoholic beverages or does not tolerate alcohol well. Introducing and attracting this group to non-alcoholic beer products could be effective.
- a significant part of respondents have a dislike for the taste of beer. For them, producers could introduce new kinds and brands of beer and fruit flavoured beers could become a good alternative.

- other groups reported health reasons, the lack of company or external pressure to reject beer, part of which could be mitigated by more efficient contact with these customers as well as with a better range of products.

Based on the results of my research, examining the following subjects would be beneficial and useful both for scientific and professions purposes:

- expanding the knowledge base related to beer consumption, fine tuning the segments, using the knowledge comparing it with the current scientific results
- promoting the practical utilization of the results
- review of the link between beer and foods
- surveying further target audiences and segments

Changing consumer behaviours have also impacted beer consumption in the HoReCa sector. This is why I think it is important to further explore the potential of out of home beer consumption, taking place in restaurants and other catering establishments. My recommendation in this respect are as follows:

- an informed campaign promoting beer consumption in restaurants and improving the culture of beer in the HoReCa industry
- more favourable prices
- a consistent level of quality in both draught and bottled beers served

My recommendation is that the marketing and management experts of companies in the Hungarian beverage sector utilize the consumer profiles established based on the responses collected, in order to improve the efficiency of their marketing activities.

6. NEW SCIENTIFIC RESULTS

Based on a descriptive analysis of the beer industry, the data obtained from surveys carried out on a large sample of Hungarian beer drinkers, as well as the synthesis of information the following points can be regarded as new or novel scientific evidence, in my view:

1. Using international and national statistics I was the first to prepare a complex overview in Hungarian, using tables and charts, providing information on the main indicators and characteristics of the Hungarian and the EU beer industries.
2. In my analysis I developed a methodology for the conceptual classification of breweries, using examples from the US and Germany.
3. With the help of index calculation I was the first to estimate the product preference and commercial product preference indicators for national beer consumers
4. Conducting primary research to examine attitudes and behaviours of beer drinkers, I made suggestions on the possible future directions and the limitations of product development in the national beer industry.
5. Analysing consumer behaviour I found that even though consumers are informed regarding their own motives, they are less conscious related to other (economical and environmental) impacts involved. Beer industry players committed to sustainable development therefore need to pay special attention to the relevant educational activities.
6. Analysing the structure of attitudes related to beer purchase and consumption, I established the map of beer consumption in Hungary which summarizes the main lines of thought of young students (18-25, male and female) as well as middle aged graduates (35-45, male and female), with regards to the demand of beer products.
7. I furthermore examined the frequency of beer consumption reported by respondents when preparing the factor analysis and the cluster analysis of the collected data. According to the research, beer drinkers can be allocated into four clusters that represent well defined consumer attitudes: the moderate beer drinker, the beer enthusiast, the stay at home beer fan, and the inhibited beer fan. Using another method for clustering, I identified the categories related to the influencing factors of beer purchase, namely the cagtegories of the passive taste obsessed, the beer enthusiasts with high standards, the informed hunters, and the beer snobs.

7. SUMMARY

At the start of my research I was primarly motivated for my work to help reestablish the former role played by my home town, Nagykanizsa, in the beer industry.

During the time elapsed since the first research, many changes have taken place in my city as well as in my own life. Thanks to these changes, I started the second survey and the evaluation of the data collected equipped with a new mindset, technical knowledge, and analytical thinking. Something seen as novelty in 2002 is now as natural for the younger generations as the air that they breathe. Although in Hungary, I do not see a chance to introduce the practice already existing in the US, that is, conducting online surveys involving the entire population, what was once a brave effort I made has for now become regular practice which is easy to use: a multitude of university dissertations, corporate surveys as well as scientific research theses are prepared using online questionnaires.

And as for this product and subject that are so close to my heart, well, during the examination I could observe that multiple changes have taken place in the beer industry during the past 15 years. The growing number of brewers and product innovation has also led to the appearance of new products, benefiting the consumer, society and the environment. Opportunities for brewers of all size appeared thanks to the diversification into low and non-alcoholic beers which led to increased sales, while availability of organic beers is steadily increasing (European Economic and Social Committee, 2013). Aquilani et al. conducted several studies of international level on the subject, which clearly showed that the consumer profile of those trying products of home breweries can be clearly distinguished from that of the ″average″ beer consumer. In the field of food consumption in Hungary, several studies (Lőrincz K., 2012; Kelemen, 2010; etc.) have confirmed the significance of the consumption and popularity of alternative products that are considered healthier within a given food or beverage category.

In summary, I think my research has successfully served its research targets. With the help of primary and secondary analysis I analysed the customer and consumer behaviours related to beer, as well as applied these to prepare the map of beer consumption in Hungary. Benefiting from the links and connections explored in my research, I trust that the volume and structure of beer consumption in Hungary may be preserved by breweries taking into account the previously presented consumer preferences and attitudes when creating their strategies. The results of my work show that the shift in customer preferences, technological development as well as the competitive pressure all point to the direction that companies must not neglect innovation to lean on formerly popular products exclusively. The peculiarities of beer and the beer industry, as well as the relatively saturated market have led to the appearance of consumer behaviour and directions that fully justify my research and further confirm the usefulness of its results for the relevant scientific groups or the players of the private sector.

8. PUBLICATIONS IN THE FIELD OF THESIS

Scientific books:

Fertő Imre – Fogarasi József - Major Anita – Podruzsik Szilárd: The emergency and survival of microbreweries in Hungary (2018); in Economic Perspectives on Craft Beer - A Revolution in the Global Beer Industry; 8. fejezet, pp. 211-228.; ISBN 978-3-319-58234-4

Publications in scientific journals:

Major Anita: (Sör)Forradalmi helyzetkép: Gyümölcsös sörök a magyar sörpiacon (várható megjelenés: 2018. március); Élelmiszer, Táplálkozás és Marketing 14. (2.); ISSN 1786-3422

Fertő Imre – Major Anita – Podruzsik Szilárd – Fogarasi József: Be- és kilépés egy érett iparágban: a magyar kisüzemi sörfőzdék esete (2016); Élelmiszer, Táplálkozás és Marketing 12. (1); pp. 39-46.; ISSN 1786-3422

Major Anita: Sörpiaci helyzetkép Magyarországon: versenyképesség a sörszektorban (2015); Gazdálkodás, 59 (5.); pp. 453-474.; ISSN 0046-5518

Kőnig Gábor - Major Anita: Changes in the Hungarian dairy industry after EU accession (2006.); Studies in Agricultural Economics, No 105.; pp. 101-112.; ISSN 1418 2106

Conference publications:

International conference - full paper:

Major Anita: Conformation of the alcoholic drinks' demand among undergraduates (2004.); 3rd International Conference for Young Researhers, Gödöllő; pp. 23-26.; ISBN 963 9483 44 3

Major Anita - Farkas Ilona: In the shadow of globalisation – Possibilities of vertical enlargement of Hungarian drink market from the view fo gaining positions of multifunctional agrifood businesses (2004); „Globalism, Globality, Globalization" – 10 Years of European Studies in Cluj, Romania, Cluj-Napoca; pp. 152-159.; ISBN 973 7677 22 6

Major Anita – Kőnig Gábor: Some characteristics of the competiveness of the globalising Hungarian beermarket (2004.); „Globalism, Globality, Globalization" – 10 Years of European Studies in Cluj, Romania, Cluj Napoca; pp. 297-305.; ISBN 973 7677 22 6

Major Anita: Comparative analysis of beer consumer's behaviour (2003.); 4th International Conference of Ph.D. Students; Economics II., Miskolc; pp. 415-420.; ISBN 963 661 585 3 ö; ISBN 963 661 589 6

Major Anita: Internet, as an alternative possibility of the primary research in analysys of beer consumer's behaviour (2003.); „A mezőgazdasági termelés és termék előállítás jövőképe"; Erdei Ferenc II. Tudományos Konferencia, Kecskemét; pp. 166-170.; ISBN 963 7294 46 Ö; ISBN 963 7294 48 1

International conference - abstract:

Fertő Imre – Major Anita: Does demographics matter for beer consumption? (2017); 6th International Conference of Economic Sciences; Kaposvár; pp. 14.; ISBN 978-615-5599-41-5

Hungarian language - full paper:

Major Anita: Innováció és magatartásvizsgálatok a söriparban (2003.); „Magyarország az Európai Unió küszöbén – Nemzetközi és regionális kihívások"; II. Országos Közgazdaságtudományi Doktorandusz Konferencia; Miskolc-Lillafüred, pp. 278-285.

Hungarian language - abstract:

Major Anita: Az információtechnológia kínálta lehetőségek a megkérdezéses sörfogyasztói magatartásvizsgálatokban (2003.); Lippay János – Ormos Imre – Vas Károly Tudományos Ülésszak, Budapest; pp. 114-115.; ISBN 963 7712 70 4

Elektronic publications:

Peer reviewed publications in Hungarian language

Major Anita: Fogyasztói magatartásbefolyásolás az Internet segítségével (2003.); Medium on Internet for Agrarinformatics in Hungary (57.); http://miau.gau.hu/miau/57/index.html; ISSN 1419-1652