

**Czech University of Life Sciences Prague**

**Faculty of Economics and Management**

**Department of MSc BA**



**Diploma Thesis**

**Consumer purchasing behaviour of beer in the Czech Republic**

**Rashid Khan**

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## DIPLOMA THESIS ASSIGNMENT

Rashid Khan

Business Administration

Thesis title

**Consumer purchasing behaviour of beer in the Czech Republic**

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### Objectives of thesis

The aim of the thesis is to obtain the important aspects of the consumer purchasing behaviour on beer product in the Czech Republic.

The sub-objectives of the thesis are as follows:

- to derive the role played by taste quotient factor in the consumer behaviour across the beer industry;
- to derive the role played by the promotions across the social media on the sale of beers in the Czech Republic;
- to obtain the impact of the consumer behaviour across the profits and market share of the Pilsner Company;
- to derive a correlation between the factors impacting the consumer behaviour of beer among the youth.

### Methodology

Methodology consists of the methods that are used to collect data from an intended population related to the subject of research. The research methodology refers to considering the significant factors related to the consumer behaviour across the beer industry in the Czech Republic.

## **The proposed extent of the thesis**

60-80 pages

## **Keywords**

consumer, purchasing behaviour, beer consumption, statistics, consumer patterns, Czech beer industry,

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- Aquilani, B., Laureti, T., Poponi, S., & Secondi, L. (2015). Beer choice and consumption determinants when craft beers are tasted: An exploratory study of consumer preferences. *Food Quality and Preference*, 41, 214-224. doi.org/10.1016/j.foodqual.2014.12.005
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- The Brewers of Europe. (2016). *The Contribution made by Beer to the European Economy*. London: Europe Economics. ISBN 978-2-9601382-6-9

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**Declaration**

I declare that I have worked on my diploma thesis titled "Consumer purchasing behaviour of beer in the Czech Republic" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the diploma thesis, I declare that the thesis does not break copyrights of any other person.

In Prague

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# Consumer purchasing behaviour of beer in the Czech Republic

## Abstract

With the advancement of technology and the on-set of globalization, the power of consumers is increasing tremendously. The needs of the consumers are to be considered while setting up a business related to any industry. The aim of this thesis is to derive the purchasing power of the consumers across the beer industry in the Czech Republic and the factors affecting it. The consumption of Pilsner Urquell beer is considered as an example for deriving these factors affecting the consumer purchasing behaviour. For this purpose, the beer industry is analysed and evaluated for observing the trends existing in the beer industry of the Czech Republic. The statistics pertaining to the beer industry in the Czech Republic are determined for obtaining the rate of consumption, production and other such aspects of the industry.

The different qualities of beer are determined and studied in the thesis. Along with it, the pricing adopted in the beer industry over a period of years are determined and the contribution of the beer industry to the economy of the Czech Republic is derived in the thesis. The data is also collected from the people living in the Czech Republic and their responses helped in determining the impact of the factors that affect their purchasing behaviour across the beer industry in the Czech Republic.

**Keywords:** Consumer purchasing behaviour, beer consumption, beer statistics, consumer behaviour patterns, Czech beer industry, cost considerations, ease of availability, taste quotient, beer production, Pilsner Urquell beer, Social media.

## Spotřebitelské chování nákup piva v České republice

### Abstrakt

Díky pokroku v technologii a na základě globalizace se síla spotřebitelů značně zvyšuje. Potřeby spotřebitelů je třeba vzít v úvahu při zakládání podniku souvisejícího s jakýmkoli odvětvím. Cílem této práce je odvodit kupní sílu spotřebitelů v celém odvětví piva v České republice a faktory, které ji ovlivňují. Spotřeba piva Pilsner Urquell je považována za příklad pro odvození těchto faktorů ovlivňujících chování spotřebitelů. Za tímto účelem je odvětví piva analyzováno a hodnoceno pro sledování trendů v odvětví piva v České republice. Statistické údaje o odvětví piva v České republice jsou určeny pro získání míry spotřeby a výroby a dalších takových aspektů průmyslu. Různé kvality piva jsou určeny a studovány v diplomové práci. Spolu s tím jsou stanoveny ceny, které se v průběhu let promítají v odvětví piva, a v práci je odvozen přínos odvětví piva pro ekonomiku České republiky. Data jsou shromažďována také od lidí žijících v České republice a jejich odpovědi pomohly při určování dopadu faktorů ovlivňujících jejich nákupní chování v celém odvětví piva v České republice.

**Klíčová slova:** Chování nákupu spotřebitele, spotřeba piva, statistiky pivo, vzorce chování spotřebitelů, české pivovarnictví, úvahy náklady, snadná dostupnost, chuť kvocient, výroba piva, pivo Pilsner Urquell, sociální média.

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**List of abbreviations**

Czech Beer and Malt Association

(CBMA)

## **1. Introduction**

Beer industry in the Czech Republic is a blooming one with the new factors of privatization and restitution introduced in it. In 2000, these forces led to the change in the ownership of the brewery in the Czech Republic. The process of concentration was also introduced and widely implemented during those times. The preferences of the consumers play an important role in the establishment of corrective actions to be carried out by the industries while deriving the consumer purchase behaviour for the beer industry. In the Czech Republic, the determinants of the psychology of the people is a strong indicator of the trend existing in the beer industry. Consumer preferences play a critical role in developing the decision regarding the purchase behaviour among the consumers. The research aims at deriving the factors that result in a specific consumer behaviour among the people living in the Czech Republic regarding the consumption of beer.

The tools and strategies used for communication have seen drastic change since the rise of social media. Social media can also be called as consumer generated media. Social media is an online form of e-marketing that has different ways of communications. Social media includes blogs, chats, messages, reviews, posts, reviews, discussion boards, one to one (consumer) emails, consumer ratings and reviews of products and services online, forums, videos, images, social networking sites, etc. Today millions of messages are sent through these Medias. These messages through these Medias have become influencing factors in consumer behaviour and purchasing patterns. They also influence post purchase behaviour of customers.

The decision of purchasing the product and service among the potential customers depends upon the influence that the marketing strategy has created on them. In some industries like the hospitality and services, the effect of marketing is even stronger. It can be seen that e-marketing helps in reducing risk and thus consumers made purchase decision of any services by relying on the world of mouth marketing strategy. The customers who have experienced or use the product spread the information in their network and this helps the people in their network to take the decision of purchasing the product.

In this study, the Pilsner Urquell Beer is taken into consideration for studying the factors influencing the consumer behaviour of the people in the Czech Republic that consume it. The customer purchase behaviour across the beer industry of the Czech Republic

for Pilsner Urquell Beer Company depends on the taste quotient of its products, cost considerations, ease of availability and the impact of promotions through the social media. Hence, the research aims at obtaining the impact of these factors in the development of decisions regarding the purchasing of Pilsner Urquell beer by the people in the Czech Republic.

## **2. Aim and Methodology**

### **2.1. Thesis Objective**

The aim of the thesis is to obtain the important aspects of the consumer purchasing behaviour on beer product in the Czech Republic. It also involves deriving the consumer's mind-set and psychology while making the decision of purchasing a specific beer product in the Czech Republic. The thesis also aims at determining the factors influencing the consumer behaviour of the people living in the Czech Republic and this is derived with the help of considering the popularity of Pilsner Urquell beer among the people in the Czech Republic.

The main objective of the thesis is:

To identify the impact of the factors that impact the consumer behaviour across the beer industry in the Czech Republic.

#### **2.1.1 Sub-objectives:**

The sub-objectives are the sub-elements which are to be derived from the main objective.

The sub-objectives of the thesis are as follows:

- To derive the role played by taste quotient factor in the consumer behaviour across the beer industry.
- To identify the influence of costing considerations on the consumer behaviour across the beer industry in the Czech republic,
- To derive the role played by the promotions across the social media on the sale of beers in the Czech Republic
- To obtain the impact of the consumer behaviour across the profits and market share of the Pilsner Company.
- To derive a correlation between the factors impacting the consumer behaviour of beer among the youth.

## **2.2 Methodology of the diploma thesis**

Methodology consists of the methods that are used to collect data from an intended population related to the subject of research (Tharenou, et al., 2007). The research methodology refers to considering the significant factors related to the consumer behaviour across the beer industry in the Czech Republic. A methodology that is based on pragmatic type consists of interpreting the subjects on the basis of the different factors that are observed related to it. It is a combination of the positivist and interpretivist theory where the results are derived through integrating the different factors affecting it. The methodology includes deriving the factors that impact the consumer behaviour across the beer industry in the Czech Republic.

Pragmatic research philosophy is used in the research methodology throughout the study to derive the factors that are responsible for the current consumption of beer in the Czech and the statistics related to it consisting of its contribution to the economy of the Czech. It involves considering the reports, journal articles and books related to the consumer behaviour of the people in the Czech Republic related to the consumption of beer. The advantages of both, qualitative and quantitative research methodology is obtained with the help of using the pragmatic type of research philosophy across the research.

### **2.2.1 Research Methodology Approach**

The research approach in the study consists of evaluating the details of the beer market in the Czech along with the factors that affect its consumer behaviour. It also involves deriving the intensity of these factors so as to increase the consumption of Pilsner Urquell across the Czech Beer industry. Thus, a combination of the deductive and inductive approach is adopted in the research. The hypothesis that is developed is analysed with the help of deductive approach as it helps establishing the validity of the hypothesis through its evaluation. There is a new theory or outcome derived with the help of using inductive approach. Deductive approach involves considering different reports, conference publications, book and journal articles that provide information about the beer industry in the Czech Republic. It also involves deriving the factors that are responsible for this high consumption across the country. The impact of the factors that lead to a specific consumer behaviour is obtained.

**2.2.2 Methodology Design**

The research is carried out on the basis of a mixed methodology where qualitative and quantitative research methods are used. It helps in deriving the impact of the different factors that are identified on the consumer purchasing behaviour of beer in the Czech Republic. With the help of a mixed methodology, the benefits of both the research methods are obtained (Creswell, 2014). The reliability is ensured in the research through the quantitative research method and the validity as well as a detailed information about the subject is obtained with the help of qualitative research method (Bazeley, 2015). First-hand responses are obtained in quantitative research method where primary data is collected from the participants. The variables that are obtained for quantitative research method are derived with the help of qualitative research methods.

In the research, qualitative research is carried out by identifying variables that impact the consumer purchasing behaviour across the beer industry in the Czech Republic. The factors that affect this behaviour are derived through evaluating journal articles, reports, conference publications and books related to the trends in the beer industry across the Czech Republic. A very structured and detailed evaluation is obtained through carrying qualitative research method. The factors that affect the development of a specific consumer purchasing behaviour across the beer industry in the Czech Republic are considered. An overview of the beer industry and the trends prevailing in the beer industry across the Czech Republic is derived with the help of qualitative research methodology. It also involves collecting information from different sources that help in obtaining the background of the beer industry in the Czech Republic.

In the research, quantitative research method is implied for collecting data on the basis of a questionnaire formed with the help of variables and factors that are obtained after reviewing the literatures. Quantitative research methodology would help the research to obtain a quantifiable outcome on the basis of which certain measures and steps would be suggested for improving the consumption of Pilsner Urquell beer in the Czech Republic.

Primary Research design is used for collecting data in quantitative research method where numerical data is obtained from the participants taken into consideration (Flaherty, et al., 2015). The primary research tends to derive the actual status of the consumer purchasing behaviour of beer from the people living in the Czech Republic. For this purpose, the factors



that impact the determination of the consumer purchasing behaviour of the people in the Czech are derived through the secondary research and the consistency of these factors is determined with the help of primary research design.

Secondary research design is carried in the research through analysing and reviewing different reports, studies and articles pertaining to the details of the beer industry in the Czech Republic along with the factors that impact the development of a specific consumer behaviour across the industry. These factors include the taste quotient, cost considerations, ease of availability and the promotions through the social media carried out by the Pilsner Urquell Beer in the Czech Republic.

### **2.2.3 Type of data**

The type of data collected in the research includes primary as well as secondary type research data. Collecting both the types of data helps in deriving reliability and validity across the research and the evaluation of the hypothesis can be carried out with greater effectiveness. Primary data is collected through collecting responses from the participants about the questionnaire developed that helps in obtaining impact of different factors on the consumer purchasing behaviour of beer in the Czech. The participants that are taken into consideration are the people living in the Czech Republic. They are in the age group of 20-25 years. The data is obtained with the help of survey that is conducted online. The survey is developed on the basis of a questionnaire shown in Appendix 2.

The secondary data in the research is obtained in the form of variables that indicate specific characteristics of the beer industry in the Czech Republic like its production and consumption, impact on the economy and factors that impact the consumer behaviour of beer across the country. It is carried with the help of studying, reviewing and evaluating journal articles, reports, books and conference publication papers related to the subject taken into consideration. After studying and reviewing, the data obtained from these sources is evaluated and analysed with respect to its impact on the consumer behaviour of beer industry and its implication on Pilsner Urquell beer.

**2.2.4 Methodology of collecting data**

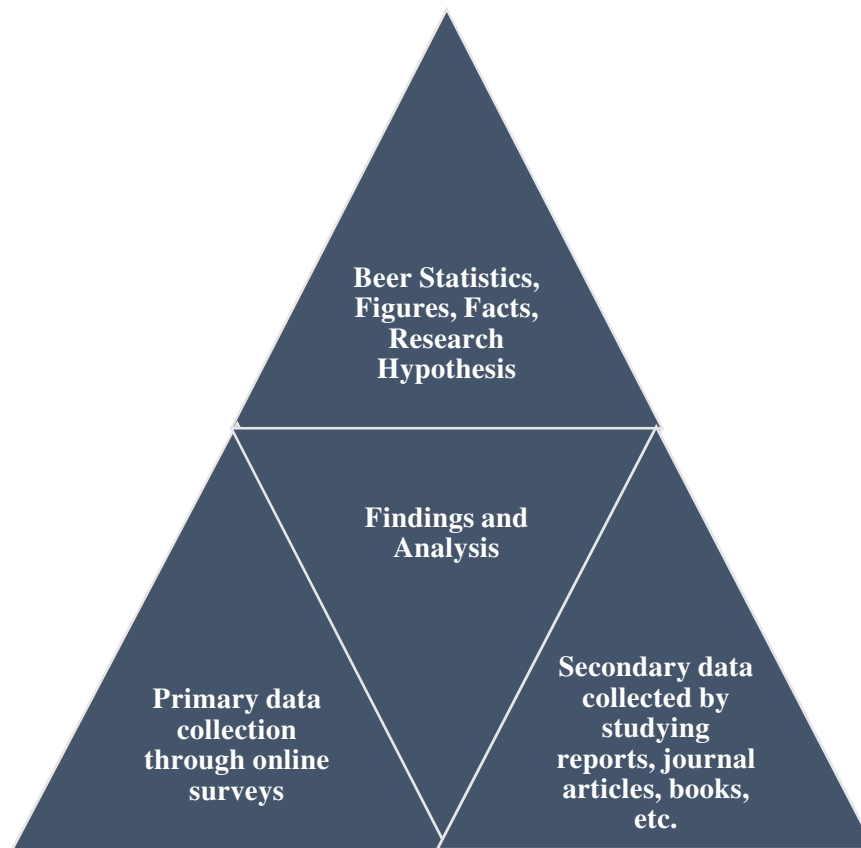
The methodology of collecting data includes considering the methods that are used for collecting both the types of data, that is, primary as well as secondary data respectively. Hence, the methodology that is carried out for collecting data includes conducting surveys for obtaining primary data from the participants about the Pilsner Urquell Beer that is taken into consideration in the research. The methodology adopted for collecting secondary data is through reviewing, evaluating and analysing different literatures pertaining to the determination of the important factors that impact the consumer purchasing behaviour of the people in the Czech and the different statistics across its beer industry. The market of Pilsner Urquell beer is derived and suitable measures for increasing its consumption are derived.

The instrument used for collecting primary data through the participants is online surveys. It is collected in the research among the participants who are the young people living in the Czech and are within the age group of 20-25 years.

**Triangulation of data**

The assimilation of different sources which are taken into consideration while carrying a research and obtaining data pertaining to the subject is termed as triangulation of data (Jick, 1979). It imparts accuracy to the research through merging the facts and figures with the factors identified in the research and obtains a proper interconnection between them. In this research, triangulation of data is carried out through collecting primary data with the help of surveys and collecting secondary data through reviewing literatures pertaining to the subject. The aspects that are involved in the triangulation of data are provided in the diagram given below:

Figure 1: Triangulation of data in research methodology



Source: (Jick, 1979)

- The thesis begins through deriving the objectives and aim of the study. It includes developing research questions for carrying out the research and deriving information about the consumer purchasing behaviour of the people in the Czech Republic.
- Along with it, there are different phases identified for studying different literatures including journal articles, reports, books, conference publications and conference publications about the subject taken into consideration. Beer statistics in terms of its production as well as its consumption across the Czech Republic is obtained for setting up the base of the research.
- Secondary data is collected in the research where the variables pertaining to the different characteristics that indicate the details of the beer industry in the Czech along with the factors affecting the consumer behaviour across the same. The variables that are derived which affect the consumer purchasing behaviour of beer in the Czech includes the taste quotient, cost considerations, ease of availability and promotions through social media.

These factors are obtained through evaluating the beer trends in the Czech Republic carried out with the help of reviewing journal articles, reports, books and accredited reliable websites related to the subject.

- Primary data is carried out in the research for Pilsner Urquell Beer through using the characteristics and factors that are derived with the help of secondary research across the study. The primary data is collected with the help of a questionnaire that is formed on the basis of the factors that are identified in the secondary research. The results are collected from the participants who are in the age group of 20-25 years.
- With the help of the data collected, there is a compilation of the parameters derived in the primary data and secondary data containing the information obtained through evaluating the articles. The research is developed through formulating this data. The findings and analysis are carried out through obtaining the results of the survey and then evaluating it for deriving the consumer purchasing behaviour of beer in the Czech Republic. It is with the help of it that a suitable recommendation is provided along with a conclusion about the subject.

### 3. Literature Review

The thesis involves deriving certain variables that help in deriving a specific consumer behaviour of the people living in the Czech Republic related to their purchase of beer. There are different literatures, studies and journals evaluated and they are discussed in this section. The composition of beer developed by the Pilsner Urquell Brewery is also derived along with the other factors contributing to the process of production and marketing of the Pilsner Urquell beer in the Czech. The composition of beer along with the different types and styles of beer is discussed in the following section. It also involves deriving the production and consumption of beer across the Czech Republic and the consumption per capita is considered for evaluation of the beer industry. The factors corresponding to the development of a specific consumer behaviour among the people living in the Czech regarding the consumption of beer are derived and discussed.

#### 3.1 Beer as a product

Beer is the oldest alcoholic drink consumed across the globe. Beer is produced with the help of a process called as brewing. It is basically a fermentation process where the starches are fermented to form beer. There are different sources of starch used in the production of beer. Cereal grains are required for fermentation and they are the source of starch in the production of beer. Few of the most common sources of starches used in the production of beer are malted barley, wheat, maize and rice. Hops is also added to beer as a preservative and it adds bitterness to the taste of beer (Bamforth, 2008). However, along with hops, there are other flavours which can also be added like fruits and herbs. Beer has many health benefits and it also tends to provide the goodness of barley water which has many advantages for the body (Kaplan, et al., 2000).

The characteristics of beer also depends on the alcohol content present in it. The alcohol content in beer is calculated with the help of two methods and they are, Alcohol by Weight (ABW) and Alcohol by Volume (ABV). ABW refers to the alcohol content with respect to the total mass of the liquid. ABV refers to calculating the alcohol content with the help of Original Gravity (OG) and Final Gravity (FG) readings at the beginning and end of the fermentation process of beer (Brian, 2012). There are five types of beer which is provided in 3.1.2 section of the thesis.

**3.1.1 Composition of beer**

Yeast plays a very significant role in the production of beer where it is entirely responsible for the fermentation process that results in the formation of beer. It is basically a type of fungus identified to have innumerable species over a period of time. There are two types of sugar fungus and they are, *Saccharomyces cerevisiae* and *Saccharomyces pastorianus*. The fermentation process is carried out with the help of either of these two sugar fungus which are a form of yeast. The fermentation process converts sugar into alcohol and the taste of the beer depends on the different attributes of the fermentation process like temperature, compounds formed and drop out time of the beer through the fermentation process (Grassi, et al., 2014).

Fermentation of beer is carried out in three steps and they are as follows:

1. Primary Fermentation,
2. Secondary fermentation,
3. Conditioning

The composition of beer is greatly affected by the fermentation process adopted to produce it. The fermentation of beer is now followed by cold conditioning so as to preserve the authentic taste and flavour of beer throughout its shelf life until its consumption (Bamforth, 2017). The composition of beer is considered along with the methods used for its production to obtain a review of the current techniques that are adopted for its production and the other details of beer like its type, flavour as well as quality and pricing in the Czech Republic is discussed in the further sections.

**3.1.2 Types of beer**

There are different processes through which a beer can be produced. The process adopted in the production of beer gives it a different taste and appearance. Beers are divided into five main types on the basis of their appearance and their production process. These five types of beer along with their appearance and process of production are provided in the following table no. 1 given below.

Table 1: Types of beer, its appearance and its process of production

| Type of beer  | Appearance                             | Process   |
|---------------|--|---|
| <b>Ale</b>    | Rich gold to reddish amber             | Top fermentation at cellar temperature  |
| <b>Lager</b>  | Pale to medium colour                  | Bottom fermentation   |
| <b>Porter</b> | Dark, almost black                     | Top fermentation with a combination of roasted malt   |
| <b>Stouts</b> | Dark, mildly astringent, coffee colour | Top fermentation  |
| <b>Malt</b>   | Light to full-bodied                   | Minimal fermentation with additional flavours and extremely low alcoholic content by volume (< 0.5 % ABV) |

Source: Cabras, et al. (2016)

#### Different styles of beer:

There are different styles of beer on the basis of the flavours added in it. The appearance of different styles of beer is somewhat different from one another owing to the characteristics of their ingredients. There are different aromas which can be observed in beer depending on the ingredients used in it. The aromas obtained from beer are categorized into the following categories:

- Fruity,
- Texture,
- Floral,
- Vegetal,
- Spicy,
- Heat-Induced,
- Biological (Brian, 2012).

Different styles of beer along with its characteristics are provided in the following table no. 2 given below.

Table 2: Different styles of beer in the Czech Republic and its characteristics

| Style of beer          | Characteristics  |
|------------------------|--|
| <b>Amber</b>           | Versatile beer, full-bodied aromas flavoured with caramel. They are either lager or ale type.  |
| <b>Blonde</b>          | Pale in colour, clear, crisp and dry possessing aroma of the hops and sweetness of malt  |
| <b>Brown</b>           | Dark amber or brown in colour, traces of caramel and chocolate in brown ale.   |
| <b>Cream</b>           | Golden colour with mild and sweet flavour  |
| <b>Dark</b>            | Chest-nut brown colour with fruity smell, British type beer produced with a combination of hops, yeast and a blend of malts.                           |
| <b>Fruit</b>           | Mostly ale type of beer, but less bitter due to the fruit flavour  |
| <b>Golden</b>          | Straw colour with traces of citrus and vanilla, spicier flavours can also be added.  |
| <b>Honey</b>           | Full-bodied beer, copper coloured with creamy texture, traces of caramel,  |
| <b>Indian Pale Ale</b> | Contains more hops than pale ale, Extra hops added for preserving the flavour and taste especially for those British troops who were deputed in India. |
| <b>Light</b>           | Light in colour and mild in flavour, lower alcohol content.  |
| <b>Lime</b>            | Light flavour with the taste of refreshing lime  |
| <b>Pale</b>            | Fruity and copper coloured, robust beers that are to be enjoyed with spicy foods   |
| <b>Pilsner</b>         | Golden colour with dry, crisp and bitter flavour, distinctive hop taste.   |
| <b>Red</b>             | Red or light brown in colour, moderate to heavy flavour with traces of caramel   |
| <b>Strong</b>          | Dark or almost black, includes old ales, double IPAs and barley wines. Has more than 7% Alcohol by Volume (ABV)  |
| <b>Wheat</b>           | Light, soft flavour due to wheat,  |

Source: Olsovska, et al. (2014)



Pilsner Urquell is a Golden lager type of beer and it is the first producer of such kind of beer in the world (Pilsner Urquell, 2017).

**3.1.3 Quality and pricing of beer**

There are different qualities of beer produced depending on the flavour required, the intensity of the beer required and the costing of the beer. The intensity of the beer ranges from being mild to moderately strong and from strong to very strong. The costing of the beer reflects the process through which the beer is produced and the addition of additional flavours to it is carried out accordingly.

The pricing of the beer is very much dependent on the demand as well as the supply of the beer in the Czech Republic. For this purpose, the production and consumption of beer is derived in the next section. The pricing of beer in the Czech Republic is provided in the following table no. 3 given below:

**Table 3: Pricing of beer in the Czech Republic**

|   | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|------|------|------|------|------|------|------|------|------|
| <b>Average Consumer Price of 1 litre beer for on-trade ( in Euro)</b>   | 2.48 | 2.50 | 2.52 | 2.54 | 2.67 | 2.69 | 2.26 | 2.15 | 2.12 |
| <b>Average Consumer Price of 1 litre beer for off- trade ( in Euro)</b> | 1.42 | 1.44 | 1.45 | 1.46 | 1.53 | 1.55 | 1.18 | 1.12 | 1.11 |

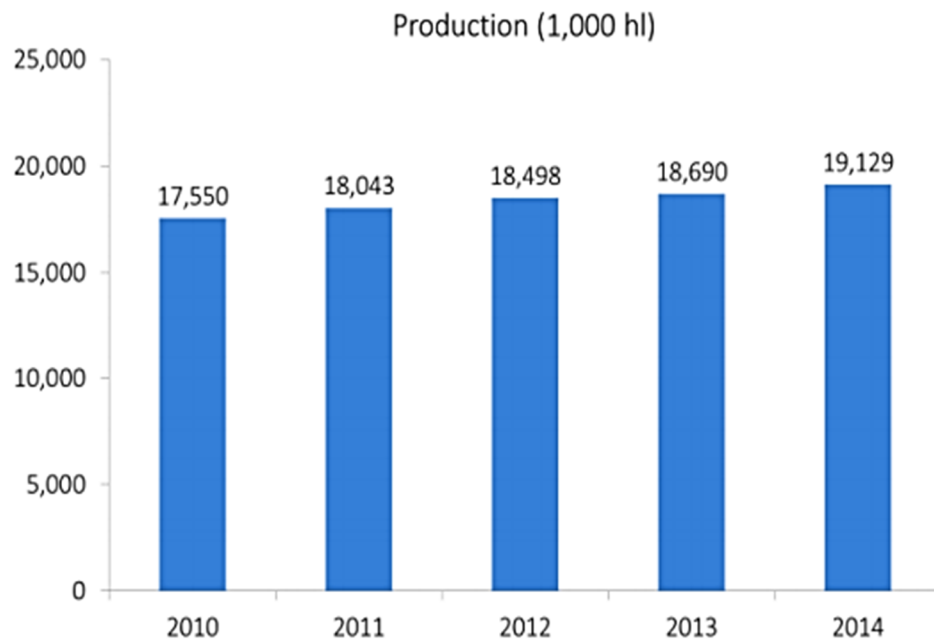
Source: The Czech Brewing Association (2013) and Europe Economics (2016)

Hence, the pricing of beer is different on the basis of the sector through which it is purchased. For the hospitality and supply sector that includes the hotels, bars and pubs, the average consumer price was as high as 2.15 Euros in 2014. On the other hand, the average consumer price of the beer across the retail sector is 1.12 Euros. From table no. 3, it is observed that the average consumer prices have always been higher for on-trade as compared to the prices off-trade. There is an extremely small amount of reduction in the average consumer prices of beer observed from 2007 to 2015 across the on-trade and off-trade sectors across the Czech Republic. Therefore, the prices of beer are fluctuating owing to the taxes imposed by the government on it. The taxes and revenues collected by the Czech government on the different sectors of the beer industry are provided in the sections below.

### 3.2 Production and consumption of beer in the Czech Republic

The production of beer in the Czech Republic has been steadily increasing owing to the increasing demand of the beer produced in the Czech. It can be seen from the following chart that the production was 17,550 thousand hectolitres (hl), in 2010 and it increased to 19,129 thousand hl in 2014. The gradual increase in the production of beer in the Czech Republic for the time period between 2010 and 2014 is provided in figure no. 2 given below.

Figure 2: Production statistics of beer in the Czech Republic



The production demographics between the time period of 2008 and 2014 is provided in the table no. 4 given below. It involves considering the basic characteristics related to the brewing sector in the Czech Republic. The number of brewing companies including the microbreweries is obtained with the purpose of understanding the production across the beer industry in the Czech Republic.

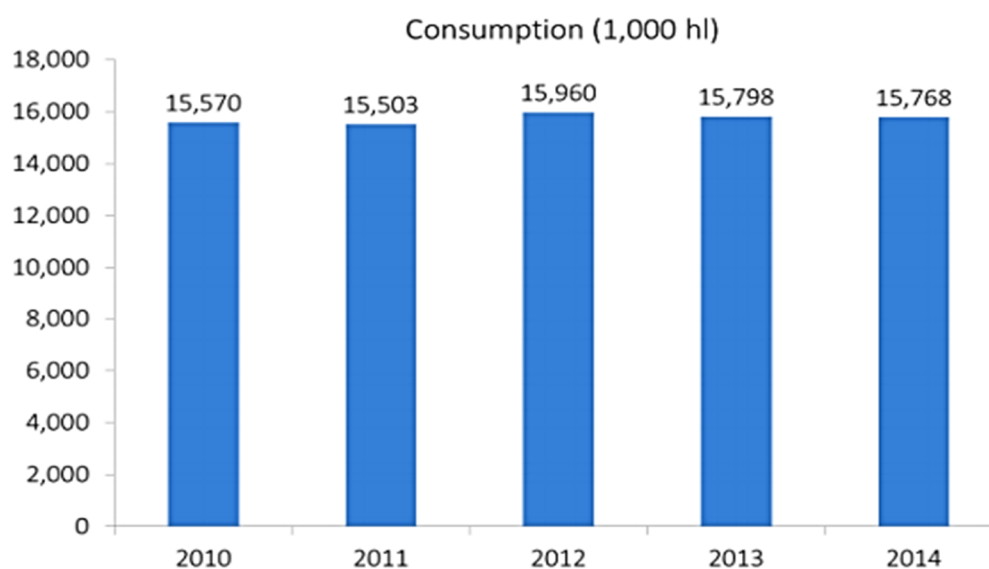
Table 4: Czech Republic's brewing sector statistics

|   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013  | 2014   |
|---|--------|--------|--------|--------|--------|-------|--------|
| Total production (in million hectolitres) | 19.806 | 19.292 | 17.549 | 18.042 | 18.497 | 18.69 | 19.129 |
| Brewing Companies                         | 115    | 116    | 135    | 177    | 197    | 289   | 322    |
| Breweries (including microbreweries)      | 128    | 133    | 151    | 191    | 213    | 308   | 338    |
| Microbreweries                            | 57     | 51     | 65     | 90     | 20     | 207   | 238    |

**Source: The Czech Brewing Association (2013) and Europe Economics (2016)**

The production of beer is high in the Czech owing to the high rates of consumption across the country. The consumption statistics of beer for Czech Republic between the time period of 2010 and 2014 is provided in the following chart in figure no. 3.

Figure 3: Consumption statistics of beer in the Czech Republic

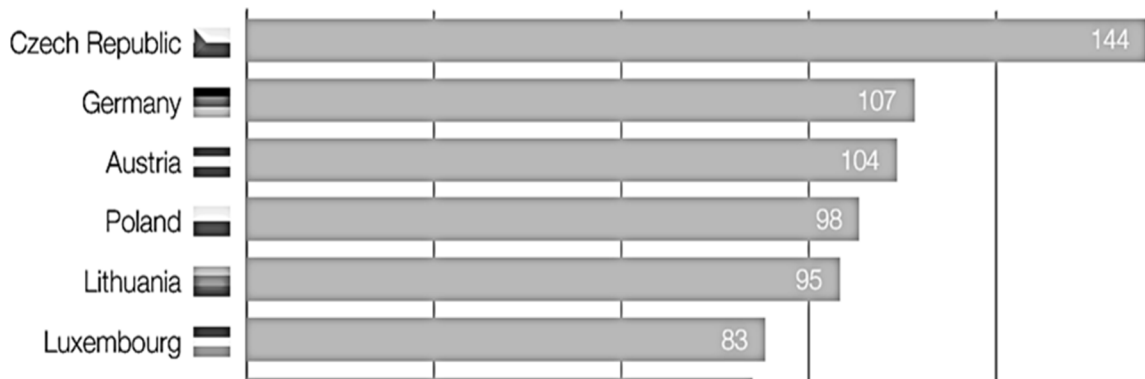


**Source: Europe Economics (2016)**

The consumption of beer has not increased largely since 2010 as observed in the above chart. Beer consumption was 15,570 thousand hl in 2010 and it ended up to be 15,768 in 2014. Hence, the surplus production of beer is used for exports across Europe and other parts of the world outside Europe. The consumption of beer depends on the per capita consumption across the Czech Republic. It is compared with the per capita beer consumption

across the other countries in Europe. A comparison of the beer consumption among the different countries in EU is provided in the chart given below in figure no.4.

**Figure 4: Beer Consumption per capita across Europe in 2014**



**Source: Walle (2015)**

The beer consumption per capita is the highest in the Czech Republic. It accounts for about 144 litres per capita on an annual average. The second highest per capita beer consumption is in Germany and the consumption per capita is about 107 litres. Thus, there is a great difference observed in the per capita beer consumption among the top two countries in Europe. This shows that beer is a very popular drink in the Czech and is consumed in large quantities by the people living across the Czech.

### **3.3 Market of beer in the Czech Republic**

Beer industry has been tremendously developing in the Czech Republic since the inception of the 19th century with the industrial revolution. The need to accustom the requirements of the increasing population, due to the increase in the employment opportunities led to a steep increase in the demand of beer. Brewing industry has been significantly developing in the Czech Republic owing to the high demand among the people where it turns out to have the highest consumption of beer per capita basis in the world.

Beer industry in the Czech is the backbone of its economy. The basic characteristics of the beer industry involves considering the total consumption of beer, consumption of beer per capita, beer consumption in off-trade and on-trade, average consumer price in-trade as well as off-trade. All of these characteristics for the year of 2013 and 2014 for the Czech Republic is shown in the following table:

Table 5: Consumption of beer and consumer spending characteristics in Beer industry across the Czech Republic

|  | 2013       | 2014       |
|--|------------|------------|
| Total consumption (in hectolitres)         | 15,798,000 | 15,768,000 |
| Total Consumer Spending (in million Euro)  | 2,563      | 2,431      |
| Consumption of beer per capita (in litres) | 144        | 144        |
| Beer consumption on-trade (hospitality)    | 41%        | 41%        |
| Beer Consumption off-trade ( retail)       | 59%        | 59%        |

Source: Europe Economics (2015)

There are many campaigns developed against binge drinking. There has been a shift from the on-trade to the off-trade in the beer industry. Off-trade includes selling of beer s through retail sector; whereas, on-trade consists of selling of beer across pubs, hotel and bars representing the hospitality sector. The values of the on-trade and off-trade characteristics of the topmost significant countries of Europe are provided in table no. 7 given below. The contribution of on-trade characteristics was about 50% for the Czech Republic in 2009. But, in 2014, it reduced to about 41% only. On the other hand, the off-trade characteristics of the beer industry in the Czech Republic was about 59% in 2014 which is much higher as compared to its value in 2009 that was 50%. It is observed from the chart that the Czech Republic has the highest shift in trend related to the characteristics of the beer industry in it where there is a gradual shift from on-trade to off-trade business.

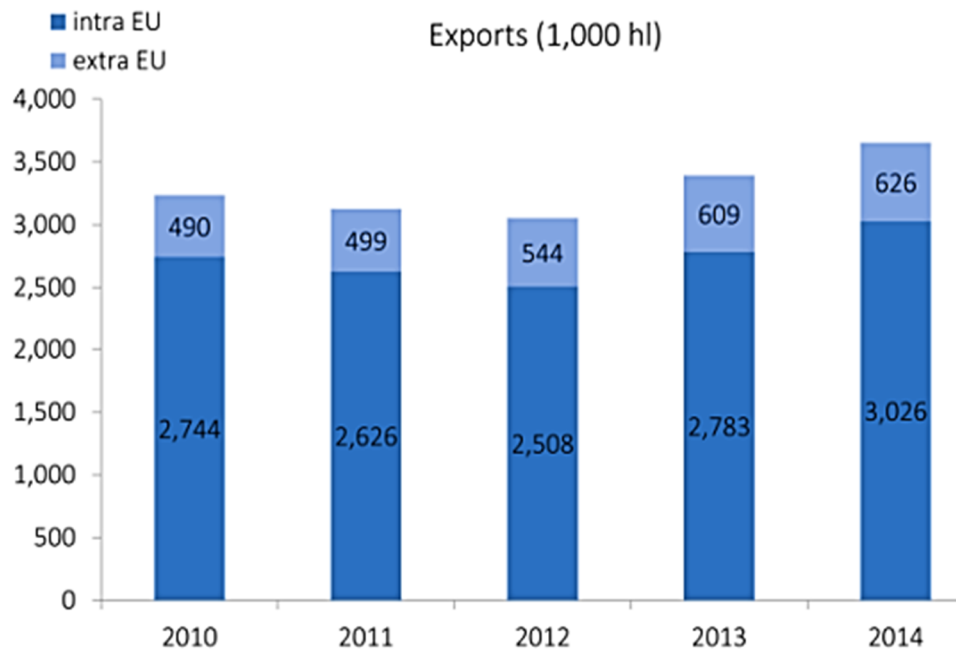
Table 6: On-trade and Off-trade characteristics of beer industry across Europe

| Country  | 2009     |           | 2010     |           | 2011     |           | 2012     |           | 2013     |           | 2014     |           |
|--|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
|  | On-trade | Off-trade | On-trade | Off-trade | On-trade | Off-trade | On-trade | Off-trade | On-trade | Off-trade | On-trade | Off-trade |
|  Austria        | 34       | 66        | 33       | 67        | 33       | 67        | 32       | 68        | 32       | 68        | 29       | 71        |
|  Belgium        | 49       | 51        | 48       | 52        | 46       | 54        | 46       | 54        | 45       | 55        | 45       | 55        |
|  Bulgaria       | 28       | 72        | 26       | 74        | 26       | 74        | 25       | 75        | 23       | 77        | 20       | 80        |
|  Croatia        | 40       | 60        | 36       | 64        | 37       | 63        | 35       | 65        | 36       | 64        | 39       | 61        |
|  Cyprus         | 49       | 51        | 48       | 52        | 45       | 55        | 42       | 58        | 40       | 60        | 42       | 58        |
|  Czech Republic | 50       | 50        | 48       | 52        | 48       | 52        | 43       | 57        | 41       | 59        | 41       | 59        |
|  Denmark        | 23       | 77        | 23       | 77        | 23       | 77        | 25       | 75        | 25       | 75        | 25       | 75        |

Source: Walle (2015)

The on-trade share in the total volume is expected to decline to 37% in 2020 as compared to 40% in 2015. Exports of beer for the Czech Republic compared for a period of five years from 2010 to 2014 is provided in the following chart given in figure no. 5.

**Figure 5: Export of beer by the Czech Republic in Europe and outside Europe**



**Source: Europe Economics (2016)**

Owing to the ancient and traditional method of brewing present in the Czech Republic, it tends to occupy a large share in the exports of beer to Europe as well as other parts of the world. The flavours that are produced in the breweries of the Czech Republic are very unique and are loved by people in Europe as well as other parts of the world. Hence, the Czech Republic has witnessed a continuous growth in its beer exports as shown in the chart given above. The export of beer within Europe has increased greatly in 2013 as well as 2014 as compared to the downfall in 2011 and 2012. On the other hand, the export of beer through the Czech Republic outside Europe has increased steadily since 2010 as seen in the chart given above. The loyalty of the customer plays a significant role in the development of a return on marketing strategy across the beer industry in the Czech Republic (Rust, et al., 2004).

Czech Beer and Malt Association (CBMA) establishes the ethical code for the breweries industries in the Czech Republic. They drafted a memorandum regarding supporting the Czech Police in their mission of achieving higher levels of traffic safety and

avoiding accidents occurring due to drink and driving (Czech Beer and Malt Association (CBMA), 2013). The members of the CBMA along with the Czech Police encourage safe driving through providing awards to the drivers that are responsible.

**3.4 Impact of beer in the Czech Republic**

The impact of beer industry in the Czech Republic is significant and there is a huge economic influence on it. The economic impact of beer industry depends on the factors like total number of jobs, value added to the economy and Government Revenues collected from the beer industry across the Czech Republic. There is a steady downfall observed among the factors provided for the impact of beer industry on the economy of the Czech Republic. The total number of jobs added was about 73,000 in 2008. It then declined over the next consecutive two years, 2009 and 2010. The number of jobs added through the beer industry in the Czech Republic increased again in 2013 to 79,952 followed by a downfall again to 76,282 in 2014

The value added by the beer industry to the economy of the Czech Republic has been changing continuously displaying increase for certain years and then showing downfall for the other years. There was a downfall to 1354 million Euros in 2014 as compared to the value added of about 1404 million Euros in 2013. The revenues generated by the government from the beer industry has been reducing continuously since 2008, except for 2012 where there was an increase in the revenues collected. The economic impact of beer in the Czech Republic as mentioned above is provided in the following table no. 8.

**Table 7: Economic impact of beer industry in the Czech Republic**

|                                    | 2008   | 2010   | 2012   | 2013   | 2014   |
|------------------------------------|--------|--------|--------|--------|--------|
| Total number of jobs               | 73,000 | 67,400 | 63,100 | 79,952 | 76,282 |
| Value added (million Euro)         | 1,147  | 1,051  | 1,091  | 1,404  | 1,354  |
| Government Revenues (million Euro) | 1,094  | 1,067  | 1,133  | 931    | 887    |

**Source: Europe Economics (2016)**

The impact of the beer industry on the employment across the different sectors in the Czech Republic involves considering the change in employment as well as value added across the following four sectors:

- Retail sector (Forward linkages):

It involves the off-trade sector where the profit is earned from the outputs and hence, it comes under forward linkages section of economic activities. Retail sector has reduced the change in employment from 8928 in 2013 to 8430 in 2014 (Europe Economics: The Brewers of Europe, 2016). It is provided in the chart given below.

- Hospitality sector:

The impact on the change in employment through the hospitality sector involves forward linkages as the profits earned are from output across the economic activities. There is a downfall in the employment generated through the beer industry with about 50,678 in 2013 to 47,866 employees in 2014. It is shown in the chart provided below.

- Supply Sector:

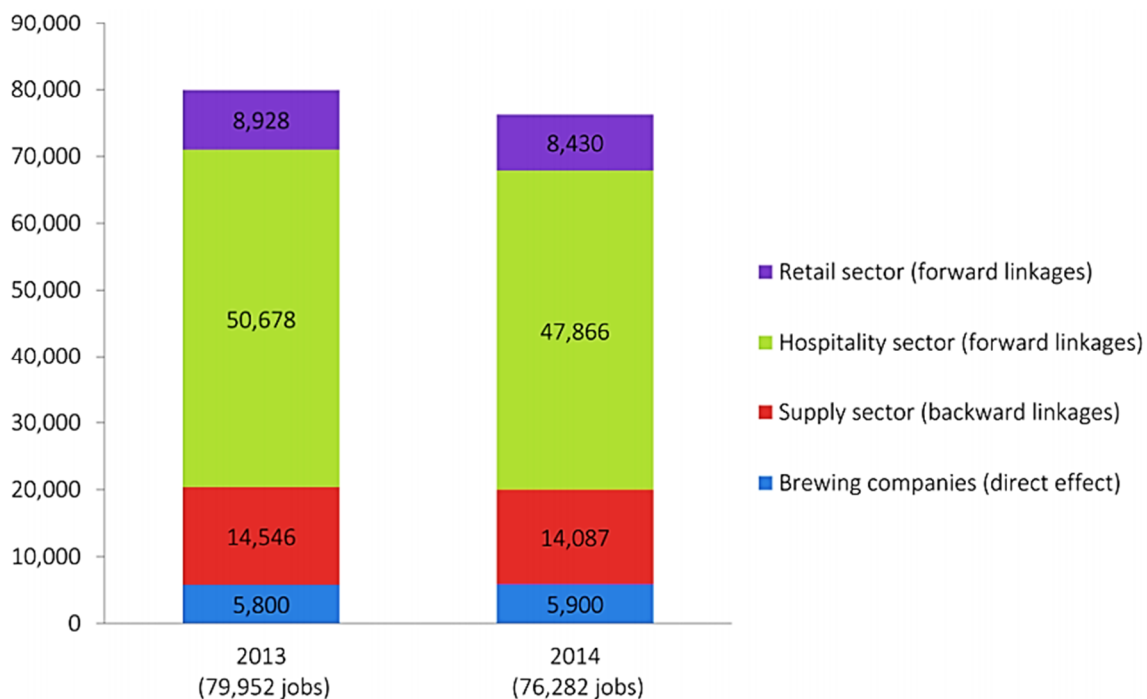
The supply sector across the beer industry in the Czech has backward linkages owing to the generation of profit from the inputs. The contribution of the supply sector to the change in employment has reduced from 14,546 in 2013 to 14,087 in 2014. It is provided in the chart provided below.

- Brewing companies (direct effect):

Brewing companies in the Czech tend to have a direct impact on the change in employment across the country. It is the only sector that has shown an increase in employment with about 5800 employees in 2013 to about 5900 employees in 2014 (Europe Economics, 2016). It is provided in the chart provided below.



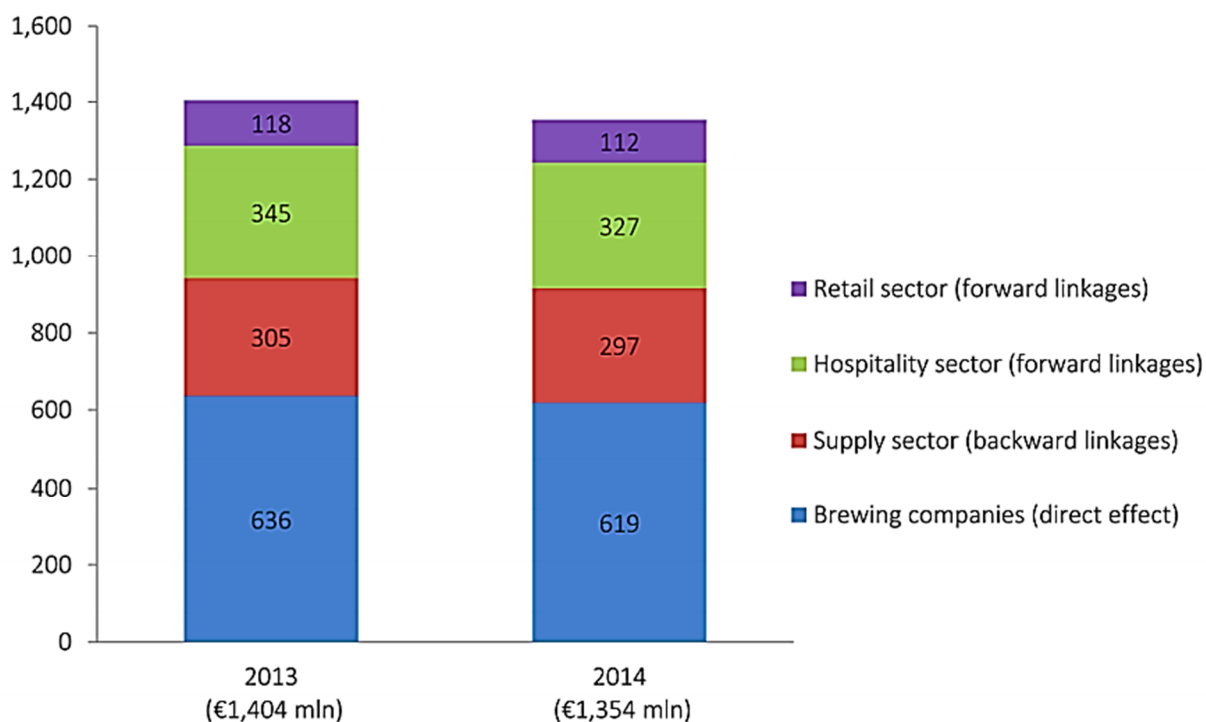
Figure 6: Changes in employment across different sectors in the Czech Republic due to the beer industry



Source: Europe Economics (2016)

Similarly, for all the four sectors mentioned above, the value added to them by the beer industry across the Czech Republic is derived. It is provided in the chart given below. The overall value added by beer to the different sectors in the Czech is declining in 2014 as compared to the value added in 2013. There is a downfall in all the four sectors of the economy that consist of economic activities having a forward and backward linkages as well as direct effect. The values added for all these four economic activities across the four sectors of economy in the Czech Republic by the beer industry is provided in the chart given below.

Figure 7: Value added to the different sectors of economy by the beer industry in the Czech Republic



Source: Europe Economics (2016)

Thus, there is a great influence of beer industry on the economy of the Republic. However, this impact is found to be declining in the last few years. There are many reasons for the downfall where the consumer behaviour of the people in the Czech Republic has changed. There are many factors that influence the consumer purchasing behaviour of the Czech people while they are buying beer. These factors are discussed in the later section.

### 3.5 Role of Pilsner Urquell beer

Pilsner Urquell is very well known for its legendary lager beer as they were the first one to produce it in 1842. The first batch of the globally famous golden (blonde) lager was brewed on 5<sup>th</sup> October, in the year 1842 and it was consumed on 11<sup>th</sup> November (Pilsner Urquell, 2017). It was produced by the Pilsen brewery in Plzen town and it tends to be the first golden lager beer in the world. It was produced fire brewing the local Czech Saaz hops, traces of caramel for sweetness and soft water of Plzen. Pilsner Urquell, is known across the globe under the brewing company SABMiller (Rail, 2015). SABMiller accounts for about 48.8% of the market by volume in the Czech Republic.

Beer consumption in the Czech Republic is closely linked to the culture and social interaction which is existing across the country. Pilsner Company has played a significant role in contributing to this culture with the development of beer during times as early as 1842. There are historic brewery cellars in the company which are available while touring the Pilsner Urquell Brewery. The current bottling plant of Pilsner Urquell consists of the modern technology that has the capacity to produce 120,000 bottles per hour (Pilsner Urquell, 2016).

### **3.6 Consumer Behaviour with beer**

The factors that are responsible for the development of a specific behaviour among the Czech people can also be termed as the factors of popularity across the beer industry among the people in the Czech Republic (Zufan & Erbes, 2000). It depends on the decision making ability of the people to purchase the beer of their choice. Purchase decision making process involves active utilization of the marketing resources through the formation of strategies for the same which have a meaning and are impactful. Improvement in the technology, easy accessibility to the networking sites and availability of internet facilities at one touch are the reasons that have tremendously increased the use of the Marketing and its impact has multiplied across the globe. People tend to easily influence other people whom they know and this serves as the major purpose of the use of digital marketing concept where this information in the form of views, reviews, opinions, suggestions and feedbacks are provided by the people regarding the product in their network. The consumer behaviour for the beer industry is derived by bifurcating the participants on the basis of gender and the four factors related to it are evaluated in the thesis.

There are four main factors which are identified through studying different research papers and reports related to the popularity of beer among the Czech people. These four factors are taste quotient, cost considerations, ease of availability and the promotions through the social media. They are discussed below.

#### **3.6.1 Taste quotient**

Taste quotient is a very significant factor in determining the sale of a beer. Consumer behaviour is greatly influenced by the taste of the beer. Beer in the Czech Republic is available in different tastes owing to the different flavours added while producing it. The

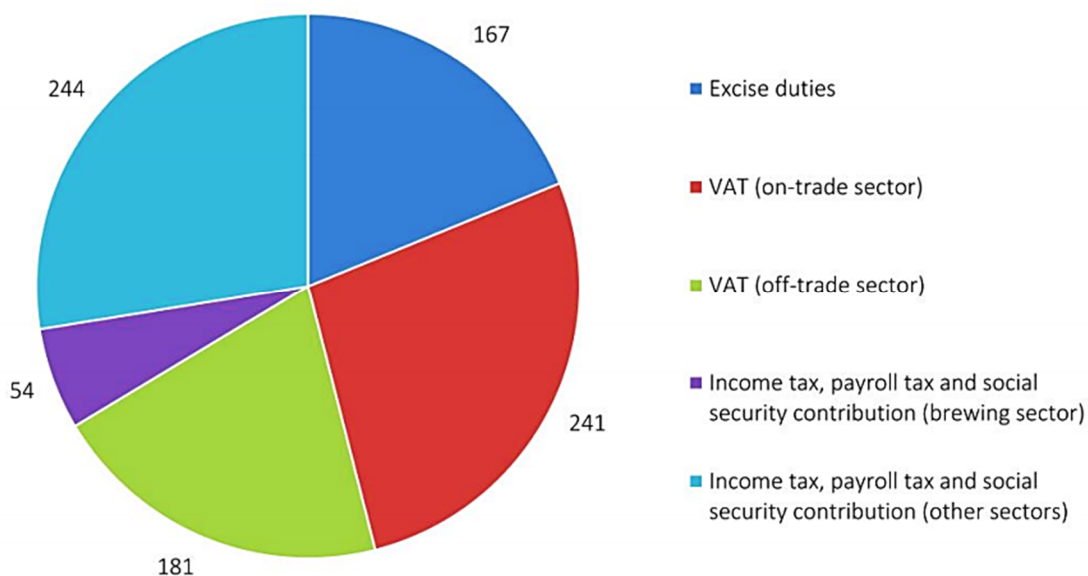
taste of the beer tends to play an important role in the selling of the Pilsner Urquell beer in the Czech Republic. People choose their beer according to the taste they like and on the basis of it, the consumer behaviour of the customers consuming beer is derived. Taste quotient also includes the type as well as style of beer (Aquilani, et al., 2015). There is a continuous change in the beer consumption patterns of the Czech people. There is a gradual shift observed along the changing trends in the popularity of beer among the people of the Czech Republic. There is a huge increase in demand for the premium quality beers, strong beers that are unpasteurized as well as beers that contain a combination of yeast and wheat. The demand for the unpasteurized beer is increasing since 2015 and as a result, there is an increase in its production in the breweries across the Czech Republic (Euromonitor International, 2016).

### **3.6.2 Cost Considerations**

The pricing of the beer is one of the most significant factor reflecting the position of the beer producing company in the beer industry of the Czech Republic. The costing of the beer contributes to the development of a specific consumer behaviour among the people living in the Czech. They are very considerate about the pricing of the beer. The pricing of the beer depends on its ingredients, flavours added in it and the process of brewing. Costing of beer depends on the tax imposed on its production and sale by the government. The current alcohol tax rate in the Czech is 21% for all the three kinds of alcohols. This has affected the profit margin of the beer producing companies by a huge margin.

The cost of the beer also depends on the taxes imposed in its production and sales. The taxes imposed on it include the Excise duties, VAT (on on-trade sector and off-trade sector), Income tax, payroll tax as well as the social security contribution for the brewing as well as other sectors in the Czech Republic. The value of the revenues generated by the above taxes across the Czech Republic in 2014 is provided in the following figure with the help of a pie-diagram. The value of each and every tax is shown separately in the figure.

Figure 8: Revenues generated by the Government of the Czech across the beer industry in 2014



Source: Europe Economics: The Brewers of Europe, 2016

The total revenues collected by the Government from the beer industry in 2014 is 887 million Euros. The highest contribution to these revenues is about 244 million Euros which is made by the Income tax, payroll tax and special security contribution collected from the sectors other than the brewing sector in the Czech Republic. It reflects the collection of taxes through the hospitality sector, supply sector and the retail sector in the Czech Republic. The second highest contribution is about 241 million Euros by the VAT on-trade sector collected by the Czech Government (Europe Economics: The Brewers of Europe, 2016). It shows that the revenues collected through the beer sold in pubs and bars is the highest in the Czech. It is because of the high prices at which these beers are sold in the on-trade sector across the pubs and bars in the country. As a result, the cost of the beer is high in the on-trade sector. Hence, the young people are bound to go to the retail shops to buy beer as it is available at cheaper prices as compared to that sold in the on-trade sector across the pubs and bars.

Beer industry has a major contribution in the generation of revenues for the government of the Czech Republic. Revenues are collected in the form of Excise duties, VAT for on-trade, VAT for off-trade, Income tax, payroll tax, social security revenues for brewing companies as well as other sectors. The revenues generated have declined by a fraction in 2014 as compared to those generated in 2013. The revenue generated has increased only in the case of income tax, payroll tax and social security revenues. There is a

10% increase in 2014 in the above mentioned revenues of the government from the beer industry (The Brewers of Europe, 2016). Overall, considering the total revenues generated, there is a downfall in the total amount from 928 million Euros in 2013 to 887 million Euros in 2014.

All the above mentioned revenues generated by the beer industry and taxes imposed on it in the Czech Republic is provided in the table given below.

**Table 8: Comparison of the Government Revenues generated across the beer industry in the Czech Republic**

|   | 2013       | 2014       | % Change      |
|---|------------|------------|---------------|
| Excise duties (million Euro)  | 179        | 167        | -6.8 %        |
| VAT (on-trade) (million Euro)   | 254        | 241        | -5.2 %        |
| VAT (off-trade) (million Euro)  | 190        | 181        | -5.2 %        |
| Income tax, payroll tax and social security revenues (brewing companies) (million Euro) | 49         | 54         | 10 %          |
| Income tax, payroll tax and social security revenues (other sectors) (million Euro)     | 256        | 244        | -4.4 %        |
| <b>Total Government Revenues (million Euro)</b>   | <b>928</b> | <b>887</b> | <b>-4.5 %</b> |

**Source:** The Brewers of Europe, 2016

Hence, on the basis of the taxes imposed by the Czech Government and other regulations for on-trade and off-trade selling of beer, the average consumer price for 1 litre of beer is varying in both of these sectors. It is compared considering the on-trade as well as off-trade average consumer prices for the two years 2013 and 2014, respectively.

**Table 9: Comparison of cost of beer in the Czech Republic for on-trade and off-trade**

|  | 2013 | 2014 |
|--|------|------|
| <b>Average Consumer Price of 1 litre beer for on-trade</b>   | 2.26 | 2.15 |
| <b>Average Consumer Price of 1 litre beer for off- trade</b> | 1.18 | 1.12 |

**Source:** (The Brewers of Europe, 2016)

The average consumer price of 1 litre of beer for on-trade in 2013 was 2.26 Euros and the same for off-trade in 2013 was 1.18 Euros (Europe Economics: The Brewers of Europe, 2016). Thus, there is a huge difference in the prices of the same beer across the markets of the Czech depending on the nature of its availability referring to its off-trade or on-trade business.

### **3.6.3 Ease of availability**

The ease of availability refers to the proximity of the on-trade and off-trade beer locations in the Czech Republic. Young people in the Czech are continuously changing their tastes and they are currently preferring the strong, unpasteurized and lager type of beer. Pilsner Urquell of the SABMiller brand is perfect that adheres to the requirements of the young people in the Czech (Rail, 2015). The on-trade business involves imposing of high values of taxes by the government and hence, the beer available through on-trade costs higher as compared to those available at off-trade. Hence, there is a gradual shift of the consumers of purchasing their favourite beer off-trade through retail stores and supermarkets rather than purchasing it on-trade through pubs and bars. Young people are striving hard to make their living and hence, they prefer strong beer of their taste, but at lower costs. The young people would be more attracted to purchase beer in bulk quantities through the retail stores and hence, the off-trade business across the beer industry is increasing since the last few years.

### **3.6.4 Promotions through social media**

The promotion of a product through the social media is one of the most common trend spreading throughout the globe. With the use of online promotion, companies can promote their products much before actually launching it in the market (Mangold & Faulds, 2009). It results in creation of hype for the product and the customers become well aware about the product (Constantinides, 2004). Pilsner Company can promote Pilsner Urquell lager beer that has its legacy across the history of beer production. Promoting a brewery tour across its plant helps in increasing curiosity among the people to know it better (Pilsner Urquell, 2016). It would ultimately help in increasing the sales of Pilsner Urquell beer across the Czech market.

Thus, these are the factors identified through different reports and journal articles that help in deriving the impact of consumer purchasing behaviour across the beer industry

in the Czech Republic. A detailed study of the above factors with the help of a systematic methodology is provided in the next section.



## 4. Practical Part

### 4.1 Sampling of data

The participants that are selected in the thesis determined with the help of data sampling. The suitability of an individual to be taken into consideration as a participant in the thesis depends on the criteria set by the sampling procedures in the thesis (Babin & Zikmund, 2015). Sampling of data in this thesis is carried out through considering the age-group of the participants and it is also observed that the participants have consumed beer atleast sometimes. The sampling is carried out through identifying the requirements of the thesis and on the basis of it, the participants for the thesis are selected. There are few aspects that are considered while determining the sampling of data in the thesis and they are provided as follows:

- “ *Participants to be surveyed,*
- *Method of collecting the sample,*
- *Selection of respondents and the number of respondents in the research”.*

There are two primary means of deriving sampling in the thesis and these means are probability sampling and non-probability sampling (Cooper, et al., 2003). They are described in the following sections.

#### 4.1.1 Probability Sampling:

Probability Sampling refers to selecting the participants randomly without any predefined parameters or criteria. The details of the participants including the background of the participants is not taken into consideration while sampling is carried out through probability sampling (Tyrer & Heyman, 2016). The different parameters pertaining to the personal and professional background of the participants are not considered in carrying out a thesis on the basis of probability sampling. There are different techniques through which a probability sampling is executed and they are provided as follows:

1. “ *Simple random sampling*
2. *Stratified sampling*

3. *Cluster sampling*
4. *Systematic sampling*
5. *Multi-stage sampling*” (Tille & Wilhelm, 2016).

#### **4.1.2 Non-Probability sampling:**

Non-probability sampling includes the type of sampling in which the participants are selected on the basis of the knowledge and judgement of the researcher. In this type of sampling, there are specific characteristics and attributes which are predefined across the thesis for better evaluation of the subject taken into consideration (Baker, et al., 2013). In this thesis, non-probability sampling is carried out by selecting participants within the age-group of 20-25 years and also considering the factor that the participants have been drinking beer for atleast one year. There are different types of non-probability sampling that are taken into consideration and they are described as follows:

1. *“Convenience sampling*
2. *Consecutive sampling*
3. *Quota sampling*
4. *Judgmental sampling*
5. *Snowball sampling*” (Baker, et al., 2013).

Hence, on the basis of the types of non-probability sampling mentioned above, the type of sampling that is used in the thesis is a mix of convenience and judgemental sampling. With the help of convenience sampling, the participants are selected belonging to the age-group of 20-25 years through considering their ease of availability for the thesis. While, judgemental sampling is observed in the thesis with the help of which, certain predefined characteristics and aspects are considered and the participants are selected on the basis of the factor that they have been drinking beer since the last year atleast.

The participants are the people living in the Czech Republic and are in the age-group of 20-25 years. The people that are taken into consideration include the students studying in different universities along with other people who are living in the Czech Republic. The responses of the participants would help in determining the effect of different factors that

impact the consumer purchasing behaviour of beer across the Czech Republic. Hence, the judgemental sampling is carried in the thesis and with the help of it, data was collected from only those participants who were relevant to the subject taken into consideration.

## **4.2 Survey Questionnaire design**

The survey is developed with the help of a questionnaire that consists all the factors which are to be determined from the thesis. A survey questionnaire helps in developing a framework for setting up a survey and it consists of all the parameters that are to be obtained in the thesis. The research question as well as the research objectives are taken into consideration while developing a questionnaire for the survey (Burgess, 2001). There are different type of questions which are used in the formulation of a questionnaire. These are discussed in the section given below.

### 4.2.1 Type of questions

The different type of questions that are used in framing a survey questionnaire provide a measurement or evaluation of the responses provided by the respondents in the survey. The type of questions that are considered through the survey questionnaire in this thesis are provided below.

#### Open ended questions:

Open ended questions are those questions in the questionnaire whose answers are not provided in the form of options and the respondents have to manually enter their answer. This type of questions are generally questions that collect personal information like name and also those that obtain the personal feedback of the respondents.

#### Close ended questions:

Close ended questions are those questions where the opinion of the respondents about a specific product or service is obtained along with the general information of the respondents. It includes the questions that have answers from options that are predetermined. In this thesis, it includes parameters like the gender demographics, period of consuming beer, type and flavour of beer preferred, and aspect which needs to be improved by the Pilsner Urquell Beer Company in its beer. Hence, in the survey questionnaire provided in Appendix 2, the questions 1, 2, 3, 4 and 10 are close ended questions as per the criteria described above.

**Dichotomous questions:**

The dichotomous questions are those questions which have answers in the form of opinions provided through a yes or a no. It also includes a third option which is the neutral element. Using these type of questions in the thesis is observed for determining the opinion of the respondents about the taste of the Pilsner Urquell beer through question no. 5. It also includes determining the opinion about the availability of the Pilsner Urquell in the Czech market as obtained through question no. 8 in the survey questionnaire provided in Appendix 2.

**Rating questions:**

The questions which are formed for obtaining ratings about the intensity of the opinion of the respondents are termed as rating questions. They help in determining a specific opinion about the use of certain aspects of the product or service taken into consideration in a research. In the thesis, the rating questions are provided in question no 6 and question no. 8 in where the opinion of the respondents are obtained about the pricing of the beer and the impact of promotion of the beer on social media.

**4.2.2 Data Scaling**

Data Scaling refers to the plotting of the data that is collected with the help of different type of questions in a survey (Buja, et al., 2008). The data obtained in the form of responses from the participants include obtaining a scalable response which can be quantified for determining the impact of the factors taken into consideration in the thesis that affect the consumer purchasing behaviour of beer in the Czech Republic. Data Scaling is carried out through considering different factors that are provided below:

**Rank order Scaling:**

Rank Order Scaling refers to the collection of responses in ranking order so as to scale the ranking of the factors considered in the answer. In the questionnaire developed for the thesis, question no. 9 is scaled on the basis of rank order scaling as shown in Appendix 2. It aims at deriving the importance of the four factors that impact the consumer purchasing behaviour of beer in the Czech Republic through obtaining its ranking from among the participants who consume beer.

**Rating scale:**

Rating Scale involves obtaining the responses from the participants which is in the form of an agreement or disagreement. The intermediate stages agreement and disagreement are also considered through obtaining the intensity of the opinion of the respondents. In the survey questionnaire developed in the thesis, question no. 6 is scaled on the basis of rating scale.

**Differential scale:**

Differential scale refers to the scaling of responses through the usage or behavioural characteristics of the participants taken into consideration in the thesis. In the survey questionnaire provided in Appendix 2, question no. 8 is scaled on the basis of differential scale where the behavioural characteristics of the participants related to the consumption of beer after watching its promotion on social media is determined.

**4.3 Methodology of Data Evaluation**

The responses of the participants that are collected with the help of an online survey are analysed in section 5 and results are derived on the basis of discussion. The results are analysed through obtaining the mean of the responses and measuring the standard deviation from the mean for the collected responses showing the consumer purchasing behaviour of beer in the Czech Republic. The consumer purchasing behaviour of the people that are consuming beer is derived by evaluating the habits of young people across the country. The factors influencing this behaviour are determined along with its intensity.

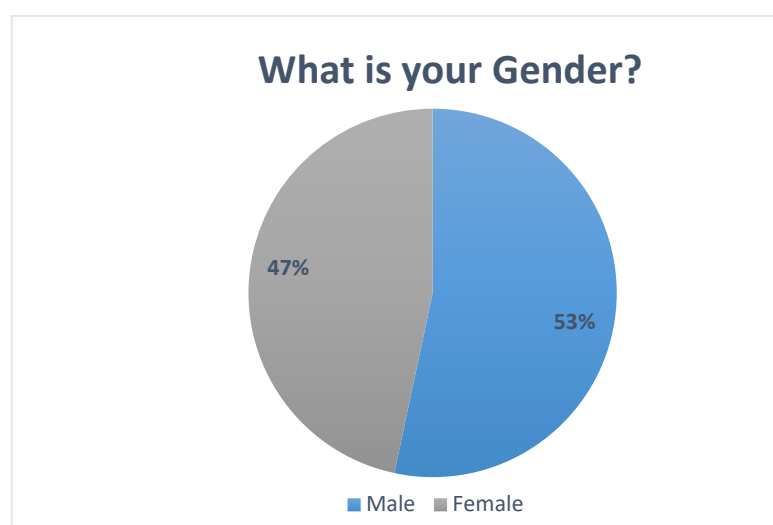
## 5. Results and Discussion

The data collected through the surveys from the people living in Czech Republic is then evaluated and analysed as per the aim of the thesis and the research objectives are attained through it. The factors that are identified through secondary research design by studying reports, journal articles and books related to the subject are evaluated with the help of primary research design carried through conducting online surveys among the people that are living in the Czech Republic.

### Gender Demographics:

Gender Demographics refers to the distribution of the participants on the basis of their gender. For carrying out any research, it is important to have equal number of participants from both the genders so as to ensure uniformity across the results derived with the help of the survey. The first question of the survey as shown in Appendix 2 helps in obtaining the Gender Demographics. The survey was filled online by about 170 participants who were the people living in Czech Republic and were between the age group of 20-25 years of age. The survey link was shared with 200 people and out of them 170 people filled the survey. Hence, 170 participants are considered in the research. The age group of 20-25 years is selected as they have consider both, taste and brand owing to their young age and dynamism. The result derived from the survey about the Gender Demographics is provided in the pie-chart given below:

Chart 1: Gender Demographics of the participants in the survey (pie-diagram)



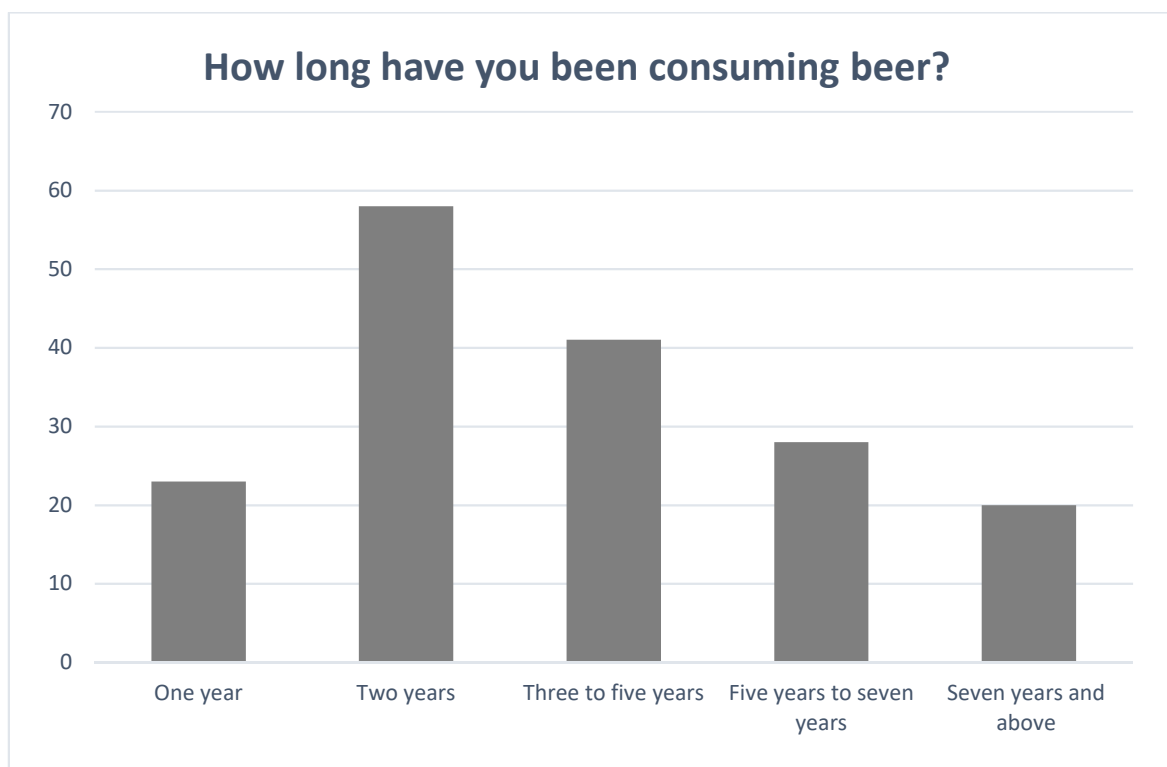
Source: Own Research (2017)

On the basis of the results derived in the pie-chart given above, it can be stated that there was almost an equal consideration from both the genders in the thesis. Out of the total 170 participants, 47% were female, that is, there were 83 females and the remaining 53% were males which constitutes 88 males. Hence, there was no bias in the collection of data in terms of the gender of the participants as seen through the results obtained through the survey.

**Consumption Time Demographics:**

The consumption demographics are determined through the question no. 2 provided in the survey. The time period for which the people living in the Czech Republic have been consuming beer is derived through this question across the survey and the results obtained is shown in the chart no. 2 provided below.

**Chart 2: Consumption Time Demographics**



Source: Own Research (2017)

On the basis of the data collected above, it is observed that a significant portion of the participants were drinking beer since the last two years. Beer consumers who are consuming beer over a different range of time period are considered in the thesis. About 35% of the participants were consuming beer since the last two years. Out of this, about 20% were females and the remaining males. While, almost an equal number of consumers of about

14% consumers were drinking beer since within the time range of last one year, five to seven years and for more than seven years respectively. About 25% were consuming beer since the last 3-5 years. Hence, the thesis is carried out through collecting data from different level of beer consumers and this ensures greater reliability across the data collected.

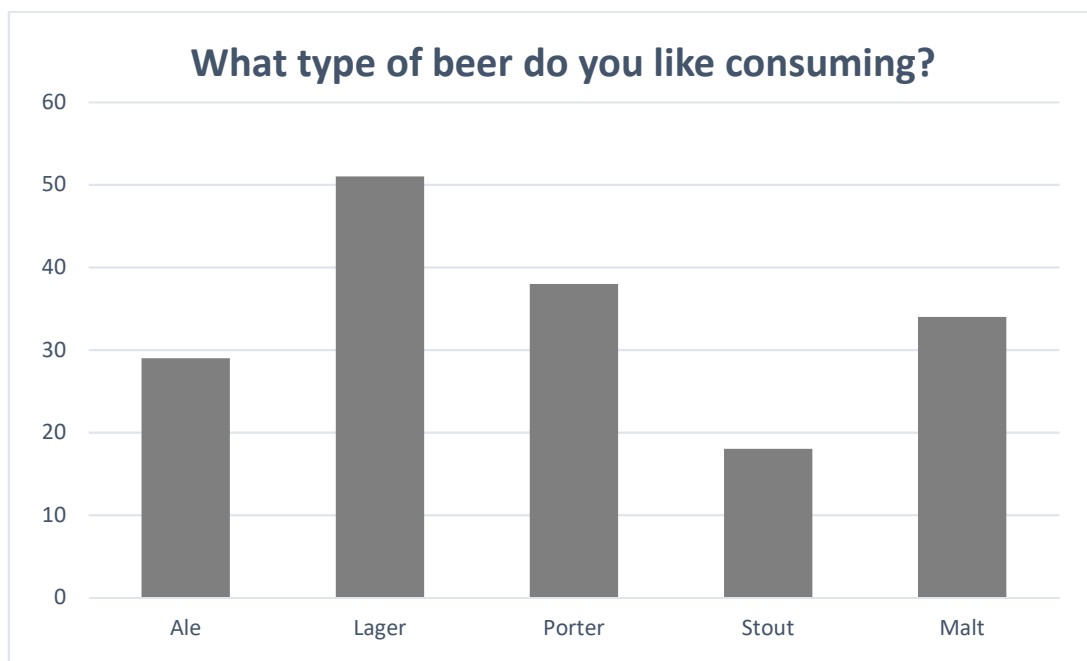
**Taste preference:**

The taste preference tends to be one of the most important factor that impacts the consumer purchasing behaviour across the beer industry in the Czech Republic. The thesis is carried out on the basis of determining different parameters that help in understanding the taste preference of the people living in the Czech Republic related to the consumption of beer. There are two parameters on the basis of which, the taste preference is derived for male and female. These parameters are described in the following sub-section.

Type of beer:

The preference of the people living in the Czech Republic in terms of the type of beer that they like to consume is derived through question no. 3 in the survey. It includes considering the five types of beer that were discussed in the literature review. Male and Female consumer behaviour related to the type of beer is also determined. The results collected related to this factor is provided in the following chart no. 3 given below.

**Chart 3: Taste Preference through the type of beer preferred for consumption**



Source: Own Research (2017)

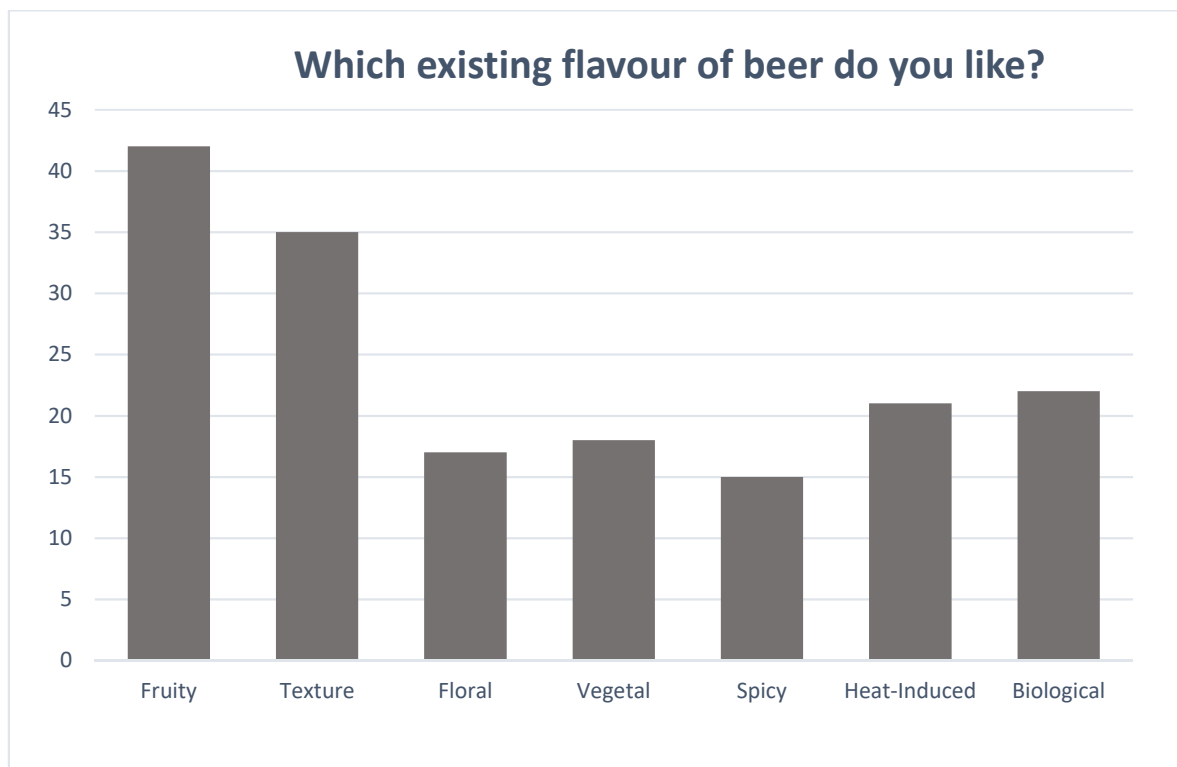


On the basis of the results obtained, it can be observed that the people in the Czech Republic that were considered as participants in the survey liked consuming Lager type of beer the most. About, 30% of the participants liked consuming Lager beer. Out of these 30% participants, 16% were males and 14% were females. While, about 22% of the participants liked consuming porter beer. Stout beer was preferred the least with only 10% of the people stated that they liked consuming it.

Flavour of beer:

Along with the type of beer, the flavour of beer is determined to obtain the taste preference of the people living in the Czech Republic. Seven different flavours of beer are considered as studied in the literature review section provided in section 3.1.2. The results that were obtained from the data collected is shown in the following chart no. 4 given below.

**Chart 4: Taste Preference through the flavour beer preferred for consumption in the Czech Republic**



Source: Own Research (2017)

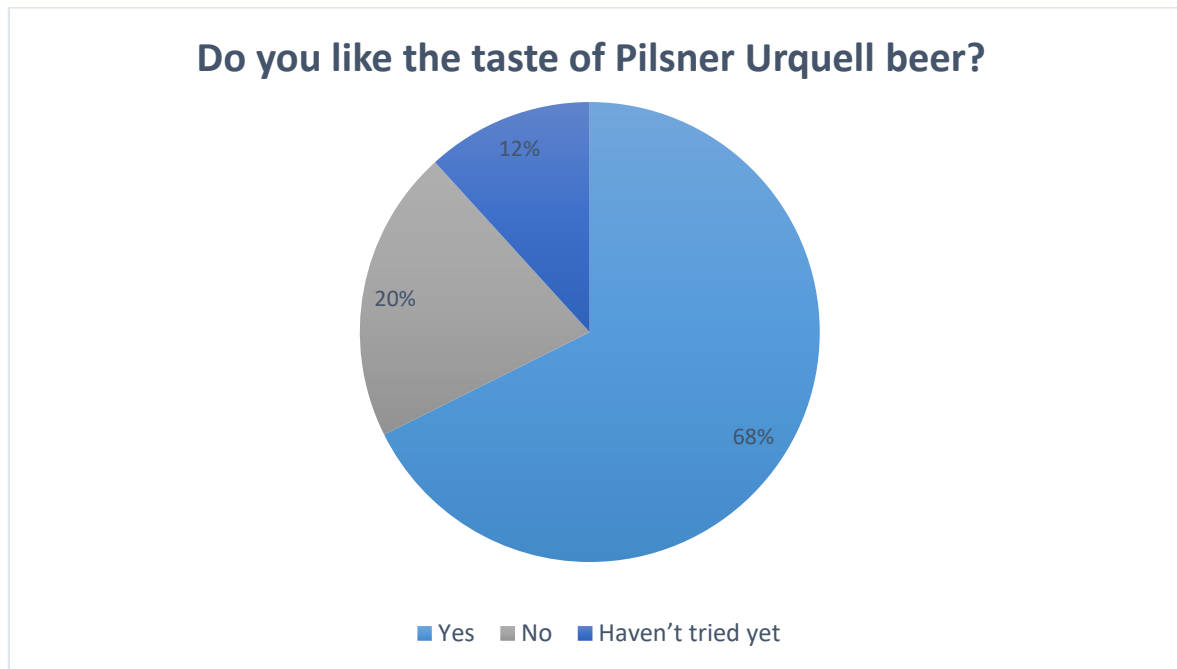
**Review of Pilsner Urquell Beer**

A review of the Pilsner Urquell Beer is carried out in the thesis through obtaining the opinion of the participants through which the data is collected in the thesis. Considering the taste, pricing and availability tends to be three most important factors that helps in deriving the consumer purchasing behaviour of the Pilsner Beer in the Czech Republic.

Taste of Pilsner Urquell Beer:

The taste of Pilsner Urquell Beer is determined with the help of question no. 5 in the survey. The participants were directly asked whether they liked the taste of Pilsner Urquell Company’s beer. The results that were collected about this factor is provided in the following chart no. 5 as shown below.

**Chart 5: Review of Pilsner Urquell Beer through the taste factor (pie-diagram)**



Source: Own Research (2017)

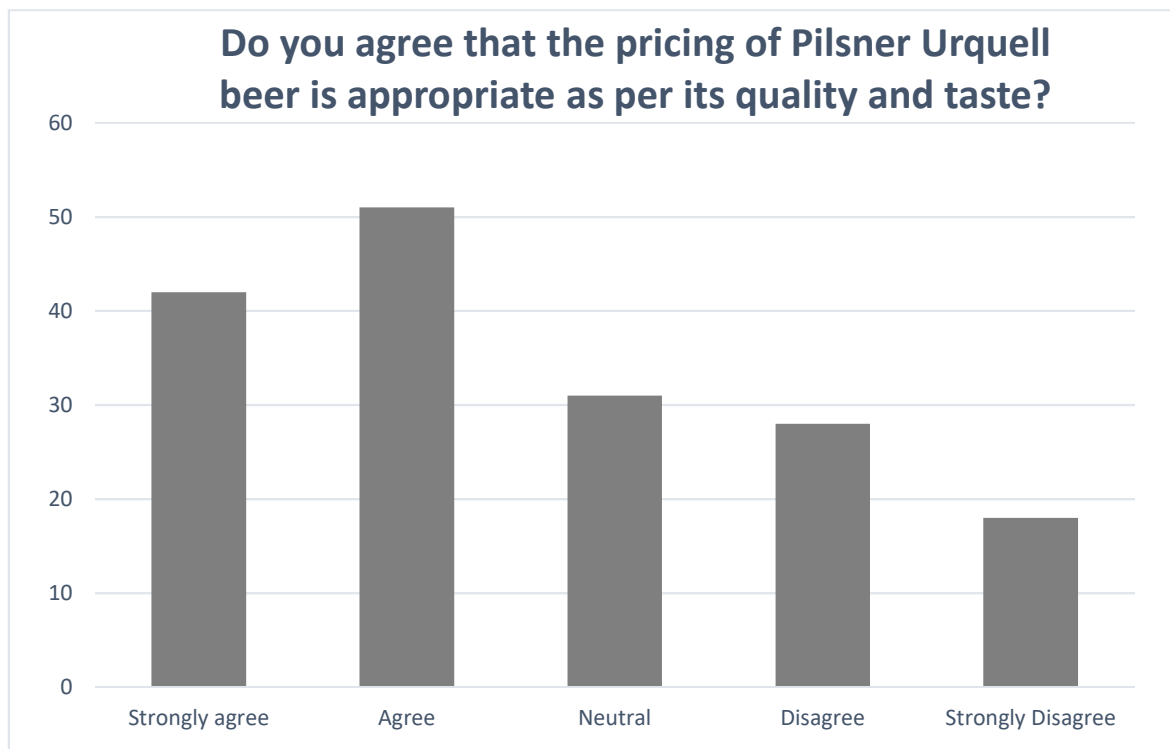
On the basis of the results shown in the above pie-diagram, about 68% of the participants stated that they liked the taste of the Pilsner Urquell Beer. Out of this, about 35% were males and 38% were females. While, about 20% stated that they did not like it. About 12% had not tried it ever among which about 9% were females and the remaining 3% were males. Hence, the results show that Pilsner Urquell Beer is liked by more than half of the population that consumes beer in the Czech Republic and is equally favourite among both the genders.

Pricing of Pilsner Urquell Beer:

After considering the taste factor, Pilsner Urquell Beer is reviewed through its pricing strategy adopted across the Czech Republic market. It is determined through question no. 6 in the survey as provided in the Appendix 2. The appropriateness of the pricing of the Pilsner Urquell Beer in the Czech Republic markets is derived and the results are shown in the chart

no. 6 as shown below. The pricing of the Pilsner Urquell Beer is derived by comparing its appropriateness with the quality and taste of beer provided by it.

Chart 6: Review of the Pilsner Urquell Beer through the pricing factor



Source: Own Research (2017)

The results derived about the above mentioned characteristic show that about 55% of the participants agreed or strongly agreed that the pricing was appropriate. Out of this 55%, 30% were males and 25% were females. About 18% were neutral on the pricing strategy of the Pilsner Urquell Beer, while, about 27% disagreed or strongly disagreed to the appropriateness of the pricing of its beer. Out of this, about, 18% were females and the remaining 9% were males. The results shown in chart no. 6 are evaluated and a mean and standard deviation is obtained through it which is shown in the table no. 10 provided below:

Table 10: Determination of mean and standard deviation through the pricing factor for Pilsner Urquell beer

| Responses          | Number of responses | Percentage |
|--------------------|---------------------|------------|
| Strongly agree     | 42                  | 25%        |
| Agree              | 51                  | 30%        |
| Neutral            | 31                  | 18%        |
| Disagree           | 28                  | 16%        |
| Strongly Disagree  | 18                  | 11%        |
| Mean               | 1.85                |            |
| Standard Deviation | 0.65                |            |

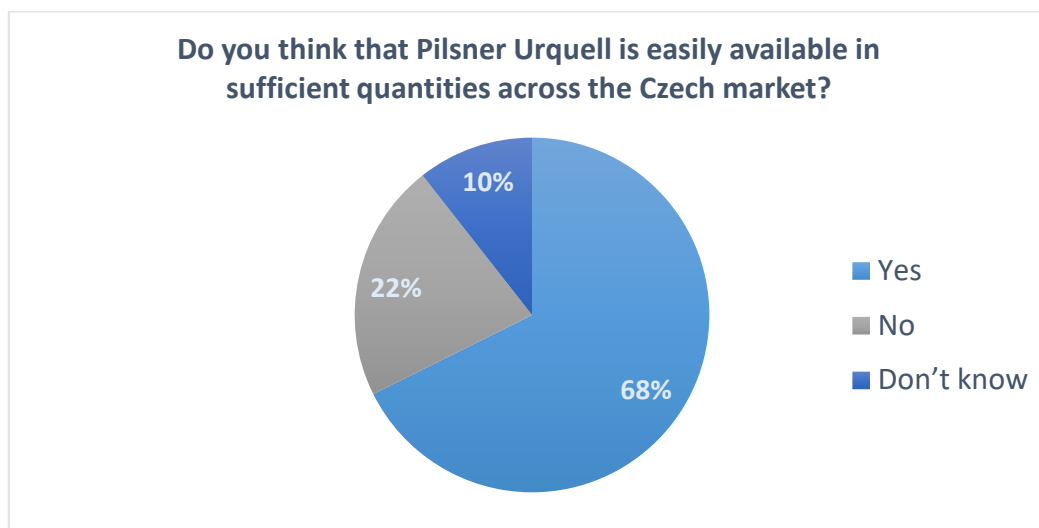
Source: Own Research (2017)

As shown in table no. 10, the standard deviation is only 0.65 and the mean of the responses is 1.85 which shows inclination of the responses towards the first two options in the question. Hence, it can be stated that majority of the participants found the pricing strategy of the Pilsner Urquell Beer to be appropriate as per its quality and taste.

Availability of Pilsner Urquell Beer:

The last factor in obtaining a review of the Pilsner Urquell Beer in the Czech Republic market is its availability in the market. It is derived with the help of question no. 7 as provided in the Appendix 2. The results that are derived related to obtaining the review of the Pilsner Urquell Beer in terms of its availability is shown in the chart no. 7 provided below.

**Chart 7: Review of the Pilsner Urquell Beer through the availability factor (pie-diagram)**



Source: Own Research (2017)

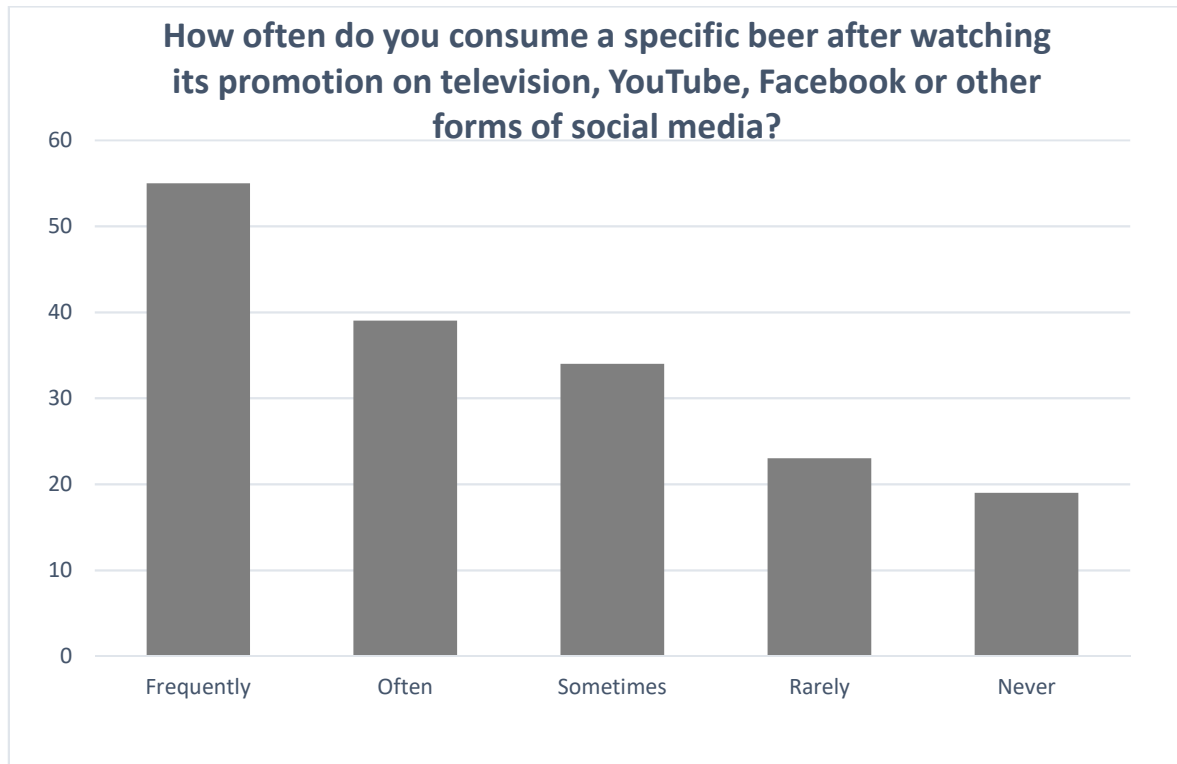
On the basis of the data collected and shown in the pie-diagram given above, it is observed that about 68% of the participants agreed to the ease of availability of the Pilsner Urquell beer in the markets of Czech Republic. While 22% denied stating that it is not easily available in the required quantities. While, 10% of the participants were neutral about its availability in the markets of Czech Republic.

**Impact of social media and promotions on consumption of beer:**

The impact of social media and promotions which is currently identified as one of the most important factor affecting the consumer purchasing behaviour across he beer industry in the Czech Republic as provided and discussed in the literature review section is

derived through collecting data from the participants about it. The impact of the social media is determined through obtaining the frequency of buying beer across the participants after watching its advertising or promotion on social media. It is obtained through question no. 8 in the survey and the results that are collected through it are provided in chart no. 8 shown below.

**Chart 8: Impact of online and social media promotions on the consumption of beer**



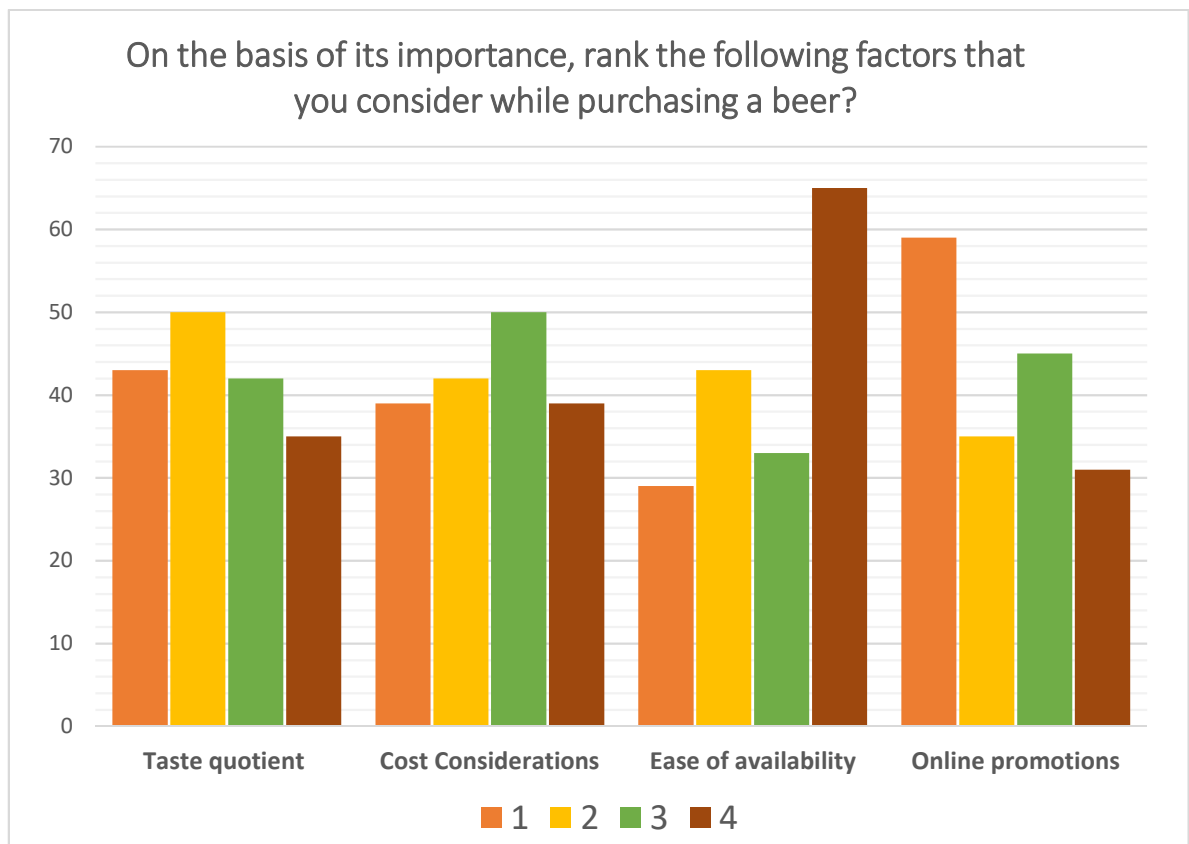
Source: Own Research (2017)

As seen in the chart, it is observed that about 55% of the participants frequently consumed beer after watching its promotion on television or other social media advertisements. About 39% stated that they often consumed beer after watching the promotion of beer and about 34% were neutral and they sometimes consumed beer after watching its advertisements and promotion on social media. While, about 23% stated that they rarely consumed beer after watching its promotion and about 19% stated that they were never attracted through the promotion of beer through social media and that they never consumed beer after watching its promotion.

**Factors considered by the consumers while purchasing a beer:**

The importance of different factors that affect the consumers while they are purchasing a beer are derived through the literature review as discussed in section 3.6. However, the intensity or magnitude of these factors is determined through question no. 9 in the survey. A ranking is obtained for the four factors that affect the consumer purchasing behaviour of the people in the Czech Republic and the results derived through the collection of data is shown in the chart no. 9 shown below.

**Chart 9: Ranking order evaluation of the four factors affecting consumer purchasing behaviour of beer**



Source: Own Research (2017)

On the basis of the results derived in the chart no. 9 as shown above, the first rank is provided by most of the participants to the online promotion of the beer as the most important criteria considered by them while purchasing a beer. The results derived in the chart no.9 are obtained from the table no. 11 as shown below:

Table 11: Evaluation of four factors affecting the consumer purchasing behaviour for beer

| Factors considered while purchasing beer | 1  | 2  | 3  | 4  | Total | Highest ranking |
|--|----|----|----|----|-------|-----------------|
| Taste quotient                           | 43 | 50 | 42 | 35 | 170   | <b>2</b>        |
| Cost Considerations                      | 39 | 42 | 50 | 39 | 170   | <b>3</b>        |
| Ease of availability                     | 29 | 43 | 33 | 65 | 170   | <b>4</b>        |
| Online promotions                        | 59 | 35 | 45 | 31 | 170   | <b>1</b>        |

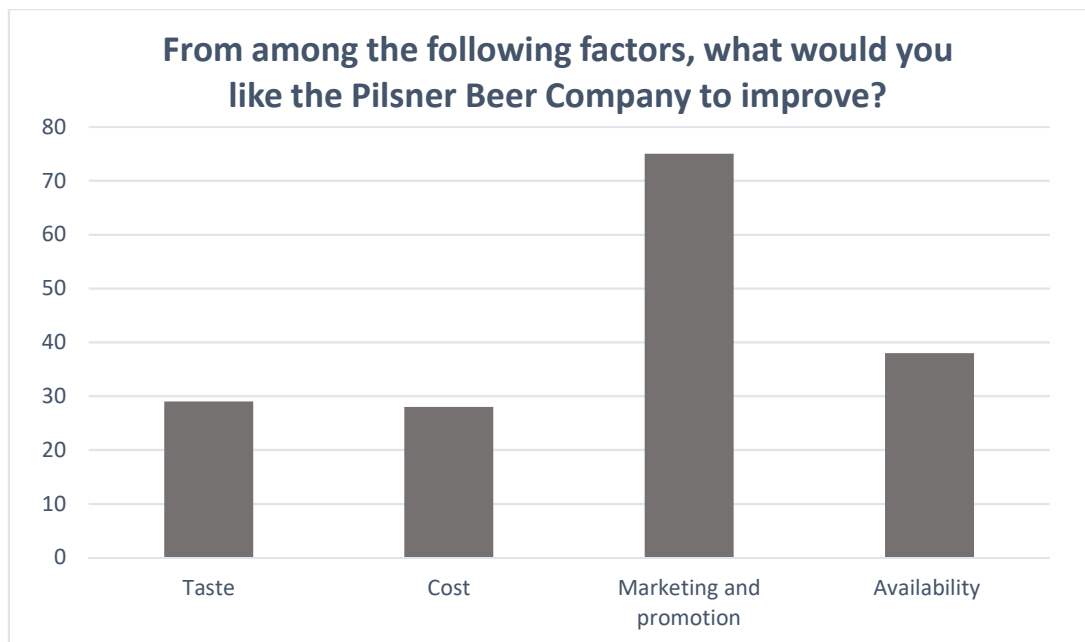
Source: Own Research (2017)

The highest ranking for each of the factor indicates the number of participants that have ranked the factor in that respective position. About 35% of the participants ranked the online promotions as the first factor that they consider while purchasing a beer. The factor which was ranked second was the taste quotient across the purchasing of beer. The factor that was ranked third was the cost considerations to be made at the time of purchasing a beer. The factor that was ranked the lowest was the ease of availability owing to the widespread availability of the beer in the Czech Republic.

#### **Suggestion for Pilsner Urquell Beer:**

The review of the Pilsner Urquell Beer was obtained through the above questions. In the last question, that is, question no. 10, a suggestion for improving the business carried by the Pilsner Urquell Company across the Czech Republic. Hence, the factors that are studied through the thesis are evaluated in the last question through obtaining the opinion of the participants for improving the business of the Pilsner Urquell Company. The results derived through this question are provided in chart no. 10 shown below.

Chart 10: Suggestion about the factor of improvement in Pilsner Urquell Beer



Source: Own Research (2017)

On the basis of the results derived, the marketing and promotion factor tends to be the most significant factor which the Pilsner Urquell Company needs to improve as per the responses of the participants.

### 5.1 Recommendations

Thus, the thesis is supported through carrying out analysis which helps in supporting the characteristics which are important to be considered for determining the consumer purchasing behaviour across the Czech Republic. The consumer purchasing behaviour of beer in the Czech Republic is studied in the thesis and the importance of different factors that impact the functioning of the Pilsner Urquell Beer Company’s products in the market are derived through the results section provided above. On the basis of it, suitable conclusions and recommendations are developed in the thesis. The consumer purchasing behaviour across the beer industry is determined through emphasizing on the role played by the different genders, age group and taste factor.

The online media that helps in promoting the product and creates a huge hype for the product along with an awareness in the market in which the product is launched. Hence, it is important for the Pilsner Urquell Beer Company to increase the awareness of its new products among the people living in the Czech Republic. There is a huge scope of utilizing



the pricing strategies as per the requirements of the people in the Czech Republic. For this purpose, Pilsner Urquell can provide different types of beers that not only provide different flavour and taste, but also, belong to different range of costs. There are better pricing and innovative social media promotion techniques to be developed by the Pilsner Urquell Beer Company for increasing its consumer base in the Czech Republic. The four factors that are impacting the consumer purchasing behaviour across the Czech Republic are to be considered for identifying the success of any company in the beer industry of the Czech Republic.

## **6. Conclusion**

Thus, on the basis of the data collected and results derived through it, the factors affecting the consumer purchasing behaviour of beer across the Czech Republic were determined in the thesis. The impact of the four factors which were identified through the secondary research is obtained through collecting primary data from the participants in the thesis. The review of the Pilsner Urquell Beer was obtained through observing the performance of different factors across the beer market in the Czech Republic.

At the same time, it also includes considering the research parameters that are important in determining the impact of these factors across the consumer purchasing behaviour of the people living in the Czech Republic pertaining to the beer industry. Since the participants were those people who have been consuming beer for at least one year, the data collected is authentic and is suitable for carrying out analysis. On the basis of the results derived, it can be concluded that recently the impact of the social media and online promotions tends to be one of the most significant factor affecting the consumer purchasing behaviour of the people while they are making the decision of purchasing a beer.

The huge scope of incorporating improvements in the quality, pricing and availability of the beer provided by the Pilsner Urquell Company is taken into consideration. On the basis of it, it is stated that the thesis has achieved its objectives through determining the role played by the identified factors on the development of a specific consumer purchasing behaviour across the beer industry in the Czech Republic. Considering the example of Pilsner Urquell Beer, it can be concluded that it needs to improve its costs and derive a better pricing strategy for satisfying the customers in the Czech Republic. They also need to increase their online and social media promotion across the Czech Republic to increase the brand awareness of the company and thereby, encourage more people to purchase Pilsner Urquell Beer.

Thus, the thesis objectives that were taken into consideration in the thesis are attained and the factors that affect the consumer purchasing behaviour of beer in the Czech Republic are derived considering the example of Pilsner Urquell Beer. Along with it, the impact of these factors and the need to improve the performance of the company through improvements in these factors are derived. It can be concluded that the beer industry in the Czech Republic is a blooming industry and Pilsner Urquell Beer Company holds a significant share in it. It has to retain its share through increasing the performance of the

factors that impact the selling of beer through adopting strategies for using the consumer purchasing behaviour of the people in the Czech Republic to increase its business.

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## 8. Appendices

### 8.1 List of Supplements

#### Appendix 1: Hypothesis

The diploma thesis involves deriving the factors that impact the consumer behaviour across the beer industry in the Czech Republic. It also includes obtaining the impact of these factors on the purchasing of beer across the country.

#### Appendix 2: Questionnaire

##### Introduction to the survey

Dear Respondents,

*“This is a survey regarding the consumer behaviour of beer among the people across The Czech Republic. The data and information that will be provided by you will be kept confidential and will not be disclosed to anyone or anywhere. Kindly fill in the questionnaire that is given below”:*

1. What is your Gender?
  - a. Male,
  - b. Female
2. How long have you been consuming beer?
  - a. One year,
  - b. Two years
  - c. Three to five years
  - d. Five years to seven years
  - e. Seven years and above



3. What type of beer do you like consuming?
  - a. Ale,
  - b. Lager,
  - c. Porter,
  - d. Stout,
  - e. Malt
  
4. Which existing flavour of beer do you like?
  - a. Fruity,
  - b. Texture,
  - c. Floral,
  - d. Vegetal,
  - e. Spicy,
  - f. Heat-Induced,
  - g. Biological
  
5. Do you like the taste of Pilsner Urquell beer?
  - a. Yes
  - b. No
  - c. Haven't tried yet.
  
6. Do you agree that the pricing of Pilsner Urquell beer is appropriate as per its quality and taste?
  - a. Strongly agree
  - b. Agree
  - c. Neutral
  - d. Disagree
  - e. Strongly Disagree

7. Do you think that Pilsner Urquell is easily available in sufficient quantities across the Czech market?
- a. Yes
  - b. No
  - c. Don't know
8. How often do you consume a specific beer after watching its promotion on television, YouTube, Facebook or other forms of social media?
- Frequently
  - Often
  - Sometimes,
  - Rarely,
  - Never
9. On the basis of its importance, rank the following factors that you consider while purchasing a beer?
- a. Taste Quotient
  - b. Cost Considerations
  - c. Ease of availability
  - d. Online promotions
10. From among the following factors, what would you like the Pilsner Beer Company to improve?
- a. Taste
  - b. Cost
  - c. Marketing and promotion
  - d. Availability