Micro brewing in Pilsen Region and Milwaukee

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Content

Introduction

This project is focused on micro brewing industry in Czech Republic, mainly Pilsen Region, and in the US, mainly Milwaukee County. It has several objectives which are firstly to analyze and compare the current trends on the beer markets in the Czech Republic and USA generally. Secondly will be analyzed and compared the current situation of the micro brewing in the both countries. As the last aim, is created the comparison between case studies of three microbreweries (two of Pilsen Region and one company of the Milwaukee County). The structure of this project ensues from the main aims and as well as two countries´ points of view.

To reach the objectives these methods are used the analysis of the available data regarding the beer market as a whole and micro brewing in particular in both countries – desk research. Also very important aspects of collecting data are personal visits of the four selected microbreweries and discussion with their founders/managers – field research.

Most of the beer consumed both in the Czech Republic and in the United States is brewed by the big industrial breweries, such as Pilsner Urquell based in Pilsen or Miller which operates in Milwaukee. Nevertheless, there are also some regional microbreweries, which offer various special beers or regional beers with "story." Micro brewing has been recently going through a boom in the Czech Republic and its popularity has been rising even in the US, according to the information provided by the Brewers Association of USA.

1. Micro brewing in the Pilsen Region

The development of micro brewing in the Pilsen Region followed the general Czech trend, which was determined by the political situation in this country. After WWII, all breweries in the Pilsen Region were gradually put under the control of the state and concentrated into several big state enterprises. This process was completed in year 1968, when all breweries of Pilsen Region belonged to the state enterprise Západočeské pivovary (Breweries of West Bohemia). The concentration of brewing then continued even in the frame of this enterprise – in 1968, this group consisted of 9 breweries while seventeen years later there remained only 6 of them, even though the volume of produced beer increased by about 87 %.[1] This structure then lasted until the Velvet Revolution, which means that there were no microbreweries in the Pilsen Region in 1989 (Chládek, 2007).

Nevertheless, despite the famous beer tradition of this region, the absence of microbreweries quite surprisingly lasted even during the most of nineties, when the first microbreweries were established in the other parts of the Czech Republic. According to Grochol, for example, in the period 1991 – 1995, 15 microbreweries were established in the Czech Republic, but none of them in Pilsen Region.

The first microbrewery in Pilsen Region ModráHvězda (Blue Star) was established in Dobřany, a small town approximately 10 km far from Pilsen, in 1998. Its initial business idea in fact copied the functioning of the comparable companies in the rest of Czech Republic. Firstly, it followed in the long brewing tradition in the Dobřany town, even the particular year of the establishment was chosen with regard to the fact that it was the 620th anniversary of the granting of brewing right to the town. Secondly, its main (or at least the most visible) differentiation tool

[1] The Pilsen region has actually been the largest beer producer in Czechoslovakia/Czech Republic during the whole post-WWII period (compare Grochol, 2011).

against the industrial breweries was the width of its product range - apart from the standard 10° light beer, which was the main product of the industrial breweries, the Modrá Hvězda started to offer several types of beer, which were rare in that time on the Czech market, such as the wheat beer and unfiltered beer.

Another microbrewery, U Rytíře Lochoty (Knight Lochota Restaurant and Brewery), was established three years ago, this time directly in the city of Pilsen. Nevertheless, it was the only one for another five years, which meant that there used to be only two microbreweries in the Pilsen Region in 2005, when there were already 49 microbreweries in the whole Czech Republic. What is more, these microbreweries formed only about 2% of the volume of craft beer brewed in the country (Grochol, 2011). Based on this fact we can conclude that the beginning of the micro brewing phenomenon was in the Pilsen Region compared to the rest of the country rather delayed. This fact can seem surprising, taking into account the general position of Pilsen Region in the Czech beer industry.

The main boom of micro brewing in the Pilsen Region started after 2005, when the phenomenon of establishing craft breweries took became more and more intensive in the whole Czech Republic. During the period from 2005 to 2010, six new microbreweries (from the total amount of 51 newly founded microbreweries in Czech Republic during this period) were established in the Pilsen Region. This growth has been continuing even until now, as seven new microbreweries have been established in this region since 2010. There are currently 15 microbreweries operating in the Pilsen Region, the total amount for the whole Czech Republic is about 200 (Deník, ekonomika, 2014)).[2] The actual state of micro brewing in the Pilsen Region is depicted in Table 1.

[2] Due to the spontaneous development of this industry it is hardly possible to find out the absolutely precise number of the microbreweries in the Czech Republic.

Note: As for the classification of particular beers we follow the labeling used by the producers of these beers themselves. The reason is that the division of beer into particular types is different according to the brewing theory and according to the Czech law. Therefore, we decided to use the terminology of particular breweries rather than to insist on some arbitrary (and questionable) general division.

Table 1 The list of microbreweries in the Pilsen Region

Name	Location	First historical record of brewing in the location, which the brewery refers to	(Re) established	Range of products	Number of products
Modrá Hvězda	Dobřany	1378	1998	Dobřanská desítka 10° light, Hospodář (Farmer) 11° wheat beer, Hvězda (Star) 12° pale ale, Hvězda 14° dark lager, Hořký (Bitter) 15° top fermented, Dragoun (Dragoon) 16° semi-dark lager, Sekáč (Reaper) 17° yeast beer, Anděl (Angel) 23° unfiltered special light beer	8
U Rytíře Lochoty	Pilsen	Refers to the general historical traditions of brewing in Pilsen	2001	12° yeast pale lager, 14° special pale lager	2
Kout	Kout na Šumavě	1736	2006	Koutská desítka 10° light, Koutská dvanáctka 12° pale lager, Koutský tmavý 14° dark, Koutský tmavý speciál 18° dark special beer	4
Belveder	Železná ruda	1787	2007	Belveder 11° light beer, Belgrad 12° semi-dark lager, Švejk 12° pale lager, Gradl 13° dark lager, Pašerák (Smuggler) 13° pale lager	5
Purkmistr	Pilsen	Refers to the general historical traditions of brewing in	2007	12° pale lager, 12° dark lager, 12° semi-dark lager, 12° wheat lager, 12° smoked lager, 12° blueberry special beer,	14

		Pilsen		12° ginger special beer, 12° sour cherry lager, 12° cannabis special beer, 12° vanilla special beer, 12° capuccino special beer, 12° fig special beer, 13° pale lager, Radní (Councillor) 14° amber semi-dark special beer	
Groll	Pilsen	Refers to the general historical traditions of brewing in Pilsen	2007	Lotr 11° light beer, Lotr 11° semi-dark beer, Lotr 12° pale lager, Kapr (Carp) 14° dark lager	4
Radouš	Šťáhlavy	1749	2008	Pilsner Ilgner 12° pale lager, Nový ležák 12° semi-dark lager, Radoush Stout 12°, Viliem Šejkspír variable beer, Dr. Čížek special herbal beer, Radoush I.P.A. Hardrock 16° top, fermented pale ale, Radoush I.P.A. tvrdá skála 14° top fermented pale ale, Radousch 11° light beer, Radoush Bock 14° semi-dark beer, 1810 Cider Beer	10
U Pašáka	Pilsen	Refers togeneral historical traditions of brewing in Pilsen		Pašák světlý 12° pale lager, Pašák tmavý 12° semi-dark lager,	2
U Stočesů	Rokycany	16th century	2011	Stočeská 11° pale lager, Patriot 12° pale lager, Řepiš 12° semi-dark lager, Hutník 12° dark lager, Weizengrimm 12° wheat beer	5

Source: Own

Let us first look at the product policy of the microbreweries in the Pilsen Region. As can be seen from the presented table, all of them except one offer some beer of Pilsner type (i. e. the bottom-fermented light beer) – either in the form of a 10° light beer or in the form of a 11° or a 12° lager – which is the far most common beer on the Czech market and which therefore forms the basic part of their range of products. The only exception is the Zhůřák brewery, which is concentrated exclusively on the production of American style top-fermented ales.[3]

At the same time these breweries usually offer a relatively wide range of special beers, which are inspired by the beer culture of foreign countries. Examples of such beers include wheat beers, which are typical for certain parts of Germany, stouts, which are usually brewed in England and Ireland or different types of ales. The only three breweries that do not permanently offer any special beers are U Pašáka, Radnice and Lyer. Nevertheless, the first two of them brew special beers on particular occasions, such as Easter, Christmas, etc.[4]In the Lyer case the current narrow range of products is caused by the fact that this brewery was established just about 4 months ago and there has been therefore not enough time to prepare another beer types than the fundamental one.[5]

The width of the range of products of the microbreweries in Pilsen Region is evident if we compare it to the number of beer types offered by the main industrial breweries on the Czech market. Just for the comparison, the biggest brewery group in the Czech Republic, Pilsner Urquell (which covers about 45 % of the Czech beer market), has 8 beer branches, but 5 of them (Pilsner Urquell, Gambrinus, Radegast, Klasik and Primus) offer only the Pilsner beer types, 1 (Velkopopovický kozel)

[3] Even its brew master is originally from the USA.

[4] This note is valid not only for these two breweries. Even the other ones usually prepare some special beers to various occasions.

[5] The brewery has already expressed the will to brew more types of beer in the near future.

offers in addition even dark lager and only the remaining two branches are the real special beers – Master with the 13° semi-dark and 18°dark lagers and Fénix, which is a flavored wheat beer. It is therefore clear that the width of the range of products is for the microbreweries in Pilsen Region the main differentiation tool against the industrial ones.

If we focus on the distribution channels used and markets targeted by the microbreweries in the Pilsen Region, their common characteristic is that they are mainly local-oriented, with only little or no attempts at all to sell their beer on other than regional market (except on some specific occasions like beer fests). It goes together with the fact that they are usually satisfied with their current size and do not express a desire to enlarge their production above the level of micro brewing. This conservatism is apparent even in the choice of distribution channels, where the microbreweries either do not fill their beer into bottles at all, or they use only manual filling for the purposes of selling bottled beer directly to the visitors of brewery. Their bottled beers cannot be found in the retail stores, though, and the microbreweries do not even intend to change this situation.[6]

The only important exception from this rule is the brewery Kout na Šumavě, which was established in 2006 with the initial plan to brew about 5 000 hl of beer per year, mainly for the local market. Nevertheless, the beer from Kout achieved larger than anticipated success on the market and even started to sell its beer in Prague and other Czech regions. The brewery began to export its products to many foreign countries like Denmark, Canada, Vietnam, Russia and United States. Thanks to these successes in the both Czech Republic and foreign countries, the Kout brewery reassessed its future plans in direction of the extensive development. Its capacity was enlarged up an annual production of 15 000 hl of beer and currently it is considering the

[6] Modern and currently very popular packages, like the small travel kegs or self-cooling kegs often offered by industrial breweries are by the microbreweries in Pilsen Region not used at all.

possibility of exporting beer even in the glass bottles. The capacity exceeding 10 000 hl per year means that the Kout brewery grew up into a standard (though still small) brewing company and it is literally not a microbrewery any more (which is also the reason why it is written in italics in Table 1).

So as to get the more detailed view of the micro brewing phenomenon in the Pilsen Region, in the following two subchapters are case studies of two chosen microbreweries – Purkmistr and Groll. Pieces of information presented in these studies were obtained by the method of expert interview. The main pillars of the interview were questions presented in chapter X. The research therefore concentrated on the initial and future plans of the microbreweries (especially regarding their product and distribution policy) and on their predictions of the development of micro brewing. As for the Purkmistr brewery, we asked the PR manager of this company as well as its brew master. The Groll brewery was represented directly by its current owner.

1.1. Case study 1 – Purkmistr brewery

Purkmistr (which is the old Czech word for major of a town) brewery was established in 2007, together with the Purkmistr Welness Hotel. As with most of the other microbreweries, even the Purkmistr builds on the historical tradition – its buildings, the origins of which can be traced to the beginnings of 17th century, used in this time to serve as a farm with its own pub, which is reminded both directly in the place and in the web presentation of the brewery.

The initial vision of the founders was to establish a small brewery with capacity about 1000 hl per year, with the possibility to enlarge it on the level 1500 hl/year in the future. About ninety percent of its production was supposed to be consumed directly in the restaurant and pub in the Purkmistr complex, the remaining ten percent was planned for the purposes of beer fests or specialized pubs.

The original production goal of 1000 hl per year was reached immediately and the capacity increase was realized in 2012. Most of the new capacity serves for the purposes of the beer spa, which was established in the Purkmistr in the same year when the production was increased. The whole capacity is almost completely used; there is only a small reserve for the purposes of some unscheduled demand. For the future the company plans to build another small brewery in the Purkmistr complex with the capacity of 500 hl per year. This smaller brewery should be used for the production of limited series of special beers, which are supposed to attract some new customers.

The brewery uses exclusively Czech resources – hops from Žatec region, malt from Moravia and yeast produced in Protivín. The prices of these resources depend on the current harvest; the long-term trend is nevertheless the increase of the prices.

Main pillars of the product range are the 12° lagers, which are supplemented by the various kinds of flavored beers. These beers are not initially brewed as the flavored ones, though, they are produced by adding the flavor into the already brewed pale lager. The reason for this technique is that brewing special batch for every flavor would be too demanding from the organizational point of view. Nevertheless, apart from these flavored beers the Purkmistr brews some special beers on various occasions (like the St. Patrick's Day, Easter etc.), where the natural way of brewing flavored beer (i. e. adding the resources during the brewing process) is used. The production of such special types should rise after building the second brewery.

Purkmistr's chief advantage in comparison to industrial breweries is the possibility to produce various types of beer, as industrial breweries have to concentrate on several main products with the stable taste and quality only. On the other hand, this advantage is closely connected with main disadvantage of microbreweries, which is according to Purkmistr is the great volume of human labor that is necessary for such production.

The industrial breweries with narrow range of products are able to employ more automation, which means lower unit costs and more stable quality.

The distribution of the brewed beer follows the initial plan as well. The vast majority of production is consumed directly in the Purkmistr complex. Beer supplied to special pubs and beer fests is filled in kegs. The Purkmistr brewery fills its beer also in the glass and plastic bottles, but does not supply them in retail, they are sold only in its own brewery shop. The reason why the bottled beer is not offered in any chain stores lies in the fact that the beer is unfiltered and unpasteurized. That is why it has to be transported and stored in the special conditions and its shelf life is relatively short. The possibility of expanding to retail (and even to pubs other regions and countries in bigger extent) is therefore rather limited. This is also the reason why these bottles are filled only manually and the brewery does not consider purchasing of any automatic machine for these purposes.

When asked about the development of the Czech beer market in last few years and about their estimation of such development for next 5 years, the representatives of Purkmistr concluded on the fact that last years have been really convenient for the development of microbreweries – while the general consumption of beer in the Czech Republic has been declining, the demand for the local special beers from microbreweries has been rising in the same time. Representatives of Purkmistr estimate that this expansion of the micro brewing sector in the Czech Republic is going to last for another approximately two years, until the total amount of microbreweries will have reached 300. This is according to Purkmistr the limit number of microbreweries, which can sustainably operate on the Czech market. If this is exceeded, the weaker companies will have to leave the market.

1.2. Case study 2 – Groll brewery

Groll brewery was established in Pilsen in the same year as Purkmistr. Another similarity is that this brewery was also established together with a brewery pub, restaurant and hotel. Again, referring to the brewing traditions plays important role in the identity and strategy of the Groll brewery – after all it is named after Josef Groll, the Bavarian brew master who brewed the first batch of the Pilsner type of beer in 1842. What is more, the very same technology like in 1842 is used by the Groll brewery nowadays – tiled stove serves as the source of heat, brewed beer is cooled by the replica of 160 years old cooler and the young beer ferments in traditional oak barrels. The Groll brewery claims to be the only company in the Czech Republic where the beer is currently brewed by this original technology, and this rarity plays important role in its marketing. Even the seat of the brewery is historical, the house was built in 18th century by the important Pilsner baroque architect Jakub Auguston. This fact is emphasized by Groll as well, which is another similarity to the Purkmistr brewery.

Even the vision of founders was quite similar to the first case study, as they wanted to create a microbrewery with the production of about 1000 hl per year, mainly for the purposes of their own hotel, pub and restaurant. This plan has been successfully fulfilled so far and nowadays the company plans to increase its capacity three times, on the 3000 hl yearly.

The range of products should remain the same even after this enlargement. In contrast with Purkmistr the Groll brewery is going to further develop its current beers rather than introduce completely new ones. This is due mainly to the organization reasons, as the implementation of some new beers into the production schedule would be too demanding. On the other hand, the existing beer branches are supposed to be brought on some new markets, as the newly produced additional volume is planned to be exported in foreign countries.[7] These exports, as well as every other supplies of Groll beers, are planned to be realized only in form of kegs delivered directly to the pubs. Offering bottled Groll beers in retail is hardly possible for the same reasons as in the case of Purkmistr – the beer is unpasteurized and unfiltered and its shelf life is therefore insufficient for the standard chain stores.

As for the resources used in the brewing, the hops are bought from Žatec region, like in case of Purkmistr. On the other hand, the malt is purchased partly from Germany and partly from Pislner Urquell. Even Groll faces the long term rising trend in prices of these resources.

As for the differences between micro brewing and the industrial breweries, the owner of Groll considers its main advantage to be the close link with the region and its handmade production. This fact guarantees that the brewery has and probably will have even in the future the stable group of consumers, for whom such attributes are important. Therefore, unlike the Purkmistr brewery, Groll does not consider the high demand for labor as a weakness, but on the contrary as one of its advantages. Actually, the owner of Groll did not mention any particular disadvantage of the micro brewing compared to the industrial breweries.

Despite this, the owner of Groll is in comparison with the representatives of Purkmistr not very optimistic regarding the future development of the micro brewing in the Czech Republic. According to her opinion this sector already reached its peak during years 2012 or 2013.[8] In the near future she estimates the decline of the number of microbreweries, because the long economic crisis has made people less willing to spend their money on relatively expensive beer from the microbreweries. She expects only the breweries that do not have large amounts of debt (i. e. the big amount of interest expenses) to survive,

[7] The owner refused to tell us to which countries should be the beer exported, as it is still in the phase of private.

[8] She was not absolutely sure of the concrete year.

and which are not based only on the selling of beer, but offer even some other services like accommodation.

2. Micro brewing in Milwaukee

2.1. The American Beer Market

The domestic beer market in the U.S. is highly concentrated, with the top four players holding 85.2% of the total market volume. Of the four major breweries in the U.S. market, Anheuser-Busch InBev is by far the largest, with a 50.1% share of the market's volume (Marketline, 2). SABMiller accounts for a further 17.4% of the market (Marketline, 12). Heineken N.V. and Molson Coors Brewing Company (MillerCoors LLC in the U.S.) account for the rest of this share of market volume. These companies are not always competitors, for instance, MillerCoors is a joint venture between SABMiller and Molson Coors Brewing Company (Marketline, 35).

Large breweries are those with an annual beer production over 6,000,000 barrels. Craft breweries can be Brewpubs, Microbreweries, or Regional Craft Breweries. The Brewers Association defines a Microbrewery as a brewery that produces less than 15,000 barrels (17,600 hectoliters) of beer per year with 75% or more of its beer sold off-site. A regional craft brewery, in contrast, is a brewery with an annual beer production of between 15,000 and 6,000,000 barrels.

Craft breweries hold a small market share as compared to mega breweries, but this share is growing rapidly. Craft breweries specialize in selling high-quality beer at premium prices, and rely on innovation and creativity to appeal to niche markets. The craft beer market in the U.S. is growing due to increasing consumer demand, but the increasing number of breweries competing for a relatively small share of the market will lead to an increase in the competitiveness of the industry in the coming years.

In 1910 the market share held by the four largest firms was only 10% (Carroll and Swaminathan, 718). In 1920, there were 1,300 breweries operating in the U.S. However, the 18th Amendment to the Constitution, which enacted prohibition of alcohol, nearly destroyed the beer brewing industry in the United States. When prohibition was repealed 13 years later in 1933 by the 21st Amendment, there were less than three-dozen breweries in the United States (Clemons, Gao, and Hitt, 156).

Craft beer production essentially disappeared after WWII. Between 1950 and 2000, the four-firm producer-concentration ratio for beer increased from 22 to 95 (Adams, 189). The failure of craft breweries to regain their pre-prohibition share of the beer market can be attributed partially to economic realities, particularly barriers to entry to the beer market. In the U.S., scale-augmenting technological changes, which enabled the automation of brewing and the acceleration of packaging, boosted concentration substantially (Adams, 200).The development of refrigeration eliminated a barrier to centralized mass production, since beers could be stored and shipped over great distances, and helped to increase the four-firm producer-concentration ratio (Clemons et al., 156).National breweries enjoyed an advantage in television advertising since craft breweries typically do not have significant advertising budgets. In sum, the barriers to entry present in the American beer market for the majority of the 20th Century, such as economies of scale, production differentiation, and advertising costs, enabled the national breweries to expand at the expense of local and regional breweries (Carroll and Swaminathan, 716).

The craft brewing industry began slowly recovering in the mid-1980s (Adams, 199). Annual volume growth in the micro brewing industry was high in the early-to-mid-90s, with a peak of 58% in 1995 (Brewers Association). In 1983, there were only 43 total breweries in the United States but by 1999, that number had risen to 1,414 (Carroll and

Swaminathan, 716). This increase can be attributed to a massive rise in the number microbreweries during this time. Slower growth occurred between 1997 and 2003, until the industry hit annual growth rates of between 6 and 12% annually every year between 2004 and 2008. Currently, as of June 2013, there are 2,538 total breweries operating in the U.S., with 2,483 of that number being craft breweries. Although craft brewers constituted only 4% of U.S. beer sales in 2008, there are currently more the 1,500 new breweries in development as of June 2013 (Brewers Association).

Mass brewers differentiate their product primarily through advertising, whereas craft brewers rely on raw materials to differentiate their product (Adams, 199).Niche markets exist for beers brewed for consumers with specific preferences relating to taste (e.g., bitterness, "hoppiness," malt flavor), as well as color, foam, ingredients, fresh- ness, alcohol level, and serving temperature (Carroll and Swaminathan, 725). The Internet allows craft beer consumers to more easily share information about highly differentiated craft beers, which could contribute to the growing demand for craft beers. This is diluting the advertising advantage of national breweries. Using data from Ratebeer.com between 2000 and 2004, the analysis from Clemons et al. suggests a correlation between sales growth and high-end consumer ratings (168).

Distribution also constitutes a major barrier to entry for microbreweries. Large, industrial breweries have retail chains through which they can easily sell and distribute their product, whereas craft breweries must rely on local distribution networks. Smaller-scale brewers have trouble attracting and retaining distributors owing to the high level of concentration in the American beer market. Some craft breweries have avoided this problem through limited mergers with their larger, industrial counterparts. For instance, Redhook is a microbrewery based in Seattle that performs its own brewing, packing, and promotion. However, 25 percent of the brewery was sold to Anheuser Busch in order to take advantage of the larger companies superior distribution network (Adams, 198).

Milwaukee

Milwaukee has always been a center of beer-related activity. In the 1960s Milwaukee was home to four of the ten largest breweries in the country; Blatz, Pabst, Schlitz & Miller Brewing Companies**.** The city is currently feeling the effects of the national explosion in craft brewing. Seven new craft breweries opened in Milwaukee in late 2013. The number of craft breweries in the city is currently in the mid-20s (depending on if one differentiates between craft and regional breweries, or counts brewpubs) (Flanigan).

2.3. Case Study-Lakefront Brewery

Lakefront Brewery was established in 1987 by two brothers, and has been at its current location since 1997. The company's vision and plans have changed in response to growth within the company, and in the craft brewing industry in general. It currently bottles around 40,500 barrels of beer annually, which makes it a Regional Craft Brewery rather than a Microbrewery. The number of products offered by Lakefront varies; there are 10 year-round lager and ales, as well as season beers and the "My Turn" series products.

In comparison with large breweries, Lakefront has several advantages. Creativity and innovation are encouraged at Lakefront Brewery. This is exemplified by the "My Turn" series, a program that allows employees to create their own type of beer. The ability of every employee to get personally involved with the brewing process, as well as the small scale of operations, lends itself to creating a sense of communal ownership amongst employees.

Lakefront also faces several challenges in comparison with large breweries. As with many craft breweries, distribution of the product is problematic. Employees have at times personally delivered kegs to bars. Additionally, Lakefront suffers from a lack of capital in comparison with large, industrial breweries. This disadvantage is becoming even more pronounced given the rising production costs faced by Microbreweries today.

Lakefront sets targets based on the amount of beer produced. Right now, demand for Lakefront's product is high. Lack of productive capacity, rather than lack of consumer demand, is the factor that is preventing further sales. As such, Lakefront Brewery has recently purchased land in Menomonee Falls, WI that it intends to use for a new brewing facility.

Prices for the raw materials used by Lakefront generally tend to remain constant throughout the year, since these products can be harvested year-round and stored for some time, for example pelletized hops. Raw materials are purchased locally when possible, and are always from within the United States. The prices of certain inputs are subject to change owing to changes in supply and demand. For instance, the popular Citra hops, used in India Pale Ales, and other types of boutique hops and become quite expensive owing to high demand.Suppliers include; Whitelabs (CA) for yeast, Hopunion for hops, and Briess-Cargill/MaltUrop for grains.

Given the low overhead required to open a new microbrewery as well as the increasing demand for craft beers, Lakefront expects to face increasing competition from even more microbreweries in the next 5 years. These high numbers of newly opening breweries will be competing with already existing breweries for a relatively small share of the beer market in an environment in which production costs are steadily rising, which could potentially lead to a Craft Beer Bubble.Continued creativity and innovation will be essential to Lakefront's continued survival in the market. New products, such as the high-selling gluten-free Beer, exemplify this.

2.3.1. Results of the case study

The craft beer industry in the United States has grown considerably since the mid-1980s, although it still occupies only a small portion of the market. Current barriers to entry in this market include the capital outlay on large- scale production plants and the need to establish reliable supplies from multiple third-party hop and barley grower (Marketline, 19). The US Beer market in total has experienced only marginal growth from 2009 to 2012, and is expected to continue growing modestly until 2017 (Marketline, 7). This minimal growth, in tandem with low start-up costs and the already-small share market share of craft breweries, should result in increased competition in this industry in the years to come. These breweries will need to rely more heavily than ever on innovation and creativity to create highly differentiated products that will appeal to a limited number of consumers.

Note: This table is not comprehensive. It surveys several area breweries, which can then be compared with the findings of table 1.

Table 2 A survey of microbreweries in the Milwaukee Region

Name	Location	Established	Number and range of products
Lakefront Brewery	Riverwest	1987	11 year round (ales and lagers), 10 seasonal, “my turn” series
Milwaukee Brewing Co.	2nd Street (Near Third Ward)	1997	6 year round (Outboard-Cream Ale, Hop Happy-IPA, Polish Moon-Milk Stout, Booyah-Ale, Louie’s Demise-Amber Ale, Pull Chain-Pale Ale), 6 seasonal, 2 hops-in-legend series
Sprecher Brewing Co.	.Glendale	1985	6 year round (Hefe Weiss, Black Bavarian, Pub Ale, Special Ale, Light, Stout), 4 seasonal, 5 premium reserve, 5 limited release, 4 session series, 2 gluten-free
Water Street Brewery	Water Street	1987	10 currently-Honey Lager Light, Bavarian Weiss, Raspberry Weiss, Maibock, Ginger Pale Ale, IPA, Victory Amber, Octoberfest, Dopplebock, Black IPA
Silver Creek Brew Company	Cedarburg	1999	5 year round (Blonde Root Beer, Pacific Coast Lager, Hefe-Weiss, IPA, Porter), 3 seasonal (Imperial Mai-bock, Ocktoberfest, Vintage Ale)

Buffalo Water Brewing Company	Third Ward	2007	1-Buffalo Bison Lager

3. Conclusion

As explained in the main part of the project, the development of American and Czech micro-brewing sector has been quite similar so far. Probably the most significant difference is the fact that the rise of the microbreweries in the Czech Republic was in comparison with the United States about one decade delayed, which was mainly caused by the Czech political reality of eighties and early nineties of the twentieth century.

Much more similarities can be found, though, especially on the field of business strategy. Both the Czech and the American craft breweries try to find their place in the market using the strategy of differentiation. Their first way to express their difference against the large industrial breweries is offering the wide range of products. In comparison with the large breweries, which usually focus mainly on one (in case of the Czech Republic) or several (in case of the American breweries) main beer brands, typical microbrewery produces not only wider range of beer types all year round, but brews also lots of special batches to the various occasions, such as Christmas, Eastern, St. Patrick Day etc. Microbreweries also often focus on types of beer, which are rather uncommon on the particular market – in the Pilsen Region there is for example craft brewery which concentrates on the American pale ale beer types, while in the Milwaukee County there are microbreweries offering typical Bavarian beers. These microbreweries try to attract the customers by something exotic and occupy possible niches in the range of products of the large brewing groups.

Least but not least, the micro-brewing sectors in both countries are similar not only in present time. The craft brewers in the Pilsen Region and Milwaukee County forecast even the future development of their businesses very similarly. After the years of steady increase, representatives of microbreweries in both states expect the termination of this positive trend during the upcoming years. The craft beer markets in discussed countries are believed to be saturated and its consumption is supposed to decline in the following period. According to the general development of the beer markets in both countries, these predictions seem to be reasonable. But, in spite of this fact all craft brewers asked within our research remain optimistic, believing that their enterprises are strong enough to survive the future hard times.

List of tables

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