2016

Craft Beer Expansion in the United States

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The Craft Beer Expansion in the United States

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FOR

SENIOR THESIS

FALL 2015

NOVEMBER 30, 2015

Table of Contents

Abstract

For centuries the world's biggest breweries, including Anheuser-Busch InBev and MillerCoors, have been producing America's favorite beers like Budweiser and Coors Light. However, more recently smaller, craft breweries have seen significant expansion as a growing number of Americans are drinking craft beers. How has this recent trend affected the beer market in the United States? More specifically, how has the recent success of craft breweries affected Anheuser-Busch InBev and MillerCoors? I examine the economic factors that have led to craft beer's success in a highly competitive market, and further, how this success has impacted Anheuser-Busch InBev and MillerCoors. My study reveals that the premier quality of craft beer has distinctively separated itself from the traditional American lagers, like Coors and Bud Light. Furthermore, as the United States has experienced economic growth, more and more Americans are choosing craft beers over these American lagers. In final, I examine and explain Anheuser-Busch InBev and MillerCoors' recent multi-billion dollar investments into the craft beer industry.

I. Introduction

The United States beer industry has a rich history littered with household names like Budweiser, Miller, and Coors. These names have come to represent the roots of American brewery tradition. And for those who fancy themselves ‘beer connoisseurs’, craft breweries have always offered beers with more flavor and taste than the traditional Bud Light or Coors Light (See Figure 1 for list of beer industry definitions). Recently, the craft beer industry has emerged to quickly become the fastest growing segment of the beer industry for the past two decades[1]. The growing popularity of these specialized products has ignited an emerging customer market throughout the United States. As portions of the U.S. beer consumer population began to acquire the taste for these craft beers, many became captivated and began seeking a wider variety of craft beers. The revolution of the beer consumer has caused a chain reaction affecting the way grocery stores, liquor stores and bars think all around the nation. Grocery and liquor stores have expanded their alcohol sections and begun to carry local beers, while bars and pubs have started to rotate their draft beers in an attempt to satisfy all customers’ demands. This revolution in beer consumption has changed the shape of the beer industry in the United States.

[1] Watson, Bart. "Brewers Association | Promoting Independent Craft Brewers." *Brewers Association*. N.p., n.d. Web. 05 Oct. 2015.

This combination of a rapidly growing craft beer industry and a plateauing, or even declining, U.S. non-craft beer industry has brought to the surface many questions about how the two will coexist in the United States beer market. The purpose of this study is to investigate the effect that the growing popularity of the craft beer industry has had on the large brewing companies in the United States, particularly Anheuser-Busch InBev (AB InBev) and MillerCoors. Additionally, this paper will forecast how this rivalry between craft beer and non-craft beer segments will affect the way the beer market in the U.S. looks in the future.

This paper proceeds in the following order. The conclusion of section I present a brief history of the beer industry in the United States as well as a literature review of previous studies on relevant topics. Section II offers economic theories that are relevant in explaining the success of craft breweries in an industry previously dominated by American lagers. I will examine how MillerCoors and AB InBev have responded to the craft industry's sustained growth in section III. Section IV will forecast how this relationship will affect the overall beer market in the near future. Finally, section V will provide a summary and conclusion along with a discussion of the further studies that can be done on this topic.

History of the Beer Industry in the United States

Before congress passed the Prohibition act (the 18th Amendment) in 1920, beer was primarily produced and consumed locally in the United States. The beer industry was widely popular in the early 1900s and consisted of over 1,300 breweries that produced approximately 57.4 million barrels annually. In the 13 years which ensued between the implementation of the 18th Amendment and the 21st Amendment repealing prohibition, the number of brewers in the United States had dwindled to less than three dozen. The 21st Amendment was met with a large demand for beer due to a lack in capacity from the remaining breweries[2].

This immense unmet demand sparked a race for economies of scale[3] in the quality production of largely undifferentiated products[4]. In order to meet this demand, breweries began producing beer as quickly and cost effectively as possible. This efficient production resulted in an increase in the number of substitute products manufactured by breweries across the United States. The invention of refrigeration was revolutionary in beer production, making it possible to easily ship products long distances. This change in transportation opened the door for centralized mass production[5]. As larger firms were able to take advantage of the economies of scale, they were also able to produce beer at the lowest prices and push competitors without the ability to manufacture at these low prices out of the market[6]. Additionally due to brewers newfound ability to transport products efficiently, those who produced beer at the cheapest prices, set a minimum efficient scale (MES) that had to be met by all brewers nationwide to avoid being pushed out of the market place[7]. As inefficient breweries were forced to exit the market, they

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[2] Clemons, Eric K., Guodong Gao, and Lorin M. Hitt. "When Online Reviews Meet Hyperdifferentiatation: A Study of the Craft Beer Industry." *Journal of Management Information Systems* 23.2 (2006): 149-71. Web. 06 Nov. 2015. 156

[3] Cost advantages firms obtain with growing size, output or scale of operation, resulting in cost per unit output decreasing.

[4] Clemons, Gao, and Lorin, 156.

[5] Clemons, Gao, and Lorin, 156.

[6] Lynk, William J. "Interpreting Rising Concentration: The Case of Beer." *The Journal of Business* 1st ser. 57.1 (1984): 43-55. Web. 07 Nov. 2015. 45.

[7]Lynk, 45.

were engulfed by breweries that were able to meet the MES. This process of acquiring failing firms allowed the successful, or most efficient, firms to use the assets of the failing firms. This further enabled successful firms to cheaply expand their operations and continue to take advantage of economies of scale. This strategy decreases average cost and results in an increase of the minimum efficient scale[8]. This circular effect resulted in an accelerated repeating cycle of increasing the MES, which led to the acquisition of inefficient firms. Therefore economies of scale increased, which again resulted in an increase in the MES and so on and so forth[9]. Also, the largest breweries began to engage in huge advertising campaigns, abled by the advent of national television, in fights for market superiority, which contributed to increases in fixed costs that many brewers couldn't afford, and thus were forced out of the market[10].

In 1950 the minimum efficient scale for a brewery was defined by an annual production of 100,000 barrels. By 2000, due to the severe concentration in the market, the necessary annual production to reach MES was 18 million barrels, or nearly 9.9% of the total market share[11]. This concentration went unopposed by consumers because as the market became increasingly concentrated, big brewers were able to pass on their efficiencies to consumers, successfully lowering the real price of beer by 11% from 1960 to 1970, and another 19% from 1970 to 1980[12]. This war of attrition continued until the

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[8] Tremblay, Victor J., and Carol Horton. Tremblay. *The U.S. Brewing Industry: Data and Economic Analysis*. Cambridge, MA: MIT, 2005. Print. 201-202.

[9] Rojas, Christian. "Price Competition in U.S. Brewing." *The Journal of Industrial Economics* 56.1 (2008): 1-31. Web. 05 Nov. 2015. 4.

[10] Tremblay and Trembaly, 277.

[11] Lynk, 46

[12] Lynk, 52

largest three breweries (Miller, Coors and Anheuser-Busch) produced almost 85% of the beer consumed in the United States[13].

While striving to take full advantage of increasing economies of scale, domestic beer became light, tasteless and uniform. However, continued economic prosperity in the U.S. contributed to an increase in the demand for a wider variety of beers[14]. Then, along came Fritz Maytag, who bought the San Francisco based brewery, Anchor Brewing Company in 1965. Maytag began producing more full-bodied and complex beer that spurred great interest from consumers. By 1975 Anchor Brewing had reached sales of 7,500 barrels a year and after just 7 years, sales were at 28,000 barrels annually. Maytag spurred a craft brewing revolution, and in no time the I-5 corridor from San Francisco to Seattle was littered with craft breweries[15]. By the end of 1982 there were only 75 craft breweries in the US. 16 years later, in 1998, there were 1,074 and by 2014 the number of craft breweries in the United States had reached 3,418.[16].

Literature Review

Tremblay and Tremblay (2005) conducted a study to investigate the change in the United States beer industry from the Prohibition era to its current state. They found that the beer market became heavily concentrated due to severe efficiencies captured through mergers and acquisitions of failing firms. Additionally they found that breweries

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[13] Clemons, Gao, and Lorin, 156.
[14] Tremblay and Tremblay, 107.
[15] Tremblay and Tremblay, 115-116.
[16] Watson, "Brewers Association | Promoting Independent Craft Brewers."

continued to strive to increase the minimum efficient scale. Those unable to meet the MES were ultimately forced out of the market. Tremblay and Tremblay go on to explain that as each of these breweries continued to grow, advertising became more important in order for breweries to convince customers their product was superior to their competitors, despite the fact that the products continued to be highly undifferentiated. Later in the book they explain how overall economic growth and stability in the U.S. in the 1980s contributed to changes in demand, specifically an increase in demand for a wider variety and higher quality of beer. Also, they explain how certain laws and taxes were able to stimulate the growth of the craft beer industry. Specifically, the increase of the excise tax in 1977 and 1991 for the largest brewers and the legalization of home brewing in 1979 propelled craft beer success. However, the paper does end by predicting that the craft beer industry may one day be able to capture 5% of all beer sales and by 2014 this number was already up to 11%.

A study by Carroll and Swaminathan (2000) investigates the success of microbreweries in a market dominated by mass-production breweries. They apply the resource partitioning theory to the beer industry in the US. During the study they reveal that large generalist-firms aim to capture the majority of a consumer base through price competition, and these organizations fight for the largest share of consumer resources. Since everyone strives to capture the largest portion of the market place, those producing general beers face the toughest competition. In competing for the largest market segment, the generalists fail to capture small segments of the market that require higher costs. However, it is most likely not worth the excessive costs to capture minimal additional market share. These niches are filled by specialists firms who produce a higher quality product which appeals to a smaller portion of the consumer population. In the end, they find that generalists, or mass-producing breweries, are targeting a heterogeneous segment of the market, while craft breweries, choose to target homogeneous segments. Later in the study, Carroll and Swaminathan explain that instead of aiming to capture specialists' market segments, which would be inefficient due to a lack of experience, generalists form alliances with craft breweries in order to capture these small market segments. They support this argument with a comparison to the airline industry, where large companies (ie. United Airlines) align with smaller passenger service airlines (ie. United Express) to capture peripheral markets.

Swann (2012) explores the transformation of the English brewing industry from 1900-2004. From 1900-1970 the beer market experienced high concentration, followed by a period of horizontal dispersion from 1970-2004. Swann credits the concentration of the beer market to four different factors. First being the large economies of scale that were found in the production, purchasing, distribution, advertising and marketing steps of the process. However, breweries were only able to take advantage of these efficiencies because of improved transportation through railways (2) and scientific advancements that allowed for beer to be stored in a keg which prevented it from going bad (3). And fourth, the presence of so-called Galbraith consumers, consumers whose tastes and buying behavior are receptive to advertising and marketing which allowed them to be influenced by large breweries. Next, from 1970-2004, there was a resurgence of small breweries throughout the country in the beer market. This resurgence followed the formation of a consumer pressure group, CAMRA (Campaign for Real Ale), who advocated for an increase in the variety of beers produced by the large breweries. Due to a lack of economies of scope[17] within the large breweries at the time, they were unable to capture these new unmet demands. Swann goes on to explain that economies of scope in the brewing process are often only found in advertising, marketing and distribution, yet not in production. This created a window in the market for craft breweries to step in and meet those demands for an increase in varieties of beer.

Similar to Swann's study, Milne and Tufts (1993) focus on the success of Canadian microbreweries. They begin by illustrating that market saturation, rapidly changing consumer demand, and intensified competitive pressures that destroyed the 'Fordist' model. The Fordist model labels a market that exemplifies the dominance of large vertically integrated companies that produce similar products. The replacement model describes a more competitive environment with increased stress on innovation and the quality of products. Also, this new model produces an advantage for the small firms who are able to quickly react to abrupt changes in consumer demand. As a response to these market shifts, large breweries focused on becoming even more efficient through improving technologies, restructuring the company, and closing inefficient plants. These improvements to efficiency decreased unnecessary expenses and lowered average costs by centralizing the production process. Additionally, large firms began producing 'full-bodied' ales, hoping to capture changes in consumer demand, but a lack of experience in the craft industry resulted in limited success with this strategy. Milne and Tufts also acknowledge that small breweries may be able to become more efficient through forming alliances with other small breweries. These alliances would allow them to save on

[17] A saving gained by producing two or more different good, when the cost of doing so is less than doing it separately

advertising and marketing expenses, as well as subcontracting out elements of the brewing process like bottle washing and delivery.

In a more recent study, Clemons, Gao and Hitt (2006) look into the effectiveness of product differentiation in the craft beer industry based on the theories of hyperdifferentiation and resonance marketing using online reviews. Hyperdifferentiation is the belief that firms are now so advanced that they are able to produce any product a consumer may demand, and manage the complexity of their diverse product portfolios. On the other hand, resonance marketing claims that the most informed consumers will only purchase products that they deeply desire. In the study they reveal that as an increase in product differentiation occurs, consumer informedness becomes a large determinant of the willingness-to-pay. The more the consumer knows about this hyperdifferentiated product, the more likely they are to pay a premium price for it. Another factor of a consumer’s willingness-to-pay is the availability of perfect or near substitutes. Through the resonance marketing technique of developing products that consumers truly love, producers paint the illusion that there are very limited substitutes in the marketplace, which increases the consumer's willingness-to-pay. In last part of the study the authors allude to the mass-producing beer market aiming to manufacture a middle-of-the-road product that can satisfy a wide array of consumers. The craft beer industry was susceptible to hyperdifferentiation and therefore required a deeper love for the specialized product that made all other potential substitutes not fit for comparison.

II. Additional Economic Principles

Multiple economic theories help explain the continued success of the craft brewing industry, and declining popularity of traditional American lagers. First, there has been a drastic shift in consumer preferences, which has resulted in consumer demand unmet by the traditional strategies of AB InBev and MillerCoors. These shifts in consumer demand caused deep-rooted market segmentation in the type of products that producers are able to offer consumers. Secondly, the resource partitioning theory provides beneficial insight as to why craft breweries are able to sustain continued growth in an industry previously dominated by megabreweries. Additionally, within the resource partitioned industry, hyperdifferentiation, resonance marketing and the omnipresence of the Internet all play a role in the success of craft breweries.

Shift in Consumer Preferences

The changes in demand that have resulted from a shift in consumer preferences are the main reason the craft brewing industry has experienced immense success since the craft brewing revolution of the 1980s. In the past 10 years, the craft brewing industry has increased its market share in volume terms approximately 8.1%, and now 11.1% of the all beer sales in the United States are craft sales. During that same time frame, craft beer's market share in dollar terms has skyrocketed from 14.3% to 19.3%.

Throughout the brewing history of both England and Canada, craft breweries experienced similar success after shifts in demand. In England from 1900-1970 the brewing industry underwent a period of concentration as a result of large economies of scale. Brewers were able to expose these economies of scale with the help of decreases in the cost of transportation and scientific developments that allowed for beer to be stored in kegs for long periods of time. This trend of mass-producers dominating the marketplace was only broken due to the efforts of the consumer pressure group CAMRA. CAMRA urged consumers to demand a wider variety and higher quality of beer in addition to fighting for reformed brewery licensing and reduction in excise taxes. As public demand for higher quality beer began to increase, mass-producing breweries found themselves unable to meet this demand due to a lack of economies of scope in production; therefore, craft breweries emerged throughout different geographic regions to meet the local demands for variety and quality[18]. Furthermore, in Canada, from 1981 to 1990 the amount of beer consumed per capita dropped from 84.31 liters to 78.16 liters, respectively. This drop in quantity was countered by an increase in quality of the beer consumers preferred to consume, ultimately a result of an aging population and a trend towards a healthier lifestyle[19].

While the shift in consumer demand in the US may not be a result of a consumer pressure group like that in England, similar forces have influenced consumers. Certain people wish to support local businesses, others, like 'hipsters'[20], prefer to not support the beer conglomerates and would rather try different types of 'indie beers' provided by the craft industry. Once the taste for a unique craft beer was able to capture the attention of even a small amount of people a circular chain reaction was put in motion. First, word of mouth helped craft popularity grow, which then increased demand, leading to the

[18] Swann, Peter. "The Fall and Rise of the Local Brew: Process Innovation, Horizontal Product Innovation and the Geographic Dispersion of Breweries in England, 1900-2004." *Social Science Research Network* (2012): 1-23. Web. 10 Nov. 2015. 6-16.

[19] Miline, S., and S. Tufts. "Industrial Restructuring and the Future of the Small Firm: The Case of Canadian Microbreweries." *Environment and Planning A* 25 (1993): 847-61. Web. 02 Nov. 2015. 853.

[20] Subculture of men and women in their 20s-30s that value independent thinking and counter-culture.

increased availability of craft beers at bars and retail locations. This increased availability resulted in an even larger amount of people tasting craft beers, igniting the reaction all over again. This circular reaction builds on itself and slowly builds the core group that constitutes the craft beer consumer base. However, while consumer trends have influenced the availability and popularity of craft beers, they have been unable to fully replicate CAMRA 's movement by failing to enacting changes in tax and licensing laws.

On the other hand, shifts in population demographics, similar to those of Canada, and ongoing economic prosperity have contributed to the U.S. population's receptiveness to a higher quality product[21]. Mirroring the Canadian population, the U.S. population is currently aging due to the high concentration of baby boomers and trending towards living healthier lifestyles. In addition, coming out of a recession, Americans are experiencing increases in disposable income along with a growing percentage of Americans are obtaining college degrees. All of these factors amount to an increase in the level of sophistication of the US population, which has largely contributed to a preference of variety and quality over homogeneity and quantity. Similarly, we have long seen this shift to higher quality products in the majority of food and beverages throughout the US. Since the late 1980s people have begun buying more expensive organic products due to their higher quality. We can see evidence of the consumers' willingness-to-pay for higher quality products in today's omnipresence and popularity of organic supermarkets, like Whole Foods or Sprouts.

Ultimately this shift in consumer preferences, beginning with the craft beer revolution, has resulted in market segmentation within the beer industry. This

[21] Tremblay and Tremblay, 107.

segmentation is exemplified in a study that revealed beer acts as a normal good with inelastic demand, but no substitution between types of beer[22]. People gravitate towards craft beers over American lagers due to a number of reasons, including; small breweries ability to deliver high-quality products, a preference of products brewed through traditional methods, a form of self-expression in choosing unique products from the 'coolest' breweries with even more unique names like 'Hoppy Ending Pale Ale' or 'Beard of Zeus', and expressing expert knowledge in the form of acting as a 'beer connoisseur'[23]. The combination of these reasons along with the formerly mentioned changes in composition of the US population's demographic play a major role in the consumer's decision to switch from drinking mass-produced American lagers to craft beers, stimulating the growth of the craft beer industry.

Continued Success of Craft Breweries

In addition to providing further evidence that the United States beer industry is heavily segmented, the resource partitioning theory presents strong arguments to how the craft industry has sustained its foothold in the competitive beer industry. Furthermore, within the craft beer market segment, successful firms are able to capitalize on the extreme levels of product differentiation by understanding the concept of resonance marketing and utilizing the power of online reviews.

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[22] Toro-Gonzalez, Daniel. McCluskey, Jill. Mittelhammer, Ron. "Beer Snobs Do Exist: Estimation of Beer Demand by Type." *EconPapers* (2014): 1-31. Web. 15 Oct. 2015. 18.

[23] Carroll, Glenn R., and Anand Swaminathan. "Why the Microbrewery Movement? Organizational Dynamics of Resource Partitioning in the U.S. Brewing Industry." *The American Journal of Sociology* 106.3 (2000): 715-762. Web. 06 Nov. 2015. 729-730.

In a purely biological sense, resource partitioning occurs when a species voluntarily chooses not to use specific resources that multiple other species already compete for, and instead choose a less sought after resource, in effect, eliminating competition by choosing to use entirely different resources. In relation to the US beer industry, these sought after resources are consumers. Large generalist organizations, AB InBev and MillerCoors, compete for the biggest resource base by producing a homogeneous product at the lowest possible price. In this race to capture the most resources possible, generalists experience strong economies of scale in the production process[24]. As the market matures, the generalists' competition for the most abundant resource intensifies. However, even the largest breweries are unable to capture the entire pool of resources. Instead, specialist firms enter the marketplace offering unique, high quality products that target a narrow homogeneous segment of the resources[25]. Since generalist, or megabrewers, can't directly compete with specialist brewers using their mass-producing techniques (unless they choose to use more capital which is discussed in section VI) the market is 'partitioned' as specialist and generalist firms depend on different segments of the resource base[26].

Within this specialist space, an increasing number of firms entering the marketplace have resulted in a vast array of products available to consumers. With such a wide variety of products, firms have begun pairing hyperdifferentiation strategies with resonance marketing to induce a stronger influence on potential customers[27]. As previously mentioned, through hyperdifferentiation firms aim to create products that are

[24] Carroll and Swaminathan, 717-719.
[25] Carroll and Swaminathan, 719.
[26] Carroll and Swaminathan, 720.
[27] Clemons, Gao and Hitt, 166-167.

so different from the other available products that there is no direct competitors. This differs from resonance marketing, which focuses on creating products that produce the strongest favorable responses from consumers[28]. By pairing these techniques together, craft firms create differentiated products with no close substitutes that consumers love. In addition, the plethora of information about these specialized products available online provides consumers with accurate and detailed information on product attributes. An example of how these three techniques work together goes as follows: craft brewers create an extremely hoppy beer (ex. Double IPA) that appeals strictly to consumers who like very dark beers, a handful of craft enthusiasts try the new beer, an even smaller number 'love' the new craft beer and decide to post a positive review on *ratebeer.com* or *beeradvocate.com,* then other beer connoisseurs see this review which inspires them to try the new beer. Together these techniques create increased consumer informedness, lack of substitutes, and strong consumer ties which results in an increase in consumer willingness-to-pay, allowing craft breweries to charge consumers a premium for their product. This premium in price is what allows the craft brewing industry to capture 19.32% of the market share in dollar terms, but only 11.05% of the total volume sold.

To conclude, in a highly price competitive industry generalist firms once aimed to capture the largest amount of consumers possible. This opened the door for small, craft firms to enter the marketplace and target narrow segments of the consumer base through a variety of highly specialized products. Then, craft breweries launched hyperdifferentiation and resonance marketing strategies in order to secure a strong consumer base. These strategies paired with an increased sophistication of the American

[28] Clemons, Gao and Hitt, 155.

population have resulted in growing amounts of consumers choosing craft beers over mass-produced American lagers.

III. Responses from Anheuser-Busch InBev and MillerCoors

Craft beer's volume share of beer sold in the United States has more than tripled in the past nine years, breaking double digits for the first time in 2014. This growth has not gone unnoticed by the megabrewers that have dominated the marketplace for the past century[29]. Arguably more pressing, 2014 marked the first year in the past 50 years that the combined volume sales of AB InBev and MillerCoors have failed to account for at least 75% of national beer sales. This recent downward trend of the traditional American lagers has triggered several responses from AB InBev and MillerCoors in an attempt to win back market share. The megabrewers have responded in two distinctive forms. First, they have focused on breaking into the craft beer industry by creating quasi-craft brands of their own and acquiring already well-established craft breweries. Second, they have attempted to negatively impact the sale of craft beers by using their market power to influence distribution channels and dedicating large levels of capital to extensive advertising campaigns.

Surging into the Craft Beer Industry

[29] Watson, "Brewers Association | Promoting Independent Craft Brewers."

After witnessing the exponential growth and continued success of craft breweries around the nation, megabrewers decided to create and market their own quasi-craft beers[30]. Due to a lack in economies of scope in the production process at large breweries[31] they were forced to create subsidiaries that were solely responsible for the production of these new specialty beers[32]. However, aside from the superior quality and additional variety, many consumers choose craft beers because they believe they are small independent organizations, are trying to support local brewers, or simply going against the mass of society.[33]

All of these reasons could potentially deter craft beer consumers from purchasing a craft type beer that is brewed by AB InBev of MillerCoors. To avoid this identity crisis, megabrewers separate themselves as much as possible from these products so that people look at them as they do any other craft beer. A Coors representative was even quoted claiming "They [the specialty products] will not say Coors. We want them disassociated from the Coors family"[34]. Often megabrewers even choose to contract out the actual brewing process of these specialty beers in order to add another degree of separation to the process[35]. A tribute to megabrewers' success, it is noted that approximately 75% of Shock Top (brewed by AB InBev) consumers believe it is from a small or unknown brewer[36]. However, recently consumers have been catching on to these deceptive strategies and earlier this year a lawsuit was filed against MillerCoors for its false

[30] Carroll and Swaminathan, 726.
[31] Swann, 6.
[32] Carroll and Swaminathan, 726.
[33] Carroll and Swaminathan, 729-730.
[34] Carroll and Swaminathan, 727-728.
[35] Carroll and Swaminathan, 728.
[36] Tuttle, Brad. "Big Beer's 5-Point Plan to Crush the Craft Beer Revolution." *Time*. Time, 16 Oct. 2015. Web. 02 Nov. 2015.

advertising of Blue Moon (brewed by MillerCoors) as a craft beer, which fails to qualify as a craft beer by the earlier definition of a craft beers being no more than 25% owned by another alcohol beverage industry member (refer to Figure 1)[37].

Despite recent hiccups, Blue Moon (MillerCoors) and Shock Top (AB InBev) are two of the fastest growing beer brands in the United States[38]. The success of these specialty beers is a direct result of the size and market power of their parent companies. The sheer size of AB InBev and MillerCoors allows them to pour capital into elaborate marketing and advertising campaigns that enable these products to gain nationwide recognition. Similarly, megabrewers are able to take advantage of economies of scope in the distribution process as they already have well-established distribution chains allowing for cheap and ubiquitous distribution of their 'craft' beers[39].

Recently, megabrewers have found that the more efficient access into the craft beer industry is through large equity investments in, and acquisitions of craft breweries[40]. There are several benefits from buying an existing craft brewery as opposed to being forced to continually produce new specialty beers like Shock Top and Blue Moon. Megabreweries tend to target craft breweries of a specific size and location. They aim to acquire breweries that are already well established but looking to take the next step in growing. Typically this means an additional \$10 - \$20 million-dollar investment, after the acquisition, to double or triple the capacity of the mid-sized craft brewery[41]. This

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[37] Tuttle, "Big Beer's 5-Point Plan to Crush the Craft Beer Revolution."
[38] Phillips, Matt. "America's Fastest-growing "craft" Beer Is Made by the World's Biggest Brewer." *Quartz*. N.p., 28 Feb. 2014. Web. 01 Nov. 2015.
[39] Swann, 15-16.
[40] Carroll and Swaminathan, 732.
[41] Rotunno, Tom. "Inside Anheuser-Busch's Craft Beer Deals." *CNBC*. N.p., 26 July 2015. Web. 03 Nov. 2015.

mid-sized firm proves to be the ideal size because the largest craft brewers wouldn't be as receptive to an acquisition, while the smallest firms would lack an established consumer base and would need additional managerial oversight. Thus, after a small investment is used to increase the annual production capacity, megabrewers leverage their firmly established business channels to put the product in front of a larger consumer base and further increase their overall market share. Along with the right size, megabrewers target firms that are located in regions where their existing lines of business are currently struggling. Most likely, these target firms already have a strong customer base due to their established success; therefore, by targeting well-established craft breweries, in popular regions where they lack a stronghold in the marketplace, it serves as quick access to a dedicated set of new consumers for megabrewers. For example, within the last two years AB InBev has acquired Seattle's Elysian Brewing and Oregon's 10 Barrel Brewing, both located in areas where AB InBev currently experiences weak sales relative to the rest of the US.[42]

Investing in these mid-level craft breweries that have already experienced mild success has proven to be more efficient than continually attempting to create new quasi-craft beers for AB InBev and MillerCoors. First, both MillerCoors and AB InBev have significant levels of cash, after all AB InBev does $47 billion in revenue annually, which makes buying established businesses far easier than attempting to create a subsidy that ventures into segments of the market where they lack experience. Similarly, by acquiring these small firms megabrewers not only gain access to new segments of the market, but

[42] Riley, Charles. "SABMiller Agrees to Takeover Offer from AB InBev in Biggest Beer Deal Ever." *CNNMoney*. Cable News Network, 13 Oct. 2015. Web. 23 Nov. 2015.

they also gain the industry knowledge and experience of the acquired firm's management team. These intangible assets give megabrewers insights into a market segment where they lack significant experience. Also, by acquiring craft breweries megabrewers can simply leave the current management team in place and contribute resources to expand the current business rather than invest time and effort into starting an entire new line of business.

Currently both AB InBev and MillerCoors have subsidies that are responsible for the production of their ‘craft’ beers and investments into craft breweries. MillerCoors developed their craft and import division, Tenth and Blake Beer Company, in 2010. Highlights of Tenth and Blake’s key deals include significant investment in Terrapin Beer Company and the acquisition Crispin Cider Company and Franciscan Well Brewery. Since inception, Tenth and Blake has experienced double digit growth[43].

On the other hand, in addition to creating a specialized division of their own, AB InBev owns a 32% equity stake in the Craft Brew Alliance. The Craft Brew Alliance is composed of five different beer and cider brands, most notably Redhook Ale Brewery, Widmer Brothers Brewery and Kona Brewing. Outside of its stake in the Craft Brew Alliance, AB InBev’s most notable acquisitions include the previously mentioned Goose Island Beer Company and Elysian Brewing.

These recent reactions from the megabrewers illustrate that the growing craft beer industry has captured their attention. The megabrewers’ existing distribution channels and large amounts of capital have contributed to the early success of their newly launched quasi-craft beers. Furthermore, a string of acquisitions of mid-sized craft breweries shows

[43] Menashe, Jeff. "State of the Craft Beer Industry." (n.d.): n. pag. Demeter Group Investment Bank, 01 Feb. 2013. Web. 10 Nov. 2015.

that the megabreweries don't intend to continue to allow the craft breweries to chip away at their market share. See Figure 2 for a comprehensive list of AB InBev and MillerCoors' investments into the craft beer industry.

Further Responses from AB InBev and MillerCoors

In addition to using their resources to capture parts of the craft brewing industry, megabrewers have also focused large amounts of capital towards marketing and advertising campaigns. Since 2010 AB InBev has sharply increased its annual North American sales and marketing expense by $571 million, or 36.5%. One of the most powerful avenues of marketing for these megabrewers is sponsorships with professional sports associations[44]. AB InBev and MillerCoors, the two largest brewers in the US, sponsor the NFL (National Football League), MLB (Major League Baseball), NBA (National Basketball Association) and NHL (National Hockey League), an effective method of reaching a broad customer base repeatedly. It is important to note that these contracts are specifically made between the professional sports associations and the traditional American lagers (refer to Figure 1) of AB InBev and MillerCoors.

To highlight the strength of these sponsorships it is essential to examine the exposure Bud Light receives through being the official sponsor of the NFL. During the 2014 season over 202 million unique viewers tuned in to watch the regular season. This fails to account for increased per game viewership during the playoffs or the Super Bowl

[44] Miline and Tufts, 853.

that attracts 115 million viewers for one game[45]. AB InBev's previous contract with the NFL ran through the 2017 Super Bowl; however, earlier this year AB InBev agreed to extend the contract through the 2022 Super Bowl for $1.4 billion, which is a 15% nominal premium compared to their previous deal. AB InBev's vice president of consumer connections, Lucas Herscovici, explained to the Wall Street Journal, "We've done the math and wouldn't be renewing this sponsorship if we didn't believe it would allow us to sell more beer." With this renewed contract AB InBev aims to increase exposure on social media outlets, which could help reach consumers who may not have tuned in to the watch the NFL games. Also, they plan to leverage their new platform as the head sponsor of Thursday Night Football to help reach younger consumers, in their 20s and 30s, who tend to start the weekend on Thursday nights[46]. From this deal we can conclude if AB InBev is willing to spend over $233 million a year on a contract with the NFL, they must firmly believe that it will help them fight the craft beer industry and improve their declining beer sales.

In addition to increases in marketing campaigns focused on improving sales of their American lagers, megabrewers have occasionally pointed negative ad campaigns at the craft beer industry. Most recently, AB InBev aired an advertisement during the 2015 Super Bowl that made fun of 'hipsters' who enjoy fussing over their fruit flavored ales. However, due to AB InBev's significant investments with the craft beer industry, the ad was viewed as hypocritical and therefore had no significant effect. After this negative ad

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[45] Baron, Steve. "NFL 2014 TV Recap: 202 Million Viewers, Game Viewership Nearly Triples Broadcast Primetime." *TV By The Numbers by Zap2itcom*. N.p., 09 Jan. 2015. Web. 16 Nov. 2015.
[46] Mickle, Tripp. "AB InBev Extends Bud Light's NFL Sponsorship." *WSJ*. The Wall Street Journal, 04 Nov. 2015. Web. 16 Nov. 2015.

ran, MillerCoors even came out with an advertisement claiming, “Every beer deserves to be fussed over,” further diluting its potential impact[47].

Aside from increased expenditures in the form and marketing, megabrewers have leveraged their large market share to manipulate and block distribution channels negatively impacting craft breweries. In the US alcohol industry there is a three-tier system that aims to keep the brewing, distribution and sale of alcohol independent of one another[48]. Within the three-tier system, brewers and importers must use wholesale distributors to get their products to retail locations where they are ultimately sold to the consumer[49].

Recently, speculation has been drawn to the enforcement of the three-tier system as it has been reported that AB InBev has been purchasing distributors throughout the country - the most recent coming in Colorado, a craft beer stronghold[50]. If megabrewers are able to obtain full ownership of the production process and the distribution channels, their market power will increase drastically and they would have the ability to block competitor’s products from reaching retail locations. Blocking mainstream channels of distribution to retail locations would hurt all competitors, but the effect would be magnified for small craft breweries.

However, even if all three-tiers are truly independent organizations, megabrewers still have the potential to take advantage of the system. Due to their large market share, often times MillerCoors and AB InBev are the main products distributed by the

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[47] Tuttle, "Big Beer's 5-Point Plan to Crush the Craft Beer Revolution."
[48] Vaheesan, Sandeep. “Halting Beer’s March to Monopoly: The Likely Anticompetitive Effects of Anheuser-Busch InBev’s Proposed Acquisition of Grupo Modelo.” *Social Science Research Network* (2015): 1-17. Web. 10 Oct. 2015. 10-11.
[49] Tuttle, "Big Beer's 5-Point Plan to Crush the Craft Beer Revolution."
[50] Tuttle, "Big Beer's 5-Point Plan to Crush the Craft Beer Revolution."

independent wholesale distribution companies; therefore, the majority of the wholesale distributor's revenue is coming from the megabrewers. This allows for megabrewers to strong-arm wholesale distributors into exclusively distributing their products, which blocks competitors and forces them to use higher-cost channels. In 2011 the former head of operations for AB InBev, Dave Peacock, wished for greater alignment between producers and distributors explaining that "aligned distributors only bring in brands that compete in segments underserved by our current portfolio."[51]. The pure size of AB InBev and MillerCoors allowed them to take advantage of the well-intended three-tier system by overpowering wholesale distributors, which forced craft breweries to use more expensive channels of distribution.

IV. Beer Market Forecast

In the early 2000s, beer industry experts projected that if craft breweries were able to continue their success they might one day be able to achieve a 5% share of the total US beer market[52]. They failed to predict that craft beers would soon become a major trend, which would catapult the craft industry to immense growth, both in sales and the number of operating craft breweries. From 2007 up until this past year, the total volume sales of the craft industry and the number of operating craft breweries in the United States averaged an annual growth rate of 12.6% and 11.9%, respectively, which resulted in an 11.1% total volume beer market share in 2014. While the majority of industry experts and analysts believe that the craft industry will continue to see success as it retains its spot as

[51] Vaheesan, 10-11.
[52] Tremblay and Tremblay, 270-280.

the hottest trend within the alcohol industry, many disagree on the magnitude of this continued success and the overall shape of the beer industry in the coming years. In the coming years several factors will contribute to the overall scope of the craft brewing industry in the US including, future market demand, possible increased efficiencies for craft breweries, potential market saturation or bubble effects and the growth strategies of the megabrewers moving forward.

Market Demand

First, the future market demand for craft beer is a function of the multiple factors that drive consumption, the availability of substitutes and the potential for increased competition. Within the beer industry craft beer performs similar to a luxury good, achieving its highest levels of success during periods of extended economic prosperity[53]. Since beginning to climb out the 'Great Recession' in 2011, the US has seen drastic improvement in levels of the most significant economic indicators, including an 8.7% increase in average household income and a 28.1% decrease in the unemployment rate, which leads to increased demand for luxury goods. Additionally, as the US population continues to age, as the last of the baby boomers generation is reaching their 50s in 2015[54], and achieve higher levels of sophistication, including 32.1% of the U.S. population obtaining a bachelor's degree, the demand for higher quality goods will continue to increase as well. Therefore, while the US continues to climb out of the 2008

[53] Tremblay and Tremblay, 107.
[54] History.com Staff. "Baby Boomers." *History.com*. A&E Television Networks, 2010. Web. 14 Nov. 2015.

recession and obtain higher levels of economic growth, the craft beer industry is expected to continue its success.

However, the availability of close substitutes and increased competition could adversely affect the craft industry. Within the beer industry there are three types of beer, mass-produced American lager, imports, and craft, all of which fail to act as close substitutes for one another[55]. Thus, the only adequate substitute is other craft beers, which only encourages consumers to switch to other varieties of craft beers, ultimately maintaining the same level of demand within the craft beer industry as a whole. One potential antagonist to the U.S. craft beer industry is the infiltration of Canadian craft beers in the US. Recently a few Canadian craft breweries have begun signing deals with US distributors to increase their sales in the United States[56]. And due to the curious nature of the craft beer connoisseur, this may slightly detract from US craft beer sales, but due to the abundance of US craft breweries it will be a minimal effect.

Too Many Craft Breweries?

The number of craft breweries in the United States has doubled in the past five years and is encroaching the record high of 4,131 set back in 1873[57]. It is projected that by 2016 there will be 5,200 craft breweries in the US, almost one brewery per 60,000 people. While this leaves an ample customer base for each craft brewer, some experts fear that this bubble of craft expansion will eventually pop and the unsuccessful brewers

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[55] Toro-Gonzalez, McCluskey and Mittelhammer, 18.
[56] "Canada vs. U.S.: Who Has the Best Craft Beer Scene?" *On Beer*. N.p., 26 Jan. 2015. Web. 20 Nov. 2015.
[57] Watson, "Brewers Association | Promoting Independent Craft Brewers."

will be cheaply acquired by the remaining firms[58]. These fears arise from the fact that many craft brewers are forced to take on large amounts of debt to open their brewery, and the expectation that as the market continues to saturate it will be harder to achieve immediate success. Without adequate levels of immediate success, new brewers are unable to pay off the interest expenses of their debt and will be pushed out of the marketplace. However, there are still over 1,000 cities with populations exceeding 10,000 throughout the US that currently have no craft breweries.[59] This confirms that there is capacity for more firms to enter the marketplace, but strategic geographic entrance may be essential for high levels of success.

Increased Efficiencies for Craft Breweries

The craft beer industry has captivated beer connoisseurs with their traditional brewing techniques and bold flavors, but certain techniques may increase the efficiency of craft brewers leading to increased profits. For some of the mid-level to larger craft breweries, opening an additional brewing plant in a different region of the US might be a profitable investment. Recently, Lagunitas, Sierra Nevada and New Belgium Brewing Company have opened additional plants, each with brewing capacity of approximately 500,000 barrels a year, with room for expansion if needed[60]. The benefit from this type of expansion is three-fold. First, it increases overall brewing capacity of the craft brewery,

[58] Mount, Ian. "Craft Beer Is Booming, but Brewers See Crossroads." *The New York Times*. The New York Times, 04 Feb. 2015. Web. 09 Nov. 2015.
[59] Delventhal, Soshanna. "The Future of the Craft Beer Industry."*Investopedia*. N.p., 06 Nov. 2015. Web. 17 Nov. 2015.

[60] Menashe, "State of the Craft Beer Industry."

which is a constant problem for the majority of successful craft breweries[61]. Next, it lowers distribution expenses by decreasing the distance products must travel to reach remote retail locations in the US. Most importantly, by opening an additional location in a new region, the craft brewery is able to expose their products to more potential consumers. The only drawback is that some craft beer fanatics may believe that by opening additional locations craft brewers lose some of their local-ness, which is also part of their attraction[62].

Additionally, aligning or teaming with other craft breweries may allow for craft breweries to overcome some of the disadvantages that are associated with being a small firm[63]. Although these networks will still lack significant economies of scale due to the large variety of craft beers, they create large economies of scope in the distribution and marketing process[64]. Craft beer networks allow craft brewers to advertise as a group, decreasing advertising expenses and appealing to a wider share of the market. Also, these networks are able to use local or regional events, like beer festivals and concerts, as a form of advertising that reaches a wider consumer base. Likewise, distributors are more inclined to work with groups of craft breweries since the aggregate demand for their products is much larger than those of a lone craft brewery. Ultimately, as megabrewers continue to swallow up existing craft breweries, the formation of these networks may allow craft brewers to capture the benefits of economies of scope without selling out to AB InBev or MillerCoors.

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[61] Mount, "Craft Beer Is Booming, but Brewers See Crossroads."
[62] Carroll and Swaminathan, 729.
[63] Miline and Tufts, 849.
[64] Swann, 6-10.

Future Strategy of Megabrewers

However, the strategies of MillerCoors and AB InBev moving forward may have the most significant impact on the success of craft beer in the coming years. First, like recent events suggest, megabrewers may choose to invest in beer companies in emerging markets. Evidence supporting this strategy comes from the recent deal in which AB InBev agreed to acquire SABMiller for almost $106 billion[65]. At first glance it appears that AB InBev's goal is to establish a largest market share in the US beer industry, however; the details of divestitures that must take place in order for the deal to pass through regulations reveal that the true potential lies in China. AB InBev is expected to sell SABMiller's 58% stake in MillerCoors, most likely to Molson Coors Brewing, who would continue the brewing and sale of Miller and Coors products throughout the United States. If the deal were approved, AB InBev would be in line to acquire SABMiller's 49% stake in the joint venture 'Snow', which is currently China's best-selling beer brand. This acquisition combined with AB InBev's current holdings in China would make AB InBev the largest brewer in China, as well as the U.S.[66]. Regardless if this deal is allowed to pass through regulations or not, it shows that the megabrewers have a keen interest in the emerging markets. Emerging markets such as China and India, have large and rapidly growing populations with low incomes, which foster the perfect market conditions for megabrewers to apply the practices they know best. In such emerging markets,

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[65] Hjelmgaard, Kim. "AB InBev and SAB Ink $104B 'in Principle' Deal." *USA Today*. N.p., 13 Oct. 2015. Web. 01 Nov. 2015.

[66] Bray, Chad. "Anheuser-Busch InBev Completes Agreement for SABMiller." *The New York Times*. The New York Times, 11 Nov. 2015. Web. 15 Nov. 2015.

megabrewers will once again be able to appeal to the majority of a country's population through mass-produced products that are made as cheaply as possible. Within the U.S., this deal will only affect Molson Coors, who would stand to become the sole owner of MillerCoors, but since they are already a part of this joint venture, no additional synergies would be realized. Therefore, there are no cost savings to be passed on to American lager consumers. In the end, if this deal shall pass Molson Coors will simply collect all of the profits from MillerCoors instead of only a portion of them.

On the other hand, it’s hard to imagine that MillerCoors and AB InBev will continue to let growing chunks of the U.S. beer market be taken away from them. AB InBev’s recent acquisitions of Elysian Brewing, 10 Barrel Brewing, and Goose Island, all within the last two years, suggest that they show no signs of slowing down their acquisitions of successful craft breweries in the US[67]. Due to immense amounts of capital as well as the steady cash flows within these megabrewers, it’s most plausible to assume that they will continue to swallow up successful craft brewers as well as break into growing markets they currently lack a stronghold in. Thus far, megabrewers’ acquisitions of craft breweries does not appear to have evidently affected the product quality or consistency of acquired firms. In the long run, greater availability of resources and increased access to distribution channels may even help lower the price of craft beers for the acquired firms. However, as craft breweries are bought out by megabrewers, consumers lose the satisfaction of purchasing from a brewery that produces unique, high quality beers. Therefore, the continued acquisition of craft breweries will negatively affect informed consumers who prefer craft beers. These consumers will then be forced to

[67] Riley, "SABMiller Agrees to Takeover Offer from AB InBev in Biggest Beer Deal Ever."

shun products that they know are ultimately owned by AB InBev or MillerCoors and search for new craft brewers to purchase from.

In the end, the number of craft breweries in the United States will continue to grow due to the recent success of craft breweries and the market for craft breweries in unsaturated areas of the United States. However, once the majority of highly populated towns have multiple craft breweries and existing craft breweries have successfully expanded to capture larger chunks of the craft beer market, the market will no longer have room for new entrants. Upon market saturation, it is likely that craft beer's share of the overall beer market reaches or surpasses the projected 20% by 2020, but due to the fact that some of these craft brewers will have large investments from megabrewers, it is unlikely that by definition craft beers (refer to Figure 1) will be able to capture 20% of the market by 2020[68].

V. Conclusion

The emergence and exponential growth of the craft beer industry since its birth in the 1980s, has forced megabrewers such as AB InBev and MillerCoors to take action in order to protect their market share of the beer industry within the United States. This study attempts to understand how craft breweries have been able to successfully and continuously chip away at the market share of the beer conglomerates. Through superior quality, bolder flavors, and a wider variety of products, the craft beer industry has successfully segmented themselves from the traditional beer market and has capitalized

[68] Notte, Jason. "Why Craft Beer Will Be Almost Unrecognizable by the Year 2020." *MainStreet*. N.p., 29 Apr. 2015. Web. 14 Nov. 2015.

upon the ability to attract a different consumer base. This coincides with previous studies that have proven craft beer, imported beer and traditional American lagers do not act as close substitutes.[69] Furthermore, craft breweries have successfully attracted a growing amount of consumers because of the sophisticated connotation that people now associate with choosing craft beers over traditional American lagers. Lastly, the fact that craft beer is a luxury good has allowed the craft beer industry to parallel the recent growth of the US economy.

The next step of this study was to examine how AB InBev and MillerCoors have reacted to their recent plateauing of sales in the U.S., which is a large consequence of the continued growth of the craft beer industry. Megabrewers saw they were slowly losing market share to the craft beer industry and therefore decided launch a few new tactics to win this share back. First, they began brewing quasi-craft beers of their own, which proved to be successful. More recently megabrewers have turned to acquiring successful craft breweries and investing extensive capital in order to quickly expand them. Thirdly, AB InBev and MillerCoors have begun using their market size to block main distribution channels for craft breweries which forces the small firms to pay higher distribution expenses. These aggressive counter attacks to the craft industry's growth show that AB InBev and MillerCoors are not going to allow small craft breweries to take away their share of the beer market.

However, craft beer has only recently, within the past 10 years, jumped from being a minimal portion of the beer industry, to capturing almost 20% of all beer profits in the US. If the US economy continues to improve as expected and the population continues to

[69] Toro-Gonzalez, McCluskey, Mittelhammer, "Beer Snobs Do Exist: Estimation of Beer Demand by Type."

change their tastes, it will be interesting to see how much more of the overall beer demand the craft beer industry will be able to capture. In future studies it will be interesting to examine how the operations, revenue and production process are affected for craft breweries that are acquired by AB InBev or MillerCoors. Additionally, it would be revealing to compare the demand for two separate craft breweries over a long period of time, while one remains independent and the other is acquired by a megabrewery.

Appendix

Figure 1

Definitions of Beer Industry Terms

MillerCoors - a U.S. joint venture between SABMiller and Molson Coors that was created on October 9, 2007

American Lager - Miller Light, Coors Light, Bud Light, Budweiser, Coors etc.

Craft Brewery - must qualify as all three

1. Small - Annual Production of 6 million barrels of beer or less (approximately 3 percent of U.S. annual sales). Beer production is attributed to the rules of alternating proprietorships.
2. Independent - Less than 25 percent of the craft brewery is owned or controlled (of equivalent economic interest) by an alcoholic beverage industry member that is not itself a craft brewer.
3. Traditional - A brewer that has a majority of its beverage alcohol volume in beers whose flavor derives from traditional or innovative brewing ingredients and their fermentation.

Microbrewery – a brewery with annual beer production below 15,000 barrels a year

Regional Brewery - a brewery with annual beer production of between 15,000 and 6 million barrels

Large Brewery - a brewery with annual beer production over 6 million barrels

Megabrewers - the largest U.S. breweries, AB InBev and MillerCoors

Figure 2

Anheuser-Busch InBev

- Owns 32% of the Craft Brew Alliance and serves as the nationwide distributor
    - Craft Brew Alliance – composed of Redhook Ale Brewery, Widmer Brothers Brewery, Kona Brewing Company, Omission Beer and Square Mile Cider
- Acquired Fulton Street Brewery (producer of Goose Island)
- Acquired Elysian Brewing
- Acquired 10 Barrel Brewing
- Acquired Blue Point Brewing Company
- Brewer of Shock Top and Landshark

MillerCoors

- Acquired minority interest in Terrapin Beer Company
- Acquired Crispin Cider Company
- Acquired Franciscan Well Brewery
- Acquired Meantime Brewery Company
- Acquired Henry Weinhard's
- Acquired Fox Barrel Cider
- Brewer of Blue Moon, Batch 19 and Third Shift

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