

M E M O R A N D U M

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Subject: Beer Brewer Industry Analysis

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Industry Analysis of Beer Brewing Industry

This report will provide an industry analysis for the beer brewing industry, discussing the attractiveness of the industry in regards to sustainable profitability. We will first give background on the industry, and then will use Porter's Five Forces, a tool that will help us to determine the attractiveness of the industry.

Industry Background

Industry name. The industry that we chose is the beer brewing industry, and we are focusing on operations based in the United States. We chose to focus on a larger scope because the top three competitors in this industry control about 90% of the market.

Industry Players. We are focusing on the big three, which are Anheuser-Busch, Coors Molson and SABMiller. These three companies control about 90% of the market. Anheuser-Busch owns Budweiser brands, Michelob brands, Busch, O'Douls as well as malt beverages. Coors Molson owns Coors brands, Blue Moon brands, George Killian's Irish Red Lager, Keystone, and Zima. SABMiller owns Miller brands, Hamm's brands, Sparks, Ice House, Red Dog and SouthPaw. We also will be considering the operations of one comparison company, Boston Beer Co., throughout this report. We are doing this in order to have a point of comparison between the big three and other players in the market.

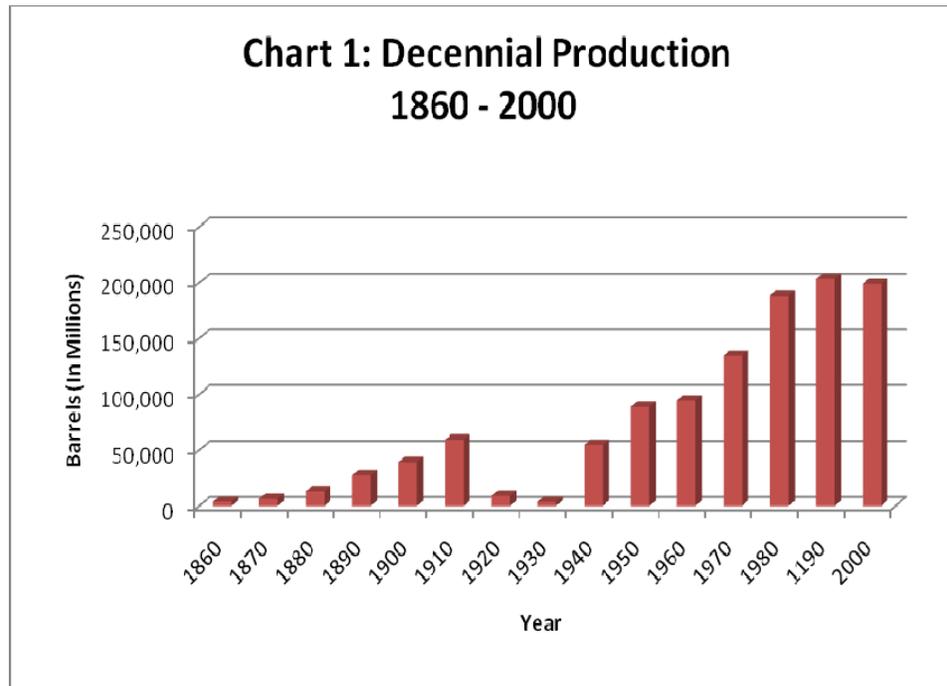
Industry Classification. The NAICS code is 312120, which is breweries. Google finance categorizes the industry under consumer noncyclical, with the subcategory beverage (alcoholic). Yahoo finance classifies it under consumer goods, with the subcategory beverages-brewers.

Output description. The actual output of this industry is domestically brewed beer, measured in barrels.

Industry size. The brewing industry is measured by the number of barrels produced per decade. As shown in Table 1 and Figure 1, the beer brewing industry has been increasing since 1860.¹

Table 1: Decennial Production 1860 – 2000		
Year	Barrels (In Millions)	% Difference
1860	3,812	-
1870	6,574	72.5
1880	13,347	100
1890	27,561	106.5
1900	39,330	42.7
1910	59,485	51.2
1920	9,263	-84.4
1930	3,681	-60.3
1940	54,891	1391.2
1950	88,807	61.8
1960	94,547	6.5
1970	134,653	42.4
1980	188,373	39.9
1190	203,658	8.1
2000*	199,173	-

*Reflects 2000-2007



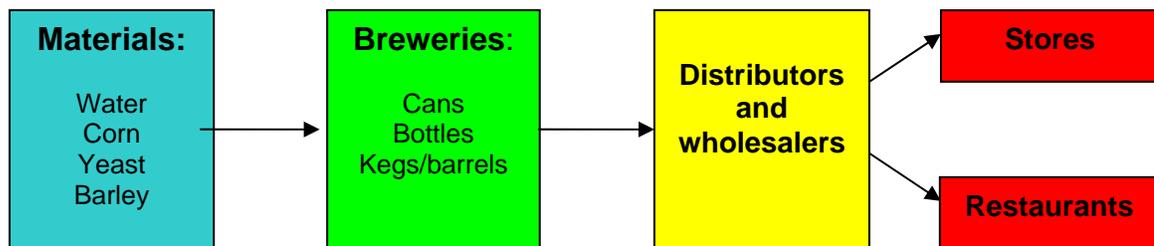
¹ Beer Almanac.

Geographic Market. Although we are focusing on domestic brewers, many of the brewers export their products overseas, while some focus domestically. Of all St. Louis-based Anheuser Busch's revenues, domestic sales contributed 75%, and international sales contributed 7%.² Denver-based Molson Coors earned 56% of their revenues from the US, compared to 25% and 19% for Europe and Canada, respectively.³ Of the Milwaukee-based Miller Brewing Company's five segments – Latin America, Europe, North America, Africa and Asia and South Africa – no more than a third of its total revenues comes from any one geographic segments.⁴ SABMiller is a much more global operator.

Supply Chain. The “big three” brewers we are studying (Miller, Bud and Coors) brew and bottle their beer on a company-owned site. They convert their raw materials into a finished product, and bottle it into pre-made containers. Therefore, the inputs that breweries need are the raw materials (such as water, barley, hops, corn and yeast) and packaging materials (such as kegs and bottles), as well as equipment (such as grain mills, tanks, yeast propagators, and packaging systems).

Law prohibits restaurants, stores and individuals from buying directly from breweries. There is a required three-tier process in place to prevent alcohol abuse, and to ensure minors are not purchasing or consuming alcohol. Therefore, individuals and retail outlets must purchase from a licensed wholesaler or distributor. Figure 1 shows a picture of the supply chain.

Figure 2: Supply Chain



“Breweries” encompasses the actual brewing part of the process, as well as the bottling process and the equipment that is used during both of these processes.

According to Yahoo finance the beer brewing industry in the United States is estimated to be worth 46 billion dollars.⁵

² <http://stocks.us.reuters.com/stocks/fullDescription.asp?rpc=66&symbol=BUD>

³ <http://www.molsoncoors.com/investor-relations/business-profiles/>

⁴ http://www.sabmiller.com/sabmiller.com/en_gb/Our+business/About+SABMiller/Our+strategic+priorities/

⁵ <http://biz.yahoo.com/ic/346.html>

Beer is the world's oldest alcoholic beverage. Early origins can be dated back to 6 million BC in written history of Ancient Egypt and Mesopotamia. It was largely considered a home activity until the 14th century when the world's oldest operating commercial brewery was established in Bavaria.⁶ This was the catalyst that broke the mold from family oriented practice, to an entrepreneur's dream. Here in the US, most of the major players in the market were established in the mid to late 1800's.

With an industry that has been around as long as the beer brewing industry has, it is no secret that it has reached a pinnacle. At the same time it is showing no signs of decline, therefore maturity is the proper life cycle stage for this industry.

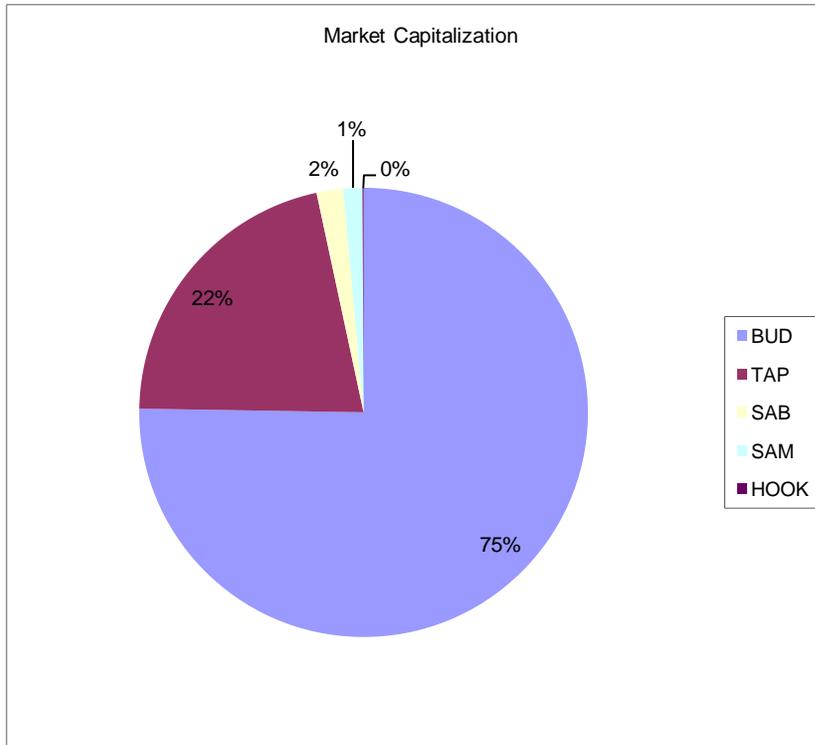
Competitors of the beer brewing industry here in the United States include; Anheuser-Busch, Miller, and Coors. Competitors to the industry itself include, wine, malt liquor, hard liquor, and of course imported beer. The micro-brewing industry, even though considered part of the US industry, has been taking a more substantial chunk of the pie in recent years. A recent study showed that Budweiser, an Anheuser Busch product, has been declining in popularity for the past 18 years consecutively.⁷ In the past, this has been due to the fact that Bud Light was gaining in popularity, however in recent years Budweiser and Bud Select have declined more that Bud Light has gained. This can be attributed to the fact that the average beer drinker is now more interested in product differentiation rather than brand identity.

Listed below are the major industry competitors, and their market capitalization.⁵

Table 2: Earnings of Beer Brewers		
Company	Symbol	Revenue (in millions)
Anheuser-Busch	BUD	\$3450
Molson Coors	TAP	9800
Grupo Casa Saba SA de CV (Miller)	SAB	875
Boston Beer	SAM	6
Redhook Ale	HOOK	37

⁶ <http://www.beertown.org/ba/index.html>

⁷ <http://www.brewblog.com/brew/distribution/index.html>



All of these brewers contend in a common competition at the annual World Beer Cup. Every two years a qualified panel of judges awards the top 3 beers in 91 categories of beer. They use the gold, silver, and bronze system. The World Beer Cup is considered, "the Olympics of Beer Competitions" because it is one of the very few international beer competitions that awards only one gold, silver and bronze in each beer category. Of the publications available the most common seems to be the Brewers Association. This association was established in 2005 when a merger of Association of Brewers and Brewers Association of America took place. Their purpose is to, "promote and Protect American Craft Beer and American Craft Brewers and the Community of Brewing Enthusiasts." ⁶

Financial Information. The financial information for each of the brewers is listed below in Table 2. As shown below, the revenue generated by the top three brewers is significantly higher than a comparison company, in this case Boston Beer Co.

Table 2: Income Statement For the Year Ended, December 31, 2007				
	Numbers in Thousands of Dollars			
	Anheuser-Busch Companies Inc. (BUD)	Molson Coors Brewing Company (TAP)	Boston Beer Co. Inc. (SAM)	SABMILLER PLC SP ADR
Total Revenue	\$ 16,685,700	\$ 6,190,592	\$ 341,647	\$18,620,000
Cost of Revenue	<u>10,836,100</u>	<u>3,702,921</u>	<u>152,288</u>	<u>15,593,000</u>
Gross Profit	5,849,600	2,487,671	189,359	3,027,000

Operating Expenses:				
Selling, General, & Administrative	(2,982,100)	1,734,408	149,031	n/a*
Non Recurring	<u>(26,500)</u>	<u>112,194</u>	<u>3,443</u>	<u>n/a*</u>
Operating Income (Loss)	2,894,000	641,069	36,885	n/a*
Income from Continuing Operations				
Total Other Income/Expenses Net	<u>13,100</u>	<u>19,771</u>	<u>4,759</u>	<u>223,000</u>
EBIT	2,907,100	660,840	41,644	2,804,000
Interest Expense	<u>484,400</u>	<u>126,462</u>	<u>-</u>	<u>n/a*</u>
Income Before Tax	2,422,700	534,378	41,644	1,883,000
Income Tax Expense	969,800	4,186	19,153	921,000
Minority Interest	<u>-</u>	<u>(15,318)</u>	<u>-</u>	<u>234,000</u>
Net Income from Continuing Operations	2,115,300	514,874	22,491	1,883,000
Non-Recurring Events				
Discontinued Operations	<u>-</u>	<u>(17,682)</u>	<u>-</u>	<u>n/a*</u>
Net Income	<u>\$ 2,115,300</u>	<u>\$ 497,192</u>	<u>\$ 22,491</u>	<u>\$ 1,883,000</u>

Capacity. Aside from financial measures, another way to measure the competitors in the industry is to consider the capacity. In the beer brewing industry, capacity is measured by the number of barrels produced. As shown below in Table 3, the capacity levels of the top three brewers (for the companies that report the data) is significantly higher than the comparison company, Boston Beer Co.

Table 3: Capacity Data for Major U.S. Beer Competitors For the Year Ended, December, 31 2007			
	Amount Produced (in millions of barrels)	Possible Capacity (in millions of barrels)	Capacity Utilized (in millions of barrels)
Anheuser-Busch	128.4	137	93.70%
SABMiller	n/a*	n/a*	n/a*
Molson Coors	n/a	45	n/a
Boston Beer Co.	1	1	100%

Employment. A third way to measure the size of an industry is to measure the numbers of employees a firm has. As Table 4 shows below, the big three's number of employees is significantly higher than the comparison company.

Table 4: Employment Data for Major U.S. Beer Competitors For the Year 2007	
	Full Time Employees
Anheuser-Busch Companies Inc. (BUD)	30,849
SABMILLER PLC SP ADR	67,000
Molson Coors Brewing Company (TAP)	9,700
Boston Beer Co. Inc. (SAM)	500

Historical Revenue. In the past five years, the beer industry has grown consistently. An increasing demand has led to an increase in revenue, as well as increasing prices over the last five years. Below, Table 5 and Figure 3 shows the revenue for the last five years for each of the big three, as well as our comparison company.

Table 5: Historical Revenue Data for Major U.S. Beer Competitors 2003-2007				
Numbers in Thousands of Dollars				
	Anheuser-Busch Companies Inc. (BUD)	Molson Coors Brewing Company (TAP)	Boston Beer Co. Inc. (SAM)	SABMILLER PLC SP ADR
2003	14,146,700	3,952,610	207,945	8,167,000
2004	14,934,000	4,305,820	217,208	11,366,000
2005	15,035,700	5,506,906	238,304	12,901,000
2006	15,717,100	5,844,985	285,431	15,307,000
2007	16,685,700	6,190,592	341,647	18,620,000

After having a basic understanding of the beer brewing industry, we can now analyze each of Michael Porter's Five Forces. Porter's Five Forces are the factors that can influence sustainable profitability within the industry. The five forces are: Intensity of Rivalry, Availability of Substitutes, Bargaining Power of Buyers, Bargaining Power of Suppliers and Threat of Entry.

Force 1: Intensity of Rivalry

Rivalry is the extent to which companies compete with one another for customers. Rivalry can be price-based or non price-based. Rivalry is measured by the concentration level of the industry; the more concentrated the industry, the

less rivalry. Other factors that increase rivalry are large capital asset requirements and high switching costs.

Price-based rivalry. The beer industry does not have evidence of price wars. Beer prices have increased, but that is mostly due to inflation. The increased prices are industry wide and not company specific. According to Barbara Hagenbaugh of USA Today: “Retail prices for beer at supermarkets and other stores were up 3% in May from a year earlier, the biggest increase in 2½ years, according to the latest data from the Labor Department⁸.”

Non-price based rivalry. The beer industry primarily competes with non-price based rivalry. There are various product innovations throughout beer brewing companies such as *Budweiser Select*, which is Anheuser Busch’s low carbohydrate beer. Miller Brewing Company released *Miller Chill* throughout the United States in July 2007, which is a light lager that is brewed with salt and lime.

Product differentiation. Within the industry there is a lot of product differentiation. The term used to differentiate and categorize beers is known as the beer style. Different breweries use various beer styles to meet consumer preferences. Beer styles can vary depending on the color, flavor, strength, ingredients, production method, recipe, history, or origin of the beer⁹. All of the major companies offer different variations of their core product. All beer is classified as either a lager or ale; which is determined by the production method and which type of yeast is used.

Concentration of industry. The concentration ratio is a measurement of the revenues of the largest firms, in comparison with the rest of the industry. The CR4 refers to the top four largest firms. If a CR4 is greater than 40%, it implies significant concentration effects. As Table 6 shows, the CR4 of beer brewing is 77%.

Table 6: Concentration Ratio of Top Four Competitors	
Company	Revenues (in millions)
SABMiller	\$ 18,620
Anheuser Busch	16,685
Molson Coors Brewing	6,190
Boston Brewing Co.	341
CR4*	77%

*\$41,836 / \$55,000

The Herfindahl Index is another measurement of concentration within an industry. It is measured by taking the sum of the market share of all firms within the industry and squaring it. A HI greater than 1800 implies significant concentration effects. As Table 7 shows, the HI for beer brewing is 2362.

⁸ <http://www.usatoday.com/money/industries>

⁹ http://en.wikipedia.org/wiki/Beer_style

Table 7: Herfindahl Index	
Company	Revenues (in millions)
SABMiller	.10
Anheuser Busch	.35
Molson Coors Brewing	.14
Boston Brewing Co.	.20
Others	.21
HI:	2362

After review of the CR4 and Herfindahl Index, it is apparent that the beer brewing industry is a concentrated industry.

Capital asset requirements. The beer brewery operations require a lot of specific assets. It approximately takes thirty days to brew Budweiser¹⁰. It consists of a “Beachwood Aging” process that requires large steel vessels. Anheuser-Busch’s property, plant, and equipment equate to 51% of its overall assets. When compared to the consumer goods industry, Procter and Gamble’s property, plant, and equipment equate to only 14% of its overall assets. Beer brewery operations require a lot of specific assets. It approximately takes thirty days to brew Budweiser¹¹. It consists of a “Beachwood Aging” process that requires large steel vessels. With these large assets, it would be difficult to exit the industry. Therefore, many companies stick it out through market downturns which makes overall industry profits fall.

Demand influences. There are many different variables that affect demand. However, the beer industry consistently has an increasing demand. From 1997-1998 Coors had a 2.9% increase in barrels consumed and Anheuser Busch experienced a 3.5% increase¹². As time goes on and more people become of legal age, demand continuously increases. Due to this stable demand, beer prices are constant and rarely fluctuate.

Switching costs. Within the beer industry there are no switching costs. The consumer can purchase whichever beer he/she favors. However, consumers are very brand loyal. Beer companies spend millions of dollars annually on advertising. The commercials are not necessarily created to increase demand, however create brand awareness. According to Gary Wilcox of allbusiness.com: “The majority of empirical evidence suggests that advertising expenditures are not significantly related to primary or aggregate demand for alcoholic beverages, but instead may positively impact selective demand for a particular brand or product category.¹³”

¹⁰ <http://www.destination360.com>

¹¹ <http://www.destination360.com>

¹² <http://www.business.uiuc.edu>

¹³ <http://www.allbusiness.com>

MillerCoors. Another factor to consider is the proposed joint venture between Miller and Coors, which would be known as MillerCoors. This would place many of the nation's recognizable beer brands under one name. The merger is in an effort to compete better against Anheuser-Busch, the country's largest brewer. Pete Coors, Vice Chairman of Molson Coors, stated: "Creating a stronger U.S. brewer will help us meet these challenges, compete more effectively and provide U.S. consumers with more choice, greater product availability and increased innovation¹⁴." This would affect the entire North American market and industry. This would reduce overall rivalry within the industry, even though it would increase the amount of rivalry that Anheuser-Busch would experience. The merger is expected to go through in mid-2008.¹⁵

Summary of rivalry effects. This industry is experiencing significant concentration effects, which decreases rivalry. Also, there are significant barriers to exit, which increases rivalry. The proposed joint venture MillerCoors would act to decrease rivalry overall. Therefore, the overall effect of rivalry on this industry is neutral.

Force 2: Availability of Substitutes

The availability of substitutes impacts industry profits because consumers may choose a substitute good over this industry. According to the trade group *Beverage Industry*, alcoholic beverage consumption per capita has risen since 2000 at around 1 percent per year.¹⁶ This suggests that alcohol consumers on average are not substituting non-alcoholic beverages for the alcohol they currently consume. Therefore, in analyzing substitutes for the beer industry, we should focus our attention on other forms of alcohol, such as wine and liquor.

Market-segment share. Looking just within the alcoholic beverage segment, we see that currently more beer is sold annually than wine and liquor combined. As shown in Figure 1, the share of total alcoholic beverage sales (in US\$) is 52% beer, 15% wine, and 33% liquor.¹⁷

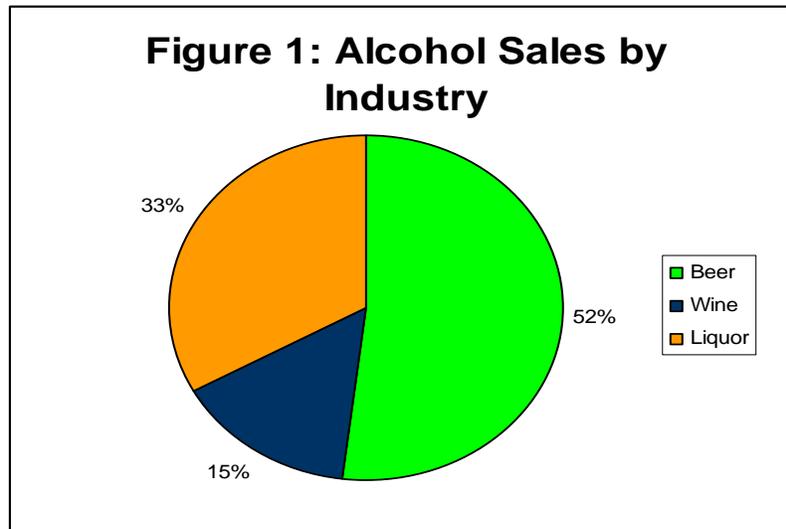
¹⁴ <http://www.nytimes.com/2007>

¹⁵ <http://www.newser.com/story/9132.html>

¹⁶ Sudano, Brian. Is Beer Back? Beverage Industry.

<http://www.bevindustry.com/content.php?s=BI/2006/04&p=7>

¹⁷ Adams Handbook Advance 2007 & Beverage Scape Jan-Dec 2006



Increasing wine consumption. Currently, beer holds a majority of the market, but that majority may be fading. A recent Gallup poll showed that more Americans named wine over beer as their drink of choice (39 percent to 36 percent, respectively). This is in line with industry trends given that wine-industry sales grew 5% last year, while beer volume fell 1% from last years totals.¹⁸ The gap between wine drinkers and beer drinkers is closing rapidly. Also, liquor sales are rising, but at a slower rate than recent years. The Distilled Spirits Council of the United States expects a 5% increase in year over year growth by the end of 2008, down from 4% last year.¹⁹ Liquor sales are starting to level off. Therefore, the wine industry is the most imminent threat to beer brewers. No longer does the beer industry have an unquestioned control of the market.

Profitability of industries. Beer brewing net profit margin is 10.50% where wine and distillery profit margin is 15.90%, compared to a 7.35% for overall consumer goods.²⁰ This shows us that wineries and distillers are able to make more money for dollar spent on input. Profitability is higher in the wineries and distillers industry than in the brewing industry.

Switching costs. Perhaps the biggest threat to beer brewing industry is that the switching cost of changing to a substitute good is practically non-existent. If a consumer decides to switch from being primarily a beer drinker to a wine drinker, it will cost the consumer nothing more than a couple of wine glasses to make the change. In order to obtain a sustainable competitive advantage with regards to substitutes is to develop brand loyalty.

Summary of substitute effects. It seems that liquor sales are rising at about the same rate as beer, which is much lower than the increase in wine consumption. More importantly, consumers are not inflicted with a cost of switching between

¹⁸ Arora, Raksha. Wine May Become Toast of Alcohol Industry. Gallup. <http://www.gallup.com/poll/12670/Wine-May-Become-Toast-Alcohol-Industry.aspx>

¹⁹ Cheers? Liquor Sales Slow. CNBC. <http://www.cnbc.com/id/22841253>

²⁰ Yahoo Finance. <http://biz.yahoo.com/p/347conameu.html>

types of alcohol. All of these factors increase the threat of substitute goods for the beer industry, which has a negative effect on industry profits.

Force 3: Bargaining Power of Suppliers

Suppliers have little bargaining power in the industry, which works in craft brewers' favor. There are  manufacturers and suppliers who provide brewing equipment to small-scale breweries. Brewers can also purchase used or refurbished equipment. Overall the certain commodities consist of:

r brewing machinery suppliers:

- Siemens
- Waage Electric Inc.
- A & B Process Systems Corp.
- Mixmor
- Boig & Hill
- Proquip Inc.

16 Commercial/retail hop suppliers in North America

50 malt suppliers throughout North America

Many of the companies that supply beer brewing equipment do not focus just on that area. They offer other products and services and the brewing equipment is just one phase of their operation.

Supplier concentration is low, which can possibly increase the sustainable profits.

As far as supplier substitutes, the ingredients that go into the brewing of beer cannot be replaced. Those ingredients are necessary for the production. You must have hops, malt, barley, yeast, and water. The beer brewing industry relies heavily on supplier input. Especially the ingredients that are in beer, therefore the suppliers are in constant need to keep this industry afloat.

re is a threat of forward integration; the larger brewing companies produce enough capital to possibly buy plots of land to grow their own hops, malt, or barley.

Force 4: Bargaining Power of Buyers

The main buyers of beer in the brewing industry are distributors. There are over 2,500 beer distributors nationwide servicing approximately 530,000 retail businesses.²¹ Bargaining power of buyers increase when: there are few distributors in the market; the distribution industry is growing faster than the manufacturer's industry; and when new competition cannot emerge.

Regulation of industry.. "The Beer distribution system was established by each state under authority in the 21st Amendment to the U.S. Constitution. They created a three tier system that enables states to track the physical movement of

beer from producers and importers to consumers by imposing licensing requirements and legal obligations on those who transport, deliver, and sell beer at each point in the stream of commerce. The three tiers consist of a supplier tier that is made up of brewers and beer importers, a distributor tier which is made up of the 2,500 plus licensed businesses that store and deliver beer at the local level and then, finally the retail tier which is made up of the 530,000 outlets that sell beer to the public.”²¹

Dedicated distributors. “The beer distributor market normally contains two to three major brand distributors in a region. There is one for Anheuser-Busch, Miller and Coors or a Coors/Miller combination. Rarely will Coors or Miller be sold under the same house as A/B. Major brand houses are the largest, most dominant beer distributor within the territory. They have very high levels of service, are in all retail licensed accounts and are aggressively competitive. They have excellent contacts within the retail trade including important chain store buyers.”²²

Miscellaneous distributors. Some markets will though, contain one or two specialty or miscellaneous brand distributors. A miscellaneous distributor carries many products other than one of the big three such as regional breweries, popular imports and non-alcoholics. Although they do not dominate the marketplace like a main brand house, they have a very good level of service and can be a good home for a small brewer.”² As a result of these specialty distributors, the distribution system can be beneficial for a startup brewery, because it allows them the network to expand their product throughout a certain region or further, thereby maximizing it potential sales.

Consolidation of distributors. Unfortunately though, “distributor consolidation has been rampant in the beer business for over three decades. The number of wholesalers has declined from more than 5,000 nationwide in 1970 to 2,500 today. Unquestionably, bigger distributors have become less friendly than smaller distributors. The large breweries like Anheuser-Busch continue to push their distributors to carry only A-B products, migrating more and more to an exclusive network, and Miller/Coors houses continue to consolidate as well. Many of the medium-sized “all-other” distributors have been purchased by the larger wholesalers,”²³ thus eliminating the market for new competitors.

Limiting new competition. The beer distribution system once provided economical benefits because it did provide the best method for large or small breweries to get their product to diverse markets and it also provided small retailers with a wide variety of beer. But, this system may eventually lead to the destruction of new competition into the market, due to the increasing pressure of

²¹ National Beer Wholesalers of American http://www.nbwa.org/Nbwa/home_Public.htm

²² ProBrewer.com, BEERWeek “Distribution 101: A short course in distribution basics”
<http://www.probrewer.com/resources/library/distribution101.php>

²³ McCormick, Tom. ProBrewer.com “Specialty Beer Distributors meeting a first”
<http://www.probrewer.com/resources/distribution/specialty.php>

the larger breweries to force distributors to carry only their products. But also, this system gives all the power to the buyer (the distributor) and their power will continue to increase because of more state regulations that require a distributor to be used.

Summary of power of buyer effects. The distributors are the ones with all the connections to the consumers & retailers, thus the distributor control the prices based on what profit margins they require. The distributors are consolidating and increasing in power. Also, distributors are limiting new competition. So, overall the Porter's force of Buyer Power is a negative for the Beer Brewing Industry.

Force 5: reat of Entry

When a new firm enters into an industry it can affect all of the firms that are currently in that industry. Porter describes this threat of entry as “new entrants to an industry bring new capacity, the desire to gain market share, and often substantial resources. Prices can be bid down or incumbents cost inflated as a result, reducing profitability.”²⁴Therefore as new firms enter into an industry the entire industry's potential for sustained profits is reduced due to the increased amount of competition in that industry. Some factors help reduce the threat of entry as they act as barriers that prevent new firms from entering into an industry. These factors include economies of scale, product differentiation, capital requirements, access to distribution channels, and government regulations. When these factors reduce the threat of entry, the profit potential for the industry increases.

Economies of Scale. Economies of scale are defined by Porter as the “declines in unit costs of a product as the absolute volume per period increase” (Porter 7). Therefore the greater quantity of a product that is produced the lower the cost of each will be to the producer. This creates an advantage for a high volume producer like those seen in the brewing industry. Economies of scale in the brewing industry also exist in areas other than in production and these include purchasing, distribution, and advertising. For example, national brewers achieve economies of scale in advertising through bulk media purchases and umbrella brand marketing. Local-craft brewers spend more than twice that spent by large brewers on marketing and advertising per barrel.²⁵ One company in particular, which is Anheuser-Busch, has done an extremely good job in exploiting the economies of scale that are present in the brewing industry. “Anheuser-Busch has been able to leverage its 45 percent U.S. market share into 75 percent of the industry's operating profits through significant economies of scale in the areas of raw material procurement, manufacturing efficiency and marketing.”²⁶ As shown here there are substantial economies of scale available in the national beer brewing industry. This is a good factor for firms that are currently in the industry as they can take advantage of these unit cost breaks and while doing so also discourage the entry of new firms into the industry.

²⁴ Porter, Michael E. “Competitive Strategy”. New York: Free Press. 1980.

²⁵ <http://www.stumptown.com/articles/mgmtbeer.html#4.2.2>

²⁶ <http://www.deed.state.mn.us/bizdev/PDFs/beer.pdf>

Product Differentiation. In Porter's book, *Competitive Strategy*, he hints at some of the barriers to entry that exist in the brewing industry. Porter states that "in the brewing industry, product differentiation is coupled with economies of scale in production...to create high barriers."¹⁷ In the brewing industry there is definitely an attempt made at creating a brand and building brand loyalty. This attempt to create product differentiation can be seen through the amount of money that the industry spends on advertising. In 2005 the brewing industry spent over \$1.1 billion on advertising and this which was the fourth straight year of ad spending that exceeded \$1 billion. The attempt to create brand loyalty by breweries has been fairly successful even though research would say that it would fail. This is due to the fact that it has been concluded in several studies that, in general, people cannot tell the difference between brands of beer. Second, more expensive brands do not cost proportionately more to make than "economy" beer.²⁰ With these findings it would be expected that the brewing industry would face a tough time in creating product differentiation and brand loyalty, yet the industry has been able to successfully create the idea that their product is better than the next and it is worth the extra money it costs.

Capital Requirements. Capital requirements needed to enter the national beer brewing industry are an advantage to the firms currently in the industry. It is estimated that the cost to construct a plant capable of producing four to five million barrels per year is around \$250 million.²⁷ In contrast it is estimated that to build a plant that would produce 500,000 barrels per year would cost \$6.2 million. In addition, the beer institute shows that the number of traditional breweries has steadily decreased from the first year of record in 1947 with 421 to 20 in 2006. While there has been a large increase in micro or specialty breweries over this time period, the capital requirements necessary to compete on the national level against the big three firms are extremely high. These high costs of operation and construction expenses act as a barrier to entry for firms that are considering trying to compete in this industry on the highest level.

Access to Distribution Channels. Another barrier to entry Porter describes is the access available to distribution channels. When a new firm is trying to enter into an industry it can find that "existing competitors may have ties with [distribution] channels based on long relationships."¹⁷ This can make it difficult to distribute their product due to the lack of available distributors. This exact scenario seems to be present in the brewing industry due to the fact that

"alcoholic beverages, ... [are] distributed through a 'three tier' distribution system (i.e. producer to wholesale distributor to retailer). The wholesale beer market is highly concentrated, with most geographic markets having only three or four beer wholesalers ... [and] these distributors generally require that a reasonable variety of products be provided before they are willing to distribute the product."¹⁸

²⁷ Adams, Walter, *Structure of American Industry*. Beer Industry. Elzinga, Kenneth. Prentice Hall: 2000.

Therefore if a new firm was considering entering the brewing industry they would need to overcome this disadvantage they would have in getting their product to the market. This advantage that the current firms in the industry hold of possible entrants creates another entry barrier to the beer brewing industry which helps to create profit potential.

Government Regulation. The beer brewing industry is one that faces a large amount of government regulation. A cause for the large amount of regulation is due to the fact that in some areas brewers can be regulated by the federal government, state governments, and localities. The federal government has seven different areas of regulation relating to the beer industry. The area relating to breweries and beer production is the one that affects the beer brewing industry. The government agency that is responsible for regulating this industry is the Bureau of Alcohol, Tobacco, and Firearms. The bureau has issued regulations regarding brewing of beer that “include restrictions on the location, use, construction, and equipment of breweries, as well as laws pertaining to the qualification of breweries and their issuance of bonds and consents of surety.” Beer breweries also face “brewing process regulations include mandatory approval of the formula and process for domestic flavored beers, such as lambics, and requirements for the measurement of beer. In addition, federal law imposes a special occupational tax (SOT) on all brewers.”²⁸ Breweries also face state regulations that vary according to each individual state in which they are located. The government regulations that breweries face help to prevent barriers to entry for potential firms considering entry into this industry. This is a benefit to the firms currently in the industry as it promotes an environment that is conducive to sustainable profits.

Summary of threat of entry effects. In the national beer brewing industry there are a substantial amount of entry barriers that protect the firms currently in the industry from new entrants. “Price competition combined with increasing vertical integration and the inherent production economies of the market leaders makes it very difficult for an inefficient major brewer to compete on a national scale.”¹⁹ Overall the national brewing industry faces a large amount of barriers to entry as there are economies of scale, brand loyalty and product differentiation effects, large capital requirements, possibly limited access to distribution channels, and large amount of government regulations. All of these factors reduce the threat of entry into the national beer brewing industry which in turn raises the industry’s potential for sustained profits.

Five Forces Summary

Table 8: Five Forces Summary		
Force	Key Drivers	Effect on Industry Profit
Intensity of Rivalry	High concentration; high innovation	0

²⁸ http://www.beer-brewing.com/apex/US_beer_market/US_government_beer_regulations.htm

Substitutes	Growing substitute industry; low switching cost	-
Bargaining Power of Suppliers	Small suppliers relative to brewers	+
Bargaining Power of Buyers	Consolidation of industry; distribution connected to retailers	-
Threat of Entry	High capital requirements, economies of scale, closed distribution channels, high government regulation.	+
Overall Analysis		0

Strategic Map. One last thing to consider is the strategic map. Below Figure 5 shows the strategic map which is based on branding and the level of specialization. These both are important aspects in the beer industry, as consumers are fiercely loyal to the brands, and brands pride themselves on the amount of specialization they can offer.

Figure 5: Strategic Map

