

Economics 620

Allegheny College

Meadville, Pennsylvania

16335

Just How Pro-Cyclical is the Beer Industry? A Case Study of the Mass Producing Beer Companies and The Boston Beer Company

April 2, 2014

Kelli Decker

Just How Pro-Cyclical is the Beer Industry?: A Case Study of the Big Three Mass Producing Beer Companies and The Boston Beer Company

By: Kelli Decker

Submitted to the Department of Economics

Project Advisor: Don Goldstein

Second Reader: Timothy Hodge

Date: April 2, 2014

I hereby recognize and pledge to fulfill my responsibilities as defined in the Honor Code and to maintain the integrity of both myself and the College as a whole.

Kelli Decker

Acknowledgments

I would like to start by thanking Professor Goldstein for his efforts in helping me not only completing this senior project, but also for guiding me throughout my three years at Allegheny. Your guidance is something that I will take with me throughout the rest of my life, and I honestly cannot thank you enough for all the insight and time you have directed towards me.

I would also like to thank Professor Hodge for being a crucial part of helping me hone in on a final topic.

The Department of Economics also deserves a huge amount of gratitude for always making sure I understood class concepts and being very willing to help me in any way possible. With the help of this department, I feel confident that I have the skills necessary to be successful in my career after Allegheny. Without a doubt, I am certain the best decision I made was transferring to Allegheny.

Finally, I would like to thank my parents, Alison and Scott Decker. Without their love and support I would not have been able to attend this school. I am eternally grateful for all of their encouragement, especially on the tough days.

Table of Contents

Acknowledgments…….3

List of Tables and Figures…….5

Abstract……..6

I. Introduction…….7

i. What is Craft Beer and Why is it Important?.....10

ii. History……12

II. Literature Review……..17

i. Is Alcohol Pro-Cyclical?.....20

ii. Why Beer?.....21

iii. Porter and Strategic Positioning……22

iv. Kaplan…….....23

v. Piscitello……..24

vi. Christensen…….25

vii. Fortune Magazine……..27

III. GDP & Recessions…….29

IV. Empirical……31

V. Conclusions and Recommendations……...…….39

Works Cited……..42

List of Tables

Table 2.1: Sales Percentage Increase in the Alcohol Industry…….Page 19

Table 3.1: Official Recession Dates…….Page 31

Table 4.1: Correlation Coefficient 1993-2012…….Page 33

Table 4.2: Correlation Coefficient 2007-2009…….Page 33

List of Figures

Figure 1.1: Alcohol Consumption Habits over the Years……..Page 8

Figure 4.1: Anheuser Busch Sales between 2006 and 2010……..Page 34

Figure 4.2: Boston Beer Company Sales between 2006 and 2010……Page 37

Abstract

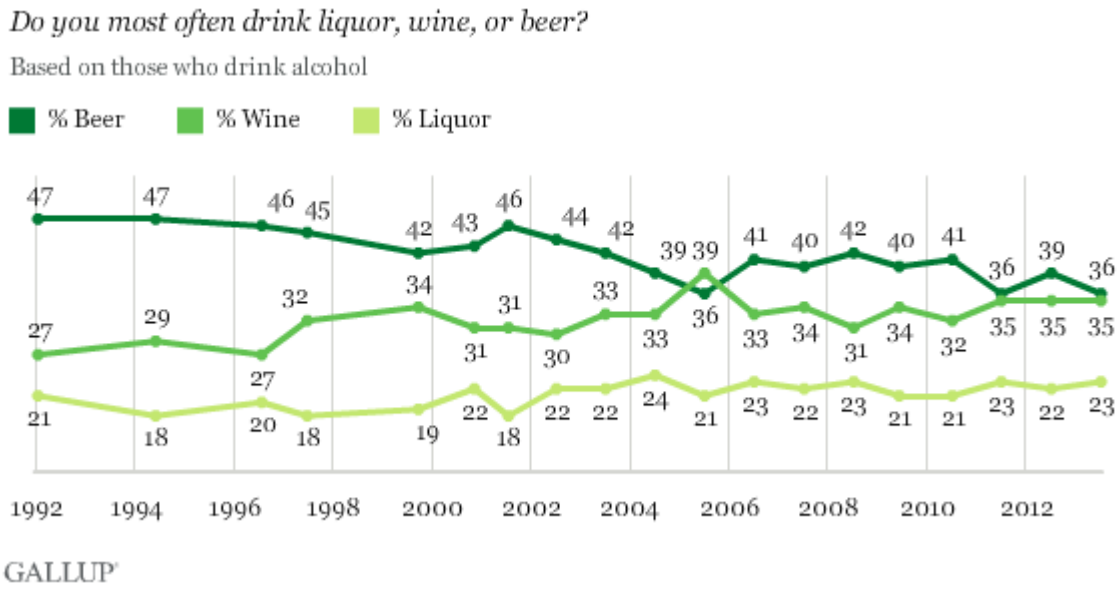
In recent years the beer industry has finally started taking off again after the aftermath of the Great Recession between 2007 and 2009. The two brewing industry giants, Anheuser-Busch InBev and MillerCoors have been losing market share due to the increase of smaller craft breweries, like that of the Boston Beer Company. Company strategies, financial data, and annual reports of each company were carefully examined to compare and contrast sales results from 1993-2012. By focusing on a product that is difficult of imitation and does well across all phases of the business cycle, Boston Beer Company has been able to see growth. To label them as countercyclical though is just too premature of an idea because craft beer has just recently taken off. They still may be able to grow throughout the period of growth the US economy seems to be getting back to again. The beer industry overall has shown not just signs of pro-cyclicality because sales increase as GDP increases, however, they also are able to grow during recessions at times that mergers occur, as shown throughout the Great Recession. I would argue this industry is more a-cyclical due to no consistent patterns of it being one way or the other in either company. This also leads me to the belief that craft companies are at risk for being a bubble, if they are not already. This study supports Michael Porter, Christensen, Piscitello, and Kaplan and Norton's thoughts that in order to gain competitive advantage and probably see an increase of sales, a company must focus not only on operational effectiveness, as the giants do, but also on the customer's and supplier's insights, as a true balanced scoreboard study would require.

Chapter I. Introduction:

During times of recessions there are very few industries, let alone companies, that are able to withstand the downward trending economy for long periods of time. “The U.S. alcohol industry is a major contributor to the economy even during times of recession as proved by accounting for over $400 billion in total U.S. economic activity in 2010” (“Economic Contributions of the Distilled Spirits Industry”). It provided over 3.9 million jobs and generated almost 90 billion dollars in wages for those workers. The contribution of this industry that has been around this country in particular since we were still a colony in about 1580 has proved to be one that needs to be taken seriously and not let slip under the cracks. State and local revenues were over $41 billion dollars in 2010 directly and indirectly ("Economic Contributions of the Distilled Spirits Industry"). While there are articles that claim the alcohol industry is fully recession proof, there is recent evidence to prove that the beer segment is having trouble. The three dominant beer companies in this country today are Anheuser-Busch InBev, SABMiller, and MolsonCoors. Leading the way, Anheuser-Busch holds 47.6% of the U.S. market share producing brand names most know such as Budweiser, Michelob, and Stella (“Our Company”).

Due to the recessions occurring since about 1990 as well as preference in the drinking population, brewing companies are finding that they need to get more creative in order to generate the same or more sales. While beer still controls the majority of sales within the alcohol industry, the industry as a whole is seeing an increase, while beer specifically is seeing a decrease in revenue. The graph below shows that liquor and wine preferences have been increasing since 1992, while beer preferences are steadily declining.

Figure 1.1



Source: http://www.bear-flavored.com/2013/10/is-craft-killing-big-beer-not-through.html

Many articles attribute this to the fact that the majority of adults buying alcohol today want wine and liquor due to a few reasons. Time posted an article on June 25, 2012 stating that after an NPR report came out on how consumer spending on alcohol has changed over the past three decades, one of the most remarkable trends is how rapidly wine has surpassed liquor as the stronger drink of choice in the home. Beer still dominates with about 50% of overall liquor store purchases, but wine accounts for about 40% now, leaving liquor behind at about 10% of overall store sales (Tuttle). Liquor sales and wine sales did seem to increase particularly the recession, likely due to the fact that it was cheaper to buy liquor and "get drunk quicker" since it holds a higher concentration of alcohol than beer. Other people consider that those mostly buying and enjoying alcohol are increasingly those who were raised in a variety filled society. For example, college students are infamous for buying alcohol. In the graph above, one can see that preferences for liquor have increased from the early 2000's on. Today's college seniors were

more than likely born in 1991, 1992, or 1993. They have grown up expecting not mass production of products like young adults of the 50s and 60s, but mass variety of products. Think about all the cell phones, cars, and electronics. Young adults today expect options and liquor and wine provide more options than the typical beer does. Other articles claim that we are now more conscious of our health. Studies have come out claiming wine is much healthier than beer on the body (Thompson). These ideas subconsciously or consciously play into the consumer mindset, which is vital when they are determining which sales to make. This type of thinking has also led management of the Big 3 beer companies towards the introduction of craft beer, to show some sort of difference rather than just light and dark, wheat and stout (Thompson).

According to the Oxford dictionary, the definition of a manager is a person responsible for controlling or administering all or part of a company or similar organization ("Definition of Manager"). Peter Drucker, a political economist and author, believed that employees and suppliers were a resource, not a cost. Before most executives focused on all aspects of the business structure, Drucker was able to focus on the human impact of management decisions, like preferences mentioned above. If recessions are bound to happen expectedly as well as unexpectedly, then managers need to be equipped for them at a moment's notice, and Peter Drucker knew this (Feder).

The focus of this senior project is to dive into the competitive management strategies of the big companies, Anheuser-Busch, SABMiller, MolsonCoors, and the Boston Beer Company before, during, and after recessions in order to understand how and what they need to change in order to remain competitive. The international companies SABMiller and MolsonCoors merged in 2007 in the U.S. and Puerto Rico only to create MillerCoors, however, I plan to look at them separately in order to have more business cycles to examine ("Experience Our Brands"). I hope

to find the cyclicality of the beer industry as a whole, however, I believe that the introduction of craft beer might distract from the ability to do this due to its great rise. To test empirically, I will find the correlation coefficients of these four to compare their trend and relation to GDP over the Great Recession of 2007-2009. By comparing these I hope to test my hypothesis to find out if Boston Beer, an all craft company, is actually countercyclical or pro-cyclical and how that affects the sale of mainstream companies such as Anheuser-Busch, SABMiller, and MolsonCoors. I hope to conclude whether or not craft beer is a long term strategy answer for the main companies, since its extreme growth of late has raised that question.

I-i: What is Craft Beer and Why is it Important?

"Before Prohibition, the United States beer industry consisted of hundreds of small breweries that brewed full-flavored beers. After the end of Prohibition, most domestic brewers shifted production to less flavorful, lighter beers, which use lower-cost ingredients, and can be mass produced to take advantage of economies of scale in production. While, domestic beers today are above 90% owned by the two giants, Anheuser-Busch and MillerCoors, tastes are changing and these two companies could be in trouble ("Featured Documents: 2012 Annual Report").

The modern craft beer industry began in a bill introduced by Wisconsin Representative William Steiger. He sponsored Alan Cranston, a senator from California, in the legalizing of home brewing on a national scale. Jimmy Carter signed this bill into law in 1978 and by the early 1980's, states were legalizing brewpubs. Recently, it has picked up steam again. To explain why, Davis, the author of this article, quoted Jason Childs, a professor at the University of Regina, who stated, "Part of it was the cost of capital." The barriers to entry are said to have fallen with

loans and investors easy to come by. Also, tastes have changed and Americans now want carefully crafted flavors as seen in the change of consumption habits above (Davis).

Craft beer's definition broadened about three years ago to keep Boston Beer Company, who has established control of the craft beer market, and will be discussed in greater detail later. Currently, the definition the Brewer's Association agrees upon is that an American craft brewer is small, producing 6 million barrels of beer or less (about 3% of U.S. annual sales), per year. The brewery must also be independent, meaning less than 25% of the craft brewery is owned or controlled by a beverage alcohol industry member that is not itself a craft brewer. The final stipulation is that it must be traditional. This means a brewer has a majority of its total beverage alcohol volume in beers whose flavor derives from innovative or traditional brewing ingredients ("What is Craft Beer?"). Regular beer typically has two color options and very few differences in tastes, where craft beer focuses on specialty and variety when it comes to style, taste, or color.

In the same Time Article mentioned earlier, we find that craft beer posted a 15% increase in sales in the U.S. Bloomberg reports between 2010 and 2011, around the same time the recession ended. Also, there were 1,693 U.S. craft breweries in 2011, which is a 2000% increase from the mid-'80s (Tuttle). According to the Brewers Association, craft beer has grown from just a marketing technique of the big three to a segment of its own. The Brewers Association claims that between 2007 and 2012, craft beer has grown from 4.4 million barrels produced per year to 7.3 million barrels ("Craft Brewing Facts"). I plan on testing to see if this means the rise of craft brewing is counter-cyclical since it seems to be growing during recessions.

At the National Beer Wholesalers Association's annual meeting, Heineken USA's CEO Dolf van den Brink made a statement saying that while "The industry has seen an explosion of

brands and line extensions. Craft brands have flooded the market with new beers on almost a weekly basis. The activity is creating some fear that beer is becoming more like wine, in which styles are emphasized over branding. There has to be a focus on building brands" ("*Is Craft Killing Big Beer — Not Through Sales, But Brand Status Erosion"*). The question seems to remain however, can beer really morph itself into being "top shelf" material like some high end wines are?

It is only in the last 2-3 years that brewing companies have seen their revenue start to take off again. In 2012, overall beer sales dropped by .9%, but in 2013 seemed to have been rising (Davis). As mentioned above one cause of this is because these companies have started to introduce craft beer within their slew of products. Overall, the craft brewing industry has increased 15% in volume and 17% in 2012 sales compared to the growth in 2011 of 13% volume and 15% in sales revenue. Also, an estimated 13,235,917 barrels of beer were sold in 2012 as opposed to 11,467,337 estimated in 2011 ("Brewers Almanac"). Business Insider claims that in 2012, 13 million barrels of craft beer was produced, an outstanding 76% increase from just 2006 (Davis).

I-ii: History

In order to fully understand how these companies are managed today, it is important to note how they began. It all started in the mid-1800s when large numbers of Germans immigrated to St. Louis and began to brew beer that later became known as lager. By the beginning of the late-1800s there were more than 50 breweries in the St. Louis area. Eberhard Anheuser had left Germany in 1843 and eventually settled in St. Louis. He later went on to become a part owner of

Bavarian Brewery, which he later bought out and renamed E. Anheuser & Co. in 1860, despite any formal training (“History”).

Adolphus Busch first started working in St. Louis as a clerk on the riverfront of the Mississippi River, and by age 21 had a partnership in a brewing supply business. Adolphus met Eberhard through this partnership, and eventually married his daughter. After years of working for his father-in-law, he purchased half ownership in the brewery and became a partner. Adolphus envisioned creating a brand that would appeal to the tastes of many people across the nation. In 1876, he and his friend Carl Conrad created what later came to be known nationally as Budweiser, the company’s flagship brand to this day. Twenty years later Michelob, America’s first specialty beer was created by Busch. In order to grow, Busch was perhaps, smarter than his competitors and introduced giveaways and premiums as well as producing the brewery as a touring facility for people to visit (“History”).

Anheuser-Busch was able to not only remain in business, but diversify and grow throughout the Prohibition and Great Depression periods by marketing for soft drinks and other non-alcohol related products as well as profiting from the invention of the metal can in 1936. Anheuser-Busch hit the 2 million barrel mark in 1938. During the 1950s and ‘60s under August Busch Jr, a national network of nine breweries was created and beer sales increased from 3 million barrels to more than 34 million barrels. Corporate diversification was extended to include family entertainment, industrial products, real estate and can manufacturing. In 1957 Anheuser-Busch became the leading U.S. brewer, a position it retains today (“History”).

As mentioned, Anheuser-Busch today is the total market leader. Anheuser-Busch InBev, formed in 2008, employs over 150,000 people based in 24 countries and 6 operational zones

worldwide. In 2013, AB InBev realized 43.2 billion U.S. dollars in revenue. They are based in Leuven, Belgium, but also have activity occurring on the New York Stock Exchange. AB InBev, InBev being the company they merged with in 2008, is one of the world's top five consumer products companies and recognized first in the beverage industry on FORTUNE Magazine's "World's Most Admired" companies list. Anheuser-Busch's portfolio includes well over 200 brands with top names such as Corona, Stella, and Budweiser. Anheuser-Busch InBev's dedication to heritage and quality can still be seen throughout their management practices. They have been in the U.S. since 1852 and have been in Belgium since the 1300s. Geographically diversified, the company is found in both developed and developing countries ("Anheuser-Busch InBev Company Profile").

The company intends to deliver revenue growth ahead of volume growth and volume growth ahead of market growth. They intend to further strengthen brand innovation in order to stay ahead of the market trends and maintain consumer appeal. They also want to make sure they are on top of things efficiently as well as providing and listening to how their consumers and shareholders feel about their products through a strong brand portfolio. External growth is something the company continues to look into more in the future. They have identified key tools that they believe are crucial to their overall corporate strategy. These include "providing an open innovation policy on all levels so they can revitalize the beer category and increase their market share, having a strong company culture invested in people and maintaining a strong target-related compensation, and holding a best-in-class financial discipline spread throughout the whole organization" ("Mission and Strategy").

SABMiller and MolsonCoors became MillerCoors, the number one competitor against Anheuser-Busch in 2007 ("Experience Our Brands"). Frederick J. Miller settled in Milwaukee

and purchased the Plank Road Brewing Company which became Miller Brewing in 1855. He used yeast that he had brought over from Europe to create the beer. Adolph Coors on the other hand was an apprentice at a brewery in Prussia while he was still a teen. He hid himself on a ship and came to America to become a brewer. He opened Golden Brewery, which later became Coors Brewing, in Colorado and tapped his first barrel in 1873. Both companies made it through Prohibition, the Great Depression, and two world wars much like Anheuser-Busch, proving they are forces to be reckoned with ("Experience Our Brands").

In addition to these companies competing against each other for market share, the craft beer trend has been pushed by small craft beer breweries and is demanding to be noted. Craft beer companies are not a large percentage of the market share as a whole at only 10% as of 2012, however, the rapid growth is something that cannot be ignored (Ginley). Boston Beer Company has been able to establish itself into a national household name, and although nowhere near in size to Anheuser-Busch, SABMiller, or MolsonCoors, it has seen steady growth throughout a recession and developed itself at what seems to be the right time.

By the 1970s a lot of home breweries were popping up across the country. People at home could create the beer they wanted, and did not have to follow corporate policies or strategies. These home breweries turned into small microbrews and today form "craft beer". "Choice, diversity, information, education, quality, personality, flavor and passion are said to be the founding characteristics of craft beer" (Papazian).

Boston Beer Company's most popular line is Samuel Adams. They are the only public all craft brewing company as they decided to do so in 1995. Founder Jim Koch was born into a very fortunate brewing family. The first born son for five generations became brew masters, but by

the time Jim Koch was ready to start his career, the market for full-flavored beer had diminished. In the early 1980s, Jim believed he could find a niche in the competitive beer market for high quality, American beer. He began brewing Samuel Adams Boston Lager in 1984 using only natural ingredients and took beer to a whole new level. He carried bottles from bar to bar and built the business outward from these interactions. By the end of the year sales reached 500 barrels, and distribution expanded across Massachusetts, into Connecticut and even to West Germany. Six weeks after it was introduced, it was named "The Best Beer in America" in the Great American Beer Festival's Consumer Preference Poll for the first of four times ("The Boston Beer Company History"). Clearly, Boston Brewing has focused on its Sam Adams line trying to design products that do well across all phases of the business cycle, the first hypothesis in the literature review section below.

The company's performance is labeled under the "Better Beers" category of the beer industry. This includes not only craft beer, but also small, independent and traditional brewers of domestic specialty beers and most imports. They are determined by higher price, quality, image and taste as compared with regular domestic beers, according to the Boston Beer Company's Annual Report.

In 1988, The Boston Brewery opened in Boston after renovations had forced production into Pennsylvania for a while. In the mid 1990's, Jim returned to Cincinnati and purchased Hudepohl-Schoenling Brewery, a place his father had apprenticed at in the 1940s. By 2000, Samuel Adams had won more awards in international beer tasting competitions than any other brewery in the world. In June of 2008, they relocated in Lehigh Valley, PA where they currently employ over 200 people and produce nearly every style of Samuel Adams beers. Overall, he employs over 700 people between Cincinnati, Boston, and Pennsylvania. Jim is said to have

pioneered the renaissance in American taste for flavorful, traditional beer since by 1995, hundreds of local breweries sprung up across the country and continue to today ("Boston Beer Company History"). It may be the largest craft brewery, but The Boston Beer Company still accounts for less than 1% of the total U.S. Beer market, while craft brewing in general is only around 10% of the total market share (Jones). This may seem like a small number, however, craft brewing has been increasingly growing over the past 5-10 years. Even with GDP seeing periods of decline and small growth, we have seen that craft brewing is taking off. The question is why?

II. Literature Review:

Periods of recessions and depressions have occurred throughout the history of the United States' economy. Virtually every decade has seen some sort of recession, proving that regardless of how we prepare, we are bound to run into a dip eventually. Warren Buffet made the statement in 2010 that "We're still in a recession, we're not going to be out of it for a while, but we will get out" (Crippen). He has unquestionably seen enough periods of recession to realize that they occur every so often and the best response is to not panic, contrary to the popular reaction by the public. Panic creates chaos and ends up just making things worse. The most recent example of this was the Great Recession of 2008. It is something that is still engrained in the minds of college students, employers, and employees across the nation.

The truth is that being "recession proof" is virtually impossible. Very few, if any, companies can be truly "recession proof". There are strategies that can aim to reduce the impacts of a downward trending GDP. Since managers need to expect that recessions are going to happen, they need to take a more in depth look of their industry and specific firm to understand how to make their organization "recession resistant" as well as whether or not it is pro-cyclical or

countercyclical to begin with. Historically, three industries have been said to be "recession-resistant" meaning that even during periods of recession they see growth. This study will take a comprehensive look at the alcohol industry, the beer segment in particular, to see what specific management techniques should be used to ensure this segment can remain on top like it has historically done during times of economic disaster. In order to recommend strategies, we first must find out if beer is pro or counter-cyclical and also look at management strategies industries around the world are currently using.

In Japan, due to the diversification of consumer tastes, a saturated beer market, and a decreasing drinking population, managers have been forced to strengthen their core business strategies and diversify into types of beverages other than beer or even liquor, such as soft drinks. In the United States, this is not the case as we find that the giants want to focus mostly on their beer and original core strategies. The companies with the flexibility to do otherwise are typically the smaller companies (Yoshimura).

Category management in the beverage industry is key right now. This goes along with the thought that consumers want choices, and managers need to realize this to remain sustainable. Mobile apps and web technology have been created to not only ease the consumer's buying process, but also to compile data on these consumers. Management then looks at this data and works with suppliers to make sure the products are available on the shelf, or behind the bar. Managers realize that consumers are more likely to buy a product they see or hear about over and over again. By advertising on these apps or through online sites, whether it be social media ones or not, the target consumer is virtually anyone (Haderspeck).

As far as the United States is concerned, in 2011, Forbes posted an article and the graph below from Sageworks showing alcohol sales in general were on the rise. In 2008 and 2009 sales did tend to slow in the amount of growth, as shown by the Beer, Wine, and Liquor Store sales increasing by two percent instead of by five or six percent as previously shown. This indicates that if the alcohol industry is not recession "proof", as sales did slow somewhat it is at least recession-resistant because it grew overall (Bierman). It also could mean that Americans tend to slow down their drinking habits during times of slower economic activity, however, never really "stop" drinking. This is where psychological aspects such as drinking because one is depressed or feeling pressure from work comes into play. People typically pull back the reins and more than anything change the type of alcohol they consume. They will not just stop buying it all together, however.

Table 2.1: Sales Percent Increase in the Alcohol Industry

Industry	**2007**	**2008**	**2009**	**2010**	**2011**
Beverage Manufacturing	11.37%	9.46%	0.64%	9.14%	9.89%
Alcohol Wholesalers	7.22%	5.87%	4.78%	6.24%	6.44%
Beer, Wine, and Liquor Stores	5.96%	2.00%	1.63%	5.74%	6.08%
Drinking Places (Alcoholic Beverages)	6.84%	3.74%	2.69%	3.13%	3.78%

Source: Sageworks

An example of this was also seen in the early 1990's when Anheuser-Busch's Budweiser fell in volume by 5.2%. The beer industry saw a 3% growth between 1987 and 1991, however, since Budweiser was a premium priced beer, that could have been why it declined. Anheuser-Busch even went as far as to blame the switch to less expensive beers by consumers, the reason for the sales decline. They ended up advertising more to make Budweiser "the household name for everyone as well as discount their products, which cost them operating profit for that year

(Vaghefi and Huellmantel 420-421). They were a big enough company that they were able to do this, and at the time domestic beer was still a huge part of consumer preference.

II-i: Is Alcohol Pro-Cyclical?

One of the most widely known researchers on the beer industry and consumption habits, is indeed Donald Freeman. Previous research on drinking consumption habits during economic struggles have produced mixed results (Freeman). Psychological research presented by Brenner and Mooney (1983) states that the stress of unemployment increases drinking behavior as a coping mechanism (Brenner and Mooney).

Freeman stated that economic research done by Sloan, et al (1995), or CJ Ruhm (1995) typically regards alcohol as a normal good, with declining incomes in recessions leading to predictions of declines in alcohol consumption. He claims that investors see the beer industry as "defensive" stocks, which are less exposed to business cycles. This was backed by the stock price rise of the industry's major companies by 46.02% between 1998 and 2003, a period which saw the bursting of the dot-com bubble and a recession between 2000 and 2001. Ruhm and Dee (2001) used microeconomic data from the Behavioral Risk Factor Surveillance System (BRFSS), and claimed that binge drinking spikes during recessions. The reason behind the conclusion was that economic stress is the primary factor, outweighing the income effects of recessions. Ruhm and Black in 2002 expanded on this sample with a larger set of explanatory variables and a weighted regression to find that alcohol is pro-cyclical even at the micro level, producing a somewhat conflicting result to the previous one (Freeman).

Freeman (2001) takes a somewhat different approach from previous literature to focus solely on beer consumption at the national level, at a monthly frequency, over the period 1955-

1994. Recessions do not typically last too long, so Freeman threw away the annual data used in previous research. Freeman used error-correction methodology (ECM) to find evidence of co-integration among the variables, but found no real evidence that beer consumption is responsive to departures from equilibrium, indicating that beer is in fact neither pro nor counter-cyclical, but acyclical (Freeman). Acyclic describes a situation where the variable has no relation, good nor bad, with the economy (Dodson). Freeman realized that although there seems to be a long-run pro-cyclicality outcome, in the short run, variables do not really have an effect one way or the other on consumption, which means they do not really affect sales too much either way.

II-ii. Why Beer?

What has astounded previous researchers on this topic and created debate is the fact that the alcohol industry and beer in particular is not a "necessity". We do not need it in order to live like we would still need groceries and toilet paper during recessions, for example. This fact made me question that whether beer is pro-cyclical or counter-cyclical, or neither, why has the segment mimicked that of being both? Furthermore, what does that mean for the future recessions that are bound to happen? I am wondering if something management is doing, or maybe even a bubble of some sort. Does the new trend of craft beer discussed below bring a legitimate management strategy option to the table and cause these counter-cyclicality ideas on what is typically considered a pro-cyclical normal good, or is it just a bubble that will eventually burst when times get better?

II-iii: Michael Porter and Strategic Positioning:

A managerial composition would not be complete without discussing Michael Porter. He spoke about this idea of "strategic positioning" in which activities within an organization should be consistent with the strategy and goals of the firm. This means that from the beginning core competencies need to be set up that are consistent with what the firm plans to do in the future. No firm should bite off more than they can chew at one time, but they should be prepared for external market changes by choosing the correct internal sets of activities. Porter mentions how firms should pick their niche, become an expert, and delay other activities because creating the "perfect fit" comes from consistency, complementariness, and effort optimization. In relating this, it may mean that companies that are focused on honing in on perfecting "one area or type of product" will be the ones best prepared and most likely to last through periods of recession (Porter).

He spoke about this idea of operational effectiveness meaning that a company should want to do things differently than competitors instead of creating "better" versions of imitable products. That means that specific products in industries that are able to grow throughout recessions are more than likely ones that differ and separate themselves from all the others. The shoddier products sell enough to make the industry as a whole look good. Michael Porter would most likely agree that products designed to do well across all phases of the business cycle through research and competencies put in place by management are a decisive factor in whether or not it is possible for that industry to be recession proof (Porter).

II-iv: Kaplan & Norton: Balanced Scorecard

The idea of a "balanced scorecard" is defined as a set of measures that gives top managers a fast but comprehensive view of the business. Basically, just as Porter believes creating the perfect fit is important, you can only create this "fit" by looking at all sides of the firm or organization, not just the financial side. During recessions businesses tend to become too focused on the end profit the product is creating for the firm, but that does not explain the entire picture. "It is important to look at the product or service from a customer, internal, innovation and learning, and financial perspective" (Kaplan and Norton 3). After researching all of these companies' annual reports, they each claim that they take into account what their customers want and not just what they believe are best.

Customers are ultimately the investors in products and services, and especially during a lull in the economy, they must see value and differentiation or they will not buy (Kaplan and Norton). This is where the thoughts of why the alcohol industry is recession proof come into play. However, some psychological studies have shown that when people feel depressed financially, they will turn to alcohol for comfort due to its ease of access and relatively cheapness. Economically, the only way to test to see which theory is more correct is through studies.

Internal perspective aids the organization in determining what they must excel at. This tracks measures such as productivity and cycle times (Kaplan and Norton). This is where managers can determine whether or not their idea of developing Porter's "strategic fit" is working, and whether or not competencies need to be changed depending on market demand.

Innovation and learning perspective tells a company whether or not the company can continue to improve and create value by launching new products or simply by improving operating efficiencies within existing products (Kaplan and Norton). During recessions, this refers to management decisions as to whether releasing new products or focusing on one's niche is the better thing to do. This will help you decide if you need to change the product line or details to downward trends in the market.

Financial perspectives are of course important, and should be taken into consideration by management during periods of strong growth and recessions. They should however, never be taken as a single indicator of how good or bad the business is doing. All things equal, the balanced scorecard provides managers with a presentation of both financial and operational measures that give top managers a fast, comprehensive view of the firm. Products should not only be prepared to be successful financially during recessions, but also valued throughout all phases of the business cycle (Kaplan and Norton). Kaplan and Norton would believe that during recessions all parts of a product from beginning to end need to be looked at, and changes to core competencies should only be messed with if absolutely necessary.

II-v: Piscitello: Corporate Diversification

Once a firm identifies their valuable resources, management's task is to figure out how they are going to use them to diversify a firm. Piscitello spoke about how firms should push technological developments in the direction their market segments are pulling them. Corporate coherence is defined as the firm's ability to generate and explore synergies of various types. It is interconnected between a company's technological competencies and its downstream activities. Higher levels of coherence should be positively associated with each of the performance

measures mentioned in Kaplan and Norton's balanced scorecard. Economic performance is not necessarily positively influenced solely by the amount of diversification, but by the ability of the organization to increase its corporate coherence (Piscitello).

Within the beer segment of the alcohol industry, I am looking into not just how diversified the product is, but also how good managers are at using technology to market and create products in a different way than ever before. This is where I came up with the idea of looking into whether or not a firm should diversify into related segments within the same industry, some of which do well during periods of growth, and some of which do well during periods of recession. Diversification can be good if performed correctly with all people and parts in mind. If a recession is occurring, maybe you should diversify into a new, related sector. "New knowledge is determined by what and where management has gotten information from in the past. It has largely been shown that each firm within an industry has its own distinct technological portfolio of competencies, and these are reflected in their pattern of technological specialization" (Piscitello). How technologies are used in these three industries will be a key indicator of its importance for managers to focus on during recessions. Certain technology strategies support organizations more than others.

II-vi: Christensen: Corporate Strategy and Management of Innovation and Technology:

Christensen takes a look at vertically centralized vs. horizontally decentralized management approaches to doing what Piscitello spoke about. Managing technology and

innovation is not just done in the R&D department; it is done throughout all aspects of the organization (Christensen). This relates again to the balanced scorecard mentioned earlier.

In the horizontal related diversification “M” management approach, the headquarters will have different divisions and within each division have R&D, Production, Marketing, and Finance/Administration departments. This means each R&D department can focus on one product versus 20 different ones like in the “U” management approach. Some criticisms of the M-form are that if there are three or four R&D departments, they will start competing against each other and will lose unity in the sense of common ground and values. It is also thought that they will not exploit shared resources across the divisions when using the M-form. They do focus on basic knowledge and basic technology tactics (Christensen).

The vertical integration “U” management approach is when headquarters has one R&D, Production, Marketing and Finance/Administration section for all products they produce. Divisional R&D departments, found in the “M” form, focus on applied R&D meaning they create new innovations and use technology more than a central R&D facility would in the U-form structure (Christensen). Depending on which approach an organization takes is an important dynamic as to how well an organization will do in a recession. If one is going to diversify into related segments, they should use the M-form, but if they want to focus on creating in best all-around products they should probably stick with a U-form management configuration.

Anheuser Busch and MillerCoors use an M-form structure of management since they are global corporations while Boston Beer is still small enough to slide by with a U-form. This helps Boston Beer create the best all-around recession proof products. This is consistant with Christensen’s theory that a decentralized company would provide little innovation and stay close

to what the market is already doing. They will try to diversify into different market segments without creating anything new really new. This has been done with the launch of products like Miller Fortune, a "crafty Bourbon beer" (Reidramsay). A centralized company will come up with really different products, such as Boston Beer Company has done. If it "clicks" like craft beer seems to have, it may expand fast enough to counteract recessions. This will be tested during the empirical section.

II-vii: Fortune Magazine

In 2009 senior editor Geoff Colvin posted an article onto CNN's website claiming that while managing in any recession is difficult, managing through the Great Recession was especially tough because it was so different from previous ones. Employment plummeted by more than two million jobs in 2008, and during the 3rd quarter of 2009 U.S. consumer spending fell at an annual rate of 3.1 percent. This was the steepest decline since 1980 meaning that managers had never seen anything like it in four decades, a frightening situation for something that comprises more than 70% of America's economy. Americans are also in more debt than they ever have been (Colvin). This suggests that management needed to be able to cut costs at least somewhat in order to appeal to customers during the previous recession.

CEO Brad Smith from Intuit in his interview with Fortune claimed how important it is for management to prepare for the worst. He stated, "You identify areas where you think you can be more efficient by assuming the worst-case scenario, then you end up saying why don't we just do that anyhow. Facing the coming reality before your competitors do can make a big difference in which of you stays healthy or even who survives" (Colvin). The article asserts that some of the most effective moves an organization makes for prospering through a recession are ones

established from the beginning, like the first hypothesis suggests. For example, in 2009 while Washington Mutual and IndyMac Bank were failing, Bank of America, who had gotten out of subprime mortgages in 2001, attracted $21 billion of new consumer deposits as consumers ran to safety (Colvin).

Ten suggestions were given to managers of industries in order to see consistent growth through recessions that seem to be more in line with the second hypothesis. They were to reset priorities to face the new reality, keep investing in the core competencies, communicate like crazy, push innovation and creations, do not rush to cut prices, focus on capital, reevaluate people, reexamine compensation, think twice about outsourcing, and choose acquisitions and mergers wisely (Colvin). Cutting prices right away is not suggested because while everyone would like to pay less for a product, the dangers to the company are greater than most realize. McKinsey research found that in a typical S&P 1500 company, a price cut of 5% would have to generate an increased sales volume of at least 19% to make up for itself. While holding prices may cause sales to decline, it is believed that sticking through that typically saves more money in the long run (Colvin). Paying attention to price-sensitivity in an industry is very crucial during recessions. Managers who also target emerging markets where consumer spending habits are high are also likely to do well, as suggested by Goldman Sachs.

Since the recent recession was so great, many theorists are changing their previous perceptions of what it means to be “recession proof”. Previous literature was based on psychological processes and knowledge to push certain beliefs and ideas into the public. Now economic research is showing that maybe no industry can truly be “recession proof”, only “recession resistant” at best. While certain industries see small or even intermediate growth during recessions, managers can never be 100% prepared and must be flexible in changing

techniques to solve problems that arise. No recession is ever the exact same, and should not be managed or treated as such. Having a solid set of core competencies from the beginning answers the question of importance when it comes to valuable products, but in order to answer which types of management practices, if any, actually show positive statistical significance, requires testing. The suppositions of theorists so far are mixed because it seems that a combination of things done from a management perspective is what it takes to make it through a recession.

After reading preliminary studies and economic management literature theories, I have come up with two hypotheses as to why this may happen. Is it the ability to quickly adapt the product line to downward shifts in the market? Is it the ability to design products that do well across all phases of the business cycle? This could be explained by the ability to keep a very lean or flexible cost structure, so one can adjust prices downward in recessions and still be profitable. This could involve the diversification of products into related segments of the same industry, some of which will perform better during recessions and some during recoveries. These questions can begin to be answered by looking at previous work done by classical management theorists such as Porter, Kaplan & Norton, Piscitello, and Christensen as well as recent studies done by economists.

III. GDP and Recessions:

GDP is defined as the measure of the USA's output of goods and services. In order to compile this number, the Department of Commerce gathers data from various sources on personal consumption, government expenditures, private investment, inventory growth and the nation's trade balance. It takes into consideration whether the output of goods and services of a society is positively impacting the well-being of the population and gauges the health of the

economy (Dodson). It represents the total dollar value of all goods and services produced over a specific time period. Usually it is expressed as a comparison to the previous year or quarter. It can be measured by the income approach or the expenditure approach. When there is negative GDP growth, investors start to worry about recessions ("What is GDP and Why is it so Important").

The National Bureau of Economic Research employs a Business Cycle Dating Committee which maintains the chronology of the U.S. Business Cycle. A recession is a period between a peak and a trough, whereas an expansion is defined as a period between a trough and a peak. During a recession, a significant decline in economic activity spreads across the economy and can last for either a couple months or a year or so. Expansions typically last for several years, but it is a period of time when economic activity rises substantially and spreads across the economy. Reversals can occur in economic activity during both recessions and expansions. There is no fixed rule that can help the committee determine if a contraction is only a short interruption of an expansion or vice versa. There is also no fixed definition of economic activity. The committee just compares the behavior of various measures of broad activity including real GDP measured on the product and income sides, economy-wide employment, and real income. They also may consider other indicators such as real sales and the industrial production index. A well-defined peak or trough in real sales or IP may help determine the overall peak or trough dates, particularly if the economy-wide indicators are in conflict or do not have well defined peaks and troughs. With that being said, below is produced the official peak and trough dates from 1990-2013.

Table 3.1 Official Recession Dates According to the National Bureau of Economic Research

Peak Date	Trough Date	Contraction-Peak to Trough (Duration in Months)	Expansion-Previous trough to this peak (Duration in Months)	Cycle Trough from Previous Trough (Duration in Months)	Cycle-Peak from Previous Peak (Duration in Months)
July 1990	March 1991	8	92	100	108
March 2001	November 2001	8	120	128	128
December 2007	June 2009	18	73	91	81

Source: http://www.nber.org/cycles/cyclesmain.html

Pro-cyclicality is a term that until the Great Recession I had never heard of. Edward Harrison, founder of Credit Writedowns claims that "it is a term used in economics to describe how an economic quantity is related to economic fluctuations in the business cycle" (Harrison). Any economic quantity that is positively correlated with the overall state of the economy is said to be pro-cyclical. If a quantity tends to increase when the overall economy is then it is classified as pro-cyclical. If quantities grow while the overall economy is slowing down then it is classified as countercyclical.

IV. Empirical:

In order to figure out the central question of how cyclical the beer segment of the alcohol industry is we must first develop a correlation coefficient comparing these four companies with GDP. "The quantity "r" is called the linear correlation coefficient, which measures the strength

and direction of a linear relationship between two variables, or in this case between a company and GDP" ("Statistics 2: Correlation Coefficient").

The correlation coefficient is between -1 and +1 always. The closer r is to positive one means that the stronger the positive correlation is between x and y. Perfect positive correlations as well as perfect negative correlations are possible if the coefficient is exactly 1 or -1. Negative correlation relationships are seen if "r" is below zero and closer to -1. When r is a zero, that typically means there is no correlation, however, a value near zero means a random relation is probably present. A correlation greater than .8 is generally described as strong whereas a correlation less than .5 is generally labeled as weak. These values can vary based upon the "type" of data being looked at however ("Statistics 2: Correlation Coefficient").

Once the correlation coefficient is determined you can also square those "r" values to find the coefficient of determination. This value is useful because it is a measure that allows one to determine how certain one can be in making predictions from a model. "The coefficient of determination is the ratio of the explained variation to the total variation" ("Statistics 2: Correlation Coefficient"). If the regression line passes exactly through every point on the scatter plot once graphed, it would be able to explain all of the variation. The further the line is away from the points, the less it is able to explain ("Statistics 2: Correlation Coefficient").

By running a correlation function in Microsoft Excel, I was able to chart the table below using U.S. Dollars in Millions.

Table 4.1: Sales Correlation Coefficients from 1993-2012 Unless Otherwise Noted

	Anheuser-Busch INBEV	SABMiller	MolsonCoors	Boston Beer Company
Correlation Coefficient "r"	0.904477575 90.45%	0.860769924 (from 2005-2012) 86.08%	0.806828768 80.68%	0.910397803 91.04%

Source: Numbers taken from Mergent Online

As one can see, the Boston Beer Company was the closest to a perfect positive fit with GDP. This means that the Boston Beer Company, as well as the "big three", overall seem to have a positive correlation to GDP. This suggests that there is a strong positive correlation stating when GDP increases, so do these companies' sales. This also means that when GDP is lower, so are sales at these companies. However, when we look at the chart below that examines the correlation coefficients during the last official recession period, we see that Anheuser-Busch seems to have actually been counter-cyclical while MolsonCoors and Boston Beer seem to show a weak positive correlation. SABMiller still holds on with a strong positive correlation.

Table 4.2: Sales Correlation Coefficients from 2007-2009

	Anheuser-Busch INBEV	SABMiller	MolsonCoors	Boston Beer Company
Correlation Coefficient "r" (from 2007-2009)	-0.602094345	0.975275326	0.275552261	0.100248094

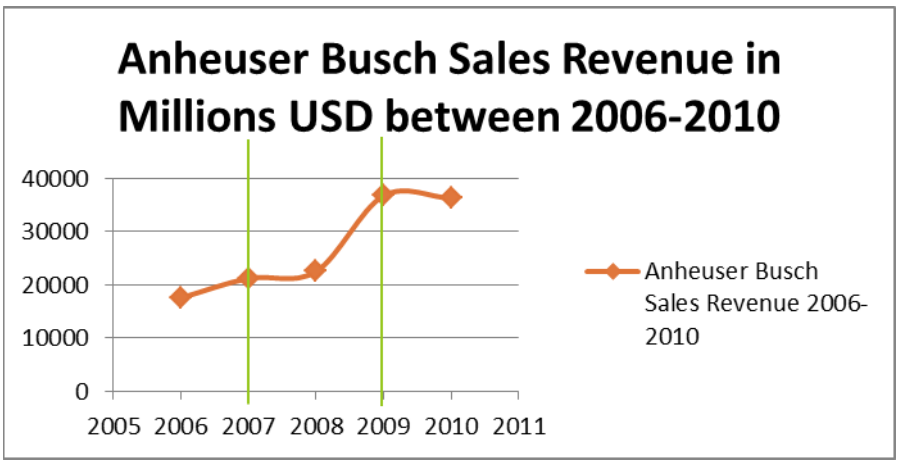
Source: Mergent Online

The two companies that seem least affected by the GDP fall during the '07-'09 Great Recession were obviously Anheuser-Busch and Boston Beer. This is also seen in the graphs below, as we can see a great sales jump for AB Inbev between '08 and '09. Throughout '07-08 these sales remained relatively stagnant, which suggests that after the 2007 merger between SABMiller and MolsonCoors, Inbev had to create a management marketing platform that would

allow them to grow during hard times. By digging into Anheuser-Busch's annual reports, I was able to find that although the correlation co-efficient shows sales growing during a period of despair, this is explained by the merger of Anheuser-Busch and Inbev on November 18th, 2008 as announced in their annual reports ("2013 Annual Report"). The growth was not due to the recession itself. Also, during periods of growth, A-B still grows, meaning that it could not truly be counter-cyclical. This means that the one most "genuinely recession-resistant" is the Boston Beer Company.

Most of the "craft beers" people are buying, are unknowingly owned by one of the two giants, A-B or MillerCoors. Anheuser-Busch just purchased Blue Point Brewing back in February 2014 to solidify their 11th craft brewing alliance. Blue Point brewing had worked its way to be among the top 50 American craft brewers by sales volume before it was bought out. Goose Island and Redhook are other names that Anheuser-Busch has merged with, making them by the definition by the Brewers Association, no longer a true "craft" beer (Tuttle).

Figure 4.1



Source: Numbers taken from Mergent Online and created in Excel

In the Letter to its Shareholders, Anheuser-Busch states that “while we are the world’s largest brewer, we do not believe our potential is limited to traditional beer occasions and consumption opportunities”. Our strategies are aimed at capturing an increasing “share of throat” by attracting consumers from the wine and hard liquor categories as well. They have developed Ritas, a beer based drink for non-beer drinkers, which has proven popular with women. Up until 2013, it seems Anheuser-Busch has really focused on operational effectiveness, while seemingly ignoring a strategy that would set them apart and continue their growth. Now, it seems that they are starting to play into the fact that they can buy resources cheaper than their competitors to create flavorful and different products for consumers (“2013 Annual Report”).

Anheuser-Busch seems to be the perfect company example of one that needs to look at “the balanced scorecard”. While their financial record has struggled in the last 7-8 years, top management is able to use their market share to buy out companies when needed along with innovating new types of beer and probing it into the market quickly. They also rely heavily on consumer tastes to ensure that they are producing things that will be bought (“2013 Annual Report”).

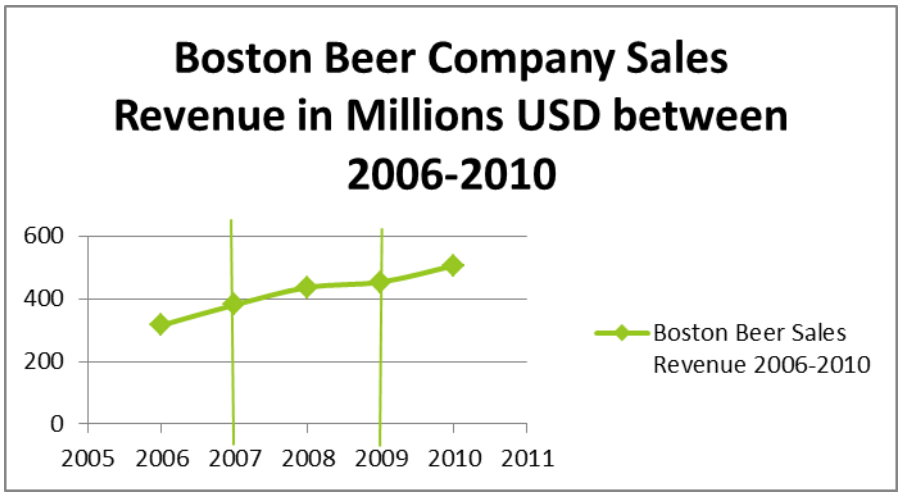
In the Annual Report, when speaking of risks, Anheuser-Busch states, “Competition in its various markets and increased purchasing power of players in their distribution channels could cause AB-InBev to reduce pricing, increase capital investment, increase marketing and other expenditures, prevent AB InBev from increasing prices to recover higher cost, and thereby cause them to lose market share or reduce margins. Any dilution of their brands as a result of competitive trends could lead to a significant erosion of their profitability. Innovation also faces inherent risks in the eyes of the management, and the new products they introduce may or may not be successful, while competitors may be able to respond quicker to the emerging trends due

to their smaller size, such as the increasing preference for craft beers produced by microbreweries" ("2013 Annual Report"). When all beers were virtually the same, Anheuser was able to strategically take control, but now it is really all about consumer taste, and Anheuser is so big they do not have the time to focus on one specific line. They also may no longer be able to cut resource costs as efficiently as they have been able to do before.

Boston Beer Company has shown through their strong positive correlation and even weak positive correlation during the most recent recessions that they are very cautious of emphasizing one product line and realize that they need to make a few changes to remain profitable long-term ("Featured Documents: 2012 Annual Report"). They have shown they understand the changes necessary by launching a new line, Angry Orchard in 2011 right after the recession. This product has seen great success thus far, and they plan on working on other new types of beer/ale to bring to market ("Featured Documents: 2012 Annual Report"). Twisted Tea is also sold by the company in order to compete with Mike's Hard Lemonade and Bud Light Lime, among others.

Launched in 2001, Twisted Tea is a new product type that is difficult of imitation. In 2012, Boston Beer claimed that sales volumes increased by 9% in the flavored malt beverages category, suggesting that this could be a new trend in the coming years ("Boston Beer Company"). The graph below shows their steady growth, but they are still considered pro-cyclical because as GDP increases, sales go up in higher amounts than they do during recessions. The likely reason for their increase during the most previous recession is just due to the craft trend in general, which has spiked dramatically since 2006.

Figure 4.2



Source: Numbers taken from Mergent Online and created in Excel

In their Annual Report, Boston Beer speaks of how they encourage their employees to train and gain as much knowledge as they can in the industry to remain successful. In 2012, their revenues increased by 13% to round out at around $629 million. They were able to launch Angry Orchard cider nationally in April of 2012, which soon became America's top brand to help them expand. They recognize that due to the large number of craft brewers and imported beers with similar prices and target drinkers that the Better Beer category is highly competitive. There are now around 3600 operating or in the planning stages of craft brewing, up from 420 in 2006 ("Featured Documents: 2012 Annual Report"). Existing breweries are building more capacity to promote more shelf space for craft beer brands. Imported beers, such as Corona and Heineken continue to compete and have seen market share growth over the last ten years. This is more than likely due to the strength and distribution networks that these competitors have over Boston Beer. As of June 2012, owner of Corona, Grupo Modelo, wish to be bought out completely by AB InBev in addition to the 50% stake they already own. This acquisition was the subject of

debate with the U.S. Department of Justice Anti-Trust Division ("Featured Documents: 2012 Annual Report"). In June 2013 however, the deal was finalized for 20.1 billion dollars ("Anheuser Busch 2013").

At times Boston Beer Company is competing for a share of the distributor's attention and selling efforts due to its size, which can be a disadvantage. They distribute through independent distributors, who may also distribute their competitor's products. Certain brewers have contracts that impose requirements on distributors that are intended to maximize the wholesaler's attention, causing increased competition ("Featured Documents: 2012 Annual Report").

"Boston Beer does have certain competitive advantages over the regional craft brewers, including a long history of awards for product quality, great available resources and the ability to distribute and promote its products on a more cost-effective basis. Additionally, the Company believes it has advantages over imported beers, including lower transportation costs, higher product quality, a lack of import charges, and product freshness" ("Featured Documents: 2012 Annual Reports"). The company also notes that they are very flexible and can adapt to changes in GDP easier than the monster giants.

A very interesting part of this case study comes with the explanation of SABMiller and MolsonCoors. SABMiller's correlation coefficient came up strongly correlated with GDP while MolsonCoors saw a weak, yet positive, correlation. If these coefficients lean towards pro-cyclicality, then currently while the market is starting to grow again, we should see a growth of sales. By penetrating the market with craft beer, also seemingly pro-cyclical, it seems MillerCoors, the merger of these two companies would highly help them remain competitive. It

seems that MillerCoors' management has seen this open door by creating their own niche brands to secure their dominance.

Blue Moon is marketed as an "artfully crafted" Belgian-inspired beer. Blue Moon's two million barrels per year comprise around 15% of the craft market by volume. It is the biggest competitor to Anheuser-Busch's Shock Top, which doubled in sales between 2010 and 2011, and continues to gain ground each year (Davis). Another craft beer company MillerCoors acquired is Leinenkugel. While true beer enthusiasts claim these are no longer craft beers, the big giants persist otherwise, wanting their customers to think they are drinking craft beer and not mainstream beer during this trend. MillerCoors, like Anheuser-Busch has been known to break into the "Better Beers" category by importing and distributing foreign brewers' brands, acquiring whole or part of small craft brewers, and creating domestic specialty beers. Boston Beer is well aware of these tactics, and feels that they can remain on top due to their flexibility regardless of GDP growth or failure.

V. Conclusions and Recommendations

There are some risk factors Boston Beer list in their annual report that I believe can be projected on an even larger scale to the craft trend in general. One is that they face almost insurmountable competition from MillerCoors and Anheuser-Busch. Some other factors are that there is no assurance of continued growth, the unpredictability and fluctuation of the company's quarterly results may adversely affect the trading price of its common stock, the company's advertising and promotional investments may not be effective, the expanding costs could adversely affect company operations or financial results, and the company is dependent on its distributors. Boston Beer is dependent on key suppliers, including foreign sources, and this

causes a dependence on foreign currency. The use of natural ingredients creates reliance on weather and crop resources that could create excesses or shortages of inventory exposure. This is important because Boston Beer separates themselves by flavor. Packaging cost or energy cost increase could harm Boston Beer's financial results, and changes in public attitude or tastes could harm the business. Regulation changes related to attitudes and taste could adversely affect them and other craft companies as well. Operating results and cash flow are obviously stronger during times of GDP growth, but if managed properly can see small growth even during times of recession ("Featured Documents: 2012 Annual Report).

It seems that the giant companies focus on operational effectiveness and cutting costs whereas Boston Beer focuses on innovation and creating a product difficult of imitation. Anheuser-Busch InBev was able to increase its net income by a multiple of about 2.5 between 2008 and 2012 (Mergent Online), however their yearly revenues were basically the same. The problem with this is that eventually, they are going to run out of expenses to cut and this number will stop looking as good.

It seems in the short term, craft beer is a good option for these companies if they do it properly, especially for SABMiller and MolsonCoors' merger MillerCoors, in order to remain as the number one competitor of Anheuser-Busch. In the long run however, craft beer will probably stabilize and/or the big companies will just merge and buyout the smaller craft breweries. In the case of Boston Beer, right now they seem adamant about not selling, however I would not be surprised to see a merger once the mini "bubble" pops. The truth is, as effective as Boston is currently due to their significant size difference, Anheuser-Busch and MillerCoors just own too much of the U.S. market share (73.7%) for me to be able to predict any major changes. I would also go as far to argue that beer is indeed acyclical because if the right marketing technique or

innovation comes along, even during times of recession, it can be popular. Overall sales may drop in the giant companies during recessions, but many other factors play into this. The current trends are able to withstand the business cycle so long as the rapid trend growth continues shown by craft beer in this case producing numbers capable of growth during both recessions and times of growth in the economy. When this trend fades away, Boston Beer is going to need to focus on other strategies to expand.

Some further research that would enhance this project would be getting overall beer industry data, separating out the mass producing companies and the craft companies. I could then acquire individual company data from Anheuser-Busch, SABMiller and MolsonCoors separating craft beer sales from their mass production beer sales. Another thing that would help further research would be expanding the number of business cycles examined, and looking more closely at MillerCoors as one company since 2007 rather than SABMiller and Molson Coors separately. The merger makes it difficult to look at MillerCoors because it honestly has not been around long enough to accurately predict much of anything. The Great Recession was difficult to analyze in this case because MillerCoors was only formed during the year the recession started, and Anheuser-Busch joined with InBev in the middle of it. This skewed the results a bit, and in the future it would maybe make for a better comp if we either waited for another couple of business cycles or got data from older ones.

Works Cited

"Annual Report 2013." Anheuser-Busch, n.d. Web. 12 Mar 2014. <http://www.ab-inbev.com/pdf/AR13/AB_InBev_AR_Financial_Report_EN.pdf>.

Anheuser-Busch. 2013. Anheuser-Busch InBev Completes Combination with Grupo Modelo. [press release] 4 June 2013. <http://www.abinbev.com/press_releases/hugin_pdf%5C565242.pdf>.

Anheuser Busch-Company Financials n.pag. *Mergent Online*. Web. 01 Mar 2014. <http://www.mergentonline.com>.

"Anheuser-Busch InBev Company Profile." . Anheuser-Busch. Web. 24 Mar 2014. <http://www.abinbev.com/go/investors/overview/anheuser_busch_inbev_company_profile.cfm>.

Bierman, Libby. "2011: The Year of...Alcohol? Strong Growth in Alcohol Related Industries." *Forbes Sageworks Stats*. Forbes, 01 Jul 2011. Web. 05 Dec 2013. <http://www.forbes.com/sites/sageworks/2011/07/01/2011-the-year-of-alcohol-strong-growth-in-alcohol-related-industries/>.

Boston Beer Company. University of Oregon Investment Group, 10 May 2013. Web. 29 Mar 2014. <http://uoinvestmentgroup.org/wp-content/uploads/2013/05/SAM-report-Final.pdf>.

Boston Beer Company Financials n.pag. *Mergent Online*. Web. 01 Mar 2014. <http://www.mergentonline.com>.

Brenner MH, Mooney A. Unemployment and health in the context of economic change. Soc Sci Med. 1983;17(16):1125–1138

Brewer's Almanac. Web. 12 Mar 2014. <http://www.beerinstitute.org/>.

Burt, Erin. "Recession-Proof Careers." . Kiplinger, 07 Nov 2008. Web. 01 Dec 2013. <http://www.kiplinger.com/article/business/T012-C000-S001-recession-proof-careers.html>.

Christensen, Jens Froslev. "Corporate Strategy and the Management of Innovation and Technology."*Industrial and Corporate Change*. 11.2 (2002): 263-288. Print.

Colvin, Geoff. "How to Manage Your Business in a Recession." *Fortune Magazine*. CNN Money, 08 Jan 2009. Web. 30 Nov 2013. <http://money.cnn.com/2009/01/07/magazines/fortune/colvin_managing.fortune/>.

"Craft Brewing Facts." . Brewer's Association, 17 03 2014. Web. 18 Mar 2014. <http://www.brewersassociation.org/pages/business-tools/craft-brewing-statistics/facts>.

Crippen, Alex. "Warren Buffett to CNBC: "We're Still In a Recession"." *CNBC: Warren Buffet Watch*. CNBC, 23 Sep 2010. Web. 22 Nov 2013. <http://www.cnbc.com/id/39320992>.

Davis, Noah. "The Craft Beer Market has Exploded, and Now Brewers are Worried about a Collapse." Business Insider, 14 Dec 2013. Web. 12 Feb 2014. < The Craft Beer Market Has Exploded, And Now Brewers Are Worried About A Collapse Read more: <http://www.businessinsider.com/alchemist-craft-beer-market-boom-bubble-outlook-2013-12>.

"Definition of Manager." *OxfordDictionaries*. Oxford Dictionary. Web. 10 Dec 2013. <http://www.oxforddictionaries.com/us/definition/american_english/manager?q=manager>.

Dodson, Edward. "Gross Domestic Product Explained Clearly." . The Progress Report, 27 Apr 2005. Web. 19 Mar 2014. <http://www.progress.org/tpr/gross-domestic-product-explained-clearly/>.

"Economic Contributions of the Distilled Spirits Industry." Distilled Spirits Council of the United States. Web. 24 Feb 2014. <http://www.discus.org/economics/>.

Experience Our Brands. Molson Coors. Web. 04 Feb 2014. <http://www.molsoncoors.com/en/Brands.aspx>.

Featured Documents: 2012 Annual Report. Boston Beer Company. Web. 05 Mar 2014. <http://www.bostonbeer.com/phoenix.zhtml?c=69432&p=irol-news>.

Feder, Barnaby. *Peter F. Drucker, a Pioneer in Social and Management Theory, Is Dead at 95*. New York Times, 12 Nov 2005. Web. 29 Mar 2014. <http://www.nytimes.com/2005/11/12/business/12drucker.html?pagewanted=all&_r=0>.

Freeman, Donald. "Beer in Good Times and Bad: A U.S. State-Level Analysis of Economic Conditions and Alcohol Consumption ." *Department of Economics & International Business: Sam Houston State University*. (2009): n. page. Web. 23 Nov. 2013. <http://www.beeronomics.org/papers/1A Freeman.pdf>.

Ginley, Mike. "U.S. Beverage Alcohol Trends." *U.S. Beverage Alcohol Forum*. Wine and Spirits Wholesalers of America. Web. 02 Mar 2014. <http://www.usdrinksconference.com/assets/files/agenda/U.S. Beverage Alcohol Trends.pdf>.

Haderspeck, Jennifer. *Category management strategies turn to big data Technology equips retailers to meet shoppers' needs*. Beverage Industry, 10 Feburary 2014. Web. 30 Mar 2014. <http://www.bevindustry.com/articles/87142-category-management-strategies-turn-to-big-data>.

Harrison, Edward. "What is Pro-cyclicality?." *Credit Writedowns*. N.p., 29 Jul 2011. Web. 18 Mar. 2014. <https://www.creditwritedowns.com/2011/07/what-is-pro-cyclicality.html>.

"History." *Dedication to Our Craft.* Anheuser-Busch. Web. 21 Mar 2014. <http://anheuser-busch.com/index.php/our-heritage/history/>.

Is Craft Killing Big Beer — Not Through Sales, But Brand Status Erosion. 2013. Chart. GallupWeb. 01 Mar 2014. <http://www.bear-flavored.com/2013/10/is-craft-killing-big-beer-not-through.html>.

Jones, Kendell. "Brewers Association Announces 2013 Craft Brewer Growth." *Washington Beer Blog*. SeattlePI, 17 Mar 2014. Web. 20 Mar. 2014. <http://blog.seattlepi.com/washingtonbeerblog/2014/03/17/brewers-association-announces-2013-craft-brewer-growth/>.

Kaplan, Robert, and David Norton. "The Balanced Scorecard: Measures that Drive Performance."*Harvard Business Review*. (1992): n. page. Print.

Miller Coors Company Financials n.pag. *Mergent Online*. Web. 01 Mar 2014. <http://www.mergentonline.com>.

Mission and Strategy. Anheuser-Busch. Web. 18 Feb 2014. <http://www.ab-inbev.com/go/investors/overview/mission_and_strategy.cfm>.

Molson Coors: Beer Company. Molson Coors. Web. 20 Mar 2014. <https://www.molsoncoors.com/en/Index>.

"Our Company." Anheuser-Busch. Web. 04 Feb 2014. <http://www.anheuser-busch.com/>.

Papazian, Charlie. *The Revival*. CraftBeer.com. Web. 29 Mar 2014. <http://www.craftbeer.com/the-beverage/history-of-beer/the-revival>.

Piscitello, Lucia. "Corporate Diversification, Coherence, and Economic Performance." *Industrial and Corporate Change*. 11.5 (2004): 757-787. Print.

Porter, Michael. "What is Strategy?." *Harvard Business Review*. (1996): n. page. Print.

Proud History. MillerCoors. Web. 24 Mar 2014. <http://www.millercoors.com/Who-We-Are/Proud-History.asp>.

Reidramsay, *Miller Launching Bourbon "Flavored" Beer*. Beer Street Journal, 27 Jan 2014. Web. 29 Mar 2014. <http://beerstreetjournal.com/miller-fortune/). >.

"SABMiller About US." SABMiller. Web. 14 Mar 2014. <http://www.sabmiller.com/>.

SABMiller Company Financials n.pag. *Mergent Online*. Web. 01 Mar 2014. <http://www.mergentonline.com>.

Scharf, Dave. *A Saskatoon/Ottawa cultural difference – beer at lunch.*. 2012. Photograph. n.p. Web. 30 Mar 2014. <http://chasedbyabear.blogspot.com/2012/04/saskatoonottawa-cultural-difference.html>.

"Statistics 2: Correlation Coefficient." N.p.. Web. 16 Mar 2014. <http://mathbits.com/MathBits/TISection/Statistics2/correlation.htm>.

The Boston Beer Company History. Boston Beer Company. Web. 20 Mar 2014. <http://www.bostonbeer.com/phoenix.zhtml?c=69432&p=irol-homeprofile>.

Thompson, Derek. *Why Are American Drinkers Turning Against Beer? Bad news for brews: Among the youngest Americans, beer preference is collapsing*. The Atlantic, 05 Aug 2013. Web. 03 Mar 2014. <http://www.theatlantic.com/business/archive/2013/08/why-are-american-drinkers-turning-against-beer/278370/>.

Tuttle, Brad. "The Recent Evolution of How We Get Tipsy." 25 Jun 2012: n. page. Web. 24 Mar. 2014. <http://business.time.com/2012/06/25/the-recent-evolution-of-how-we-get-tipsy/>.

US Business Cycle Expansions and Contractions. N.d. Chart. The National Bureau of Economic ResearchWeb. 20 Mar 2014. <http://www.nber.org/cycles/cyclesmain.html>.

Vaghefi, Reza, and Alan Huellmantel. *Strategic Management for the XXIst Century*. Boca Raton, Florida: CRC Press, 1999. 420-421. Print.

"What is craft beer?." N.p.. Web. 06 Mar 2014. <http://www.craftbeer.com/the-beverage/what-is-craft-beer>.

"What is GDP and why is it so important?" Investopedia, 26 Feburary 2009. Web. 18 Mar 2014. <http://www.investopedia.com/ask/answers/199.asp>.

Yoshimura, Toru. “New Diversification Strategies for the Japanese Alcohol Industry”. Diss.

Massachusetts Institute Technology, 2007. *DSpace@MIT*. Web. 30 Mar. 2014. <http://dspace.mit.edu/handle/1721.1/39536>.

About the Author:



Kelli Decker is an Economics major following the managerial track with a minor in Communication Arts. She is a member of the UNICEF and Astronomy clubs as well as serving as a peer leader. She was fortunate enough to attend an experiential learning seminar trip to Ireland in May 2013. Following graduation, she plans to obtain a career in the financial field and at some point earn an MBA through an accredited program.