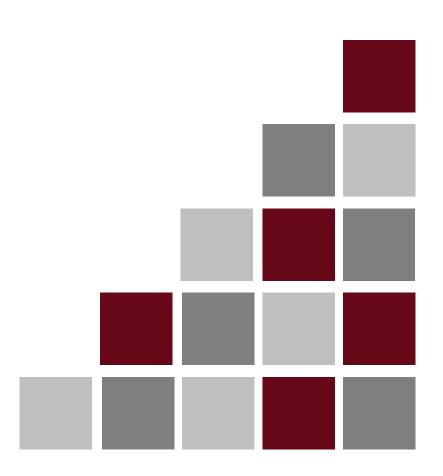
Principles by IUCG:

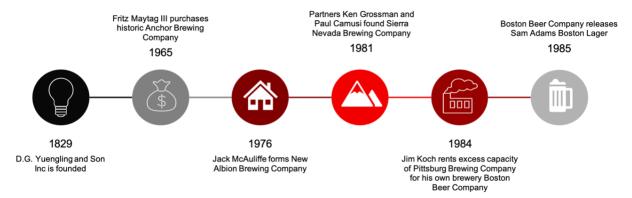
The Rise of Craft Brewing in the United States



INTRODUCTION

What is a craft brewery?

Within the past 10 years there has been an evident boom in the number of craft breweries in the United States, causing reason for concern within the overall brewing industry about production strategies. The Brewers Association' definition of a craft brewery is based on two key variables, size and ownership. Craft breweries can only brew up to 6 million barrels per year and cannot be more than 25% owned by an outside beverage or alcohol industry member. These include microbreweries, brewpubs, contract breweries and regional breweries. In 2017, Congress passed the Tax Cuts and Jobs Act to provide relief to the growing number of craft breweries which further established this definition. The act reduced the excise tax on beer for smaller brewers allowing them to continue producing at the same scale without experiencing the same tax burden as macro-brewers. In regard to products, craft brewers pride themselves on high quality products that are never produced using adjuncts or artificial ingredients. Smaller production levels also allow brewers to perfect their recipes which makes for an exceptional product and differentiates them in the market.



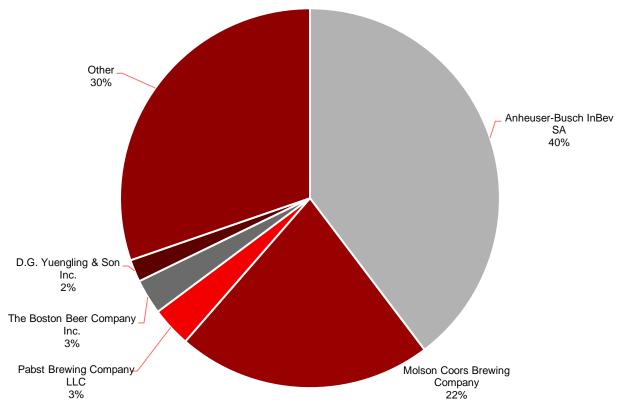
Brief history of modern craft brewing.2

^{1 &}quot;Craft Brewer Definition." Brewers Association, Brewers Association, www.brewersassociation.org/statistics-and-data/craft-brewer-definition/.

² Elzinga, Kenneth G., et al. "Craft Beer in the United States: History, Numbers, and Geography." Journal of Wine Economics, vol. 10, no. 3, Dec. 2015, pp. 242–274. EBSCOhost, doi:https://dx.doi.org/10.1017/jwe.2015.22.

How do craft breweries fit into the larger macro-brewing industry?

The overall brewing industry has an annual revenue of \$33.7 billion with craft brewing accounting for \$6.8 billion.3 Within the past 10 years the numbers of macro breweries has decreased due to consolidation while the number of craft breweries has been continuously growing.4 The two giants in macro-brewing, Anheuser Busch InBev and Molson Coors Brewing Company make up 61.4% of the overall market and have established efficient, widespread production facilities with strong distribution channels all over the world.5 In recent years, the growing number of craft breweries has in part been caused by a shift in consumer preferences and the deregulation of distribution laws. These advantages have allowed numerous small-scale brewers to enter this growing industry and reap its benefits.



Brewing market distribution.6

³ IBISWorld. "Breweries in the US." IBISWorld Industry Research Reports in the US, 2019, clients1.ibisworld.com/reports/us/industry/default.aspx?entid=288.

⁴ Elzinga, Kenneth G., et al. "Craft Beer in the United States: History, Numbers, and Geography." Journal of Wine Economics, vol. 10, no. 3, Dec. 2015, pp. 242–274.

⁵ IBISWorld. "Breweries in the US." IBISWorld Industry Research Reports in the US, 2019, clients1.ibisworld.com/reports/us/industry/default.aspx?entid=288. 6 Ibid.

INDUSTRY OVERVIEW

Barriers to Entry

Although craft breweries may not face extensive barriers to entry, there are key factors that determine the scalability and sustainability of their business.

Initial Equipment Investment

Equipment costs represent a substantial financial investment for anyone entering the brewing space and is a necessary first step to becoming a profitable craft brewery. Sound equipment allows for efficient production and a quality product for brewers. While the actual tanks and fermenters are not difficult to find, they are necessary for determining production capabilities and packaging the product.

Affordable Inputs

Given the small production levels that define a craft brewery, any increase in price of inputs will consequently increase prices to the consumer. Macro-brewers have an advantage in this sense as they do not experience as great of a burden on consumer pricing if a specific hop or barley becomes scarce.

Established Distribution Channel

Without access to wide distribution networks, many breweries remain stuck to a hyper local customer base and cannot expand at the necessary rate. As distribution regulations have been eased in many parts of the United States, some craft brewers have been able to get their products to a wider audience and remain successful today. More recently breweries have opted to avoid the distributor entirely by operating as a taproom brewery.

Quality Product

What separates one craft brewery from another as well as from a macro-brew is its superior flavor and premium characteristics. Craft brewers must make calculated decisions on recipes and brewing methods to cater to the audience of beer drinkers that appreciate the smallest details of their purchase.

Competitive Segments

There are six distinct craft beer market segments currently recognized by the Brewers Association.⁷ The four largest, which will be explained in further detail, include microbreweries, brewpubs, taproom breweries, and regional breweries.

Microbreweries

A microbrewery is a small-scale brewery that produces less than 15,000 barrels of beer per year.8 Of those 15,000 barrels, 75% are sold off-site through the utilization of various distributors, wholesalers, and retailers.9 The three most popular means of selling include the three-tier distribution system, the two-tier distribution system, and the direct-to-consumer method. Currently, microbreweries makeup 62% of the total amount of craft beer breweries in the United States and contribute 22% to the overall production volume of the industry as well.10

Brewpubs

A brewpub is a restaurant-style type of brewery where 25% or more of sales occur on-site.11 These breweries typically operate significant food services and beer is brewed primarily for sale in the restaurant or bar. Brewpubs currently consists of thirty-five percent of the total amount of craft brewery establishments in the United States and contribute six percent to the production volume of the craft beer industry.12

Taproom Breweries

A taproom brewery is a craft brewery that sells 25% of its beer on-site, however, they do not operate significant food services.13 The beer is brewed primarily for sale in the taproom and as a result, the majority of their sales are direct-to-consumer. As states make the turn to relax laws associated with direct-to-consumer selling, taproom breweries have the potential to see tremendous growth in the coming years.

 $^{{\}tt 7}\,{\tt ''Craft\ Brewer\ Definition.''}\,\, Brewers\ Association, Brewers\ Association, www.brewers association.org/statistics-and-data/craft-brewer-definition/.$

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

Regional Breweries

A regional brewery is the largest producer of craft beer in the industry as they have annual beer production between 15,000 and 6,000,000 barrels. 14 Regional craft breweries currently makeup 3% of the total amount of craft beer breweries and nearly 70% of the total craft beer industry production volume. 15

Current Players

Boston Beer Company

The Boston Beer Company has historically been both one of the largest and most prominent craft beer producers in the country since its inception in 1984. It is most well-known for its signature line of beers, Samuel Adams, and produces around four-million barrels of craft beer per year while employing around 1,500 people.16 The company sells most of its beer domestically, accounting for 96% of total sales, and implemented a Freshest Beer Program amongst one-hundred-twenty of its distributors to reduce the overall time their craft beers experience while in transit.17 Boston Beer Company has seen stable revenue growth over the course of the past five years; however, the company is starting to see a decline in its present market share of 11% due to new craft beer producers entering the market.18

D.G. Yuengling & Son

Just like Boston Beer Company, D.G. Yuengling & Son represents one of the largest craft beer breweries in the country whilst also being the oldest in the nation. The brewery produces an estimated 5.7 million barrels of beer per year and conducts most of its operations on the East Coast in states such as New York, Pennsylvania, and Georgia. 19 Over the course of the past five years, the company's revenue has been largely stagnant as it declined at an annualized rate of around 0.1%. Similar to Boston Beer Company, D.G. Yuengling & Son's current market share of 9% is expected to decrease as the barriers to entry for craft beer producers continue to become lower across the United States.

^{14 &}quot;Craft Brewer Definition." Brewers Association, Brewers Association, www.brewersassociation.org/statistics-and-data/craft-brewer-definition/.

¹⁵ Ibid.

¹⁶ IBISWorld. "Craft Beer Production in US." IBISWorld Industry Research Reports in the US, IBISWorld, 2018, https://clients1.ibisworld.com/reports/us/industry/default.aspx?entid=4302.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid.

New Belgium Brewing Company

New Belgium Brewing Company was founded in 1991 and produces more than one-million barrels of beer on an annual basis.20 The company has recently completed the construction of a new distribution facility in Asheville, North Carolina which will allow the company to ship an additional 500,000 barrels of beer per year. Currently, New Belgium Brewing Company has a market share of 3.6% and was expected to garner \$243.6 million in revenue during 2018.21

Sierra Nevada Brewing Company

Sierra Nevada Brewing Company was founded in 1981 and is one of the fastest growing craft beer producers in the country. In addition to its brewing facility, the company runs a restaurant and concert venue on its premises in order to provide a branded experience and to take advantage of the new trend of "Beer Tourism". Sierra Nevada Brewing Company has a current market share of 3.5% and was expected to have a revenue of \$236.6 million during the year 2018.22

Market Share Concentration

Over the course of the last several years, market share concentration in the Craft Beer industry has become relatively low. In 2018, the top four players in the Craft Beer industry accounted for 28.7% of total industry revenue.23 With the introduction of new trends across the United States such as the deregulation of alcoholic beverage distribution and the desire for more variety in the taste of beer products, we expect the market share concentration to decrease further over the next few years as it becomes even easier for new breweries to enter the craft beer market.

Products

The craft beer market segment includes a wide variety of products including the likes of Belgian witbier, seasonal beverages, lagers, pale ales, and stouts. However,

India Pale Ale is consistently the most popular type of beverage amongst consumers and in the year 2018, had expected sales that would account for 25.2% of total industry revenue.24 The product is known for its floral aroma, pale golden color, and its bitter finish.

²⁰ IBISWorld. "Craft Beer Production in US." IBISWorld Industry Research Reports in the US, IBISWorld, 2018, https://clients1.ibisworld.com/reports/us/industry/default.aspx?entid=4302.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

External Drivers

There are four main external drivers for the craft beer industry. These external drivers include demand from beer wholesaling, per capita disposable income, per capita expenditure on alcohol, and beer excise taxes.

Demand from Beer Wholesaling

Historically, demand from beer wholesaling has been one of the largest external drivers for not only craft beer but the entire alcoholic beverage market. At the conclusion of prohibition in the 1930s, the United States government mandated that all states adopt the three-tier distribution system for producers of alcoholic beverages. This prohibits alcoholic beverage manufactures from selling direct-to-consumer and requires them to sell to a wholesaler or distributor who will then sell to a retailer before finally reaching the consumer. We expect the demand from beer wholesalers to increase due to the fact that Americans are looking for a greater variety in the styles of their beer as a result of the market being saturated with American Light Lagers. This combined with the steady increase of new craft beer breweries entering the market, we forecast increased demand from beer wholesalers over the next several years.

Per Capita Disposable Income

Craft beer is typically more expensive than traditional American Light Lagers. Thus, higher disposable incomes are closely linked to greater sales of craft beer. Since 2009, American citizens have seen considerable growth in their discretionary income, and this has translated to unprecedented growth for craft beer. In September of 2019, country wide disposable income reached its highest in American history, totaling a little over sixteen-trillion dollars.25 With this figure expected to grow to over seventeen-trillion by the end of 2020, we see disposable income positively impacting craft beer in the coming years.

Per Capita Expenditure on Alcohol

The age demographic that spends the most on craft beer is males and females aged twenty-one to thirty-four.26 Over the last couple years, the unemployment rate of this age demographic has continually decreased. With an increase in employment, discretionary income levels of this demographic are expected to also grow. As this age demographic continues to see falling unemployment levels and growing disposable incomes, their

expenditure on alcohol is expected to grow. These signs point to a positive growth potential for craft beer.

Beer Excise Taxes

Beer excise taxes are taxes levied on those who produce and sell any product associated with beer. The Tax Cuts and Jobs Act, passed by Congress in December 2017, provides a temporary tax cut for many producers of beer, especially manufacturers of craft. The new act reduces the federal excise tax to \$3.50 per barrel on the first 60,000 barrels for domestic brewers producing fewer than two-million barrels annually.27 The act also reduces the federal excise tax to \$16 per barrel on the first six-million barrels for all other brewers.28 Both of these characteristics of the new Tax Cuts and Jobs Act are incredibly beneficial to craft beer producers as their costs associated with taxation are cut dramatically. With craft beer producers facing tax cuts, breweries now have more capital to spend on activities such as branding, promotion, and expanding upon existing product lines, signaling a chance for further growth.

CURRENT STATE

Industry Life Cycle

The craft beer industry has seen fairly stable growth ever since the early 2000s. Even in a beer market that saw a 1% decrease in overall sales in 2018, sales of craft breweries have continued to increase at a rate nearing 4% by volume.²⁹ The craft beer segment of the entire beer industry now has a 13.2% market share by volume, and we expect this growth to continue over the course of the next five years.³⁰ Producers of craft beer, unlike their macrobrewery counterparts, are known to offer a wide variety of different beer styles and flavors. With the saturation of American Light Lager in the beer marketplace, many consumers have started to search for other options. As a result, many consumers of beer have turned to producers of craft. With brewers in this space constantly innovating and expanding upon their product line, consumer excitement surrounding these products is extremely high. Also, since 2009, disposable income in the United States has grown consistently. In September

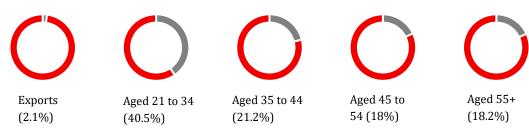
^{27 &}quot;Federal Excise Tax." Beer Institute, Beer Institute, www.beerinstitute.org/beer-policy/legislative-policy/excisetax/.

²⁸ Ibid.

²⁹ "Craft Brewer Definition." Brewers Association, Brewers Association, www.brewersassociation.org/statistics-and-data/craft-brewer-definition/.

2019, disposable income in the United States reached an all-time high of sixteen-trillion. Disposable income is one of the largest external drivers of craft beer and with disposable income expected to increase to about seventeen-trillion at the conclusion of 2020, the expectation is for craft beer to continue its trajectory of positive growth. Recently, there has been considerable deregulation concerning the distribution of alcoholic beverages across the United States. Ultimately, distribution deregulation lowers the barriers to entry for new entrants in the market and as a result, in areas with this deregulation, there has been a surge in the formation of new breweries. As more states start to see the positive economic impacts, it is expected that more states will start to deregulate their legislation pertaining towards alcohol distribution, allowing more craft beer producers to enter the market.

Age Demographic Breakdown



Age distribution amongst consumers of craft beer.31

Geographic Breakdown

The Western United States

Currently, in the United States, the West is dominating the industry and holds 23.8% of the entire industry's establishments.32 In fact, the state of California holds the highest percentage of craft beer producers in the United States at 12.2%.33 Reasons for California having such a large overall percentage of the entire country's craft beer producers stem from the fact that the state has an extremely well-balanced climate and that the state is known to have above average water quality. Legislative changes such as Washington completely abolishing the three-tier distribution system has enabled craft beer producers to sell direct-to-consumer and to mitigate costs associated with packing and distribution. This has prompted a surge in the amount of craft breweries in Washington and now the state houses over 5.9% of the

³¹ IBISWorld. "Craft Beer Production in US." IBISWorld Industry Research Reports in the US, IBISWorld, 2018, https://clients1.ibisworld.com/reports/us/industry/default.aspx?entid=4302.
32 Ibid.

country's establishments.34 This effectively makes Washington the second largest producer of craft beer in the country.

The Great Lakes Region

The Great Lakes region of the United States is another popular destination for craft breweries. States within this area of the country are known to have exceptional water quality that provides high levels of calcium, magnesium, and balanced alkalinity which are known to alter the taste and style of any beer product. Within this region, states such as a Michigan have also started to undergo distribution deregulation, leading to an influx of craft breweries entering the region. Currently, the Great Lakes region accounts for 16.8% of the country's craft beer establishments.35



Geographic distribution of craft breweries.36

Consumer Preferences

About 60% of the adult population of the United States drink alcohol and beer is preferred by 45% of those drinkers. Beer remains an alcohol of choice due to its lower alcohol content, drinkability and celebratory qualities. It is often referred to as "The World's Most Celebrated Drink" as it is celebrated year after year everywhere from Munich's Oktoberfest to China's Qingdao International Beer Festival. Beer has the power to bring communities together in a way that no other alcohol can. The sports industry also has much to do with the communitive qualities of beer. For decades sports arenas and teams have developed marketing campaigns

³⁴ IBISWorld. "Craft Beer Production in US." IBISWorld Industry Research Reports in the US, IBISWorld, 2018, https://clients1.ibisworld.com/reports/us/industry/default.aspx?entid=4302.
35 Ibid.

з6 Ibid.

alongside breweries to reiterate beer's popularity in the sporting world. Today's group of alcohol drinkers, mainly those aged 21 to 34, are beginning to value a quality product over something mass-produced using artificial ingredients. Consumers appreciate the fact that craft beer has high attention to detail, a variety of styles and quality inputs.

TRENDS IN CRAFT BREWING

Brewery Districts

A recent trend that has been occurring in the United States is the clustering of breweries that create recognizable brewery districts. Often times, these districts develop a reputation amongst locals and visitors as a place to go visit multiple breweries and to sample a variety of different craft beers. The formation of these brewery districts come from a variety of different factors. From 1984 to 2000, light beer saw its market share grow from 0.4% to over 40%. As light beer began to become America's most popular style of malt beverage, the beer market effectively became saturated with American Pale Lager. This saturation of American Pale Lager in the beer marketplace opened the door for craft breweries, who brew a variety of different styles and flavors. The amount of differentiation that occurs amongst various craft brewers allows them to cluster together in a specific area as there is very little direct competition with other establishments.37 With the variety of product that is produced within each craft brewery, collaboration amongst craft brewers is fairly common. Often times, two or more breweries will come together and concoct new beer recipes and brews. This creates a lot of excitement amongst consumers and has led to more and more breweries establishing locations near other craft beer brewers. Many of these breweries act as a hybrid of restaurant, manufacturer, and entertainer and so pose a challenge for many city planners.38 With this, many different craft beer producers are placed in close proximity to one another from a city planning standpoint. These brewery districts have effectively transformed the experience of drinking beer and as more individuals look for a combination of variety and entertainment, brewery districts should continue to increase in popularity in the United States.

Innovative Products

Brewing different styles of beer and alternative products allows craft brewers to target new cohorts of drinkers who would not otherwise drink a traditional beer. This trend has increased in recent years with the adoption of products such as hard cider and spiked seltzer. Brewing companies such as Boston Beer Company have capitalized on this by creating their own versions of these new products with brands such as Angry Orchard Hard Cider and Truly Spiked Seltzer. Apart from these products, seasonal beers have been a very successful market for craft breweries. These beers include summer offerings or seasonal flavored beer that are only available for a limited time. Limiting when these products are on the shelves drives up demand and in turn increases sales as consumers excitement increases when they are released. Through catering to new audiences and limiting availability, craft brewers different and unconventional products help them to continually bring in new customers.

Social Media

The communal aspect of drinking beer has also found a home within craft brewing. Beer connoisseurs throughout the United States use social media to communicate and share experiences with their fellow beer drinkers. Applications like Untappd, BeerAdvocate, and Beer Citizen have brought the beer community online and provide small breweries a much larger scope of customers. These social media outlets allow users to log their brewery trips, rate beers, and communicate with friends about their opinions. As the craft brewing experience shifts more to an entertainment space rather than a place to simply purchase beer, these posts and ratings provide breweries the much-needed advertising to bring new customers in. Popular breweries have become destinations for people who are passionate about the product, slowly bridging the gap between a small-scale production facility with a strictly local customer base to a well-known establishment with demand from customers all around the country and world.







BeerAdvocate



Beer Citizen



Taproom Brewing Model

The newest and most profitable experiential brewery takes form as a taproom. Taproom brewing models brew, package and sell their beer all in one place, cutting out distributors, liquor stores or restaurants and as a result greatly increasing their margins. This model differs from a brewpub in that there is no restaurant experience or licensing needed, allowing brewers to focus on perfecting their key product, beer. Customers who visit taprooms are able to purchase beer as well as drink on site and enjoy the ambiance of the brewery and its patrons. Many craft brewers have resorted to this model to increase profits and combat the large wholesale distributors that have strong ties to macro-breweries.

INDUSTRY OUTLOOK

Economic Impact

The craft brewing industry has had a profoundly positive impact on the United States economy. Per the Brewers Association, small and independent craft brewers contributed \$79.1 billion to the United States economy in 2018.39 The craft beer industry also provided more than 550,000 total jobs with over 150,000 of those pertaining directly to breweries and brew pubs. On a by-state-basis, California, Pennsylvania, and Texas saw the greatest economic output at \$9.0, \$6.3, and \$5.1 billion respectively.40

Opportunities to Continue Current Growth

The craft brewing industry is currently growing and will continue to grow despite the threat of a saturated market. Revenue within this industry is expected to increase about \$500 million over the next five years along with the per capita expenditure on alcohol increasing about \$100 million over the same period. Given the shift in consumer preferences and the demographic choosing to drink craft beer over other alcohols and brands of beer, craft breweries have room to grow. In order to sustain this growth, the trend of innovation needs to continue to keep up with the demands of consumers and tap into new customer segments. Craft breweries have the advantage of being able to switch up recipes and products relatively easily and can utilize this to attract previous wine and spirit drinkers. Accessing untapped

consumer groups is the key to supporting the projected growth within the craft brewing industry.

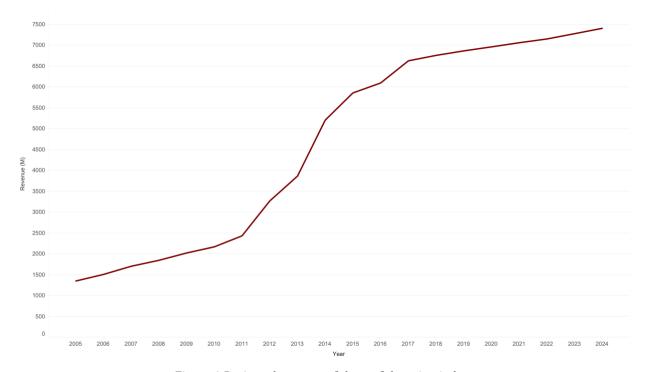


Figure 1 Projected revenue of the craft brewing industry.41

References

- "A-10. Unemployment Rates by Age, Sex, and Marital Status, Seasonally Adjusted." *U.S. Bureau of Labor Statistics*, U.S. Bureau of Labor Statistics, 1 Nov. 2019, www.bls.gov/web/empsit/cpseea10.htm.
- "Federal Excise Tax." *Beer Institute*, Beer Institute, <u>www.beerinstitute.org/beer-policy/legislative-policy/excise-tax/</u>.
- IBISWorld. "Craft Beer Production in US." IBISWorld Industry Research Reports in the US, IBISWorld, 2018, https://clients1.ibisworld.com/reports/us/industry/default.aspx?entid=4302.
- IBISWorld. "Breweries in the US." IBISWorld Industry Research Reports in the US, 2019, clients1.ibisworld.com/reports/us/industry/default.aspx?entid=288.
- Elzinga, Kenneth G., et al. "Craft Beer in the United States: History, Numbers, and Geography." Journal of Wine Economics, vol. 10, no. 3, Dec. 2015, pp. 242–274. EBSCOhost, doi:https://dx.doi.org/10.1017/jwe.2015.22.
- Mifsud, Courtney. "Why Beer Is the World's Most Popular Drink." Time, Time, 1 Oct. 2018, time.com/5407072/why-beer-is-most-popular-drink-world/.
- Sorini, Marc E. "Understanding the Three-Tier System and Its Impacts on Craft Beer." *CraftBeer.com*, 1 Sept. 2017, www.craftbeer.com/craft-beer-muses/three-tier-system-impacts-craft-beer.
- "United States Disposable Personal Income." *United States Disposable Personal Income | 2019 | Data | Chart | Calendar*, Trading Economies, tradingeconomics.com/united-states/disposable-personal-income.

"Craft Brewer Definition." *Brewers Association*, Brewers Association, www.brewersassociation.org/statistics-and-data/craft-brewer-definition/.

Nilsson, et al. "Geographic Patterns of Craft Breweries at the Intraurban Scale." *Taylor & Francis*, The Professional Geographer, 10 Oct. 1970, www.tandfonline.com/doi/abs/10.1080/00330124.2017.1338590?journalCode=rt pg20.