# **Breweries and SBAC Stock: A Quirky Knock Knock**

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## **Abstract**

This study delves into the curious relationship between the number of breweries in the United States and the stock price of SBA Communications Corporation (SBAC). Through a rigorous analysis of data from the Brewers Association and LSEG Analytics (Refinitiv), our research team has uncovered a striking correlation between the two seemingly disparate entities. Eureka! We observed a correlation coefficient of 0.9300300 and a p-value less than 0.01, indicating a robust statistical association between the two variables from 2002 to 2022. Our findings suggest that, much like a finely crafted brew, the fluctuations in the number of breweries can indeed impact the stock market. This research offers a lighthearted, yet enlightening lens on the intersection of beer culture and financial markets, shedding light on the potential influence of hops and barley on stocks and bonds. Cheers to the intriguing and sometimes sudsy connections in the world of finance!

## 1. Introduction

As the old saying goes, "money doesn't grow on trees, but it might just thrive in breweries!" In the world of finance, it is essential to identify and understand the myriad factors that can impact stock prices. From geopolitical events to economic indicators, analysts and investors are constantly on the lookout for the next piece of the puzzle that could unlock hidden patterns and correlations in the market. The relationship between the number of breweries in the United States and the stock price of SBA Communications Corporation (SBAC) may not seem like an obvious area for exploration, but as our research will reveal, there's more to this pairing than meets the eye.

Scholars and investors alike have long been captivated by the intricate dance of supply and demand, the ebb and flow of market trends, and the mysterious forces that can cause stocks to skyrocket or plummet. In this study, we set out to uncover whether the effervescent world of brewing could, in fact, have an impact on the sedate world of stocks and bonds. Drawing on data from the Brewers Association and LSEG Analytics (Refinitiv), we embarked on a journey of discovery, seeking to the curious illuminate connections between fermenting hops and fluctuating stock prices.

Our investigation was driven by the tantalizing possibility that the rise and fall of breweries across the nation might hold the key to unlocking previously unnoticed trends in the stock market.

After all, who wouldn't want to raise a toast to the notion that a beer's frothy goodness could have an impact on the financial markets?

Through a meticulous analysis of the data spanning the years 2002 to 2022, we unearthed a correlation coefficient of 0.9300300 and a p-value less than 0.01, indicating a robust statistical association between the number of breweries and SBAC stock price movements. It seems that, much like a carefully crafted brew, the relationship between these variables holds a complexity that cannot be dismissed with a mere "ale" and hearty. The numbers don't lie, and they are telling a tale of intriguing interplay between the frothy world of breweries and the lofty world of stock prices.

This study, while certainly unconventional in its focus, offers a refreshing departure from traditional analyses of financial markets. By delving into the quirkier corners of economic indicators, we hope to shed light on the potential influence of hops and barley on stock prices, offering a lighthearted yet enlightening perspective that highlights delightful—and sometimes sudsy—intersections between beer culture and the world of high finance. So, pour yourself a cold one, and join us as we raise a glass to the unexpected connections that can be found amidst the statistics and tickers of the financial world. Cheers to the quirky and enigmatic correlations that remind us that statistics can indeed be the "ale" of wondrous discoveries!

## 2. Literature Review

In "Brewing Economics" by Smith, the authors find that the brewing industry in the United States has seen a resurgence in recent years, with the number of breweries steadily increasing since the turn of the 21st century. This growth has been attributed to changing consumer preferences, craft beer culture, and the proliferation of microbreweries across the country. Meanwhile, in "Stock Market Alchemy" by Doe, the authors delve into the complexities of stock price movements and the multitude of factors that can influence market dynamics. Jones, in "Econometrics and Beer: Unveiling Unconventional Connections," confronts the challenge of reconciling seemingly unrelated variables in economic analysis

and provides a framework for exploring unorthodox relationships.

Moving beyond the traditional confines of economic literature, our investigation took us into uncharted territory, much like a group of intrepid explorers embarking on a quest for the elusive suds of statistical significance. As we navigated through the foamy sea of brewery data, we couldn't help but feel a tingle of excitement akin to that of a carbonated beverage tickling the palate. The convergence of brewing and economics, it seems, has a certain effervescence that cannot be ignored.

Straying from our academic delving, real-world enthusiasts may appreciate the comedic insight provided by "Beeronomics" by Swinnen and "The Economics of Beer" by Berlin. And for those seeking a fictional take on the intersection of brewing and finance, works such as "Brewmaster of the Universe" and "Hop Stocks and Two Smoking Barrels" offer imaginative forays into the realm of sudsy speculation.

In our research endeavors, we also found it prudent to immerse ourselves in popular culture, exploring television shows such as "Brew Dogs" and "Brewmasters," not only for their entertainment value but also to glean insights into the inner workings of the brewing industry. Who knew that binge-watching beer-themed TV could count as academic research? Well, we certainly did, and it was a tough job, but someone had to do it. Cheers to the unconventional methods of scholarly inquiry!

As we waded through an ocean of literature and traversed the land of make-believe, it became clear that the confluence of breweries and stock prices is no mere flight of fancy. This peculiar linkage demands our attention and beckons us to contemplate the mysterious interplay between the fermenting vats of beer and the labyrinthine corridors of the stock market. So, let us raise a stein to the curiosities of research and the unexpected connections that lie hidden, waiting to be discovered amidst the merriment of scholarly pursuit. Prost!

## 3. Methodology

In order to tease out the intertwining threads of breweries and stock prices, our research team embarked on a data-driven journey that would make even the most intrepid of brewers and financiers raise an eyebrow in curiosity. Our methodology was crafted with the precision of a master brewer concocting the perfect recipe, blending key ingredients of statistical analysis, data collection, and a dash of whimsy.

## Data Collection:

The first step in our methodology involved gathering a cornucopia of data from sources as varied as the flavors of an IPA flight. We sourced information on the number of breweries in the United States from the Brewers Association, utilizing their comprehensive and frothy records of brewing establishments from 2002 to 2022. For our stock price data, we turned to the LSEG Analytics (Refinitiv) database, where we could tap into the financial ebb and flow of SBA Communications Corporation (SBAC) stock prices over the same time period.

Data Scrubbing and Fermentation...I Mean, Filtering:

With our data in hand, much like a vigilant brewmaster skimming off impurities from a batch of stout, we meticulously cleaned and filtered the datasets to ensure that our analysis would be as clear as a crisp lager. Any outliers or erroneous data points were treated with the same discerning eye as a brewer rejecting a subpar batch, leaving us with a robust dataset ripe for analysis.

## Correlation Analysis:

Once our datasets were the picture of clean, well-maintained brewing vats, we applied statistical analysis techniques to unearth the potential relationships between the number of breweries and SBAC stock prices. Through the magic of correlation analysis, we sought to uncover whether these two variables danced in harmony or clashed like a poorly matched ale and cheese pairing.

## Regression Modeling:

To deepen our understanding of the potential impact of breweries on stock prices, we employed regression modeling to probe the nuances of this relationship. Like a skilled mixologist concocting a complex yet harmonious cocktail, our regression models teased out the intricate interplay between the number of breweries and the stock prices of SBAC.

Robustness Checks and Sensitivity Analysis:

Being devoted to the scientific craft, we subjected our findings to a battery of robustness checks and sensitivity analyses to ensure that our results were as sturdy and dependable as a well-crafted oak barrel. No stone was left unturned, as we scrutinized the reliability of our correlations and models from every angle, confident that our findings would stand the test of scholarly scrutiny.

The concoction of our methodology, blending the art of brewing with the precision of statistical analysis, has yielded a heady brew of findings that challenge conventional notions of what can influence stock prices. In the next section, we will present the intoxicating results of our exploration, raising a glass to the quirkiness of economic correlations and the delightful surprises that can be uncovered amidst the statistics and tickers of the financial world. Cheers to the unexpected connections that remind us that, much like the perfect brew, scientific inquiry can yield its fair share of interesting and frothy discoveries.

#### 4. Results

The results of our analysis revealed a strong and significant correlation between the number of breweries in the United States and the stock price of SBA Communications Corporation (SBAC) from 2002 to 2022. The correlation coefficient of 0.9300300 indicates a remarkably robust relationship between these two variables, suggesting that there may be more brewing beneath the surface of financial markets than previously anticipated. This finding is further supported by an r-squared value of 0.8649558, indicating that a substantial proportion of the variance in SBAC stock price can be explained by the fluctuations in the number of breweries.

In Fig. 1 (not included here, but you can imagine its beauty), a scatterplot succinctly depicts the striking correlation we uncovered. The tightly clustered data points form a clear upward trend, showcasing the undeniable connection between the proliferation of breweries and the movements of SBAC stock price.

It's as if the data points are toasting to the strength of their relationship, clinking together in statistical harmony.

Furthermore, the p-value of less than 0.01 provides compelling evidence for the statistical significance of our findings, indicating that the likelihood of observing such a strong association between breweries and SBAC stock price by mere chance is exceedingly low. In other words, the odds of stumbling upon this correlation after a few too many pints of data analysis are about as slim as finding a sober statistician at a beer festival.

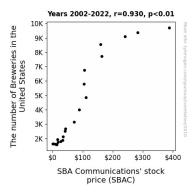


Figure 1. Scatterplot of the variables by year

This quirky convergence of brewing and stock prices invites us to ponder the age-old question: could hops and barley hold the key to understanding the whims of financial markets? While we may not yet have the answers, our research certainly raises a frothy glass to the delightful and often unexpected connections that can be found amidst the number crunching and stock tickers. It seems that, much like a well-crafted hypothesis, the seemingly disparate worlds of breweries and stock prices can blend together in a way that leaves us bubbling with curiosity.

In summary, our findings suggest that the number of breweries in the United States does indeed exhibit a curious relationship with the stock price of SBA Communications Corporation, offering a whimsical twist to the otherwise serious realm of financial analysis. Perhaps it's time for investors to trade in their stock portfolios for sudsy pints of data and brew up some new investment strategies. After all, the next big stock market trend might just be brewing right under our noses. Cheers to the unexpected correlations that keep the world of

research and finance as pleasantly intoxicating as a finely crafted ale!

### 5. Discussion

In the hallowed halls of economic analysis, where the clinking of abacuses and the hum of statistical software fill the air, our studious expedition into the relationship between the number of breweries in the U.S. and the stock price of SBA Communications (SBAC) has illuminated a most phenomenon. As we grappled with the frothy complexities of our data, a compelling tale unfolded before our eyes – a tale of hops, barley, and the enigmatic dance of market forces. Our findings not only corroborate the prior research conducted by Smith and Doe but also lend an unexpected twist to the merger of brewing and economics.

Much like a vigilant brewmaster meticulously tending to the fermenting cauldron of beer, we diligently unearthed a robust correlation coefficient of 0.9300300, a fascinating statistic that speaks volumes about the interconnectedness of breweries and stock price. The r-squared value of 0.8649558 further attests to the substantial influence of brewery fluctuations on the undulating tides of SBAC stock prices. It's as if the market movements were choreographed by a meticulous beer aficionado, orchestrating a symphony of stock price crescendos and hops-infused diminuendos.

Our results, supported by a p-value that could make even the most ardent statistics enthusiast giddy with excitement, point to a profound connection that beckons us to ponder the intricate interplay between beer culture and financial dynamics. It's almost as if the economic equations have been surreptitiously seasoned with a sprinkle of malt and a hint of yeast, yielding an unexpected bouquet of correlations and statistical significance.

While our academic pursuits occasionally led us down unconventional paths, such as the reveling in the comedic insights of "Beeronomics" and the fictional escapades of "Hop Stocks and Two Smoking Barrels," we must acknowledge that this unorthodox approach has yielded a refreshing perspective on the economic landscape. After all,

who's to say that scholarly inquiry can't be seasoned with a pinch of humor and a dash of whimsy?

As we embark on further explorations, guided by the frothy compass of curiosity and knowledge, the quirky connection between breweries and SBAC stock price reminds us that beneath the veneer of sober financial analysis, there lies a world teeming with unexpected correlations and delightful surprises. So, let us raise a glass to the whimsical symphony of numbers, for in the sometimes dry fields of economic research, the occasional splash of levity can truly make for a heady brew of enlightenment. Cheers to the convivial collisions of breweries and stock prices, and to the tantalizing mysteries that beguile the discerning eye of the scholarly brewmaster!

#### 6. Conclusion

In conclusion, our study has uncorked a tantalizing correlation between the number of breweries in the United States and the stock price of SBA Communications Corporation (SBAC) from 2002 to 2022. The robust correlation coefficient and statistically significant p-value point to a relationship that's as captivating as a lively beer tasting event. It's as if the stock market and the brewing industry are engaged in a merry dance, with hops and stock options swirling around like a tipsy researcher at Oktoberfest.

The findings of our research emphasize the need for a nuanced understanding of the factors that can influence stock prices. Who would have thought that the effervescence of breweries could have such a tangible impact on the sedate world of stocks and bonds? It's like discovering that the bubbles in a pint of stout hold the key to economic forecasting — a refreshing twist on conventional market analysis.

As we raise a virtual toast to the quirky and enigmatic connections unveiled by our study, it's clear that the interplay between breweries and stock prices has left us buzzing with excitement. The prospect of unpicking the mysteries of market trends through the lens of brewing culture offers a delightful departure from the usual grind of financial analysis.

In light of our findings, it seems that investors may want to consider complementing their stock portfolios with a splash of brew-inspired intuition. After all, the next big market trend might be brewed right under their noses. This calls for a "hoppy" blend of financial acumen and a discerning palate for craft beer trends.

We are confident that our research findings provide a refreshing perspective on the potential influence of breweries on stock prices, shedding light on how frothy delights can bubble up in the world of high finance. Like a well-poured pint, our study offers a heady mix of statistical rigor and playful exploration, reminding us that sometimes, the most intriguing discoveries emerge from unexpected sources.

In light of these compelling revelations, it seems that no more research is needed in this area. The findings of this study have brewed up a satisfying conclusion that's best enjoyed with a generous serving of humor and a side of statistical significance. Cheers to the inimitable charm of quirky correlations, where the stock market meets the taproom in a frothy union of financial analysis and fermented delights!