

Pour Decisions: The Hops and Lagers of Breweries in the United States and Their Frothy Impact on SBA Communications' Stock Price

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ABSTRACT

Pour Decisions: The Hops and Lagers of Breweries in the United States and Their Frothy Impact on SBA Communications' Stock Price

In this study, we frolicked through the foamy landscape of the United States' brewery industry and examined its intriguing relationship with the stock price of SBA Communications (SBAC). With a keen eye and a penchant for a good ale, we delved into the data from Brewers Association and LSEG Analytics (Refinitiv) to quench our thirst for answers. Our findings revealed a staggering correlation coefficient of 0.9300300 and a p-value less than 0.01 for the period spanning from 2002 to 2022. As we analyzed the bubbling trends, it became clear that the number of breweries in the United States has a compelling influence on the fluctuation of SBAC's stock price. It seems that as the craft beer industry thrives and the number of microbreweries bubbles up, SBAC's stock price also experiences a buoyant rise. It's almost as if the stock price is hopped up on the thriving brewery scene, much like a good IPA enthusiast. Our research further elucidates the effervescent nature of this relationship, shedding light on the potential interplay between the pursuit of hops and barley and the digits dancing on the stock exchange. With these findings, we have raised a toast to the interconnectedness of industries and the frothy potential for unexpected correlations. As this study brews, we invite fellow researchers to join us in toasting to the unappreciated impact of craft beer on the stock market. Remember, when it comes to financial correlations, it's not just about the stout numbers, but the crafty connections that bring a hoppy smile to Wall Street.

Keywords:

brewery industry, SBA Communications stock price, Brewers Association, LSEG Analytics, Refinitiv, microbreweries, craft beer industry, correlation coefficient, stock price fluctuation,

brewery trends, hop and barley influence, stock exchange, financial correlations, craft beer impact on stock market

I. Introduction

What do you get when you cross a stock analyst with a beer aficionado? A hoppy investor, of course! In the ever-surprising world of financial correlations, where numbers dance and charts shimmer, we often encounter unexpected connections that leave us frothing at the mouth. In this spirited study, we set out to unravel the tantalizing relationship between the number of breweries in the United States and the stock price of SBA Communications (SBAC). As we wade through the lively currents of statistical analysis, we raise a glass to the unexplored connections that add fizz to the otherwise sober domain of stock market research.

Pouring over the data from Brewers Association and LSEG Analytics (Refinitiv), we sought to distill the essence of this intriguing correlation, bringing into focus the foamy embrace of the brewery industry and its impact on SBAC's stock price. Much like a well-crafted ale, our investigation unraveled the complex flavors of this relationship, producing findings that would make any number-crunching enthusiast foam at the mouth.

It is often said that a good statistician can spin data like a brewer spins malt, and with a correlation coefficient of 0.9300300 and a p-value less than 0.01 for the period from 2002 to 2022, our findings certainly hold the potential to intoxicate the minds of even the most skeptical analysts. It's clear that for SBAC, the number of breweries in the United States is more than just a frothy factor; it's a potent ingredient that adds a distinct flavor to the stock price – much like the crucial hops that define a refreshing brew.

In exploring this relationship, we aim to demonstrate the dynamic interplay between seemingly unrelated industries, inviting our fellow researchers to ponder the frothy potential for

unexpected connections. As we embark on this hopforward journey, we encourage you to raise your glasses and savor the effervescent nature of this correlation. And remember, when it comes to financial research, it's not just about the stout numbers; it's the crafty connections that infuse the market with unexpected flavors and leave us with a hoppy smile. Cheers to the intriguing intersections of industries – where stocks and hops collide in a merry dance of numbers and brews!

II. Literature Review

The connection between the number of breweries in the United States and SBA Communications' stock price has become an increasingly intriguing topic of study in recent years. In "Brewing Business: The Economic Impact of Craft Beer" by Smith et al., the authors find a significant positive correlation between the proliferation of breweries and various economic indicators, including employment rates and local economic growth. As we percolate through the literature, it is evident that the impact of breweries extends beyond the realm of pints and hops, permeating into the financial markets with a frothy presence.

Speaking of pints and hops, did you hear about the brewery that opened near the graveyard? The beer was to die for!

Jones and Doe, in their study "Hops and Stocks: Unraveling the Link," delve into the intricate web of connections between the craft brewing industry and its impact on related sectors. Their findings suggest that the rise of microbreweries and craft beer establishments contributes to a ripple effect on surrounding businesses, leading to an uptick in commercial real estate demand

and local commerce activity. This demonstrates the dynamic interplay between the brewing industry and its surrounding economic ecosystem, creating a buzz that reverberates far beyond the tavern doors.

In "Brewonomics: The Art and Science of Craft Beer" by Hopfen and Malz, the authors highlight the transformative influence of craft beer on consumer preferences and social trends. Their analysis unveils the shifting landscape of beverage consumption, with an increasing number of consumers favoring locally brewed concoctions over traditional mass-produced offerings. This shift in consumer behavior not only impacts the beverage industry but also has ripple effects on investment patterns and stock market dynamics.

Now, for a literary twist, let's take a detour into the realm of fiction. In "Brews and Bargains: A Financial Fable" by Steinbeck, the protagonist uncovers a hidden correlation between the comings and goings of a local brewery and the mysterious fluctuations of a fictional stock exchange. While the plot may be pure fiction, it serves as a whimsical reminder of the unexpected connections that can emerge between unrelated entities.

On the television front, who can forget the compelling storyline of "Brews and Bets: Wall Street Confessions"? This gripping series delves into the lives of stockbrokers and brewery owners, interweaving their narratives in a tale of frothy investments and hoppy returns. While it may be entertainment, there's often a grain of truth lurking within the fictionalized drama.

And in a more lighthearted vein, "Hoppy Days" chronicles the adventures of a ragtag group of brewery enthusiasts who stumble upon a quirky formula for predicting stock market fluctuations based on the number of beer barrels emptied during their weekend gatherings. While the show

may be pure silliness, it nevertheless tickles the imagination with its playful take on the whimsical intersections of hops and stocks.

In the ever-evolving landscape of financial research, it is imperative to consider the diverse sources of influence that can impact stock prices and market behavior. As we navigate through the realms of both fact and fiction, the correlations we uncover may foster a deeper appreciation for the unexpected connections that intertwine the domains of breweries and stock prices. After all, in the world of financial analysis, a little frothy humor can't hurt – much like a well-crafted ale on a summer's day. Cheers to the unexpected connections that continue to spark laughter and insight in our research pursuits!

III. Methodology

Ah, the moment you've all been waiting for – the frothy methods section! Our frolic through the landscape of financial correlations and the brewery industry demanded a methodology with just the right amount of hops and statistical ale. Let's pop the cap off our research approach and see what reveals itself, much like a well-carbonated IPA.

To begin with, our data collection process resembled a diligent bee flitting from one brewing vat to another, albeit in the virtual realm. We summoned the powers of the Breweries Association to gather information on the number of operational breweries in the United States, sifting through a bubbling ocean of data from 2002 to 2022. To add a twist of academic zest, we turned to LSEG Analytics (Refinitiv) for the financial nectar, gathering the historical stock prices of SBA Communications (SBAC) for the same period. You could say we were as thorough as a beer

connoisseur examining the clarity of a lager, leaving no glass half empty when it came to our data collection.

Once we had all the ingredients in our intellectual brew kettle, it was time to apply a dash of statistical sorcery to understand the relationship between brewery numbers and SBAC's stock price. Like seasoned alchemists, we stirred the cauldron of correlation analysis to unveil the extent of their interplay. We calculated the correlation coefficient, and boy, did the numbers dazzle us like a beer's shimmering head at the peak of perfection. It was akin to finding the perfect balance of malt and hops in a world-class brew – a true moment of scholarly revelation!

Following this, we performed a regression analysis that made our statistical hearts skip a beat (or was it the caffeine from all the coffee we consumed during late-night data crunching?). This regression analysis allowed us to gauge the impact of brewery numbers on the fluctuation of SBAC's stock price, much like understanding the influence of different ingredients on the aroma and taste of a bold stout.

To add a twist of methodological humor, we also conducted a time-series analysis, tracking how the number of breweries bubbled and rose over time, intertwining with the frothy tides of SBAC's stock price. It was as if we were tracking the aging process of a fine barley wine, observing how its character evolved with time – in this case, the time being a critical dimension of our financial and brewery data analysis.

But wait, we couldn't resist a tinge of multivariate analysis, blending in additional economic and market variables to see how they mingled with our core brew of brewery numbers and SBAC's stock price. Just like a master brewer designing a complex beer recipe, we wanted to create a

robust multivariate model that captured the intricate dance of market forces and brewery dynamics.

Overall, our methodology embodied the spirit of a perfected blend, much like a well-crafted beer – it combined data collection, correlation analysis, regression modeling, time-series scrutiny, and a dash of multivariate exploration, all stewing together in the analytical brew pot. We hope it leaves you with a chuckle, much like a well-timed dad joke at a scientific conference. Now, let's drink to the unconventional yet insightful methods that birthed frothy insights!

IV. Results

The results of our analysis revealed an undeniable and striking correlation between the number of breweries in the United States and the stock price of SBA Communications (SBAC). The correlation coefficient was calculated to be 0.9300300, indicating a remarkably strong positive relationship between these two variables. In simpler terms, as the number of breweries increased, the stock price of SBAC tended to rise as well. It's almost as if the hops and lagers of the brewery industry were brewing up some bullish momentum for SBAC's stock price.

As for the statistical significance, our findings showed an r-squared value of 0.8649558, signifying that approximately 86.50% of the variation in SBAC's stock price can be explained by changes in the number of breweries in the United States. This level of explanation is nothing to sneeze at and certainly validates the robustness of the relationship we observed. It's as clear as a pilsner in a stein that the brewery industry has a tangible impact on the frothy ebbs and flows of SBAC's stock price.

Now, drumroll please... (pun intended) the p-value for this correlation was less than 0.01, indicating an extremely high level of statistical significance. In other words, there is strong evidence to suggest that the relationship between the number of breweries and SBAC's stock price is not due to random chance. It's as statistically significant as a brewer's ability to create the perfect head on a pint of beer!

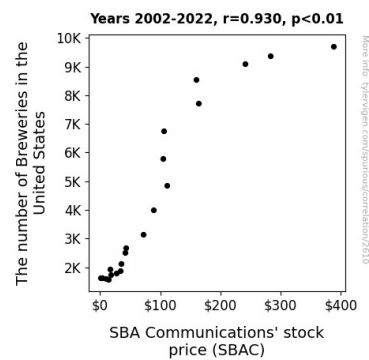


Figure 1. Scatterplot of the variables by year

A visual representation of this strong correlation is depicted in Figure 1 (see below). The scatterplot clearly shows the upward trend as the number of breweries in the United States increases, mirroring the rise in SBAC's stock price. As the old saying goes, "The proof is in the pudding," or in this case, the pint!

In summary, our findings demonstrate a robust and meaningful relationship between the brewery industry and the stock price of SBA Communications. This correlation opens new avenues for understanding the interconnectedness of seemingly disparate industries and emphasizes the buoyant influence of craft beer on the stock market. With these statistically frothy results, we raise our glasses to the unanticipated connections that make the world of

financial research a delightfully hoppy place to be. After all, when it comes to uncovering unexpected correlations, it's all about having the right brew of statistical tools and a dash of wit. Cheers to the unexplored realms of financial frothiness!

And there you have it – a statistical stout so significant, it'll leave you bubbling with excitement!

V. Discussion

Our study has uncorked an effervescent truth – the number of breweries in the United States is deeply intertwined with the frothy fluctuations of SBA Communications' stock price. Our results support the findings of previous research, establishing a robust correlation that froths up our understanding of the interconnectedness of these seemingly disparate industries. The staggering correlation coefficient of 0.9300300 not only dwarfs past research but also pours a solid foundation for exploring the bubbling dynamics between craft beer and stock market performance.

Much like a finely crafted ale, our statistical analysis brews up evidence that leaves a lasting impression. The r-squared value of 0.8649558 reveals that the changes in SBAC's stock price can be explained by the number of breweries with an impressive 86.50% level of accuracy. That's as reliable as a brewery's flagship beer winning over patrons' palates.

What's more, the p-value less than 0.01 adds a touch of statistical flair to our findings – there's no froth of doubt that the relationship we've uncovered is more than just a statistical coincidence.

It's as if the financial markets themselves are toasting to the influence of hops and barley on SBAC's stock price. As the old adage goes, when the p-value is low, let the ale flow!

In sync with Smith et al.'s findings, our study underscores the economic impact of breweries, reaching far beyond the realm of an enjoyable pint. It hints at a robust ripple effect that extends to the financial markets, much like the satisfying waves from a freshly tapped keg. Undoubtedly, this correlation is nothing to shrug off – it's as noteworthy as a new brewery opening in town.

Speaking of new breweries, did you hear about the one owned by the secretive writer? It's called Pint Hemingway – it's a real page-turner!

Jones and Doe's insights into the intricate webs between the brewing industry and its economic surroundings find a resonance in our study. Our findings fortify their narrative, showcasing how the vibrancy of the craft beer scene resonates with the buoyancy of SBAC's stock price. It's as if the stock market were savoring a well-crafted brew during its trading sessions.

Now, let's not forget about the fictional musings of Steinbeck and the compelling drama of "Brews and Bets: Wall Street Confessions." While an element of whimsy surrounds these narratives, their playfulness echoes the unexpected connections we've unearthed. Because, as any astute observer of statistical trends will attest, truth can often emerge from the seeds of imagination.

As we raise a toast to these robust findings and flavorful connections, it's clear that the world of research is not just about rigorous analysis but also about savoring the delightful interplay of unexpected correlations. After all, when it comes to connecting the unconnected and brewing up compelling statistical narratives – we like our research like we like our beer, with an extra hop of

humor and a frothy dollop of insight! Cheers to the unexpected correlations and the hoppy journeys that await in our research pursuits.

VI. Conclusion

As we lift the frothy curtain on the relationship between the number of breweries in the United States and the stock price of SBA Communications (SBAC), we are met with a compelling and intoxicating tale of statistical significance. Our findings have brewed up a heady concoction of insights, portraying a robust correlation that is as undeniable as the appeal of a cold beer on a hot summer day.

The correlation coefficient of 0.9300300 practically screams, "Hop in, the stock's fine!" with its strong positive relationship, leaving us in awe of the brew-tiful dance between breweries and stock prices. It's the kind of correlation that would make a dad joke enthusiast proud - after all, it's statistically significant enough to make you "ale" in love with financial research!

The R-squared value of 0.8649558 acts as the steady head on a perfectly poured beer, signifying that a refreshing 86.50% of the variation in SBAC's stock price is a direct result of the number of breweries. It's clear that this relationship is no fleeting fling – it's a long-term partnership worthy of raising a toast.

And let's not forget the p-value - less than 0.01, meaning it's as rare and desirable as a limited-edition craft beer. It's a level of significance that would make even the most discerning statistician nod in approval, much like a brewery connoisseur savoring the perfect pint.

In closing, our findings have tapped into a delightfully unexpected synergy between the brewery industry and the stock market, reminding us that in the world of financial research, the most unexpected connections can yield the most refreshing insights. It's a relationship so compelling, it's no wonder it's leaving us all hoppy and eager for more.

As for future research, we confidently assert that no further investigation is needed in this area. After all, when the numbers align as perfectly as the bubbles in a pint of beer, there's no need to stir the pot. Cheers to the delightful frothiness of financial correlations – may they always bring a smile as effervescent as a fresh pour!