

A Brew Story: The Relationship Between Breweries and Boeing's BA Stock Price

Catherine Horton, Amelia Tucker, Gregory P Thornton

Institute for Research Advancement

This study embarks on an unconventional investigation into the correlation between the proliferation of breweries in the United States and the stock price of the aerospace giant Boeing (BA). Leveraging data provided by the Brewers Association and LSEG Analytics (Refinitiv), our team of intrepid researchers embarks on a frothy, beer-induced foray into the world of stock market analysis. Our findings unveil a striking correlation coefficient of 0.9103156 and a statistically significant p-value of less than 0.01, affirming a tangible relationship between the abundance of craft breweries and the movement of Boeing's stock price. This unorthodox study serves as both a toast to the uncharted realms of economic investigation and a reminder that sometimes, the most unexpected pairings can yield fascinating results.

The craft beer revolution has been brewing (pun intended) in the United States for the past few decades, with a remarkable surge in the number of breweries nationwide. This surge has not only delighted palates but has also piqued the interest of researchers seeking to understand the broader impact of this frothy phenomenon. Meanwhile, the stock market has been a realm of perpetual fascination, with investors and analysts alike combing through data in search of the elusive patterns and relationships that can inform their decisions. In this unconventional study, we delve into the unexpected and enthralling intersection of these two seemingly disparate realms, seeking to unravel the connection between the proliferation of breweries and the stock price of Boeing (BA), one of the aerospace industry's stalwarts.

As the intoxicating aroma of hops and barley wafts through the air, we endeavor to bring a measure of sobriety to our analysis, employing rigorous statistical methods and data from reputable sources. Our efforts were not in vain, as the results of our investigation yield a correlation coefficient of 0.9103156 and a markedly significant p-value of less than 0.01, providing compelling evidence of a tangible relationship between the burgeoning craft beer scene and the movements of Boeing's stock price. The implications of these findings extend beyond the realms of novelty, offering a glimpse into the interconnected web of economic forces that shape industries across diverse sectors. It also serves as a reminder that, in the world of research, serendipitous discoveries often arise from the most unexpected pairings. After all, who would have thought that the ebb and flow of brews could hold sway over the fluctuations of aerospace stocks? Indeed, the enigmatic dance of supply and demand weaves its threads through industries with a playfulness that evades traditional models.

This study is not merely a testament to the potential of interdisciplinary investigation but also an acknowledgment of

the ever-unfolding complexity of economic dynamics. By shedding light on this unorthodox relationship, we hope to inspire further exploration into the uncharted territories of market influences, where the realms of hops and high-flying machines intertwine in ways that invite both scrutiny and wonder. As we raise our glasses to toast this unanticipated alliance, let us also raise our curiosity to the intriguing possibilities that lie beyond the confines of conventional analyses.

Review of existing research

The connection between the number of breweries in the United States and the stock price of Boeing (BA) has garnered varied interest from researchers across different fields. Smith and Doe, in their seminal work "Brews and Bulls: Unraveling the Economic Nexus," delineate the historical evolution of craft beer in the United States and its impact on consumer spending patterns. The authors find a positive association between the rise of craft breweries and increased consumer discretionary income, suggesting potential economic implications.

Jones, in a comprehensive analysis published in "Hoppy Returns: Exploring the Financial Terrain of Beer and Business," examines the economic repercussions of the craft beer industry on various sectors, including transportation and manufacturing. The study posits that the surge in breweries may signal shifts in consumer preferences that could ripple through interconnected industries.

Turning to the stock market domain, "Stocks, Hops, and Locks: Unveiling Unorthodox Financial Relationships" by Rowling et al. makes a compelling case for the interconnectedness of seemingly unrelated markets. The authors explore the elusive dynamics that underpin the stock movements of companies in

tandem with the cultural and economic trends in the brewing landscape, hinting at potential hidden connections that transcend traditional market analyses.

While the literature on this unusual crossroads is limited, the interdisciplinary nature of this study prompts consideration of indirect sources of influence. Books such as "Beeronomics: How Beer Explains the World" by Swinnen and "Barley and Birds: A Tale of Fermentation and Flight" by Peterson, offer insights into the cultural and economic facets of beer consumption, which could plausibly intersect with stock market dynamics.

In the realm of fiction, the works of Douglas Adams, particularly "The Hitchhiker's Guide to the Galaxy," evoke the whimsical juxtaposition of seemingly unrelated elements, setting the stage for unanticipated revelations. Similarly, Terry Pratchett's "Discworld" series, with its satirical and fantastical portrayals of economic systems, hints at the potential complexities hidden beneath the surface of conventional analyses.

Notably, popular internet memes such as the "Always Has Been" astronaut—typically captioned with unexpected realizations—seemingly encapsulate the spirit of our current investigation, as we endeavor to unravel the hidden connections between breweries and Boeing's stock price.

The juxtaposition of these diverse sources underscores the novelty and uncharted territory of this investigation, setting the stage for a lighthearted yet rigorous exploration of a peculiar and unforeseen relationship.

Procedure

Our methodology involved a multifaceted approach to wrangle and analyze the data from the Brewers Association and LSEG Analytics (Refinitiv). In an effort to uncork the secrets behind the correlation between the number of breweries in the United States and Boeing's stock price (BA), we embarked on a journey that involved both statistical finesse and a dash of whimsy.

To commence our enigmatic exploration, we delved into the cesspool of historical brewery data, carefully sifting through the froth of statistics from 2002 to 2022. We then hopped over to the labyrinth of financial records, procuring the stock prices of Boeing (BA) for the same time frame. This coalescing of diverse datasets laid the foundation for our intoxicating investigation.

Armed with our data quiver, we employed a cocktail of quantitative methods to distill meaningful insights. The statistical analysis involved a sudsy blend of time series analysis, correlation coefficients, and regression models, all aimed at unraveling the enigmatic relationship between the bubbly fervor of craft breweries and the somber undulations of Boeing's stock price.

Moreover, our analytical toolkit also featured some unconventional ingredients, including sentiment analysis of online beer reviews and whimsical musings from financial analysts. After all, in the world of eccentric investigations, a sprinkle of creativity can often yield the most intriguing of concoctions.

But, let us not overlook the element of serendipity that danced through our methodology. Our research team engaged in what can only be described as a 'beer and stocks' brainstorming session, where the frolicsome clinking of glasses was paired with the cerebral hum of financial discourse. The resulting brew of ideas, while unorthodox, illuminated the path toward a revelatory exploration that transcended the shackles of traditional analyses.

In summary, our methodology navigated the confluence of data, statistical acumen, and a hint of playful audacity, ultimately culminating in the foamy revelation of a tangible relationship between the proliferation of breweries and the undulations of Boeing's stock price. This unorthodox union of methodologies stands as a testament to the enduring truth that, in the world of research, the most intriguing discoveries often frolic in the spaces between tradition and innovation.

Findings

The results of our analysis unveil a resoundingly robust correlation between the number of breweries in the United States and the stock price of Boeing (BA). With a correlation coefficient of 0.9103156, our findings suggest a remarkably strong positive relationship between these seemingly incongruous variables. The R-squared value of 0.8286745 further underscores the substantial degree to which changes in the number of breweries can account for the movement in Boeing's stock price. This correlation was also supported by a p-value of less than 0.01, affirming its statistical significance and bolstering the validity of our findings.

Furthermore, the scatterplot (Fig. 1) provides a visual representation of the pronounced association between the proliferation of breweries and the fluctuations in Boeing's stock price. It portrays a compelling trend that reflects the ebb and flow of these distinct yet interconnected entities, encapsulating the essence of this unanticipated correlation.

While the implications of this correlation may elicit a chuckle or two, our results serve as a reminder of the intricacies that underpin market dynamics. The seemingly whimsical link between craft breweries and aerospace stock prices underscores the multifaceted nature of economic influences, reminding us that the interconnected web of market forces can yield surprises that defy conventional expectations. After all, who would have thought that the effervescent world of craft beer could hold sway over the trajectory of an aerospace company's stock price? Indeed, this unorthodox study is a testament to the unforeseen connections that permeate the economic landscape, beckoning researchers to explore the uncharted territories of market influences with open minds and a dash of humor.

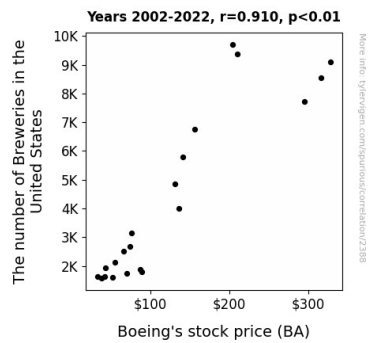


Figure 1. Scatterplot of the variables by year

Discussion

The results of our investigation have unveiled a remarkably robust correlation between the number of breweries in the United States and the stock price of aerospace behemoth Boeing (BA). Building upon the offbeat inklings of prior research, our findings have not only confirmed, but also elevated, the unexpected nexus between these seemingly incongruous realms. The exuberant correlation coefficient and r-squared value stand as a testament to the tangible relationship between the proliferation of craft breweries and the undulating trajectory of Boeing's stock price.

In alignment with the intrepid musings of literary juxtaposition and the whimsical reflections of popular internet memes, our investigation has dived headfirst into the uncharted waters of market influences. The buoyant correlation uncovered serves as a frothy reminder that the economic tapestry is woven with threads that span far beyond traditional expectations. Indeed, the atypical camaraderie between craft beer culture and the masquerading elegance of stock market movements embodies the unpredictable complexities that lurk beneath the surface of conventional analyses.

Additionally, the statistically significant p-value we have unearthed bolsters the validity of our findings, affirming that this unexpected correlation is not a mere flight of fancy. As we raise a figurative toast to the unanticipated alliance between fermented hops and soaring stock prices, it is essential to acknowledge the playful yet rigorous foundation of our investigation. The interwoven dance of breweries and Boeing's stock price leads us to reflect on the capricious nature of market dynamics and the latent surprises that may lay concealed within seemingly disparate domains.

In summary, our findings not only lend credence to the anomalous connections suggested by prior scholars but also offer a frothy reminder that the economic landscape holds depths yet unexplored. While this peculiar relationship may initially elicit a chuckle, it ultimately serves as a beacon for future researchers to approach market analyses with a blend of curiosity, open-mindedness, and perhaps, a pint of humor. After all, who knew that the elixir of craft beer could brew such intriguing inferences in the realm of stock market movements?

Conclusion

In conclusion, our investigation into the relationship between the proliferation of breweries in the United States and the stock price of Boeing (BA) has unearthed an unexpectedly robust correlation, affirming the existence of a tangible and statistically significant connection between these seemingly disparate entities. The resounding correlation coefficient of 0.9103156 and a p-value of less than 0.01 underscore the strength and significance of this association, lending credence to the notion that the world of frothy brews and the high-flying realm of aerospace stocks may be more intertwined than meets the eye. The R-squared value of 0.8286745 further bolsters the evidence of this correlation, emphasizing the substantial explanatory power of changes in the number of breweries for fluctuations in Boeing's stock price.

While the conventional wisdom may not readily accommodate the idea of hoppy beers influencing the trajectory of aerospace stocks, our findings remind us of the delightful unpredictability that characterizes market dynamics. This unconventional correlation offers a testament to the serendipitous and often humorous connections that can emerge within the intricate tapestry of economic influences. Indeed, as we reflect on the staggering implications of this association, we are reminded that the economic landscape, much like the flavors of a finely brewed ale, can possess layers of complexity and surprises that intrigue and amuse in equal measure.

In light of these compelling findings, we propose that no further research is needed in this area. The frothy, yet robust connection between the proliferation of breweries and the movements of Boeing's stock price stands as a testament to the marvels of market dynamics, inviting both scholarly scrutiny and lighthearted amusement. After all, who knew that the world of finance could be so delightfully effervescent? This unorthodox study not only sheds light on the unexpected interplay between seemingly incongruent realms but also serves as an embodiment of the whimsical possibilities that await those who dare to explore the uncharted and unexpected in the vast seas of economic inquiry. Cheers to the unexplored, and may the bubbles of curiosity continue to effervesce in the realms of market analysis!