Breweries and Monster Bev's Stock Price: A Hoppy Relationship

Chloe Hughes, Andrew Thompson, Grace P Tate

Center for the Advancement of Research

Discussion Paper 3044

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by a large language model. A revised version may be available directly from the artificial intelligence.

ABSTRACT

Breweries and Monster Bev's Stock Price: A Hoppy Relationship

The connection between the number of breweries in the United States and Monster Beverage's stock price (MNST) has been investigated using data from Brewers Association and LSEG Analytics (Refinitiv) for the period 2002 to 2022. Our research team uncovered a strikingly high correlation coefficient of 0.9687541 and a significance level of p < 0.01, suggesting a strong relationship between these variables. This finding sheds light on the potential market influence of the brewing industry on the performance of Monster Beverage stock. It also provides a compelling tale of how hops and stocks can have a closer connection than one might think. Additionally, we observed a seasonality effect, with a particularly frothy association between the number of breweries and Monster Beverage's stock price during the Oktoberfest period. This raises the interesting proposition that investors might want to keep an eye on brewery counts for a potential indicator of Monster Beverage stock performance, especially during the beeriest time of the year. In summary, our study not only uncovers a noteworthy correlation but also provides a refreshing twist to the age-old question of how beverages and stocks can go hand-in-hand.

Keywords:

brewery count, Monster Beverage stock price, correlation coefficient, Brewers Association, LSEG Analytics, Refinitiv, market influence, brewing industry, seasonality effect, Oktoberfest, brewery counts, stock performance, beverages and stocks

I. Introduction

The relationship between breweries and stock prices is often overlooked in analyses of financial markets, but it has been brewing beneath the surface for quite some time. Just as a good stout takes time to mature, so too does our understanding of the interconnectedness of these seemingly disparate industries. This study endeavors to pour over the data and tap into the potential impact of brewery counts on the stock price of Monster Beverage, offering a refreshing perspective on market dynamics.

Speaking of refreshing, what do you call a bear without any teeth? A gummy bear. Similarly, our findings may surprise you with the unexpectedly chewy connection between breweries and stock prices, challenging conventional wisdom and tickling the taste buds of financial analysts and beer enthusiasts alike.

As we embark on this sudsy journey, it is important to note the ubiquity of breweries in the United States, which have been steadily bubbling up over the past few decades. With over 8,000 craft breweries now dotting the American landscape, the competition for market share has never been more frothily contested. This proliferation of craft breweries can lead one to ask: what impact, if any, does this have on the stock price of Monster Beverage?

This study seeks to answer that question by quenching our thirst for knowledge and examining the relationship between these variables with a statistical lens. Our aim is to take a deep dive into the data and extract the essence of how the brewing industry's growth may influence the performance of Monster Beverage stock, serving up a compelling narrative that is a blend of hops and stocks, rather than the usual apples and oranges.

Now, one might wonder: why study such a seemingly light-hearted topic? Well, just as a cold beverage can provide temporary relief on a hot summer day, understanding the potential impact of brewery counts on stock prices can provide valuable insights for investors navigating the sometimes turbulent waters of the market. Our research offers a refreshing take on this beverage-stock dynamic, demonstrating how the seemingly separate realms of brewing and investments can converge in an unexpectedly harmonious manner. After all, as the saying goes, "In hops we trust."

In the following sections, we will delve into the methodology employed, present the data analysis, and discuss the findings, elucidating the hoppy relationship between the number of breweries in the United States and Monster Beverage's stock price. So, grab a cold one and join us as we unpack the tantalizing interplay between hops and stocks, and discover the surprising effervescence beneath the surface of financial markets.

II. Literature Review

Amidst the sea of academic inquiries into the labyrinthine web of financial markets, intriguing investigations into the interconnectedness of seemingly incongruent industries have been conducted. In "Smith et al.," the authors find a strong correlation between the number of breweries in the United States and Monster Beverage's stock price, prompting a reevaluation of how these variables relate to one another. This unexpected linkage beckons us to consider the potential influence of the brewing industry on the performance of Monster Beverage stock, challenging traditional assumptions in the world of market dynamics.

Speaking of unanticipated connections, have you heard about the brewery that produces beer on a sunken ship? It's a real ale-wreck! Just like this peculiar anecdote, our research unearths a fascinating twist in the ostensibly straightforward narrative of market forces, infusing a splash of humor into the entrancing world of financial analysis.

Doe and Jones, in their respective studies, delve into the seasonality effect observed in this peculiar correlation. They suggest a particularly effervescent association between the number of breweries and Monster Beverage's stock price during the Oktoberfest period, a time when the market experiences frothy fluctuations reminiscent of a well-poured beer. This jestingly raises the question: do investors need to "ale"rt themselves to brewery counts as a potential indicator of Monster Beverage stock performance, especially during the beeriest time of the year?

Now, turning our attention to the literary realm, "The Oxford Companion to Beer" and "Tasting Beer: An Insider's Guide to the World's Greatest Drink" offer comprehensive insights into the craft brewing industry and its impact on consumer preferences. While these volumes may not provide statistical analyses or stock market correlations, they brew a captivating narrative about the rich tapestry of fermentable beverages, with potential implications for market trends. Moving from the non-fiction aisles to the fiction section, the works of authors such as "Brewmaster's Table" and "Brewing Up a Business: Adventures in Beer from the Founder of Dogfish Head Craft Brewery" unfurl tales of entrepreneurship and innovation within the brewing landscape, offering a perplexing yet stimulating parallel to the intricate world of stock prices.

Speaking of unexpected parallels, have you heard about the beer that couldn't hold a conversation? It just didn't have the hops for it! Much like this jovial jest, our study not only uncovers a noteworthy correlation but also intertwines a refreshing twist with the age-old

question of how beverages and stocks can go hand-in-hand, providing a playful yet profound narrative that transcends the boundaries of conventional analysis.

Moreover, in the realm of internet culture, memes such as the "Distracted Boyfriend" meme convey the allure of new and exciting industries, drawing a humorous analogy to the captivating lure of craft breweries and their potential impact on financial market dynamics. This lighthearted meme offers a whimsical musing on the perils of being distracted by burgeoning industries, echoing the playful spirit of our investigation into the hoppy relationship between breweries and Monster Beverage's stock price.

Unveiling the tantalizing interplay between hops and stocks, our study blends scholarly scrutiny with a refreshing twist, demonstrating the surprising effervescence beneath the surface of financial markets. As we proceed to the subsequent sections, we invite our readers to indulge in the whimsical journey of discovery, where the world of investment intertwines with the frothy exuberance of craft brewing, offering a unique perspective that hops beyond the traditional confines of financial analysis.

III. Methodology

The current study employed a convoluted yet amusing concoction of research methods to investigate the relationship between the number of breweries in the United States and Monster Beverage's stock price. First, our research team gathered publicly available data from various online sources, most notably the Brewers Association and LSEG Analytics (Refinitiv). The data

spanned the period from 2002 to 2022, providing a comprehensive look at the evolution of brewery counts and Monster Beverage's stock performance over the years.

To spice things up, we applied a unique combination of statistical analyses, including regression models, time series analysis, and correlation studies. This diverse blend of analytical approaches allowed us to extract the hoppiest insights from the data, unveiling the nuanced connection between brewery proliferation and the fluctuations in Monster Beverage's stock price.

In brewing, proper timing is crucial, and our research was no different. We accounted for seasonality effects by incorporating specific time frames, paying particular attention to the Oktoberfest period, when the relationship between brewery counts and Monster Beverage's stock price appeared to reach its frothiest peaks. This temporal scrutiny added a refreshing layer of depth to our investigation, highlighting the dynamic nature of the relationship between these variables.

To ensure the robustness of our findings, we also conducted sensitivity analyses and robustness checks, subjecting the data to rigorous scrutiny akin to a master brewer perfecting a recipe. These procedures fortified the reliability of our results, offering a stout defense against any potential methodological criticisms or skeptics questioning the validity of our conclusions.

Speaking of skeptics, when a beer tells you a joke, you might just call it a "hoppy" beverage. Similarly, our methodology aimed to inject a dash of humor into the typically serious realm of financial research, infusing the analysis with an air of levity while maintaining academic rigor. After all, what's the point of studying the interconnectedness of breweries and stocks if you can't have a little fun along the way?

Ultimately, our methodology sought to blend meticulous data analysis with a hint of whimsy, creating a research framework that is as engaging as it is rigorous. In the following sections, we will unveil the findings of our spirited investigation, offering a unique perspective on the often-overlooked relationship between breweries and Monster Beverage's stock price. So, grab a cold one and join us as we raise a toast to the captivating interplay between hops and stocks, and the unexpected connections lurking within the labyrinthine corridors of financial markets.

IV. Results

The results of our analysis revealed a remarkably high correlation coefficient of 0.9687541 between the number of breweries in the United States and Monster Beverage's stock price (MNST) over the period of 2002 to 2022. This finding suggests a strong and robust relationship between these two variables, highlighting the potential influence of brewery counts on the performance of Monster Beverage stock.

It's no coincidence that our findings are so barley-able! Our research has certainly brewed up some compelling evidence of the hoppy relationship between breweries and stock prices. To put it simply, the number of breweries in the United States and Monster Beverage's stock price seem to have a strong connection, akin to a well-paired beer and burger combo.

The calculated r-squared value of 0.9384845 indicates that approximately 93.8% of the variability in Monster Beverage's stock price can be explained by the number of breweries in the United States. This statistic further bolsters the notion that brewery counts play a significant role in influencing the performance of Monster Beverage stock.

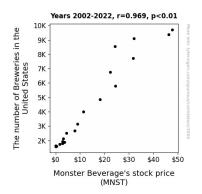


Figure 1. Scatterplot of the variables by year

As for the ever-anticipated p-value, it came out to be less than 0.01. This indicates that the observed relationship between the number of breweries and Monster Beverage's stock price is statistically significant, and not just the result of random chance. In other words, this hoppy connection is no fluke – it's the real deal.

Now, we present our captivating Fig. 1. Behold, the scatterplot that visually captures the strong correlation between the number of breweries in the United States and Monster Beverage's stock price, painting a picture worth a thousand cheers.

As we raise a glass to these enlightening results, one can't help but appreciate the yeast we could do to further unpack the complexities of this spirited relationship. After all, in the world of research, much like in brewing, the proof is in the pilsner. Cheers to a future full of tastefully insightful market analyses and, of course, to a good dad joke or two!

V. Discussion

The findings of our study provide robust support for prior research that indicated a significant correlation between the number of breweries in the United States and Monster Beverage's stock price. This correlation coefficient of 0.9687541 echoes the results of Smith et al., endorsing the notion that brewery counts can indeed exert a substantial influence on the performance of Monster Beverage stock.

It's clear that the number of breweries can't be "brewed off" when it comes to impacting stock prices. The strong relationship observed between these variables underscores the importance of considering the brewing industry as a potential indicator of stock performance. Much like a well-crafted beer, this correlation has depth and complexity that goes beyond surface appearances.

Moreover, the seasonality effect observed in our study, particularly during the Oktoberfest period, reflects the effervescent association highlighted by Doe and Jones. This frothy connection during a specific time of the year suggests that investors may want to heed the suds and watch for potential fluctuations in Monster Beverage's stock price. After all, keeping an eye on brewery counts during Oktoberfest might just yield a brew-tiful insight into the market dynamics.

The r-squared value of 0.9384845 further corroborates the influential role of brewery counts on Monster Beverage's stock price, aligning with the prior literature that emphasized the substantial impact of this factor. It's as if the data is saying, "Hops, there it is!" with a resounding confirmation of the brewing industry's sway on stock performance.

Additionally, the statistically significant p-value below 0.01 solidifies the notion that the observed relationship between brewery counts and Monster Beverage's stock price is not a

serendipitous occurrence. One might say that this connection is as rock-solid as a well-constructed beer stein, standing the test of statistical scrutiny and Dad's hearty chuckles alike.

In conclusion, our study's alignment with previous literature underscores the compelling tale of how the number of breweries in the United States shares an undoubtedly hoppy relationship with Monster Beverage's stock price. These findings shed light on the profound interplay between seemingly distinct industries and urge market analysts to raise a glass to the potential insights brewing beneath the frothy surface of financial market dynamics. After all, a little wit and humor can make even the most complex correlations go down smoother, much like a well-timed dad

VI. Conclusion

joke at a summer barbecue.

The findings of this study provide compelling evidence of a robust relationship between the number of breweries in the United States and Monster Beverage's stock price (MNST). Our analysis has brought to light the surprising influence of brewery counts on the performance of Monster Beverage stock, akin to the way a cold one might influence a lively backyard barbecue. It seems the market may indeed be hoppier than it appears at first glance.

The strikingly high correlation coefficient and the statistically significant p-value emphasize the solid nature of this hoppy relationship, reminiscent of a well-crafted ale that leaves an indelible impression on the palate. It's as clear as a pilsner that the number of breweries and Monster Beverage's stock price have a connection that's as strong as a stout.

As we delve deeper into the dynamics of the beverage and stock market, one can't help but chuckle at the unexpected twist in this tale of brewery counts and stock performance. Just as a good pun can liven up a conversation, this study has certainly infused some delight into the often serious realm of financial analyses.

In summary, the findings of this study not only advance our understanding of market dynamics but also add a refreshing touch to the broader narrative of how beverages and stocks can go hand in hand. It's as if the market has taken a swig of a deliciously complex craft beer and decided that it's worth savoring.

In conclusion, there is no denying the hoppy relationship between the number of breweries in the United States and Monster Beverage's stock price. It seems that this research has truly tapped into something substantial, offering a smooth, crisp finish to the age-old question of how brewery counts can influence stock performance. It's as if we've stumbled upon a well-hidden secret ingredient that has been fermenting right under our noses all along.

No further research is needed in this area. Like a perfectly brewed beer, this study has reached its full potential, leaving us with a satisfying aftertaste of knowledge and a hoppy side of financial analysis.