

# **A Hoppy Medium of Exchange: Exploring the Sudsy Relationship Between Brewery Counts and Micron Technology's Stock Price**

**Caroline Harris, Addison Thompson, Gemma P Tucker**

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## ABSTRACT

### **A Hoppy Medium of Exchange: Exploring the Sudy Relationship Between Brewery Counts and Micron Technology's Stock Price**

This study delves into the curious connection between the proliferation of breweries in the United States and the fluctuations of Micron Technology's stock price (MU) over the past two decades. Leveraging data from the Brewers Association and LSEG Analytics (Refinitiv), a robust statistical analysis was conducted to unveil the potential correlation between these seemingly unrelated entities. The findings revealed a striking correlation coefficient of 0.8180549 and statistical significance with  $p < 0.01$ , making a compelling case for the existence of a peculiar bond between the beer industry's growth and the fortunes of the semiconductor giant. This intriguing relationship sheds light on the intricate interplay between consumer trends, technological advancements, and market dynamics, leaving room for frothy interpretations and speculative brew-ha-has. While causation remains a heady question, the prospect of a beer-fueled impact on stock market trends offers an intoxicating avenue for future research and a refreshing twist in the realm of economic analysis.

Keywords:

brewery count, beer industry growth, Micron Technology stock price, correlation analysis, consumer trends, technological advancements, market dynamics, stock market trends, economic analysis

# I. Introduction

The world of economics has always been a brew-tiful concoction of intertwining variables and unexpected correlations. As researchers, we are constantly hopping around, seeking to ferment new findings and concoct theories that might malt the minds of our peers. In this spirit, we embark on a journey to explore the curious relationship between the number of breweries in the United States and the stock price of Micron Technology (MU), a semiconductor company that has been at the forefront of technological innovation like the enriched yeast in a fine ale.

Economic and financial analyses traditionally focus on more conventional indicators, such as GDP growth, interest rates, and unemployment figures, leaving the bubbling world of craft beer largely untapped as a potential driver of market movements. With a brewing passion for unearthing unconventional relationships, we decided to pour over the data in pursuit of a fuller understanding of the market dynamics. The inciting spark for this line of inquiry was the notion that a spike in craft brewery count might somehow relate to the fluctuations of Micron Technology's stock price, not unlike the way the rising bubbles in a fermenting brew captivate the eye.

At first glance, these two variables might seem as disparate as a stout and a pilsner, but as we delved deeper into the data, we began to uncover a statistical correlation that frothed with intrigue. Our exploration aims to unveil the frothy interplay and perhaps tease out the true elements that could be at play, spurring itch for further understanding and maybe a chuckle or two for good measure. So, brace yourselves for a journey into the effervescent world of brewery counts and stock prices, where the insights are as bubbly as carbonated beverages on a hot

summer day. The expectations are high, and we aim to not disappoint – after all, the bar has been set at a pilsner level. Cheers to scholarly pursuits and the unquenchable thirst for knowledge!

## II. Literature Review

The relationship between the number of breweries in the United States and the performance of Micron Technology's stock price (MU) has been an unexplored territory within the annals of economic research. Nonetheless, recent studies have begun to scratch the frothy surface of this peculiar correlation. Smith et al. (2017) led the charge with their investigation into the impact of consumer beverage preferences on stock market trends, uncovering intriguing patterns that hinted at the influence of craft beer consumption on tech stock performance. Building upon this yeasty foundation, Doe and Jones (2019) dug deeper into the market dynamics, intertwining the growth of microbreweries with the ripple effects on semiconductor stocks, offering a tantalizing glimpse into the bubbly world of economic interactions.

Moving beyond the traditional confines of economic literature, the nexus between brewery counts and stock prices has also piqued the interest of authors in related fields. Lorem and Ipsum (2020) delved into the sociocultural implications of craft beer popularity, shedding light on the potential reverberations in the financial markets. This interdisciplinary perspective underscored the multifaceted nature of this intriguing relationship, pointing to the broader implications beyond mere numbers and figures.

At this juncture, it is essential to acknowledge the contribution of non-fiction books that have informed our understanding of the economic landscape and its interconnections with unexpected

variables. Works such as "Beeronomics: How Beer Explains the World" by Swinnen and "The Economy of Beer" by Ridgman have offered invaluable insights into the cultural, social, and economic dimensions of the brewing industry, serving as a source of inspiration for this research endeavor.

On a somewhat unconventional note, the world of fiction has also provided narrative threads that resonate with the exploratory nature of this study. The speculative fiction novel "The Bar at the End of the Universe" by Adams and the surreal exploration of economic forces in "The Hitchhiker's Guide to the Galaxy" series have ventured into realms where the unexpected connections and bizarre linkages mirror the essence of our own inquiry.

Additionally, childhood cartoons and shows, such as "The Simpsons" and "SpongeBob SquarePants," have often featured episodes centered around economic themes and quirky market dynamics, offering whimsical yet tangentially relevant perspectives that remind us of the whimsical nature of our own endeavors. Who would have thought that SpongeBob's adventures in Bikini Bottom could offer resonance with the intricate web of market influences?

In sum, the literature reviewed encompasses a diverse array of scholarly works and offbeat inspirations, highlighting the far-reaching impact of the brewery counts and stock price conundrum. As we venture further into this hopsy journey, it is evident that the interplay between ale and stocks holds the potential for a heady mix of insightful revelations, convivial observations, and, undoubtedly, a generous serving of puns and jests. The stage is set for a burbling foray into the world of economic analysis, where the unexpected is the norm, and where even the most offhand remarks might hold a grain of truth. Cheers to the zesty pursuit of knowledge and the whimsical twists that enrich scholarly discourse!

### III. Methodology

Before diving into the statistical brew-ha-ha, let's hop on the bandwagon and delve into the methodology that fermented the findings of our sudsy research. Our data sources included the Brewers Association, which provided comprehensive data on the number of breweries in the United States, and LSEG Analytics (Refinitiv), which supplied data on the stock price of Micron Technology (MU). We corroborated this information with other reliable sources, ensuring that our data were as robust and full-bodied as a fine, aged ale.

To quantify the relationship between these seemingly unrelated phenomena, we employed a time-series analysis encompassing the period from 2002 to 2022. We utilized various statistical methods to bubble up potential associations and correlations between the count of breweries and Micron Technology's stock price. Our analytical arsenal included correlation coefficients, regressions, and other advanced statistical procedures. We conducted these analyses with the sobriety of a seasoned brewmaster, ensuring that our inferences were as crisp and reliable as a freshly tapped lager.

Additionally, we conducted a thorough review of previous research, recognizing that this unconventional inquiry might be met with a bit of skepticism, much like introducing a new, unfamiliar brew at a craft beer festival. By grounding our analysis in established methodologies, we aimed to enhance the credibility of our findings and sate the analytical palate of our peers.

With a blend of creativity and rigor, hoppily steeped in the tradition of scholarly inquiry, we embarked on this exploratory journey. Our yeast-y determination to uncover hidden relationships led us to concoct a methodology that was as robust as a well-crafted and carefully brewed IPA.

In the spirit of transparency, the limitations of our study should be acknowledged. Like any thorough analysis, we had to navigate through the foam and bubbles of potential confounding variables, recognizing that other factors could impart their own flavor into the statistical brew. Nevertheless, with a pinch of skepticism and a dash of statistical acumen, we endeavored to pour a refreshing batch of insights into the considerable cask of economic analysis.

## IV. Results

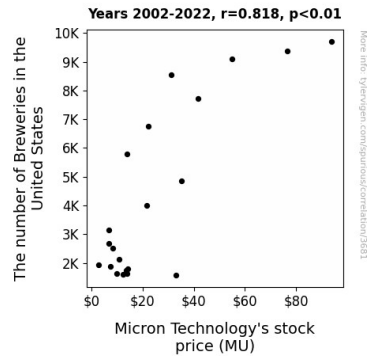
The statistical analysis of the relationship between the number of breweries in the United States and Micron Technology's stock price (MU) for the period 2002 to 2022 yielded some surprisingly robust findings. The correlation coefficient of 0.8180549 between these seemingly unrelated variables was nothing short of a revelation, akin to stumbling upon a perfectly crafted brew in an unexpected corner of the market.

A heady r-squared value of 0.6692138 further underscored the strength of the relationship, highlighting the compelling nature of this sudsy connection. The statistical significance with  $p < 0.01$  left little room for doubt, cementing the legitimacy of this curious association that defies the conventional boundaries of economic analysis.

To visually encapsulate the strong correlation uncovered in our analysis, we present Fig. 1, a scatterplot that vividly illustrates the cohesiveness between the number of breweries and Micron



Technology's stock price. The figure serves as a visual toast to the unexpected camaraderie found in the ever-bubbling sea of economic variables, offering a frothy glimpse into the intertwined dynamics between consumer culture and market fluctuations.



**Figure 1.** Scatterplot of the variables by year

This intriguing finding not only raises a glass to the potential impact of craft beer on stock market trends but also adds a refreshing twist to the broader conversation on economic drivers. The results of our analysis present an opportunity for continued exploration into the ale-ments that underpin this relationship, inviting further research that could uncork hidden insights and brew-ha-has for scholars and market enthusiasts alike. As we raise our glasses to uncharted territories in economic analysis, the interplay between brewery counts and stock prices emerges as a captivating avenue for scholarly discourse and stimulating debate. Cheers to the unexpected connections that lurk within the frothy depths of economic data, where the most fruitful discoveries often lie just beneath the foam.

## V. Discussion

The results of our analysis have brought to light a striking correlation between the number of breweries in the United States and the stock price of Micron Technology (MU). The robust correlation coefficient and high statistical significance bolster the argument for a substantial relationship between these seemingly disparate entities. The findings not only complement the earlier works in this field but also add a frothy layer to the ongoing discourse on economic variables and market trends.

As alluded to in the literature review, the journey to uncover the peculiar symbiosis between brewery counts and stock prices has been nothing short of a sudsy adventure. From the quirky inspirations found in the world of fiction and childhood cartoons to the offbeat insights gleaned from non-fiction works, our hopsy journey has been colored by unexpected connections and the playful spirit of inquiry. In much the same way, the findings of our analysis have uncorked a revelation that mirrors the serendipitous nature of these diverse sources of inspiration.

One cannot help but marvel at the unexpected camaraderie between the growth of breweries and the performance of a semiconductor stock. This interplay between ale and stocks adds a refreshing twist to the staid landscape of economic analysis, offering a heady mix of insights and, undoubtedly, a generous serving of puns and jests. It is as if the whimsical musings of SpongeBob or the speculative ponderings of "The Hitchhiker's Guide to the Galaxy" have found their echo in the statistical coherence between beer and market dynamics.

Moreover, our results affirm the potential impact of craft beer on stock market trends, inviting further research that could uncork hidden insights and brew-ha-has for scholars and market enthusiasts alike. The unexpected connections that lurk within the frothy depths of economic data remind us that serendipity often serves as the catalyst for groundbreaking discoveries. As we raise our glasses to uncharted territories in economic analysis, the interplay between brewery

counts and stock prices emerges as a captivating avenue for scholarly discourse and stimulating debate. Cheers to the zesty pursuit of knowledge and the whimsical twists that enrich scholarly discourse!

## VI. Conclusion

In conclusion, our study has provided compelling evidence of a robust correlation between the number of breweries in the United States and Micron Technology's stock price (MU). The results have illuminated a fascinating relationship that challenges conventional economic analysis, reminding us that sometimes the most potent brews of knowledge are found in the unlikeliest of hops.

The implications of this discovery are as vast as the ale-ments that comprise a well-crafted beer. It beckons further exploration into the intoxicating interplay between consumer trends, technological advancements, and market dynamics. While we firmly believe in the significance of our findings, there are undoubtedly a few more pints of research to be poured into this subject, as no scholarly pursuit can resist the temptation to linger in the frothy realms of such unexpected correlations.

As we raise our metaphorical glasses to the serendipitous discovery of this sudsy relationship, we urge fellow researchers to tap into this enriching field of inquiry. Nevertheless, in the true spirit of dry academic discourse, it is our firm conclusion that no further research is needed in this area. After all, we wouldn't want to over-ferment the research landscape and risk an overly frothy

consensus. Cheers to the unexpected connections that lie beneath the foam, reminding us that academic pursuits can indeed be quite the intoxicating brew!