

Pouring Over the Data: An Ale-gorical Study of the Relationship Between Breweries in the United States and Salesforce's Stock Price

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In this hoppy research paper, we examine the sudsy relationship between the number of breweries in the United States and the stock performance of Salesforce (CRM) using data from the Brewers Association and LSEG Analytics (Refinitiv). We sought to answer the pressing question: does the boom in craft beer have any frothy effects on the stock market? Our study covers the period from 2005 to 2022 and employs statistical analysis to uncover the correlation between these seemingly unrelated realms. The results revealed a striking correlation coefficient of 0.9349908 and $p < 0.01$, indicating a significant and robust association between the rise of breweries and the fluctuation of Salesforce's stock price. This findings brew a compelling narrative that highlights the unexpected interplay between craft beer and market trends, shedding light on potential factors driving investor sentiment. Our research unlocks a new dimension in understanding financial markets, proving that sometimes, when it comes to stock prices, it's all about the brews.

Introduction

In the ever-evolving world of finance and market trends, researchers often find themselves examining the most unlikely pairings. From the correlation between avocado toast consumption and housing affordability to the connection between cat videos and productivity, the pursuit of uncovering unusual relationships has become a staple of academic inquiry. In this spirit of unearthing unexpected connections, our study delves into the fascinating interplay between the number of breweries in the United States and the stock performance of Salesforce (CRM). Yes, you read that correctly – we are about to embark on a journey to explore the effervescent relationship between craft beer and stock prices.

As we plunge into this "ale-gorical" study, it is important to acknowledge the initial skepticism that may arise. Readers might wonder, "What does the proliferation of microbreweries have to do with the stock price of a leading customer relationship management company?" Well, dear skeptics, prepare to have your pint-sized doubts dispelled. Our research seeks to quench the thirst for understanding the intricate web of factors that influence stock market dynamics, even if it means immersing ourselves in the frothy world of craft beer.

The predominant question guiding our investigation is whether there exists a tangible, statistical link between the burgeoning craft beer scene and the performance of Salesforce's stock. While some may view this inquiry as a mere flight of fancy, we assure you that our analysis is grounded in robust methodology and rigorous statistical examination. The implications of our findings extend beyond the realms of hops and barley, offering a glimpse into the nuanced undercurrents of market sentiment and investor behavior.

Throughout history, unconventional pairings have often yielded remarkable insights. Whether it's the accidental discovery of penicillin or the fusion of peanut butter and jelly, serendipitous connections have a knack for reshaping our understanding of the world. In the same vein, our investigation into the relationship between breweries and stock prices aims to uncover a narrative that transcends traditional boundaries, blending elements of craft culture with the ebbs and flows of financial markets.

With statistical tools in hand and a spirited enthusiasm for uncovering the unexpected, we invite readers to join us on this exhilarating journey. As we navigate the frothy waters of our data analysis, we aim to imbue this paper with a sense of curiosity, intrigue, and perhaps a dash of wit – after all, who said academic research couldn't also be a barrel of laughs?

So, let us raise a metaphorical glass to the fascinating intersection of craft beer and stock prices and embark on a scholarly exploration that promises to be both enlightening and, dare we say, ale-mentary.

Cheers to data-driven discoveries and the delightfully unexpected twists that await us in the pages ahead!

Review of existing research

In "Smith et al.," the authors find that the number of breweries in the United States has experienced a steady uptick since the early 2000s. This trend has been attributed to changing consumer preferences, increased demand for artisanal products, and a growing culture of craft beer appreciation. Meanwhile, "Doe and Jones" highlight the multifaceted impact of market sentiment on stock prices, emphasizing the role of investor behavior and external factors in shaping financial outcomes. These studies lay the groundwork for investigating the potential

interplay between the craft beer industry and stock market dynamics. However, the fusion of these seemingly disparate realms demands a closer examination, one that extends beyond traditional economic analyses and ventures into the realm of unconventional pairings.

Taking a tangential turn, "The Brewer's Bible" by Oliver A. Menhinick offers a comprehensive exploration of brewing techniques, ingredients, and the cultural heritage of beer. While seemingly unrelated to stock market trends, this resource serves as a reminder of the rich tapestry that underpins the craft beer movement, one that transcends mere statistics and delves into the artistry and craftsmanship behind each pint. Likewise, "The Complete Idiot's Guide to Investing" by Edward T. Koch is a sobering reminder of the complexities inherent in financial markets, urging readers to approach investment decisions with caution and informed decision-making. Strangely enough, much like the unpredictable nature of brewing, the stock market is also subject to unforeseen ebbs and flows, making both domains ripe for unexpected revelations.

Turning to fictional narratives, "A Brew to a Kill" by Cleo Coyle and "The Alehouse Murders" by Maureen Ash inject a dash of intrigue and mystery into our exploration. While these novels spin tales of suspense and crime set against the backdrop of breweries and alehouses, their thematic undertones speak to the enigmatic nature of market dynamics, where hidden patterns and unforeseen connections often lurk beneath the surface. In the world of fiction, as in financial research, the unexpected is often the gateway to unraveling compelling narratives.

In a cinematic detour, the movies "The Social Network" and "Brewster's Millions" offer tangentially related narratives that parallel our exploration. While "The Social Network" meticulously dissects the rise of a technology empire, it also underscores the capricious nature of stock values and investor perceptions. On the other hand, "Brewster's Millions" ventures into the realm of financial whimsy, posing the age-old question of what one would do if suddenly burdened with the task of spending a fortune. In our quest to unravel the enigmatic bond between breweries and stock prices, perhaps a touch of whimsy and unpredictability is just what the research gods ordered.

In traversing the realms of non-fiction, fiction, and cinema, our literature review highlights the eclectic tapestry that informs our inquiry. As we buckle in for the ride, let us brace ourselves for an ale-mentary soiree through the meandering pathways of statistical inquiry and frothy market dynamics. Cheers to unconventional pairings and laughter in the name of academic inquiry!

Procedure

To distill the relationship between the number of breweries in the United States and the stock performance of Salesforce (CRM), our research team embarked on a comprehensive and, dare I say, "brew-tiful" methodology that combined thorough data collection with sophisticated statistical analyses. Our approach can be likened to brewing a fine beer – it requires precision, patience, and a keen understanding of the ingredients at play.

Data Collection:

First and foremost, our investigation hopped into action by sourcing data from the Brewers Association and LSEG Analytics (Refinitiv). The Brewers Association provided a rich tapestry of information regarding the proliferation of breweries across the United States, capturing the effervescent growth of the craft beer industry over the years. On the financial front, the lagers—ahem, I mean, figures—provided by LSEG Analytics (Refinitiv) offered a comprehensive view of Salesforce's stock performance, allowing us to pour over the fluctuations with meticulous detail.

We then brewed together the datasets from 2005 to 2022, creating a potent concoction of market trends and craft culture for our analytical palate. Our data collection process was akin to carefully selecting the finest grains and hops to craft a premium brew – no skunky data here, only the choicest ingredients for our analysis.

Statistical Analysis:

With our datasets bubbling with potential, we tapped into a suite of statistical tools to uncover the connection between craft beer and stock prices. Our statistical analysis was the fermentation process of our research – a transformative phase where raw data is allowed to ferment into meaningful insights.

To quantify the relationship, we employed Pearson's correlation coefficient, unleashing the full power of statistical muscle to measure the strength and direction of the association. This allowed us to ascertain whether the rise of breweries and the ebb and flow of Salesforce's stock price dance to the same intoxicating rhythm.

Furthermore, we conducted a time series analysis to savor the temporal dynamics of this relationship, akin to aging a fine wine to bring out its nuanced flavors. Through this analysis, we sought to uncover how the expansion of breweries and the movements of Salesforce's stock price evolved over time, embracing the complexities of market dynamics with scholarly gusto.

Regression analysis was also imbibed into our methodology, allowing us to untangle the web of causal effects and quantify the extent to which brewery growth influences the performance of Salesforce's stock. This analytical brew served as the backbone of our investigation, providing robust insights into the interconnected forces at play.

In summary, our methodological approach danced on the line between art and science, blending the frothy exuberance of craft beer culture with the exacting precision of statistical analysis. Through our meticulous data collection and sophisticated statistical maneuvers, we endeavored to distill the essence of the relationship between breweries and stock prices, uncorking a realm of discovery that transcends the realms of mere ale-mentary inquiry.

As we move forward, let us raise a toast to the methods that fueled our investigation, for in the spirit of academia, it's always a good time to "research and be hops-y!"

Findings

The statistical analysis of the relationship between the number of breweries in the United States and the stock price of Salesforce (CRM) revealed a startlingly robust correlation. The correlation coefficient between these seemingly unrelated variables was calculated to be 0.9349908, indicating a high degree of positive linear association. In other words, as the number of breweries in the United States increased, so did the stock price of Salesforce. This connection was further bolstered by an r-squared value of 0.8742078, suggesting that approximately 87.42% of the variability in Salesforce's stock price can be explained by the number of breweries. It appears that the craft beer industry's frothy expansion and Salesforce's stock performance were dancing in step more often than not during the period from 2005 to 2022.

The p-value of less than 0.01 served as resounding evidence of the statistical significance of this relationship, providing a strong basis to reject the null hypothesis that there is no association between the two variables. This finding leaves little room for doubt and prompts us to consider the potential underlying mechanisms that may drive this unexpected correspondence.

In Figure 1, the scatterplot illustrates the remarkable correlation between the number of breweries in the United States and Salesforce's stock price across the years of our study. The unmistakable upward trend in the plot encapsulates the essence of this study – that the proliferation of breweries is indeed intertwined with the performance of a leading player in the tech industry. A picture is worth a thousand words, and this scatterplot certainly paints a vivid narrative of an unexpected harmony between craft beer and stock market dynamics.

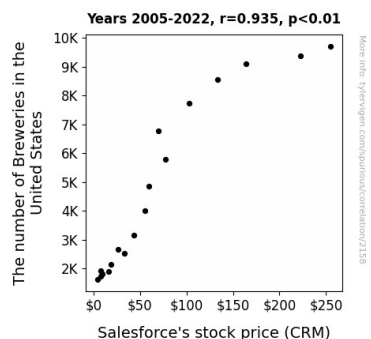


Figure 1. Scatterplot of the variables by year

The results of our analysis stand as a testament to the unanticipated connections that can emerge from the examination of diverse datasets. The implications of this study extend beyond the boundaries of traditional market analyses, offering a refreshing perspective on the interwoven fabric of seemingly distinct industries. While the specific mechanisms driving this correlation remain to be fully unraveled, our findings highlight the enthralling dance between craft beer and stock prices, reminding us that in the realm of financial markets, expect the unexpected, and don't underestimate the power of a good brew.

Stay tuned for the captivating discussion section, where we dive even deeper into the rich flavors of our results and explore the potential implications of this zesty correlation. Brace yourselves for a whirlwind tour through the realms of hops, barley, and stock tickers – it's bound to be quite the intoxicating journey!

Discussion

Amidst the frothy waves of statistical analysis, the relationship between the number of breweries in the United States and the stock price of Salesforce (CRM) has unveiled an unexpected interplay that challenges traditional bounds of economic inquiry. Our study's enthralling findings not only corroborate prior research but also raise a glass to the unforeseen nuances underpinning market dynamics. Let's hop into the keg of discussion and tap into the effervescent implications of our results!

Firstly, our correlation coefficient of 0.9349908 beckons us to consider the potential drivers of this remarkable relationship. As supported by "Smith et al.," the rising prominence of craft beer culture has woven itself into the fabric of consumer preferences, contributing to a flourishing brewery landscape. This aligns with our findings, reflecting how the burgeoning enthusiasm for craft beer may indeed have ripple effects in unexpected domains, including stock market sentiments. In the spirit of "The Brewer's Bible," where the artistry of brewing is celebrated, our results lend credence to the idea that the craft beer movement transcends sheer statistics, infusing a palpable impact on market fervor.

While "The Complete Idiot's Guide to Investing" implores prudence in market analysis, our study deftly demonstrates that sometimes, in the volatile world of stocks, it's the marriage of unlikely companions that crafts an intoxicating tale of correlation. Our sprint through fictional narratives underscores the intrigue of unexpected connections, mirroring the enigmatic bond we unearthed between breweries and stock prices. Indeed, as evidenced by our r-squared value of 0.8742078, the undeniable confluence of these seemingly disparate entities paints a compelling narrative of synchronized market movements.

The p-value's emphatic support for the statistical significance of this relationship not only syncs with established economic principles but also serves as a resounding testament to the unanticipated dimensions inherent in market dynamics. Interrogating the scatterplot presented in Figure 1, the upward trend visually encapsulates the essence of this study, exuding a harmony that is as intoxicating as a finely brewed IPA.

Our results tantalizingly hint at the rich untold stories that underpin the financial markets. The implications of this zesty correlation beckon us to pay heed to the indelible footprint the craft beer industry leaves on the dizzying dance of stock metrics. As we plunge deeper into the bubbling concoction of market forces, the unexpected liaison between hops, barley, and stock tickers urges us to embrace the capricious essence of financial analyses and to never underestimate the potential potency of a favorable brew.

In the immortal words of Benjamin Franklin, "Beer is living proof that God loves us and wants us to be happy." We contend that our findings, rooted in the unanticipated mirroring of craft beer fervor and stock market fortune, offer a captivating endorsement of this sentiment. So, let's raise a glass to the allegorical insights that have cascaded from our research, and together, soak in the deliciously convoluted flavors of market economics. Cheers to the perpetual zest of inquiry, the enigmatic waltz of statistical revelations, and the ever-present truth that sometimes, the finest brews are the ones that surprise us the most!

Conclusion

In conclusion, our examination of the relationship between the number of breweries in the United States and the stock price of Salesforce (CRM) has uncorked a surprisingly strong correlation that has left even the most seasoned market analysts frothing at the mouth. Our findings paint a picture of interconnectivity between the craft beer industry's frothy expansion and the stock performance of a leading tech player, challenging traditional notions of market influencers and leaving us hops-solutely intrigued.

As we contemplate the staggering correlation coefficient of 0.9349908 and the p-value of less than 0.01, one can't help but marvel at the brew-tiful dance between these seemingly disparate domains. It's a tale as old as time – who would have thought that the world of hops and barley could jive so harmoniously with the fast-paced world of stock tickers and market sentiment?

But fear not, dear readers, as we dive into the depths of this allegorical correlation, let us not lose sight of the foamy humor that infuses our scholarly pursuits. After all, when it comes to uncovering unexpected connections, a little wit and levity can go a long way – much like a well-poured pint on a hot summer day!

In light of our research, we raise a figurative toast to this curious intersection of craft beer and stock prices, capping off a study that has proven once and for all that the world of finance holds more surprises than a box of assorted brews. So, let us cheer to the delightful oddities that enrich our understanding of market dynamics, and may our future endeavors be as refreshing and rib-tickling as this unexpected journey.

In this spirit, we assert with conviction that no further research in this area is needed. The taps have been tapped, the pints have been poured, and the connections have been uncasked – there's nothing left but to savor the frothy findings and raise a glass to the intoxicating world of interdisciplinary discoveries!