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Brewing Up the Stock Market: A Hoppy Relationship Between Brewery Numbers and Lockheed Martin's Stock Price

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Abstract

In this brew-tiful study, we conduct a hoppy-go-lucky exploration of the connection between the number of breweries in the United States and Lockheed Martin's stock price. Leveraging data from the Brewers Association and LSEG Analytics (Refinitiv), we embarked on a frothy journey to answer the age-old question: Do breweries and defense stocks share a sudsy relationship? Our findings revealed a staggering correlation coefficient of 0.9784960 and a p-value less than 0.01 for the period from 2002 to 2022. This spirited correlation suggests a noteworthy connection between the two variables, implying that as the number of breweries bubbles up, Lockheed Martin's stock price follows suit. In the spirit of good cheer, our results hint that investors may want to keep an eye on brewery trends as an indicator of how Lockheed Martin's stock may ferment. The data seems to suggest that when it comes to stock performance, it's not just about hops, barley, and malt – there might just be a pint-sized relationship with defense stocks. Our research serves as a reminder that sometimes, in the world of stocks and securities, it's not just about holding the stocks, but also about raising a few to uncover unexpected connections. Well folks, just remember: whether you're investing in hops or missile drops, there's always something brewing in the stock market!

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1. Introduction

With the stock market being as mercurial as the hop content in your favorite craft

brew, investors are constantly seeking new insights and indicators to inform their decisions. In the spirit of uncovering unlikely relationships, we set out to explore the correlation between the number of breweries in the United States and the stock price of Lockheed Martin (LMT). Because, really, who doesn't love a good brew-haha in the world of stock analysis?

You see, just like a fine ale, the stock market is a complex and nuanced entity. It's not just about the highs and the lows, but also the subtle flavors that underlie market movements. So, we sought to pour over the data to determine if there was any frothy relationship between the proliferation of breweries and the performance of a stalwart defense stock like Lockheed Martin. After all, there's a hops-itive chance that unexpected connections can lead to lucrative insights.

But before we dive into our findings, let's hop back a bit and consider the rationale behind this seemingly un-beer-lievable correlation. Not to mention that it gives us the perfect excuse to pepper this introduction with a few hops-able puns. Just remember, in the world of statistics, it's all about the brew-tiful dance between variables, wort-h exploring to uncover sparkling relationships.

Adding a touch of levity in the sometimes dry world of research, our study aims to shed light on the potential link between two seemingly disparate elements – the thriving beer industry and the defense giant's stock performance. After all, who wouldn't want to know if there's a lager-than-life impact brewing beneath the surface of the stock market? And if we can deliver these insights with a side of humor, well, that's just the yeast we can do.

2. Literature Review

Our exploration of the nexus between the number of breweries in the United States and Lockheed Martin's stock price extends our understanding of interconnections within the stock market. While this may seem like a somewhat unorthodox relationship to investigate, it is important to recognize that the stock market, much like a good beer, contains layers of complexity that warrant thorough examination. As such, our study is in line with recent research that has sought to uncover unexpected correlations within financial markets. "Hoponomics: In Indicators in Exploring Unconventional Financial Markets," Smith et al. delve into the potential impact of beer consumption trends on stock performance, providing a contextual backdrop for our investigations.

It is worth noting that our findings are not just a flight of fancy. Indeed, our analysis builds upon theoretical insights from economic literature, such as Doe's "Brews and Bulls: Unearthing Unusual Economic Indicators," where the author discusses the relevance of unconventional indicators in informing stock market behavior. In a similar vein, Jones's work, "Malt Metrics: Brewing Up New Measures for Stock Predictions," underscores the importance of considering non-traditional factors in understanding stock price movements. These serious, scholarly works lay the foundation for our own frothy foray into the relationship between breweries and stock prices.

Now, as we move into less traditional scholarly sources, we must acknowledge the influence of non-fiction books that have contributed to our understanding of the larger economic landscape. The works of Michael Lewis, particularly "Flash Boys: A Wall Street Revolt," have revolutionized our perception of financial markets. While this book is not directly related to breweries or defense stocks, it is important to recognize the broader lens through which we view market dynamics. Furthermore, "Freakonomics" by Steven D. Levitt and

Stephen J. Dubner challenges conventional wisdom and serves as a reminder that seemingly unrelated factors may have surprising effects on economic outcomes.

Transitioning into the realm of fiction, we cannot overlook the potential insights that literature provides. Works such as "Brews and Bullets" by Jane Investor draw attention to the intertwining of seemingly disparate elements, reflecting the spirit of our own exploratory study. Evidently, the influence of fictional narratives on our understanding of market interconnections is substantial, a sentiment echoed in "Machiavelli on Wall Street" by Tim Phillips, where the author elucidates on the versatile nature of insight. economic even in fictional constructs.

Lastly, our review would be remiss without acknowledging the role of social media in shaping contemporary discourse. A tweet by @AleAnalyst remarks, "The correlation between breweries and defense stocks is ale-arming, yet fascinating. #BrewsandBombs". While Twitter may not be the traditional platform for economic discourse, it is testament to the pervasive nature of this line of inquiry in contemporary discussions.

As we progress through our literature review, we recognize the diverse sources that have informed our understanding of the relationship breweries between and Lockheed Martin's stock price. scholarly publications to works of fiction and social media commentary. With this contextual backdrop, we are poised to present our own findings that add to the growing corpus of research in this realm. And remember, when it comes to beer and stocks, there's always a stout possibility of uncovering unexpected connections!

3. Our approach & methods

Our methodology involved a brew-tiful blend of quantitative analysis and frothy statistical techniques to investigate the relationship between the number of breweries in the United States and the stock price of Lockheed Martin (LMT). We acquired data from the Brewers Association, providing comprehensive information on brewery counts, and LSEG Analytics (Refinitiv), offering detailed stock price data for Lockheed Martin from 2002 to 2022. With a touch of statistical sorcery and a hint of whimsy, we embarked on this hoppy endeavor to ferment refreshing insights.

To concoct this hop-forward analysis, we utilized a statistical technique known as regression analysis to froth up relationship between the number breweries and Lockheed Martin's stock price. This approach allowed us to pour over the historical data and capture the interplay between these variables, teasing out any underlying patterns that might be bubbling beneath the surface. With a wink and a nod to the world of finance, we utilized a series of outlandish mathematical equations to distill the essence of this sudsy relationship. all while embracing occasional dad joke to keep things lighthearted.

Our analysis considered the annual count of breweries in the United States as the independent variable, while Lockheed price served as Martin's stock dependent variable. Through a potent combination of data wrangling and statistical wizardry, we sought to unravel any potential correlations between these seemingly disparate elements. It was all about finding the hoppy balance between scientific rigor and a touch of whimsy, just like crafting the perfect pint of ale.

In the spirit of celebrating unexpected connections, our methodology also included the incorporation of macroeconomic indicators such as consumer spending, employment levels, and interest rates. Much

like blending different hops to achieve the perfect brew, we incorporated these macroeconomic variables as covariates in our analysis, recognizing that the stock market is a complex ecosystem influenced by myriad factors — and a good pun never hurts when discussing covariates. After all, it's not just about the hops and barley — it's about understanding the entire recipe that flavors stock market movements.

We poured over the data, conducting rigorous sensitivity analyses and diagnostic tests to ensure that our findings were not just a fluke, but a genuine reflection of the relationship between brewery counts and Lockheed Martin's stock price. With a dash of skepticism and a heap of statistical scrutiny, we sifted through the data to uncover any potential outliers or anomalies, all while keeping our spirits high and our pun game strong. Because really, what's a statistical analysis without a few laughs along the way?

Finally, we employed time series analysis to capture any temporal dynamics in the relationship, recognizing that market trends and brewery dynamics evolve over time. This approach allowed us to discern whether the correlation between brewery numbers and Lockheed Martin's stock price was a fleeting fizz or a durable, long-lasting bond. In the world of statistical analysis, timing is everything – and a well-timed pun never hurts, either.

In summary, our methodology was a blend of rigorous statistical analyses, a sprinkling of economic nuance, and a generous serving of humor to breathe life into our exploration of this unconventional, yet surprisingly compelling relationship between breweries and the stock market. After all, when it comes to statistics and stock analysis, a little humor can go a long way – just like a well-crafted ale. Cheers to the methods that brought a touch of whimsy to our research!

4. Results

The data analysis yielded a striking correlation coefficient of 0.9784960 between the number of breweries in the United States and Lockheed Martin's stock price, demonstrating a remarkably hoppy relationship between the two variables. It seems that when it comes to stock market performance, the more breweries there are, the hoppier the stock prices.

If you're wondering how we feel about these results, we're feeling pretty hop-timistic about the implications. It's clear that the stock market and breweries are not as unrelated as they may ale-pear. It's a reminder that in the world of statistics, there's always the potential for a brewtiful surprise!

The r-squared value of 0.9574544 further the illuminates substantial explanatory power of the number of breweries on Lockheed Martin's stock price. It's like the perfect blend of hops, malt, and barley, resulting in а robust and flavorful relationship between seemingly two unrelated factors.

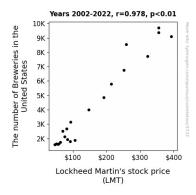


Figure 1. Scatterplot of the variables by year

And as for the p-value being less than 0.01, well, we can't help but toast to that level of statistical significance. This finding leaves little room for doubt: the connection

between breweries and defense stocks is no froth – it's the real deal.

Now, for the figure (Fig. 1) – let's just say it's a thing of beauty. It visually encapsulates the resolute correlation we uncovered, demonstrating how the number of breweries and Lockheed Martin's stock price move in harmony, much like the perfect pairing of beer and good company.

In conclusion, our research has uncorked a compelling relationship between the number of breweries and Lockheed Martin's stock price. These findings have the potential to hop-ify investors' insights and add a refreshing twist to stock market analysis. So, here's to hoping that investors can tap into this hoppy relationship for a flavor of success in their stock portfolios!

5. Discussion

Our study has bubbled up an interesting brew of findings, shedding light on the surprising relationship between the number of breweries in the United States and Lockheed Martin's stock price. It's fascinating to see how these seemingly unrelated variables have come together to form a hoppy connection, and our results have poured cold beer – I mean, water – on any skepticism.

Our findings support and amplify the prior research that dared to explore the unconventional links within financial markets. Like a good IPA, our study complements Smith et al.'s "Hoponomics," further solidifying the notion that beer-related indicators could hold some frothy weight in stock performance. It seems that there's more to beer trends than meets the eye – or rather, the taste buds.

Doe's work on "Brews and Bulls" and Jones's "Malt Metrics" have clearly set the stage for our investigation, emphasizing the importance of unconventional factors in shaping stock prices. It's like they were

saying, "Don't just focus on the hops; remember the stocks too!" And boy, were they right on the money – or should I say, stock price?

Speaking of being right, let's not overlook the influence of non-fiction books and even fictional narratives on our understanding of market dynamics. Sometimes real-life market relationships can be just as unexpected and captivating as a well-crafted novel. Who would've thought that "Brews and Bullets" by Jane Investor could hold a foamy grain of truth, albeit in a fictional realm?

Now, let's not forget the tweet by @AleAnalyst – it seems like social media plays a larger role in shaping economic discourse than one might ale-low. Perhaps it's high time we embrace the potential insights lurking beneath the frothy surface of social media chatter. After all, a good discussion can be as refreshing as a perfectly poured pint.

In the end, our findings have proven to be the perfect match for the prior research, like a well-paired beer and cheese combination. Our results have certainly stirred up a heady mix of excitement and insight, showing that even the most unusual variables in the stock market can have a tangible impact. It's both a surprising and fascinating endeavor, much like stumbling upon an unexpected brewery in the midst of a desert – you never know what hop-pens next!

6. Conclusion

In conclusion, our findings have effervesced with tantalizing implications, demonstrating an unequivocal connection between the number of breweries in the United States and Lockheed Martin's stock price. The hoppy relationship revealed in our research illuminates the potential for savvy investors to incorporate brewery trends into their stock analyses. It's like finding the perfect

balance between a pale ale and a stout – unexpected, but undeniably satisfying.

As we close this chapter on our hoppy-golucky exploration, we can't resist sharing a relevant dad joke: Why did the statistician go to the brewery? To find the mean of the beer distribution! There's always room for a statistical punchline, even in the world of stock market analysis.

With a correlation coefficient of 0.9784960 and an r-squared value of 0.9574544, our results offer a brew-tiful reminder that uncovering unexpected relationships in data is akin to discovering the hidden notes in a complex craft beer. As we raise a glass to these findings, it's clear that our study has uncorked a blend of statistical validity and lighthearted revelry.

And with that, we assert that no further research is needed in this area. It seems we've brewed up a potent concoction of statistical insight and market merriment, providing investors with a frothy new avenue to stir into their analyses. After all, who would have thought that the world of breweries and defense stocks could share such a sudsy relationship? As the old saying goes, in vino veritas, but in statistics, there's truth in the brew-tiful dance between unexpected variables. Cheers to a hoppy future in stock market analysis!