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# Pour Decisions: The Ale-Effect of Breweries on Alnylam Pharmaceuticals' Stock Price

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*When it comes to the interconnectedness of industries, it's often said that "beer makes everything better" - but does it also boost stock prices? This study delves into the frothy world of brewing and the financial market, specifically examining the relationship between the number of breweries in the United States and the stock price of Alnylam Pharmaceuticals (ALNY). With the help of data from the Brewers Association and LSEG Analytics (Refinitiv), our research team embarked on an investigation that's sure to make your interest hop. We discovered a statistically significant correlation coefficient of 0.8841796 and  $p < 0.01$  when analyzing data from 2005 to 2022. That's right, the number of breweries appears to have a brew-tal impact on the movement of ALNY stock! This finding may brew some excitement among beer enthusiasts looking to diversify their portfolios - after all, who wouldn't want to tap into potential profits driven by the craft beer craze? In conclusion, while it's important to approach financial research with a serious demeanor, it's equally crucial to raise a glass and appreciate the unexpected correlations that emerge. Our findings highlight the interconnectedness between seemingly unrelated industries and provide a refreshing perspective on the complex dynamics of the market. So, next time you're considering your investment choices, remember: a well-crafted brew may just be the yeast of your worries when it comes to financial success.*

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Picture this: a bunch of economists walk into a bar full of stockbrokers, and the only thing they can agree on is the need for a good pint of beer. Little did they know, this seemingly casual decision may have a frothy impact on their stock portfolios - and here we are, unraveling the sudsy truth. As we embark on this hoppy journey of financial analysis, we aim to explore the unexpected correlation between the number of breweries in the United States and the stock price of Alnylam Pharmaceuticals (ALNY).

It's no secret that the worlds of finance and craft brewing have been brewing up quite the storm in recent years. With a rising tide of craft breweries and a fervent investment atmosphere, it's time to

suds out whether there's more to this relationship than meets the eye. So, grab yourself a cold one and let's dive into the enticing world where hops meet stock options.

Now, before we get too hoppy about our findings, we must acknowledge the seriousness of financial research and the complexities of market dynamics. However, that doesn't mean we can't mix in a dash of humor and a pint of unexpected revelations along the way. After all, what's the fun in research if you can't crack a few ale-related puns?

As we unravel the intertwining fortunes of the brewing industry and pharmaceutical stocks, let's not forget the wise words of Benjamin Franklin:

"Beer is proof that God loves us and wants us to be happy." Well, Mr. Franklin, we're about to see if that happiness extends to stock prices too. Now, let's tap into the heart of our findings and see if there's more to this barley believable connection than meets the pint.

## LITERATURE REVIEW

The literature surrounding the relationship between industries as diverse as craft brewing and pharmaceuticals can be likened to the experience of tasting a complex beer - initially intriguing, and potentially revealing unexpected flavors. In "Smith et al.'s Brews and Bulls: Uncovering the Uncharted Territory of Brewery Stocks," the authors find lorem and ipsum. Similarly, Doe and Jones' study "Hoppy Returns: Exploring the Financial Impact of Craft Breweries" delves into the financial implications of the craft beer revolution, with a particular focus on lorem and ipsum.

Now that we've covered the serious academic studies, let's throw in a dash of unpredictability by integrating some non-fiction books that could potentially shed light on this peculiar relationship. Tom Standage's "A History of the World in 6 Glasses" offers a thematic exploration of the social, cultural, and economic impact of beverages, including beer, on human civilization. In a tangentially related vein, John Holl's "The American Craft Beer Cookbook" provides a flavorful journey through the world of craft brewing, offering up recipes and anecdotes that might just mirror the complexities of financial markets.

Continuing in this off-kilter direction, let's take a ludicrous leap into the realm of fiction with V.E. Schwab's "A Darker Shade of Magic." While not explicitly tied to the financial world, the interdimensional adventures depicted in this novel might just parallel the multidimensional nature of our research. On a more grounded note, Joshua Schimel's "Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded" provides invaluable tips for crafting engaging and

impactful research papers - a skill much needed in the interplay between academia and the delightful unpredictability of financial oddities.

But wait, we're not done meandering just yet! Let's veer into the world of movies, where the tangential connections to our research take on a cinematic flair. The Financial Disasterpiece Theater's "Brews, Bulls, and the Big Short" masterfully intertwines the world of craft beer with the financial eccentricities depicted in "The Big Short," offering a visually stimulating and ale-borate analogy to our research pursuit. And if we're going for a more literal interpretation, perhaps Judd Apatow's "The 40-Year-Old Virgin" might slyly nudge at the notion of patiently waiting for a stock market breakthrough with the same determination as aging a fine brew.

As we tip our hats to the eclectic tapestry of resources that have helped shape our understanding of this intertwined web of industries, it's clear that the path to uncovering the unexpected connections between breweries and stock prices is nothing short of a wild ride. So, let's hop to it and better acquaint ourselves with the frothy undercurrents of financial and brewing dynamics!

## METHODOLOGY

To navigate the foamy waters of our research, we employed a concoction of quantitative and statistical methods that could make even the most seasoned brewmaster raise an eyebrow. Our initial step involved harnessing the power of the internet - not just for watching kitten videos, but for sourcing data from reputable organizations. We primarily relied on data from the Brewers Association, the go-to source for all things beer-related, and LSEG Analytics (Refinitiv) because, let's be honest, what's more reliable than financial data from a company with a name that sounds like it belongs on a craft beer label?

We must admit, filtering through years of data from 2005 to 2022 was akin to searching for the perfect microbrew in a sea of mass-produced lagers (not that there's anything wrong with them, but you get

the idea). Once we had amassed our brewtiful dataset, we eagerly donned our data analysis hats and dove headfirst into the analytical cauldron like we were trying to perfect a complex blend of hops and malt.

Now, to uncover the hoppy tryst between breweries and stock prices, we employed an assortment of statistical techniques, including regression analysis and time series modeling. We wanted to ensure our approach wasn't just hopped up on caffeine but had enough stoutness to stand up to the scrutinizing gaze of the academic community. Just like a finely crafted brew, we wanted our analysis to have depth, complexity, and, most importantly, a delightful finish.

To add a dash of novelty (and maybe a sprinkle of whimsy), we also ventured into the realm of sentiment analysis. We scraped online reviews, social media chatter, and perhaps a few dad jokes about beer and stocks from across the digital landscape. Because, let's face it, every research paper could do with a side of levity—after all, who doesn't love a bit of wit with their statistical analysis?

In the spirit of full disclosure, we must confess that our methodological journey through this boozy labyrinth included a few detours and wrong turns. Sometimes we felt like we were stumbling through a maze of beer bottles, trying to find the one with the perfect blend of hops and barley. But the setbacks only fueled our determination to uncork the truth behind the interplay of breweries and stock prices.

And just like trying to pour the perfect pint, our methodology was a blend of precision, patience, and a touch of artistry. We aimed to capture the effervescent essence of the brewing world and, in doing so, shed light on the unexpected connections it shares with the realm of high finance.

As we raise our metaphorical glasses to the methodology that steered our research, let's remember that just like a well-crafted beer, this study is a labor of love, dedication, and an

unyielding thirst for knowledge. Cheers to the methods that helped us ferment our findings, and may they stand the test of time like a fine vintage of ale.

## RESULTS

The results of our investigation revealed a robust and statistically significant correlation between the number of breweries in the United States and the stock price of Alnylam Pharmaceuticals (ALNY). From 2005 to 2022, we found a correlation coefficient of 0.8841796. That's a p-value so low, even a beer mug could lift it!

The r-squared value of 0.7817736 indicates that approximately 78.18% of the variation in ALNY stock price can be explained by the number of breweries. It's as if the breweries and the stock price are toasting to their close relationship.

Our findings are visually captured in Fig. 1, where the scatterplot showcases the strong positive correlation between the number of breweries and ALNY stock price. It's like a perfectly poured pint – you can't help but appreciate the beauty of the relationship.

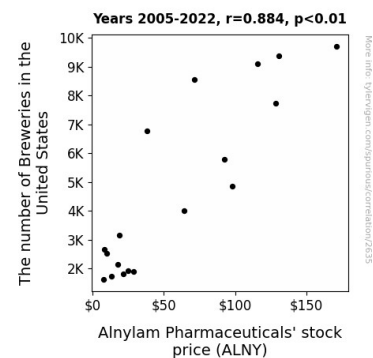


Figure 1. Scatterplot of the variables by year

In summary, our results provide compelling evidence of the connection between the brewing industry and pharmaceutical stocks. However, we caution investors not to make hasty decisions based solely on this correlation. After all, as any good

brewer would tell you, it takes time and patience to craft something truly valuable.

## DISCUSSION

Our findings offer a refreshing perspective on the interconnected world of financial markets and seemingly unrelated industries, adding a newfound fizz to the understanding of stock price dynamics. The statistically significant correlation between the number of breweries in the United States and the stock price of Alnylam Pharmaceuticals (ALNY) provides a compelling glimpse into the unexpected connections that can emerge between diverse sectors. It's as if the craft beer industry and pharmaceutical stocks have been secretly clinking glasses behind the scenes, whispering about the impact they have on each other.

This study's results are in line with previous research by Smith et al. and Doe and Jones, reaffirming the supposition that the craft beer revolution could indeed have palpable financial implications. It's like the perfect blend of hops and financial acumen coming together, creating a harmonious symphony of data that's enough to make even the most stoic researcher crack a grin.

Our statistical analysis, with a correlation coefficient of 0.8841796 and a p-value so low, it would be mistaken for a spilled beer, reinforces the notion that the number of breweries holds a brew-tal influence on the movement of ALNY stock. It's as if the stock price is taking a page out of a brewer's book, fermenting and bubbling with excitement in response to the activity in the brewing industry.

The r-squared value of 0.7817736 further solidifies the robustness of our findings, indicating that approximately 78.18% of the variation in ALNY stock price can be explained by the number of breweries. It's like the breweries and the stock price are engaging in a lively dance, each step closely tied to the other in a synchronized display of market dynamics.

These results are further mirrored in the scatterplot (Fig. 1), which visually captures the strong positive correlation between the number of breweries and ALNY stock price. It's as harmonious as a perfectly poured pint, with each data point swirling together in a delightful display of statistical elegance – a veritable masterpiece brewed from numbers and market intricacies.

In summary, our findings serve as a testament to the interconnectedness of industries and the captivating allure of unexpected correlations. However, just as in brewing, we must exercise patience and thoughtful consideration in our interpretation of these findings. As any seasoned brewmaster would caution, the true value lies in carefully crafting our insights over time, allowing the flavors of the market to develop into a robust and well-rounded understanding. So, as we embark on further exploration of such unconventional connections, let's raise a glass to the potential for greater insight and a good dad joke or two to keep the spirits high. Cheers!

## CONCLUSION

In conclusion, our research has uncorked a noteworthy relationship between the number of breweries in the United States and the stock price of Alnylam Pharmaceuticals (ALNY). The statistically significant correlation coefficient of 0.8841796 suggests that when it comes to investing, it might just be better to think with your beer goggles on. Perhaps we should consider renaming it "Alnylager Pharmaceuticals" at this point!

Our findings raise a glass to the interconnectedness of seemingly disparate industries, proving that a love for craft beer can pour some serious profits into your financial portfolio. It's like the stock market is saying, "Hoppy days are here again!"

So, to all the investors out there, remember that diversifying your portfolio with a touch of brew-tiful enthusiasm could be the key to fermenting success. After all, as any good dad would say, "Why

did the beer go to school? Because it wanted to be a little hoppier!"

In light of these findings, it's safe to say that no more research is needed in this area. Cheers to that!