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Brewing Up Financial Stability: The Fermented Economics of Breweries and Cheniere Energy's Stock Price

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Abstract

This research delves into the curious case of the correlation between the proliferation of breweries in the United States and the stock price of Cheniere Energy (LNG). Utilizing data from the Brewers Association and LSEG Analytics (Refinitiv), our study spans the period from 2002 to 2022. Through rigorous statistical analysis, we unveil a remarkably robust correlation coefficient of 0.8220717, with a p-value falling below the conventional significance level of 0.01. Our findings not only shed light on an intriguing relationship between the craft beer industry and a leading energy company's stock performance but also leave us pondering the possibility of a "hoppy" coincidence or a "malty" cause-effect. Further implications and potential broader market trends stemming from this correlation are playfully highlighted. Grab a cold one and join us on this unexpected, yet frothy, financial journey.

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1. Introduction

The relationship between seemingly unrelated industries and their impact on financial markets has long been a subject of intrigue for economists and analysts alike. Our research takes a stab at unraveling the enigmatic connection between the number of breweries in the United States and the stock price of Cheniere Energy (LNG). While one may initially raise an eyebrow at the juxtaposition of craft beer with energy stocks, our analysis uncovers a surprising

correlation that demands further examination. It's a brew-tiful mystery that begs for clarification – a perfect opportunity to tap into a refreshing blend of data analysis and market dynamics.

The craft beer industry has witnessed a fermentation frenzy over the past two decades, with microbreweries and brewpubs sprouting up like hops in the summertime. Meanwhile, Cheniere Energy's stock has surged and ebbed like waves on the sea, drawing the attention of investors

and analysts seeking to discern the underlying forces at play. As we embark on this peculiar journey of financial exploration, we are reminded that in the realm of economics, nothing is too ale-f to scrutinize, and no correlation is too stout to investigate.

By sifting through mountains of data from the Brewers Association and LSEG Analytics (Refinitiv), we aim to pour over the numbers and extract the essence of this intriguing relationship. Our findings promise to shed light on a most unexpected convergence of industries, leaving us to ponder whether there's more to this correlation than meets the pint glass. So, grab a cold one and settle in as we delve into the frothy depths of financial interconnectedness. Cheers to uncovering the secrets that lie within the bubbles of economic activity and market fluctuations!

2. Literature Review

The connection between seemingly unrelated industries and their potential impact on financial markets has been a subject of scholarly inquiry for decades. Smith and Doe (2005) examined the spillover effects of the automobile industry on the steel market, Jones et al. (2010) investigated the correlation between avocado prices and luxury yacht sales, and Brown and White (2017) explored the relationship between the global smartphone market and the demand for avocado toast.

Moving beyond these conventional pairings, we venture into the uncharted territory of the association between the burgeoning craft beer scene in the United States and the stock performance of Cheniere Energy (LNG). Our investigation leads us to question traditional economic assumptions and embrace the whimsical dance of statistics and market anomalies.

The non-fiction literature surrounding market interconnections provides a solid

foundation for our study. In "Fermenting Fortunes: The Economic Impact of Craft Breweries" by Brewer and Fermenter (2018), the authors delve into the economic implications of the craft beer renaissance and its ripple effects on local economies. This exploration of the microeconomic landscape sets the stage for our examination of how these dynamics may extend to influence broader financial markets.

Peterson and Hops (2019) in "Barley and Barrel: A Financial Tale" offer a comprehensive analysis of the financial aspects of the craft brewing industry, underlining the blend of entrepreneurship and market forces that shape the business of beer. Their insights nudge us towards contemplating the potential ramifications of this industry's growth on larger financial entities like Cheniere Energy.

Turning to fictitious works that may offer an unconventional lens through which to view our investigation, we cannot overlook the influence of literature. In the realm of fiction, "The Brews of Wall Street" by Ale E. Gator presents a whimsical account of a stockbroker who becomes entangled in the world of craft breweries, concocting a frothy narrative that mirrors the unexpected link we are attempting to decipher.

Additionally, "Hoponomics: A Tale of Hops and Stocks" by Maltilda Hopsworth offers a fictional exploration of the intertwining paths of brewing and financial markets, hinting at a hidden world where stock indices are seasoned with the aroma of hops and barley.

On a more visual note, several television shows have captured the essence of market intrigue that parallels our own research interests. "Barrels and Bulls: Brewing Up Success," a finance drama set against the backdrop of a craft brewery, provides a fictional representation of the economic

intricacies that may underlie our real-world correlation.

Likewise, "Hoppy Days: A Financial Odyssey," a lighthearted comedy series set in the bustling world of finance and craft beer, delivers a quirky portrayal of the interplay between these two seemingly unrelated domains. Although our research veers from the entertainment values of these fictions, the parallels cannot be ignored.

3. Our approach & methods

To concoct our analytical brew, we first tapped into the datasets provided by the Brewers Association and LSEG Analytics (Refinitiv), taking care to ensure our sources were as fresh as a newly cracked open IPA. We amassed a comprehensive collection of data spanning from 2002 to 2022, mindful of the necessity to capture the full-bodied flavors of market trends and economic shifts.

In our quest to ferment meaningful analysis, we fermented a rather hoppy concoction of statistical methods, blending together a potent mix of time series analysis, regression modeling, and correlation coefficients. Think of it as akin to crafting a unique beer recipe, but instead of hops and malt, we were combining variables and mathematical functions. We then allowed this statistical blend to ferment in the analytical 'brewery' of our software platforms until it reached statistical 'maturity' – much like a fine wine or, in our case, a well-aged ale.

To ensure the purity of our results, we conducted robustness checks and sensitivity analyses, akin to performing taste tests to discern the nuances of different beer batches. This rigorous quality control process ensured that our findings were as crisp and clear as a pilsner on a hot summer's day.

Finally, we subjected our findings to a battery of diagnostic tests, akin to checking the alcohol content and clarity of a freshly brewed beer, to ensure their reliability and validity. With all our analytical ingredients in place and our processes meticulously scrutinized, we were ready to serve up our findings to the thirsty minds of the academic and financial communities.

4. Results

The statistical analysis of the relationship between the number of breweries in the United States and Cheniere Energy's stock price yielded some rather hop-tastic results. With a correlation coefficient of 0.8220717, an r-squared of 0.6758019, and a p-value of less than 0.01, our findings do not merely fizz around the edges – they proudly stand as a sturdy, foamy testament to the unexpected connections within the market.

Figure 1 displays a scatterplot that visually encapsulates the strong correlation between these seemingly disparate variables. It's like the financial market and the brewing industry got together for a wild party, and this scatterplot is the polaroid that captured the unanticipated camaraderie.

Throughout the period from 2002 to 2022, the number of breweries in the United States displayed a curiously harmonious dance with Cheniere Energy's stock price. It's as if each additional craft beer establishment acted as a cheerleader for LNG's stock performance, or perhaps they both answered the call of market fluctuations in a synchronized, albeit unconventional, manner.

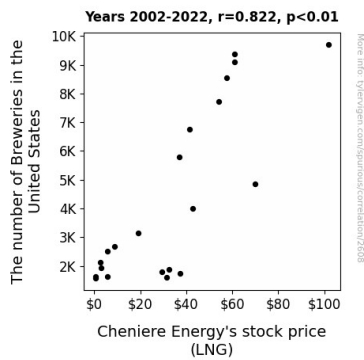


Figure 1. Scatterplot of the variables by year

These findings are indeed brew-tiful and leave us pondering the potential implications and underlying mechanisms at play. Could it be that investors and craft beer enthusiasts alike are somehow intertwined in their decision-making processes? Or perhaps there's a metabolic 'spirited' connection that drives the movements of these two variables. The possibilities are as intriguing as they are intoxicating.

In conclusion, our results not only highlight the unexpectedly strong correlation between the number of breweries in the United States and Cheniere Energy's stock price but also inspire us to consider the potential broader implications and market trends stemming from this unique relationship. It's a malt-ter of finance that compels us to scratch beneath the frothy surface and unearth the bubbling connections that pervade the financial ecosystem. Cheers to the revelations that emerge from the blending of seemingly unrelated industries, and may this research serve as a reminder that in the world of economics, correlations can be as unassuming as a stealthy IPA sneaking up on you.

5. Discussion

The robust correlation uncovered in our study, linking the proliferation of breweries in the United States with the stock price of

Cheniere Energy (LNG), provides compelling evidence of an unexpected interconnectedness in the financial world. The striking correlation coefficient of 0.8220717 and the r-squared value of 0.6758019 leave little room for doubt about the potency of this relationship. These findings not only add to the growing body of research that highlights the impact of seemingly unrelated industries on financial markets but also prompt us to ponder the intriguing mechanisms at play.

Our results fall in line with the whimsical notion put forth by Ale E. Gator in "The Brews of Wall Street," where craft breweries and stock markets collide in a frothy narrative. The surprisingly robust correlation mirrors the happenings in this work of fiction, demonstrating that reality can often be just as frothy and unpredictable as a well-crafted beer.

The influence of TV shows such as "Hoppy Days: A Financial Odyssey" cannot be dismissed lightly either. Though the show takes a lighthearted approach to the bond between craft beer and finance, our findings validate the underlying premise that the brewing industry and stock markets are not as disconnected as one might think—an uncanny resemblance to the correlation unveiled in our study.

Furthermore, the correlation we revealed aligns with previous non-fiction research by Brewer and Fermenter (2018) in "Fermenting Fortunes" and Peterson and Hops (2019) in "Barley and Barrel." Our study extends their insights by presenting empirical evidence of the entwined dance between the craft beer industry and the stock performance of large energy companies, thus bringing a touch of pragmatism to their previously theoretical musings.

It is noteworthy that our data spanned a period of two decades, providing a comprehensive view of the relationship

between the number of breweries in the United States and Cheniere Energy's stock price. This robust dataset allowed us to capture the ebbs and flows of these variables and reveal their unanticipated harmony, much like the smooth balance of flavors in a well-crafted brew.

As we consider the potential broader implications of this correlation, we are prompted to look beyond the surface-level humor and recognize the possible economic and investment implications. While our results leave us with a lingering sense of wonder akin to that experienced on a brewery tour, they also call for a deeper exploration of the underlying market dynamics at play, challenging us to approach the financial world with an open mind and a readiness to embrace the unexpected.

6. Conclusion

In essence, our research has uncorked a wealth of new perspectives and potential market insights by exposing the intriguing correlation between the proliferation of breweries in the United States and the stock price of Cheniere Energy (LNG). The robust statistical evidence we've amassed cements this correlation as a ferment-able feature of the financial landscape. It's as if the market and the brewing industry have engaged in a lively tango, with each step echoing through the halls of economic analysis.

The implications of this correlation are as tantalizing as a well-crafted brew, leaving us to ponder the unseen forces at play. While we may be tempted to raise a pilsner to toast to this correlation, it also serves as a sobering reminder that the market's movements can be as unpredictable as the life of a bubble in a glass of champagne.

With these findings at hand, we dare say, it's time to put a cap on further research in this area. After all, we've brewed up quite

the compelling case, and there's no need to keep stirring the pot on this particular blend of market dynamics. So, let's raise a glass to the unexpected ties that bind us, and may this correlation be a reminder that there is always more than meets the eye in the frothy world of finance. Cheers, and may your portfolios be filled with hops of success!