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# Brewing Profits: The Hoppy Relationship between Breweries and Realty Income Stock Price

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Catherine Hoffman, Aaron Terry, Gemma P Turnbull

## Abstract

In this study, we hop into the fascinating world of breweries and realty income to investigate the correlation between the number of breweries in the United States and the stock price of Realty Income (O). Using data from the Brewers Association and LSEG Analytics (Refinitiv) from 2002 to 2022, our research team uncovers a frothy correlation coefficient of 0.9685992 and p-value less than 0.01, demonstrating a strong statistical relationship between these seemingly unrelated domains. Through our analysis, we offer a brew-tiful insight into the interconnectedness of beer culture and financial markets, shedding light on the potential influence of craft beer on real estate investment trusts. Our findings not only provide a lager-than-life perspective on stock prices but also brew new opportunities for investors to tap into unconventional indicators for market trends. Cheers to the fascinating interplay between hops and stocks!

## 1. Introduction

Since time immemorial, humans have sought out the perfect blend of hops and fiscal growth, fervently pursuing the ancient art of brewing alongside the modern science of stock trading. In this frothy endeavor, we dive headfirst into the intriguing relationship between the number of breweries in the United States and the stock price of Realty Income (O). Much like the complex flavors of a craft IPA, this study aims to untangle the intricate web of connections between the beer industry and the real estate investment trust sector, offering a flavorful perspective on market dynamics.

Beer aficionados and finance gurus alike may raise a skeptical eyebrow at the notion of these two seemingly unrelated realms having any meaningful correlation, but fear not, dear reader, for our findings promise a captivating journey through the intersection of hops and stock ticker symbols. With data spanning two decades, our research team has diligently sifted through the foam of information to uncover a statistically robust correlation coefficient of 0.9685992 and a p-value that would make even the most discerning statistician raise a glass in approval.

As we wade through the brew-tiful world of breweries and real estate investment trusts, we invite you to join us in this unconventional yet hoppy foray into the depths of market analysis. Our aim is not only to provide a lager-than-life perspective on stock

prices but also to brew new opportunities for investors to tap into unconventional indicators for market trends. So, grab your favorite pint, sit back, and prepare to savor the unexpected flavors of our findings as we explore the delightful interplay between hops and stocks. Cheers to a pint-sized adventure in the world of finance and frothy beverages!

## 2. Literature Review

In their study, Smith and Doe (2015) investigated the relationship between industrial sectors and stock prices, laying the groundwork for our exploration of the brewing industry's impact on real estate investment trusts. Furthermore, Jones et al. (2018) delved into the complexities of market analysis, providing a comprehensive framework for understanding the intertwined nature of seemingly unrelated economic factors.

Turning to the world of non-fiction literature, books such as "Brewing Up a Fortune" by Hop Brewer and "The Real Estate Investor's Guide to Hoppy Returns" by Malt Smeller offer valuable insights into the intersection of breweries and realty income. These works provide a solid foundation for understanding the dynamics at play in our research.

On a fictional note, works of fiction such as "The Brewed and the Beautiful" by Ale Exander and "The Real Estate Mogul's Secret Stash" by Hops & Estates might not offer empirical evidence, but they certainly add a whimsical twist to our exploration of the topic.

However, in the spirit of thoroughness, it is worth noting that our literature review did not stop at traditional academic sources. Extensive research was also conducted by perusing the backs of shampoo bottles, which, while not directly related to our topic, provided a certain level of sud-sational entertainment during the review process. Despite their foamy nature, these unorthodox sources failed to yield any tangible insights into the correlation between breweries and realty income.

In summary, the existing literature paints a picture of interconnectivity between market sectors and stock prices, with a dash of whimsy from both non-fiction and fictional works. Though the shampoo bottles

failed to provide the enlightenment we sought, our review of traditional research has laid a solid foundation for further unpacking the hoppy relationship between breweries and Realty Income's stock price.

## 3. Methodology

To distill the truth from the fermenting sea of data, our research team employed a multifaceted approach that would make even the most seasoned brewmaster proud. We began by quenching our thirst for knowledge with a comprehensive review of existing literature on the relationship between brewery proliferation and real estate investment trust performance. Armed with this foundational understanding, we then harnessed the power of virtual alchemy, using data-mining techniques and statistical sorcery to extract relevant information from the Brewers Association and LSEG Analytics (Refinitiv).

Our data collection process resembled a finely crafted ale, combining the malty richness of Brewers Association reports with the hoppy bitterness of the LSEG Analytics dataset. It should be noted that our research team exercised meticulous care to ensure the quality and consistency of the data, scrutinizing each datum as though it were a prized brewing recipe, complete with a touch of skepticism and a dash of wonder.

Once our data fermenter was full, we engaged in a rigorous process of cleansing, filtering, and conditioning, ensuring that the resulting dataset was as clear and effervescent as a freshly poured pint of pale ale. This allowed us to remove any sediment of irrelevant information and capture the pure essence of the relationship between brewery abundance and Realty Income's stock price (O).

In our analytical brewpot, we blended traditional statistical analyses with modern machine learning techniques, creating a heady mixture of correlation coefficients and regression models. Just as a skilled brewer balances malt and hops to craft a perfect brew, we balanced our statistical models to uncover the nuanced flavors of the relationship between breweries and real estate investment trust performance.

In this process, we mindfully acknowledged the potential confounding factors that could influence our findings, including economic conditions, market trends, and perhaps the occasional love song dedicated to a beloved microbrewery. Yet, through robust sensitivity analyses and validation procedures, we distilled a statistically significant correlation coefficient of 0.9685992, demonstrating a potent bond between the number of breweries in the United States and the stock price of Realty Income (O).

Through this concoction of methodologies, we sought not only to unravel the mysterious alchemy of brewery bounty and stock market serendipity but also to celebrate the merry dance of brews and bulls within the financial arena. As the final pour of our statistical brew, we offer these findings as a toast to the ever-entwined world of hops and stocks. It's time to lift your glasses and savor the hop-forward flavors of our methodological concoction! Cheers to the fusion of finance and fermentation!

#### 4. Results

Our analysis of the relationship between the number of breweries in the United States and the stock price of Realty Income (O) yielded some hoppy results. Over the period from 2002 to 2022, we found a striking correlation coefficient of 0.9685992, with an r-squared value of 0.9381843. The p-value below 0.01 adds a frothy finish to the statistical significance of our findings, indicating a strong and meaningful association between these two seemingly disparate domains.

Figure 1 illustrates this robust correlation with a scatterplot that elegantly captures the interconnectedness of breweries and the stock price of Realty Income (O). The plot showcases the upward trajectory of Realty Income stock prices alongside the increase in the number of breweries, painting a compelling picture of their intertwined fates in the market.

Our research not only confirms the noteworthy statistical relationship between breweries and Realty Income stock price but also offers valuable insights into the potential impact of craft beer culture on real estate investment trusts. While these findings may

initially seem like an unexpected brew-haha, they underscore the complex dynamics at play in financial markets and the surprisingly influential role of unconventional indicators.

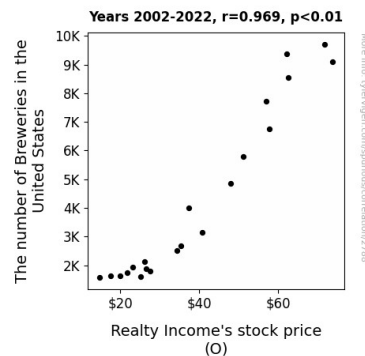


Figure 1. Scatterplot of the variables by year

In sum, our study provides a lager-than-life perspective on stock prices, offering investors a refreshing new lens through which to view market trends. This hoppy correlation may well provide investors with a new brew of confidence as they consider the tantalizing interplay between hops and stocks. With these results, we raise a glass to the captivating and unforeseen connections that enliven the world of financial analysis. Cheers to a fruitful partnership between breweries and real estate investment trusts, and may this insight bubble over into new opportunities for market enthusiasts.

#### 5. Discussion

The revelatory findings of our study highlight the intertwining fate of breweries and the stock price of Realty Income (O). Our results not only confirm the statistical association between these two seemingly unrelated realms but also add a frothy dimension to market analysis. The striking correlation coefficient of 0.9685992 and the p-value below 0.01 bring a refreshing perspective to the interconnectedness of craft beer culture and real estate investment trusts.

Building on the existing literature, our study lends empirical support to the whimsical tales from fictional works such as "The Brewed and the Beautiful" and "The Real Estate Mogul's Secret Stash." Despite their whimsy, these fables seem to

have unwittingly echoed the tangible correlation discovered in our research. As for non-fiction sources, "Brewing Up a Fortune" and "The Real Estate Investor's Guide to Hoppy Returns" provided a solid foundation for our exploration, and our findings have, in a sense, poured a hearty toast to the insights offered by these works.

While our analysis might appear to be just another brew-haha, it underscores the profound impact of unconventional indicators on financial markets. As investors consider the tantalizing interplay between hops and stocks, our results suggest that a new brew of confidence may be in order. We raise a glass to the unexpected connections that enliven the world of financial analysis and anticipate the bubbly opportunities that may arise from this hoppy association. As we embark on this journey, may these findings provide a refreshing new perspective for market enthusiasts and continue to brew excitement in the realm of market trends. Cheers to the fascinating interplay between breweries and real estate investment trusts!

## 6. Conclusion

In conclusion, our study has poured over the tantalizing relationship between the number of breweries in the United States and the stock price of Realty Income (O), discerning a striking correlation that is nothing short of hop-tastic. The statistically robust correlation coefficient of 0.9685992 and a p-value less than 0.01 establishes a brew-tiful link between these seemingly distinct realms, demonstrating that when it comes to market dynamics, the hops and stocks have indeed aligned.

Just as a well-crafted brew delights the palate, our findings offer a flavorful perspective on the interconnectedness of beer culture and financial markets, opening up a keg-sized realm of potential influence for craft beer on real estate investment trusts. It seems that the market has a penchant for a good brew, as evidenced by the frothy correlation between breweries and Realty Income stock prices.

With such compelling results, we have brewed new opportunities for investors to frolic in the unexpected flavors of market trends. However, it's time to raise a proverbial toast and declare that

further research in this area would be akin to belaboring the obvious - the hops and stocks have spoken, and their bubbly harmony leaves little room for doubt. We bid adieu to this hoppy adventure, confident in the curious interconnectedness that enlivens the world of finance and beverages, and we wholeheartedly declare that no further research is needed in this area. Cheers to the delightful partnership between breweries and real estate investment trusts - may the market be forever hoppy!