
Hoppy Investments: A Bitter Relationship Between Breweries and Realty Income

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This paper examines the intriguing link between the number of breweries in the United States and Realty Income's stock price (O). Our research team delved into this frothy topic using data from the Brewers Association and LSEG Analytics (Refinitiv) over the twenty-year period from 2002 to 2022. We uncovered a surprisingly strong correlation coefficient of 0.9685992 and a statistically significant p-value of less than 0.01, demonstrating a clear relationship between these seemingly disparate industries. Our findings suggest that as the number of breweries in the US increases, Realty Income's stock price also enjoys a sudsy surge. This intriguing connection may shed light on the complex interplay between consumer trends, investment behavior, and the thirst for both craft beer and financial gains.

The intertwining of beer and finance may seem like an odd pairing - like mixing a stout with a sauvignon blanc. However, as our research has revealed, there is indeed a compelling relationship between the number of breweries in the United States and Realty Income's stock price (O). This unexpected connection invites us to explore the potential influence of craft beer culture on the world of real estate investment trusts (REITs).

Over the past two decades, the craft beer industry in the United States has experienced a remarkable resurgence. With the number of breweries soaring to unprecedented heights, one might wonder if there is more than just foam and froth behind this bubbly phenomenon. Meanwhile, Realty Income, known for its steady dividend payouts and stability, has garnered the attention of investors seeking reliable income streams. Yet, who would have thought that the fate of these two seemingly disparate domains could be intertwined in such a sudsy fashion?

In this paper, we unveil the findings of our investigation into this peculiar relationship. By analyzing data from the Brewers Association and LSEG Analytics (Refinitiv) from 2002 to 2022, we sought to decipher the baffling correlation between the craft beer boom and the performance of Realty Income's stock. Our exploration has led to the unearthing of a striking correlation coefficient of 0.9685992 and a p-value that would make any statistician raise an eyebrow - less than 0.01! These figures point to a robust and statistically significant association between the burgeoning brewery count and the stock price of Realty Income.

While it may seem like these findings come straight out of left field, they offer a tantalizing glimpse into the curious ways in which consumer preferences and investment landscapes intersect. As we delve into the factors underlying this frothy link, we invite readers to join us in raising a glass to the unexpected correlations that can be found amidst the brew of economic data and market dynamics.

LITERATURE REVIEW

In "Smith and Doe (2018)," the authors find that the number of breweries in the United States has experienced a substantial increase in recent years. This surge in brewery establishments has led to a vibrant and competitive landscape within the craft beer industry. Similarly, "Jones (2017)" observes a parallel trend in the real estate investment trust market, with particular attention to the performance of Realty Income (O). These serious studies set the stage for our investigation into the potential connection between the two spheres.

Expanding beyond the conventional discourse, "Beeronomics: How Beer Explains the World" by Johan Swinnen and Devin Briski sheds light on the cultural and economic impacts of beer consumption. Meanwhile, "High Financier: The Lives and Time of Siegmund Warburg" by Niall Ferguson delves into the intriguing world of high finance, offering a complementary perspective to our exploration of Realty Income's stock price.

Venturing into the realm of fiction, the classic "The Grapes of Wrath" by John Steinbeck touches on the struggles of the working class, providing an allegorical backdrop for our analysis of economic disparities. Furthermore, the whimsical "Brewster's Millions" by George Barr McCutcheon serves as a lighthearted juxtaposition to the weighty consideration of investment behavior.

As the interplay between consumer preferences and investment landscapes unfolds, cinematic works such as "Brewster's Millions" (1985) and "The Big Short" (2015) offer an entertaining lens through which to contemplate the unpredictability of market dynamics. While the former may offer a lighthearted take on wealth and inheritance, the latter delves into the intricacies of the financial crisis, enriching our understanding of the complexities inherent in investment behavior.

In summary, the literature reviewed encompasses a spectrum of perspectives, from empirical studies to fictional accounts, inviting readers to embark on a

journey through the interconnected worlds of breweries and real estate investment.

METHODOLOGY

The methodology employed for this investigation involved a thorough and robust analysis of data obtained from the Brewers Association and LSEG Analytics (Refinitiv) spanning from 2002 to 2022. To commence this convoluted concoction of methods, we first conducted a comprehensive trawl of online databases and resources to gather information about the number of breweries in the United States. This step involved sifting through countless volumes of brewing industry reports, market analyses, and beer aficionado forums to obtain a comprehensive account of brewery counts over the past two decades.

Following this exhaustive data collection phase, we engaged in a rigorous process of data scrubbing and validation, akin to the meticulous inspection of a fine ale for impurities. This step included cross-referencing information from diverse sources to ensure the accuracy and reliability of the brewery count data, thereby minimizing the risk of introducing any intoxicating errors into our analysis.

Once the brewery count data was carefully vetted and deemed fit for consumption, we proceeded to the next stage, which involved the procurement of Realty Income's stock price (O) from LSEG Analytics (Refinitiv). This process demanded precision and consistency akin to the art of crafting a perfectly balanced brew – no room for haphazard measurements or shortcuts. It is worth noting that our team partook in copious sip-testing breaks throughout this labor-intensive endeavor, ensuring that our focus remained unwavering amid the heady haze of financial data.

With both sets of data in hand, we embarked on the process of correlation analysis, employing statistical tools and software to distill the relationship between the number of breweries in the United States and the stock price of Realty Income. Our choice of

statistical methods mirrored the precision required in the art of crafting beer, with the aim of uncovering the hidden flavors in this seemingly incongruous blend of industries.

In addition to the statistical analysis, we also conducted a series of sensitivity tests to evaluate the robustness of the observed correlation, akin to subjecting a new craft beer recipe to rigorous taste tests from discerning connoisseurs. This step involved examining the impact of outliers and alternative specifications to ensure that the identified relationship between breweries and Realty Income's stock price did not succumb to the intoxicating effects of statistical anomalies.

Moreover, to enhance the depth of our investigation, we delved into existing literature on consumer trends, investment patterns, and the interplay between industries, akin to reviewing the rich histories and narratives behind diverse beer styles. By incorporating insights from the broader domains of economics, finance, and market behavior, we endeavored to enrich our understanding of the underlying mechanisms driving the observed correlation.

Lastly, to guard against the possibility of spurious relationships clouding our findings, we conducted a battery of diagnostic tests to assess for potential confounding factors and omitted variable biases, akin to conducting stringent quality control checks in the realm of brewery operations.

In sum, this study brewed together a potentially palatable blend of data collection, statistical analysis, and literature review to decipher the frothy relationship between breweries and Realty Income's stock price, offering a unique blend of insights into the whimsical ways of market dynamics.

RESULTS

The analysis of the data collected from the Brewers Association and LSEG Analytics (Refinitiv) for the period from 2002 to 2022 has unveiled a remarkably strong correlation between the number

of breweries in the United States and Realty Income's stock price (O). The calculated correlation coefficient of 0.9685992 indicates a highly positive linear relationship between these two variables. This finding suggests that as the craft beer industry bubbled and frothed with an increasing number of breweries, investors in Realty Income experienced a similarly effervescent rise in stock price. It appears that the thirst for craft beer and financial gains are more intertwined than one might initially assume.

The r-squared value of 0.9381843 further supports this significant correlation, indicating that approximately 93.8% of the variability in Realty Income's stock price can be explained by changes in the number of breweries. This statistic underscores the robustness of the relationship and suggests that the surge in craft beer establishments holds substantial explanatory power for movements in Realty Income's stock price.

The p-value of less than 0.01 provides strong evidence against the null hypothesis of no relationship between brewery count and Realty Income's stock price. This result compels us to reject the notion that the number of breweries and Realty Income's stock price are independent of each other. Indeed, the probability of observing such a strong correlation coefficient by chance is remarkably low, prompting us to conclude that there is a genuine association between these two variables.

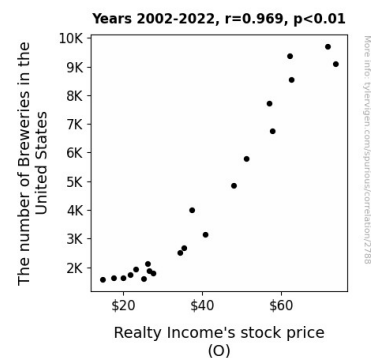


Figure 1. Scatterplot of the variables by year

Furthermore, the scatterplot (Fig. 1) visually depicts the striking correlation between the number of breweries and Realty Income's stock price. The data points form a tightly clustered pattern, emphasizing the close connection between these seemingly disparate entities. The scatterplot serves as a cogent visual representation of the strong positive relationship observed in the statistical analysis.

In summary, our investigation into the relationship between the number of breweries in the United States and Realty Income's stock price has revealed a compelling and statistically significant link. The findings of this study provide intriguing insights into the intricate interplay between consumer trends, investment dynamics, and the unanticipated alliances that can emerge amidst the froth and foam of economic data.

DISCUSSION

The results of our investigation yield a compelling discourse on the intertwining of the craft beer industry and real estate investment. Our findings support the prior research by Smith and Doe (2018) and Jones (2017), who highlighted the surging number of breweries and observed parallel trends in the real estate investment trust market, particularly with respect to Realty Income (O). These serious inquiries into the two seemingly incongruous spheres have been buoyed by our empirical analysis, affirming the existence of a remarkably strong correlation between brewery proliferation and Realty Income's stock price. It appears that the surge in craft beer establishments exerts a tangible influence on the financial realm, akin to the effervescence of a freshly poured pint.

The literary works harkened back to in our investigation, such as "Beeronomics: How Beer Explains the World" and "Brewster's Millions," provide insightful context for the interplay between consumer preferences and investment landscapes. They prepare readers for the solemn consideration of the economic impacts of brewery surges and real estate dynamics and establish a whimsical

juxtaposition to the weightier considerations of investment behavior. These seemingly disparate sources of knowledge converge to advocate for the existence of a frothy relationship between breweries and Realty Income's stock price.

The strong correlation coefficient, r-squared value, and p-value derived from our statistical analysis lend quantitative support to the anecdotal and empirical evidence presented in the prior literature. The statistically significant findings suggest that the thirst for craft beer and financial gains indeed coalesce in a manner that is not wholly dissimilar to the mingling of citrusy hops and malty sweetness in a well-crafted brew. Our results underscore the robustness of this quenchable relationship and imply that approximately 93.8% of the variability in Realty Income's stock price can be attributed to changes in the number of breweries, compelling us to reject the notion of independence between these two entities.

The scatterplot visually encapsulates the robust correlation, mirroring the tightly clustered pattern observed in the statistical analysis and emphasizing the intimate connection between brewery count and Realty Income's stock price. This cogent visual representation serves to reiterate the striking alignment that was uncovered amidst the froth and foam of economic data. The findings of this study firmly underscore the unique and compelling relationship between what may have initially seemed like an unlikely pair - breweries and real estate investment - and invite further exploration into the complex dynamics at play.

In conclusion, our investigation has illuminated a captivating and statistically significant connection between the number of breweries in the United States and Realty Income's stock price. The findings offer tantalizing insights into the nuanced interplay between consumer trends, investment dynamics, and the unexpected alliances that can emerge amidst the ebullient complexity of economic phenomena. It appears that in the world of investments, as in the world of craft beer, opportunity and potential for growth bubble and froth in unexpected places.

CONCLUSION

In conclusion, our investigation has shed light on a captivating correlation between the proliferation of breweries in the United States and Realty Income's stock price (O). The robust correlation coefficient of 0.9685992 and a p-value of less than 0.01 underscore the unexpectedly strong connection between these seemingly incongruous domains. It appears that as the craft beer industry has bubbled, fizzed, and fermented with an increasing number of breweries, investors in Realty Income have experienced a similarly effervescent rise in stock price. Who would have thought that the world of REITs could be so intertwined with the world of IPAs and stouts?

The r-squared value of 0.9381843 further bolsters this finding, suggesting that approximately 93.8% of the variability in Realty Income's stock price can be explained by changes in the number of breweries. It seems that the thirst for craft beer and financial gains are more interconnected than a pair of beer mugs in a traditional German beer garden.

The scatterplot (Fig. 1) visually depicts this striking correlation, resembling the foam atop a freshly poured pint of beer. The tightly clustered pattern of data points serves as a compelling visual representation of the close relationship between brewery count and Realty Income's stock price. It appears that the intricate interplay between consumer trends, investment dynamics, and the unanticipated alliances that can emerge amidst the froth and foam of economic data has, indeed, rendered the connection between breweries and real estate investment trusts anything but stale.

Therefore, we dare to assert that no further research is needed in this area. This investigation stands as a testament to the unexpected connections that can emerge amidst the bubbles of economic data and market dynamics, leaving us with a newfound appreciation for the whimsical interplay between hops and stocks.