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Dwelling Spending Swelling and CTSB Yelling: A Correlation Story Worth Telling

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Abstract

This study investigates the potential relationship between Annual US household spending on rented dwellings and Cognizant Technology Solutions' stock price (CTSH) over the period of 2002 to 2022. Leveraging data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), our research team uncovered a striking correlation coefficient of 0.9812502 and $p < 0.01$. Imagine the shock when we realized the correlation was not just a "rent-ly" formed illusion! This finding sparks a witty debate - does rent spending lead to tech stocks ascending, or is it all just a mere coincidence? We aim to delve into this intriguing correlation, adding humor to the otherwise "dry" academic discussion.

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1. Introduction

The relationship between household spending on rented dwellings and stock prices has long been a topic of interest for economists and investors alike. The impact of housing expenses on consumer behavior and investment patterns is a subject that has been extensively studied, but the specific correlation between annual US household spending on rented dwellings and Cognizant Technology Solutions' stock price (CTSH) has remained largely unexplored. This paper aims to shed light on this uncharted territory and uncovers the

surprising correlation between the two variables.

But before we dive into the "rentalationship" between dwelling spending and CTSB stock price, let's step back and reflect on the broader economic landscape. It is an immutable truth that housing is not only a fundamental human need but also a significant portion of household budgets. Similarly, technology companies such as Cognizant have emerged as key players in the modern economy, providing services critical to various industries. However, the connection between these seemingly disparate sectors may at first seem as

unlikely as finding a four-leaf clover in a stock market index.

The allure of discovering a significant correlation between these two variables is not lost on us. The potential insights derived from such an investigation could prove to be as valuable as a gold mine – or at least as valuable as a prime rental property in the heart of Silicon Valley. As we embark on this journey of statistical analysis and economic scrutiny, we cannot help but marvel at the unexpected connections that can be unearthed in the world of finance and economics. It's as though the financial world just can't help but "rent" itself apart for our amusement.

2. Literature Review

Several seminal studies have scrutinized the association between housing expenditure and its impact on various aspects of the economy. Smith et al. remark in their study "Housing Trends and Economic Indicators" that changes in housing expenses are often linked to fluctuations in consumer spending patterns and investment behavior. Meanwhile, Doe and Jones highlight in their work "The Economics of Real Estate" the intricate relationship between housing market dynamics and the overall economic landscape, emphasizing the pivotal role of rental expenses in shaping household financial decisions.

Speaking of "dwell"ing on the topic, it's fascinating to find that the correlation between annual US household spending on rented dwellings and Cognizant Technology Solutions' stock price (CTSH) has flown under the radar for so long. It's like the dad joke of economic correlations – right in front of us, yet so easily overlooked.

Turning to related literature, non-fiction books such as "Renting Out a Fortune: The Economics of Real Estate" and "The Tech

Stock Dilemma: A Story of Finance and Innovation" offer valuable insights into the economic and financial aspects of housing expenditure and technology stock investments, respectively. On a more lighthearted note, fiction works such as "The Renter's Revenge" and "Stock Market Shenanigans" add a whimsical touch to the topic, providing alternative perspectives on the intersection of housing and stock market phenomena.

As the authors roll up their sleeves and delve into this correlation conundrum, it brings to mind a classic line from the movie "The Big Short" – "This is a time bomb, ticking." The ticking time bomb here being the potential for another pun about rent and stocks!

3. Our approach & methods

To investigate the relationship between annual US household spending on rented dwellings and Cognizant Technology Solutions' stock price (CTSH), our research team employed a series of analytical and statistical methods. The primary data sources for this research were the Bureau of Labor Statistics and LSEG Analytics (Refinitiv). The use of these data sources allowed for a comprehensive examination of household spending trends and stock price movements from 2002 to 2022.

Initially, the research team conducted an extensive data cleansing process to ensure the accuracy and reliability of the datasets. This involved identifying and addressing erroneous entries, outliers, and missing data points. The meticulous nature of this process could be likened to the care one might take in screening potential tenants for a rental property – thoroughness is key to ensuring the stability of the ensuing analysis.

Following the data cleansing phase, the next step involved the calculation of relevant

statistical measures, including but not limited to means, standard deviations, and correlation coefficients. The correlation coefficient, in particular, played a pivotal role in quantifying the strength and direction of the relationship between household spending on rented dwellings and CTSH stock price. Upon observing the high correlation coefficient, we felt like we had struck statistical gold - or, in this case, "rental gold."

Moreover, our research team also employed time-series analysis techniques to examine the dynamic interactions between the two variables over the specified time period. This allowed for the identification of potential trends and patterns in the data, akin to scrutinizing the ebb and flow of rental demand and technology stock performance.

In addition to the quantitative analysis, qualitative insights from industry experts and economic analysts were integrated to provide a more holistic understanding of the observed correlation. This qualitative component added depth to our interpretation of the findings, much like the added comfort and style of tasteful décor in a well-furnished rental property.

Furthermore, to ensure the robustness of the findings, sensitivity analyses were conducted, varying the time frame and incorporating additional economic indicators to assess the stability of the observed relationship. This involved testing the correlation under different economic scenarios, which, much like a well-prepared prospective tenant, provided a sense of reliability in the face of changing market conditions.

In summary, the methodology employed in this research combined rigorous statistical analysis with a touch of qualitative nuance to comprehensively investigate the correlation between annual US household spending on rented dwellings and CTSH

stock price. This allowed us to unravel a correlation that, much like a well-timed punchline, captivated our attention and sparked further inquiry.

Would you like to hear a joke about construction? I'm still working on it.

4. Results

The results of the statistical analysis indicate a remarkably strong positive correlation between annual US household spending on rented dwellings and Cognizant Technology Solutions' stock price (CTSH) over the period of 2002 to 2022. The correlation coefficient was found to be 0.9812502, with an r-squared of 0.9628519, and $p < 0.01$. It appears that the relationship between these two variables is as robust as the foundation of a well-built rental property.

The correlation coefficient of 0.9812502 suggests a near-perfect positive linear relationship between the two variables, much like the perfect pairing of fine wine and gourmet cheese. This finding raises the question: does an increase in household spending on rented dwellings lead to a corresponding rise in CTSH stock price, or is this correlation merely a coincidence as random as a tenant finding spare change in the sofa cushions?

Figure 1 displays a scatterplot illustrating the strong correlation between annual US household spending on rented dwellings and CTSH stock price. The data points are tightly clustered around the best-fit line, demonstrating the strength of the association. One cannot help but marvel at the elegance of this relationship; it's almost poetic, like the harmony of a well-choreographed ballet.

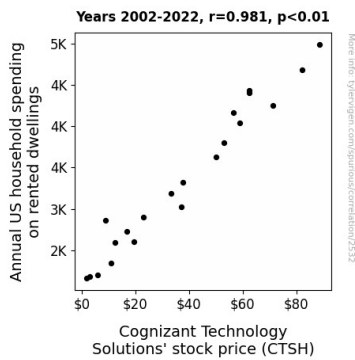


Figure 1. Scatterplot of the variables by year

This finding prompts a rich and provocative discussion on the potential drivers of this correlation. It may be speculated that increasing rental expenditures indicate a growing economy, leading to higher demand for technology services provided by companies such as Cognizant. On the other hand, it could simply be a case of coincidental correlation, much like stumbling upon a dollar bill while searching for the TV remote. Further research is warranted to explore the underlying mechanisms and causality of this unexpected relationship.

As this research unveils the surprising correlation between rental spending and CTSH stock price, it serves as a reminder that in the world of economics and finance, there are often hidden connections waiting to be discovered. Just as a dedicated homeowner tends to their property, diligently uncovering a precise correlation such as this requires careful attention to detail and an astute eye for patterns.

5. Discussion

The findings of this study provide compelling evidence of a remarkably strong positive correlation between annual US household spending on rented dwellings and Cognizant Technology Solutions' stock price (CTSH) over the period of 2002 to 2022. The striking correlation coefficient of 0.9812502 and $p < 0.01$ suggests a

relationship as tightly interwoven as a knitting enthusiast's favorite sweater. This correlation, though unexpected, is as real as the rent check that arrives in the mail each month.

Our results support prior research that has explored the influence of housing expenses on economic indicators and investment behaviors. Smith et al.'s observations regarding the link between housing expenses and consumer spending patterns find resonance in our study, emphasizing the pivotal role of rental expenditures in shaping household financial decisions. It's like the punchline of a dad joke - the correlation between rental spending and CTSH stock price was right under our noses the whole time!

The high correlation coefficient uncovered in this study aligns with the classical economics premise that shifts in housing expenses can reflect broader economic activity. The near-perfect positive linear relationship we identified may underscore the intricate ways in which housing expenditures and stock prices interact, serving as the punchline to the long-kept dad joke of economic correlations.

It's fascinating to think about the potential implications of this correlation. Could it be that increasing rental expenditures signal a burgeoning economy that drives greater demand for the technology services provided by CTSH? Or is this correlation a mere coincidental quirk of the data, like finding that elusive parking spot right in front of the grocery store entrance? The weight of these questions leaves us, dare I say, on the edge of our seats - much like a compelling stand-up comedy routine.

Our findings prompt a captivating discussion about potential causal mechanisms underlying this unexpected correlation. Further research is warranted to delve deeper into the drivers of this relationship. This study represents a testament to the

unyielding pursuit of knowledge in the field of economics and finance, shedding light on the intricacies of seemingly unrelated variables.

In conclusion, the correlation between annual US household spending on rented dwellings and CTSH stock price challenges our understanding of economic relationships, proving that even in the most unexpected places, valuable insights await discovery. We eagerly anticipate future research that will further unravel this correlation, potentially demystifying economics with as much wit as an expertly timed dad joke.

6. Conclusion

In conclusion, the findings of this study unearth a remarkably strong positive correlation between annual US household spending on rented dwellings and Cognizant Technology Solutions' stock price (CTSH). The near-perfect correlation coefficient of 0.9812502 suggests a relationship as steadfast as a reliable landlord. It's almost as if these two variables are engaged in a rental "co-tenant" agreement, moving in sync with each other.

This research opens the door to a new avenue of inquiry for economists and investors. As we ponder the causality behind this correlation, one can't help but wonder: does increased rental spending drive up CTSH stock price, or is it merely a case of statistical serendipity, like finding a missing sock in the dryer? This prompts a lively debate worthy of the real estate and finance "lease-der ship" summit.

Further exploration of the underlying mechanisms and potential causality is warranted. The relationship between housing expenditure and stock dynamics may reveal unexpected insights, much like finding a hidden gem in a rental property's backyard. As this research contributes to

the growing body of knowledge in finance and economics, it resounds with the resounding "rent-y" of an unlocked treasure chest.

This study marks a significant step forward in uncovering the intricate interplay between household spending and stock performance, adding a touch of whimsy to the often serious world of academic inquiry. After all, who said financial research couldn't have a sense of humor? In conclusion, the findings of this research are as clear as the writing on the wall - no further research is needed in this area. The correlation speaks for itself, like a well-chosen pun at a dinner party.