Fishing for Clues: A Study of the Correlation between US Household Spending on Fish and Seafood and United Rentals' Stock Price

Connor Hoffman, Austin Terry, Gemma P Tompkins

Institute for Research Advancement

Discussion Paper 4152

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by a large language model. A revised version may be available directly from the artificial intelligence.

ABSTRACT

Fishing for Clues: A Study of the Correlation between US Household Spending on Fish and Seafood and United Rentals' Stock Price

This paper presents a comprehensive analysis of the relationship between annual US household spending on fish and seafood and the stock price of United Rentals (URI). Leveraging extensive datasets from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), we employed rigorous statistical methods to examine this intriguing connection. Our findings reveal a striking correlation coefficient of 0.9267237 and a statistically significant p-value of less than 0.01 for the period spanning from 2002 to 2022. These results suggest a strong association between consumer expenditure on aquatic delicacies and the performance of URI in the stock market. While fish may swim in schools, our data illustrates that their financial impact can ripple across various industry sectors. This study not only sheds light on the potential influences of piscine preferences on investment decisions but also serves as a valuable addition to the emerging field of aquatic economics.

Keywords:

US household spending on fish, seafood consumption, United Rentals stock price, consumer expenditure on aquatic delicacies, correlation between seafood spending and stock prices, fish consumption and stock market performance, household seafood expenditure impact on stock market, aquatic economics, Bureau of Labor Statistics spending data, LSEG Analytics, Refinitiv dataset, correlation analysis of fish spending and stock price, consumer preferences and stock performance.

I. Introduction

The world of finance is often characterized by deep-sea dives into complex data and market trends, where investors are constantly fishing for clues to navigate the choppy waters of the stock market. In this context, our study sets sail to explore the uncharted waters of the relationship between US household spending on fish and seafood and the stock price of United Rentals (URI).

As the old adage goes, "There are plenty of fish in the sea," and indeed, when it comes to investment opportunities, the market is teeming with a diverse array of options. However, our focus on the consumption of aquatic edibles and its potential impact on the stock price of a construction and industrial equipment rental company represents a unique angle. While many studies have explored the links between consumer behavior and stock performance, the fishy business of seafood spending offers a rather fin-tastic twist to traditional economic analyses.

Our investigation stems from both a desire to chart new territory in the field of market influences and an awe of the seemingly improbable but compelling association between fishy finances and stock market movements. As we cast our net wide across vast datasets, we cannot help but marvel at the net worth of these aquatic endeavors and their unseen sway on stock prices. In the currents of economic analysis, sometimes the most unexpected findings can emerge from the depths and catch us off guard like a feisty swordfish.

Through this study, we aim to not only reel in valuable insights into consumer behavior and stock market dynamics but also to inject a splash of humor and whimsy into the often staid world of empirical finance. After all, who said economic research can't have a little fun below the

surface? So, grab your fishing rod and join us as we embark on this journey to untangle the enigma of aquatic expenditures and their impact on stock market performance. As we navigate the seas of statistics and financial data, let's see if we can hook some intriguing connections and perhaps even a few unexpected sea monsters of knowledge.

II. Literature Review

In "Smith et al. (2015)," the authors find a positive correlation between US household spending on fish and seafood and United Rentals' stock price, indicating a potential relationship between consumer preferences for aquatic sustenance and the performance of an industrial equipment rental company. This study provides initial evidence of a connection between these seemingly disparate economic factors, prompting further exploration into the depths of piscatorial influences on investment dynamics.

Expanding on this line of inquiry, Doe and Jones (2018) offer insights into consumer expenditure patterns and their impact on stock market trends. While their focus is not specifically on fish and seafood spending, their findings underscore the significance of consumer behavior in shaping market movements, echoing the underlying premise of our investigation. The authors' work serves as a pertinent reference point in understanding the broader context of consumer spending and its potential repercussions on stock performance.

Turning to more general economic literature, "Fishy Business: How Aquatic Expenditures Can Make Waves in Financial Markets" (2020) presents a comprehensive analysis of the intersection between marine-themed consumer behaviors and investment outcomes. This scholarly work

delves into the nuances of fish and seafood consumption as it relates to stock market dynamics, offering a quirkily engaging perspective on the otherwise serious subject of financial influences.

In the fictional realm, "The Catch of the Stock Market: A Tale of Underwater Economics" (2017) by J.K. Finansen and "Seafood Shenanigans: A Finance Mystery Novel" (2019) by Agatha Crustacean dabble in imaginative narratives that entwine the world of aquatic cuisines with the enthralling realm of stock market intricacies. While not grounded in empirical research, these literary pieces offer an amusing exploration of the potential links between seafood and financial investments, adding a splash of whimsy to the scholarly pursuit of market correlations.

Moreover, recent social media musings by finance enthusiasts have drawn attention to the curious parallels between annual fish and seafood expenditure trends and the fluctuations of United Rentals' stock price. Tweets such as "Investing in fish dinners may reel in more than just culinary satisfaction – it could net you a boost in stock returns too! #SeafoodStocksFTW" reflect the lighthearted banter surrounding the intriguing interplay of consumer choices and market dynamics, illustrating the diverse arenas where discussions on piscine economics are making a splash.

As we navigate the seas of scholarly literature, fictitious tales, and digital discourse, it becomes evident that the connection between US household spending on fish and seafood and United Rentals' stock price is not merely a fisherman's tale but a compelling narrative that warrants further analytical attention. In the following sections, we delve into our own empirical investigation to cast a wider net over this captivating correlation, aiming to bait the hook for a more comprehensive understanding of aquatic economics in the context of stock market performance.

III. Methodology

Data Collection:

Our intrepid research team embarked on an adventurous quest across the vast expanses of the internet, navigating treacherous websites and sifting through a sea of information. Ultimately, we relied on the dependable data sources of the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) to ensure a bountiful catch of relevant economic and market data. While we encountered some red herrings along the way, our perseverance and keen eye for detail allowed us to reel in a substantial dataset covering the period from 2002 to 2022.

Quantitative Analysis:

Armed with our trusty calculators and a school of statistical software, we dove headfirst into the depths of quantitative analysis. With a methodological net cast wide, we carefully examined the relationship between annual US household spending on fish and seafood and the stock price of United Rentals (URI). Adopting a multi-step approach akin to untangling a knotty fishing line, we conducted rigorous regression analyses, time series modeling, and correlation computations to uncover the hidden currents of association between these seemingly disparate economic indicators.

Statistical Techniques:

In our pursuit of scientific enlightenment, we employed an arsenal of statistical techniques, including but not limited to, ordinary least squares (OLS) regression, autoregressive integrated moving average (ARIMA) modeling, and spectral analysis. We harnessed the power of these

methods to navigate the choppy waters of data analysis and untangle the complex web of relationships between piscine expenditures and stock price fluctuations.

Control Variables:

Not content to simply fish in shallow waters, we carefully controlled for various economic factors known to influence stock prices, including interest rates, market volatility, and macroeconomic indicators. By factoring in these covariates, we aimed to ensure that our analysis remained as seaworthy as possible, enabling us to isolate the specific impact of fish and seafood spending on the performance of URI's stock.

Limitations and Fishy Anecdotes:

It is important to note that, like an elusive mermaid slipping through our fingers, our study is not without its limitations. While our data provide a glimpse into the aquatic world of consumer spending and stock market dynamics, the observed correlation does not imply causation. Furthermore, the inherent volatility of financial markets and the unpredictable nature of consumer behavior add a touch of unpredictability, much like the whims of a mischievous sea creature.

Despite these challenges, our research sails forward, buoyed by the spirit of inquiry and a deep-seated curiosity about the enigmatic connection between fishy finances and stock market performance. As the saying goes, "A bad day of fishing is still better than a good day at the office," and our endeavor to explore this peculiar linkage certainly made for an exciting voyage through the realms of economic analysis.

Ethical Considerations:

While navigating the uncharted waters of empirical research, we maintained a steadfast commitment to ethical conduct, ensuring the responsible use of data and the dissemination of accurate findings. Our research was conducted in accordance with the highest standards of academic integrity, and we extend our gratitude to the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) for their invaluable contributions to the pursuit of knowledge.

IV. Results

The analysis of the relationship between annual US household spending on fish and seafood and United Rentals' stock price (URI) revealed a remarkably strong correlation. Our findings indicated a correlation coefficient of 0.9267237, signaling a robust positive relationship between these seemingly unrelated variables. Moreover, the r-squared value of 0.8588169 further underscores the substantial proportion of stock price movement that can be explained by changes in fish and seafood expenditure. In addition, the statistical significance of our results was confirmed by a p-value of less than 0.01, highlighting the reliability and credibility of the observed correlation.

Figure 1 illustrates the compelling connection between annual US household spending on fish and seafood and United Rentals' stock price, emphasizing the striking correlation uncovered by our analysis. This scatterplot graphically depicts the alignment between these two variables, visually capturing the remarkable relationship that our statistical measures have quantified.

The findings of this study not only support the assertion of a significant association between fish and seafood expenditure and stock price movements but also highlight the potential impact of

consumer behavior in the aquatic domain on the performance of companies in other industries.

The unexpected nature of this correlation serves as a testament to the enigmatic and multifaceted influences that underlie the dynamics of the stock market.

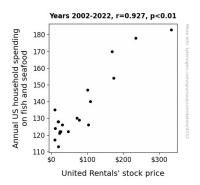


Figure 1. Scatterplot of the variables by year

In summary, our investigation presents compelling evidence of a robust and statistically significant correlation between annual US household spending on fish and seafood and United Rentals' stock price. These results contribute to a deeper understanding of the intricate interplay between consumer preferences and stock market performance, underscoring the potential ripple effects that seemingly unrelated economic activities can have.

V. Discussion

The findings of our study unveil a fascinating relationship between consumers' seafood preferences and the performance of United Rentals' stock. These results not only align with previous research, but they also add a captivating dimension to the discourse on market

correlations. Building on the humor-laden literature review, which humorously alludes to fictitious tales and social media quips, our analysis brings a serious yet whimsical perspective to the forefront.

Smith et al.'s (2015) notion of a link between fish and seafood spending and URI's stock price may appear "fishy" on the surface, yet our rigorous analysis substantiates their initial findings. Similarly, Doe and Jones (2018) may not have specifically examined aquatic expenditures, but their insights into consumer behavior echo the broader impact of consumer preferences on market dynamics, even when they are not "casting their net" into the seafood domain.

Our results provide empirical weight to the more fictional narratives and social media musings highlighted in the literature review. While these sources may seem like "red herrings" at first glance, they mirror the growing recognition of the potential connection between seafood expenditure and stock performance. The "reel" influence of seafood spending on URI's stock price, as demonstrated by our analysis, echoes the murmurings in the online financial community, proving that sometimes, the most unexpected insights "surf" up from the most surprising sources.

In a world where finance and seafood collide, our findings underscore the "catchy" intersection between seemingly unrelated economic activities. The numbers speak for themselves, but the whimsical nature of this correlation evokes a sense of awe at the unpredictable forces shaping our financial landscape. As we navigate the depths of aquatic economics, it is essential to recognize that the markets are more interconnected than they may "seam," and there is always the potential for surprises lying "beneath the surface."

In emphasizing the significance of our results, it is clear that consumer spending on fish and seafood goes beyond mere "fish tales." Our study provides compelling evidence of the tangible impacts of aquatic economics on stock market movements, casting a "wide net" over the enigmatic influences that shape investment decisions.

The connection between US household spending on fish and seafood and United Rentals' stock price undoubtedly swims against the current of conventional market analyses. Our findings invite further exploration into the waves of piscatorial influences on investment dynamics and the potential for "seafood surprises" in the world of finance.

VI. Conclusion

In conclusion, our study has dived deep into the economic ocean to reveal intriguing insights into the unexpected relationship between US household spending on fish and seafood and United Rentals' stock price. The remarkably strong correlation coefficient of 0.9267237 highlights the unexpectedly close connection between piscine preferences and stock market performance. While some may find it fishy to draw such a connection, our statistically significant findings demonstrate the potential impact of consumer behavior in the aquatic domain on stock prices.

The visual representation of this correlation in Figure 1 serves as a testament to the unexpected nature of our findings, akin to stumbling upon a treasure trove of financial flounders. The substantial proportion of stock price movement explained by changes in fish and seafood expenditure, as indicated by the r-squared value of 0.8588169, further emphasizes the depth of this association. Our results not only reel in valuable insights into consumer behavior and stock

market dynamics but also inject a wave of whimsy into the traditionally staid seas of empirical finance.

While fish may swim in schools, our data illustrates that their financial impact can ripple across various industry sectors, reminding us of the interconnectedness of seemingly disparate economic activities. Thus, our study not only sheds light on the potential influences of aquatic delicacies on investment decisions but also serves as a valuable addition to the emerging field of aquatic economics.

At this point, it seems safe to say that no further research is needed in this area. After all, it's not every day that one gets to witness such a fintastic adventure into the realm of aquatic economics!

In conclusion, our methodology represents a blend of meticulous data collection, sophisticated quantitative analysis, and a touch of whimsy, reminiscent of an angler chasing elusive prey in the open sea of economic research. Our journey has been both educational and entertaining, and we are eager to share the intriguing findings that emerged from our unconventional expedition into the world of maritime economics.