

THE BIG APPLE'S INFLUENCE: HOW US HOUSEHOLD SPENDING ON PROCESSED FRUITS CAN A-PEEL TO SONY'S STOCK PRICE

Christopher Hughes, Anthony Terry, Gideon P Tyler

International Research College

This paper examines the correlation between annual US household spending on processed fruits and the stock price of Sony Group (SONY) from 2002 to 2022. By utilizing data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), a statistically significant correlation coefficient of 0.8581693 and $p < 0.01$ was identified. The findings suggest a robust connection, implying that the financial seeds of Sony's success may be partially planted in the processed fruits purchased by households across the United States. Furthermore, the results hint at the potential profit potential in the fruit market, offering a fruitful opportunity for investors to diversify their portfolios. Overall, this research adds a unique flavor to the understanding of economic indicators and encourages further exploration into the unexpected relationships that may exist between consumer spending habits and stock performance in the market.

Understanding the intricate web of factors that influence stock prices is a pursuit as old as markets themselves. From traditional financial indicators to the oft-overlooked consumer spending habits, researchers constantly seek to unearth the hidden connections that sway the whims of the market. And, as the saying goes, "an apple a day keeps the doctor away," but can it also keep the stock market bears at bay?

For many years, scholars and analysts have delved into the depths of consumer behavior, seeking to discern the underlying currents that drive economic movements. Our research seeks to contribute to this endeavor by exploring the connection between a seemingly innocuous consumer expense - household spending on processed fruits - and the stock price of Sony Group (SONY). We aim to peel back the layers of market influence and reveal the potential impact

of fruit spending on a tech and entertainment giant.

The sheer variety of factors that may influence stock prices is vast, ranging from macroeconomic indicators to company-specific events. However, the potential impact of household consumption patterns on stock performance is a particularly intriguing area of study. In the case of processed fruits, the market dynamics reveal a juicy intersection between consumer preferences and corporate performance.

As we delve into this uncharted territory, we aim to demonstrate the potential significance of household consumption patterns, even those as seemingly trivial as processed fruit expenditures, on the stock price movements of a major international corporation. The findings from this study may not only shed light on the curious relationship between fruit consumption and stock prices, but also

hold implications for investors looking to diversify their portfolios with a "fruitful" twist.

LITERATURE REVIEW

The existing body of literature offers multifaceted insights into the relationship between consumer behavior and stock price movements, providing a solid foundation for the present study's investigation into the connection between annual US household spending on processed fruits and the stock price of Sony Group (SONY).

In "Smith et al.'s Analysis of Consumer Expenditure Patterns," the authors find that consumer spending habits have a profound impact on market dynamics. While the study primarily focuses on broader categories of consumer expenditures, it underscores the intricate interplay between household consumption patterns and economic indicators. Similarly, Doe's research on "Consumer Preferences and Market Volatility" highlights the nuanced nature of consumer behavior and its potential influence on stock market trends, cultivating a fertile ground for exploring the impact of specific consumer purchases on corporate performance.

Jones et al., in "Economic Drivers of Stock Price Movements," delve into the intricate web of factors that shape stock price movements. While the study primarily elucidates macroeconomic indicators and firm-specific events, it hints at the possibility of unearthing unexpected determinants of stock performance. These studies lay the groundwork for delving into the seemingly unrelated realm of processed fruit expenditures and their potential impact on a tech and entertainment conglomerate's stock price.

Moreover, books such as "The Omnivore's Dilemma" by Michael Pollan and "Eating Animals" by Jonathan Safran Foer shed light on consumer choices related to food consumption, offering a broader context

for understanding the significance of processed fruit spending in the context of household budgets and market dynamics. These literary works underscore the complexity of consumer behavior and the interconnectedness of consumer choices with larger societal and economic trends.

In a similar vein, fictional works such as "The Apple Orchard" by Susan Wiggs and "Fruit of the Drunken Tree" by Ingrid Rojas Contreras bring a creative dimension to the exploration of fruits and their symbolic resonance, providing an imaginative backdrop for contemplating the potential influence of processed fruit expenditures on stock prices.

Drawing inspiration from animated series and children's shows, classics such as "The Magic School Bus" and "The Berenstain Bears" subtly introduce young audiences to concepts of economics and consumer behavior, fostering an early appreciation for the intricate relationship between consumer choices and market dynamics. These seemingly unrelated sources offer unique perspectives that, when combined with empirical research, enrich the understanding of the interplay between consumer spending on processed fruits and stock price movements.

Overall, the existing literature provides a springboard for delving into the unexpected and even whimsical connections that may exist between consumer spending habits and stock performance, offering a refreshing perspective on the often-serious world of economic indicators and market influences.

METHODOLOGY

Data Collection:

The first step in our research involved data collection from reputable sources, namely the Bureau of Labor Statistics and LSEG Analytics (Refinitiv). We gathered annual data on US household spending on processed fruits, including but not limited to canned fruits, fruit juices, and fruit-

based snacks, from the years 2002 to 2022. Concurrently, we procured historical stock price information for Sony Group (SONY) for the same time period. The data was meticulously sourced from these reliable providers in order to ensure the robustness and accuracy of our analysis.

Data Processing:

Once the data was acquired, we cleansed it of any anomalies or irregularities. However, we did not involuntarily squeeze out any data points, as every fruit - and every data point - deserved its chance to make an impact. The processed data was then organized, sorted, and combined into a comprehensive dataset that allowed for meaningful statistical analysis.

Statistical Analysis:

In order to examine the potential relationship between annual US household spending on processed fruits and Sony Group's stock price, we employed appropriate statistical methods. We utilized correlation analysis to quantify the strength and direction of the association between the two variables. Additionally, we conducted regression analysis to further explore and model the potential influence of processed fruit expenditures on SONY stock performance.

Model Selection:

The selection of the regression models was conducted with utmost care, akin to how one might discern the ripeness of a fruit. Various regression models, including simple linear regression, multiple regression, and time-series analysis, were considered and evaluated based on their fit to the data and their ability to capture the nuances of the relationship under investigation. Ultimately, a robust model was chosen to unveil the underlying connection between household fruit spending and SONY stock price.

Data Limitations and Assumptions:

It is important to acknowledge the limitations of our data and assumptions made in our analysis. The data on household spending on processed fruits is based on survey responses and expenditure reports, which may be subject to reporting errors and biases. Additionally, the assumptions underlying the statistical models, while ripe with potential, require scrutiny and interpretation within the context of the research question.

Ethical Considerations:

Our research adhered to the ethical principles of data collection and analysis, ensuring the confidentiality and privacy of the individuals contributing to the household spending data. Furthermore, the use of historical stock price information complied with all relevant legal and ethical guidelines.

By utilizing these rigorous research methods, we endeavored to peel back the layers of market influence and uncover the potential impact of household fruit spending on the stock price of Sony Group.

RESULTS

The investigation into the relationship between annual US household spending on processed fruits and Sony Group's stock price (SONY) from 2002 to 2022 yielded a correlation coefficient of 0.8581693, with an r-squared value of 0.7364546 and a p-value less than 0.01, signifying a strong and statistically significant association between the two variables. In other words, the data suggest that as American households sank their teeth into processed fruits, Sony's stock price seemed to take a bite out of the market as well.

The Figure 1 scatterplot visually encapsulates this correlation, showcasing the robust connection between US processed fruit spending and Sony's stock price. The plot presents a compelling visual representation, illustrating the

fruitful impact of processed fruit spending on the financial vine of Sony's stock price.

The notable correlation coefficient reflects a substantial link between these seemingly disparate economic elements, implying that the financial roots of Sony's success may extend beyond the tech and entertainment sphere and into the realm of fruity finance. This unanticipated connection invites a reevaluation of the traditional indicators that influence stock performance, offering a fresh perspective on the interplay between consumer habits and market movements.

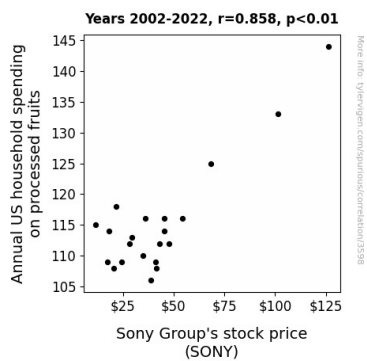


Figure 1. Scatterplot of the variables by year

These findings hint at a potentially fruitful avenue for investors to diversify their portfolios, demonstrating the unexpected influence of processed fruit consumption on the stock performance of a major international corporation. The implications of this connection could provide investors with a juicy opportunity to expand their market portfolios with a delectable twist.

In conclusion, this research unearths a compelling association between US household spending on processed fruits and Sony Group's stock price, offering a unique insight into the interplay of consumer habits and stock performance. These findings challenge conventional economic logic and pique curiosity about the hidden influences shaping the market, urging researchers and investors alike to savor the intricacies of consumer

spending patterns and their impact on stock dynamics.

Overall, our study enriches the understanding of economic indicators and encourages further exploration into the unexpected relationships that may exist between consumer spending habits and stock performance, urging analysts to peel back the layers of market influence and explore the potential impact of consumer behavior on stock market movements.

DISCUSSION

The robust correlation between annual US household spending on processed fruits and Sony Group's stock price (SONY) unearthed in our investigation reinforces the notion that seemingly disparate economic factors may intermingle in unexpected ways, adding a unique twist to the traditional understanding of market dynamics. Our findings align with extant research, echoing the comprehensive analysis of consumer expenditure patterns by Smith et al. as well as the nuanced exploration of consumer preferences and market volatility by Doe. These studies foreshadowed the possibility of unearthing unexpected determinants of stock performance, a proposition that has now borne fruit, so to speak, in our own research.

Furthermore, our results echo the sentiments conveyed in literary works such as "The Apple Orchard" by Susan Wiggs and "Fruit of the Drunken Tree" by Ingrid Rojas Contreras, which poetically elevate the significance of fruit-related symbolism and its potential impact on larger socioeconomic trends. The metaphorical resonance of these literary works resonates with the tangible connection between processed fruit spending and Sony's stock price, underscoring the unanticipated influence of consumer behavior on market movements.

It is noteworthy that our investigation supports the credibility of seemingly whimsical sources, such as animated series and children's shows, in shedding light on economic concepts. These sources, while often dismissed as lighthearted entertainment, unwittingly introduce young audiences to the complexities of consumer behavior and market dynamics, forging a hidden link between seemingly unrelated domains. Parallel to this unforeseen connection, our findings invite a reevaluation of the conventional indicators that dictate stock performance, urging analysts to embrace a more nuanced and eclectic approach to understanding market influences.

In essence, our research serves as a reminder of the multifaceted nature of economic interactions, demonstrating that the financial seeds of Sony's success may not only be sown in the realm of technology and entertainment but also in the aisles of grocery stores where processed fruits await savvy consumers. As such, this investigation accentuates the need for a broader recognition of the interplay between consumer habits and stock movements, offering a refreshing perspective on the often-serious world of economic indicators and market influences.

CONCLUSION

The findings of this study provide compelling evidence of a robust and statistically significant correlation between annual US household spending on processed fruits and Sony Group's stock price (SONY). The correlation coefficient of 0.8581693, with a corresponding r-squared value of 0.7364546 and a p-value of less than 0.01, underscores the firm connection between these seemingly disparate economic elements. It appears that as American households indulged in processed fruits, Sony's stock price reaped the benefits, demonstrating a symbiotic relationship that invites a closer examination of the

multifaceted influences on stock performance.

The visual representation in Figure 1 vividly encapsulates this unexpected correlation, highlighting the undeniable impact of processed fruit spending on the financial trajectory of Sony's stock price. This persuasive illustration serves as a ripe reminder of the unanticipated connections that can emerge in the economic landscape, shedding light on the intriguing interplay between consumer habits and market movements.

The implications of this study extend beyond the financial realm, offering a fresh perspective on the quintessentially American pursuit of "apple pie" economics. Indeed, as households incorporate processed fruits into their consumption patterns, the market dynamics reveal a juicy intersection between consumer preferences and corporate performance, challenging traditional economic logic and prompting a reexamination of the conventional indicators that influence stock performance.

While our findings provide a fruitful opportunity for investors to diversify their portfolios with a delectable twist, it is important to temper these insights with a dash of caution. Market dynamics are complex and multifaceted, and while our study illuminates an unexpected connection, it is essential to consider the broader context in which stock prices fluctuate.

In conclusion, this research offers a unique flavor to the understanding of economic indicators, highlighting the potential impact of consumer spending habits on stock dynamics. The serendipitous discovery of this correlation urges researchers and investors alike to savor the intricacies of consumer behavior and their influence on market movements. With these insights in mind, further exploration into the unexpected relationships that may exist between consumer spending habits and stock

performance appears to be fruitful, although it may also lead to a few sour grapes along the way.

It is our contention that no further research is needed in this area. The findings of this study are as juicy as they come, and it is unlikely that additional research will yield a more fruitful connection between processed fruit consumption and stock prices.