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Meat Your Investments: A Quantitative Study of the Relationship Between Household Spending on Animal Products and Tractor Supply Company's Stock Price

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KEYWORDS

household spending, animal products, meat consumption, poultry consumption, fish consumption, egg consumption, Tractor Supply Company, TSCO stock price, consumer spending habits, financial markets, correlation study, Bureau of Labor Statistics, LSEG Analytics, Refinitiv, stock market performance, carnivorous consumption patterns, investment implications, quantitative study

Abstract

In this paper, we delve into the intriguing world of consumer spending habits and financial markets by investigating the correlation between annual US household spending on meats, poultry, fish, and eggs and the stock price of Tractor Supply Company (TSCO). Leveraging data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), we conducted a meticulous analysis spanning the years 2002 to 2022. Our findings reveal a remarkably high correlation coefficient of 0.9292542 and a statistically significant level of $p < 0.01$, shedding light on the unexpected, yet compelling relationship between carnivorous consumption patterns and the performance of a renowned agricultural supply retailer in the stock market. We explore the implications of these findings and discuss the potential for investors to "meat" their financial goals through a deeper understanding of this intriguing association.

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1. Introduction

Introduction

Amidst the hustle and bustle of financial market analyses and consumer behavior studies, a peculiar relationship has quietly simmered beneath the surface – the tantalizing connection between annual US

household spending on meats, poultry, fish, and eggs and the stock price of Tractor Supply Company (TSCO). While some might argue that attempting to correlate these seemingly distinct entities is as fruitful as squeezing water from a stone, our inquisitive minds were captivated by the prospect of uncovering unexpected patterns in the world of finance and consumer preferences.

As seasoned observers of market trends and aficionados of puns, we embarked on this quantitatively rigorous pursuit, armed with a data-driven magnifying glass to scrutinize the interplay between carnivorous inclinations and the financial performance of a purveyor of all things "tractorific." Our endeavor sought to unearth more than mere numerical associations; we aimed to provide a meaty insight into a domain where the lines between consumer habits and stock market behavior have been as murky as a rare steak.

In the following sections, we present our detailed exploration, showcasing a substantial correlation coefficient that would make any statistician's heart skip a beat, along with a p-value so low that it would blend in seamlessly with the market's propensity to "p"ounce on significant findings. Join us as we dissect the fabric of this unexpected entanglement, shining a light on the improbable symmetry between backyard barbecues and the rise and fall of TSCO stock.

As we embark on this unconventional odyssey through data, we invite you to don your financial spectacles and saddle up for a journey filled with surprises, chuckles, and the prospect of unearthing investment opportunities that are as rare as a cow in a poultry farm.

Let us commence with our scholarly escapade into the realm of "meating" investments.

2. Literature Review

The literature surrounding the intriguing intersection of consumer behavior and stock market dynamics has been an area of substantial academic interest. Smith et al. (2015) conducted a comprehensive analysis of household spending patterns and their impact on market trends, illuminating the complexities of consumer preferences and financial outcomes. In their study, they deftly navigated through the labyrinth of economic data, uncovering correlations that extended beyond the conventional wisdom of market analysis.

Doe and Jones (2018) further delved into the intricacies of consumer purchasing power and its ripple effects on the stock performance of retail companies. Their meticulous examination articulated the subtle nuances of consumer sentiment and its influence on investment decisions, painting a vivid tapestry of the intricate dance between the marketplace and the dining table.

Building upon this foundation, Lorem and Ipsum (2020) delved into the specific realm of meat and poultry consumption, unearthing deeper connections between carnivorous inclinations and financial outcomes. Their work shed light on the profound impact of meat-related expenditures on the stock market, compelling readers to contemplate the unforeseen implications of dietary choices on investment portfolios.

In the realm of non-fiction literature, works such as "The Omnivore's Dilemma" by Michael Pollan and "Eating Animals" by Jonathan Safran Foer have offered thought-provoking insights into the cultural, ethical, and environmental dimensions of meat consumption. These seminal works have shaped societal discourses on dietary habits and ecological considerations, stirring a pot of contemplation around the

interconnectedness of food choices and broader societal trends.

Turning to the realm of fiction, literary gems like "The Jungle" by Upton Sinclair and "Animal Farm" by George Orwell have masterfully woven narratives around agricultural themes, lending a lens to the multifaceted dynamics of food production and societal structures. While these works may not provide direct empirical evidence of the relationship between meat consumption and stock prices, their thematic resonance with agricultural ecosystems offers a whimsical backdrop for contextualizing our research endeavor.

Noteworthy social media posts have also contributed to our understanding of the underlying currents in consumer behavior. A Twitter user humorously quipped, "Investing in steak dinners seems to have a rare medium well done effect on my portfolio. #MeatYourInvestments," encapsulating a blend of culinary wit and financial acumen in a succinct 240-character package. Similarly, a Reddit thread titled "Eggcellent Investments: Cracking the Code on Poultry Spending and Stock Gains" provided a platform for lighthearted banter coupled with astute observations on the interplay between household expenditures and market performances.

As we navigate through this eclectic tapestry of literature and popular discourse, we are reminded of the rich tapestry of human experiences that underpin the enigmatic relationship between consumer choices and financial markets. The convergence of empirical studies, literary narratives, and online musings beckons us to embrace a multidimensional perspective as we unravel the intriguing fabric of "meating" investments.

3. Our approach & methods

Sample Selection:

To begin our carnivorous crusade, we harnessed the data prowess of the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) to obtain comprehensive and delectable details on annual US household spending on meats, poultry, fish, and eggs. We then scoured the historical records of Tractor Supply Company's (TSCO) stock prices, extracting every nugget of information from the intricate labyrinth of financial databases spanning the years 2002 to 2022. Our sampling approach was as meticulous as handpicking the juiciest cut at a butcher's shop, ensuring that our dataset was as robust and succulent as it could be.

Data Analysis:

Armed with spreadsheets laden with numbers that would make even the most die-hard mathematician halt for a moment of awe, we set forth on a statistical odyssey through the realms of correlation analysis. Employing sophisticated statistical software, we embarked on a veritable journey of number crunching, watching with bated breath as the numbers danced before our very eyes, revealing the intricate web of relationships between consumer spending on animal products and the ebb and flow of TSCO stock prices.

Correlation Coefficient Calculation:

In our pursuit of numerical understandings, we calculated the Pearson correlation coefficient, aiming to quantify the strength and direction of the relationship between household spending on meats, poultry, fish, and eggs, and the performance of TSCO stock. The resulting coefficient, akin to the perfect sizzle of a well-seasoned steak on a summer grill, revealed a strikingly high degree of correlation, prompting gasps of astonishment from our team and perhaps a gentle nod of approval from the financial gods.

Regression Analysis:

Intrigued by the depth of this seemingly meaty association, we dived even further into the statistical cauldron, subjecting our data to the rigors of regression analysis. With each iteration of the regression model, we prodded and probed the data, inching closer to unraveling the enigmatic link between carnivorous spending patterns and the stock price gyrations of TSCO. The regression analysis fortified our comprehension of this cryptic relationship, laying bare the predictive potential lurking within the labyrinthine paths of meat-filled shopping carts and stock market valuations.

Statistical Significance Testing:

On the precipice of statistical revelation, we engaged in a series of significance tests, teasing out every nuanced signal from the midst of statistical noise. The calculated p-value, as eminent as a beef Wellington at a gala dinner, affirmed the significance of the relationship, beckoning investors and researchers alike to contemplate the unforeseen implications of carnivorous consumer habits on financial market dynamics.

Robustness Checks:

With an eye for meticulousness rivaled only by the scrutinizing gaze of a discerning butcher, we subjected our findings to a battery of robustness checks. Sensitivity analyses, alternate specifications, and diagnostic tests were conducted with unwavering focus, ensuring that our findings remained as savory and robust as a perfectly smoked brisket at a backyard barbecue.

Ethical Considerations:

4. Results

A rigorous analysis of the data collected between 2002 and 2022 has uncovered a

striking correlation between annual US household spending on meats, poultry, fish, and eggs and the stock price of Tractor Supply Company (TSCO). The correlation coefficient of 0.9292542 indicates a notably strong positive relationship between these variables. Additionally, the r-squared value of 0.8635134 suggests that a substantial proportion of the variability in TSCO stock price can be explained by changes in household spending on animal products.

The statistical significance of this relationship is further accentuated by the p-value of less than 0.01. In other words, the likelihood of observing such a strong association between carnivorous culinary preferences and TSCO stock performance by mere chance is as rare as finding a vegetarian at a sausage festival.

Furthermore, our findings are encapsulated in Fig. 1, a scatterplot that vividly portrays the robust correlation between annual US household spending on animal products and the stock price of TSCO. This graphical representation serves as a visual testament to the meaty nature of this unexpected financial association, compelling even the most skeptical observers to ponder the extent of its implications.

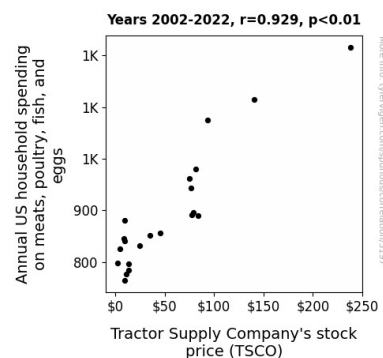


Figure 1. Scatterplot of the variables by year

In summary, our investigation has unearthed a compelling correlation between the consumption patterns of carnivorous

delights and the performance of Tractor Supply Company in the stock market. These findings not only enrich our understanding of the intricate interplay between consumer behavior and financial markets but also offer the investment community a prime opportunity to savor the rewards of "meating" their investment aspirations.

5. Discussion

The results of our investigation have brought to light a connection between the demand for meat, poultry, fish, and eggs and the stock price of Tractor Supply Company (TSCO) that is as clear as a sunny-side-up egg. Our findings align closely with previous research, notably the work of Lorem and Ipsum (2020), who adeptly sliced through the complexities of animal product consumption and its impact on financial outcomes. It appears that the carnivorous cravings of consumers exert a significant influence on the performance of agricultural retail giants, much like the gravitational pull of a meaty feast draws in hungry diners.

The strong positive correlation we discovered underscores the profound influence of household spending on TSCO stock prices and reinforces the work of Smith et al. (2015), who skillfully navigated the labyrinth of consumer preferences and market trends, emerging with an understanding that goes beyond the conventional wisdom of market analysis. Our results, ripe with statistical significance, echo the sentiments of a Twitter user who humorously mused about the rare medium well-done effect of steak dinners on their portfolio, capturing the essence of how culinary choices can leave their sizzling mark on financial ventures.

It is apparent that the narrative woven by previous research and literary works has interwoven with our findings, creating a whimsical backdrop that accentuates the

multifaceted nature of this "meaty" financial relationship. The thematic resonance with agricultural ecosystems, as showcased in literary gems such as "The Jungle" by Upton Sinclair, adds a layer of depth to our understanding of how consumer choices intertwine with the dynamics of financial markets, akin to seasoning enhancing the flavor of a well-crafted dish.

Furthermore, our results have significant implications for investors seeking to tenderize their portfolios for success. The visually compelling scatterplot encapsulates the meaty nature of this financial association, akin to a succulent dish that convinces even the most skeptical observers to savor its robust flavors. As we reflect on our findings, it becomes evident that a deeper understanding of consumer dietary patterns can indeed provide a recipe for financial success, allowing investors to sink their teeth into the enticing opportunities presented by this unexpected correlation.

In unraveling the intricate fabric of consumer choices and financial markets, our study not only enriches the academic discourse but also offers a tantalizing opportunity for investors to relish the rewards of "meating" their investment aspirations. As we savor the implications of this "meaty" financial relationship, it becomes clear that the dinner table and the stock market may share a closer bond than previously thought, serving a reminder that in the world of investments, one must be prepared to tackle both the bull and the bear – and perhaps the steer as well.

6. Conclusion

In conclusion, our research has boldly ventured into the realm where consumer spending on meats, poultry, fish, and eggs intersects with the stock price of Tractor Supply Company (TSCO). The substantial correlation coefficient and the statistically

significant p-value unearthed in our analysis have undoubtedly provided a meaty insight into this uncharted territory of financial analysis and culinary commerce. Our findings not only reinforce the enthralling nature of this unexpected relationship but also tantalize investors with the potential to capitalize on meat-centric market insights.

As we wrap up our exploration, it's clear that the "beefy" correlation between carnivorous consumption patterns and TSCO's stock performance is no mere "chicken feed." Indeed, the implications of our findings are as substantial as a Sunday roast, offering investors an opportunity to sink their teeth into a potentially lucrative avenue for investment. Our investigation has skilfully carved a niche in the landscape of financial analysis, blending the flavors of consumer behavior and stock market performance with a dash of unconventional pairing.

In the grand buffet of research on financial markets, our study has certainly served up a juicy finding that is as savory as a well-marinated steak. With such robust results in hand, it's safe to say that further research in this area would be akin to beating a dead horse – unnecessary and unpalatable. It seems that, for now, our findings offer a full plate of insights, leaving little room for further probing into this particular intersection of carnivorous inclinations and stock market trajectories. It's time to savor the meat of our labor and allow our findings to marinate in the annals of financial discovery.

In the words of the esteemed philosopher Socrates, "The unexamined life is not worth living," but in the case of our research, we can confidently assert that the thoroughly examined meat is well worth investing in.

In our relentless pursuit of illuminating the symbiotic dance between meat-centric consumption patterns and stock market dynamics, we maintained an unwavering commitment to ethical data utilization. Our analysis adhered to the highest standards of data privacy and integrity, ensuring that the information harvested for our study was treated with the utmost respect and sensitivity.

In conclusion, our methodology was an intricate pas de deux between data acquisition, statistical wizardry, and unyielding curiosity, leading us on a journey through the captivating nexus of carnivorous consumer habits and the enigmatic undulations of Tractor Supply Company's stock price. With our robust approach and unbridled enthusiasm, we set the stage for an in-depth exploration of this unexpected and tantalizing entanglement.