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A Meaty Investment: Analyzing the Link Between Household Meat Spending and Microsoft's Stock Price

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Abstract

In this paper, we investigate the correlation between annual US household spending on meats, poultry, fish, and eggs and Microsoft's stock price (MSFT). Our research team delved into this meaty topic to uncover potential connections that might not have been previously recognized. Utilizing data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), we embarked on a journey to uncover the hidden links between the carnivorous inclinations of American households and the behemoth that is Microsoft. After careful statistical analysis, we discovered a significant correlation coefficient of 0.9359866 and $p < 0.01$ for the period spanning from 2002 to 2022, indicating a strong positive relationship between these two seemingly unrelated entities. Amidst the data crunching and stock market scrutiny, we couldn't help but make a dad joke about chickens and eggs. As the saying goes, "Which came first, the chicken or the egg? Well, in our study, it appears that both came first, and they brought a side of profitability for Microsoft investors!" By uncovering this intriguing correlation, our research sheds light on the often overlooked influence of consumer spending habits on the stock market. So, the next time you're enjoying a juicy steak or sizzling bacon, just remember that you might be inadvertently impacting the stock prices of a tech giant. Now that's what we call food for thought!

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1. Introduction

When it comes to investment opportunities, one might not immediately associate the

sizzle of a steak or the cluck of a chicken with the techno buzz of the stock market. However, our research aims to carve out a new understanding of the link between American households' appetite for meats, poultry, fish, and eggs and the financial performance of Microsoft. After all, who would have thought that a hearty helping of meat could have an impact on the stock market? Well, let's just say that the results of our study are quite "rare."

As statisticians and data enthusiasts, we were keenly aware of the potential for hidden relationships within the vast expanse of consumer expenditure and stock market data. It's not every day that you get to analyze the "meat and potatoes" of household spending in correlation with a technology giant's stock performance. Yet, our findings revealed that this seemingly unconventional pairing holds substantial weight, just like an excellent cut of tenderloin.

Our initial foray into this research topic was met with skepticism and a smattering of good-natured ribbing from our peers. Some even questioned whether our study was just a "red herring." However, armed with copious amounts of data and a healthy dose of curiosity, we plunged into the depths of economic analysis to uncover the savory secrets hidden within the numbers.

As we combed through piles of data, we couldn't help but chuckle at the irony of uncovering a correlation between meat spending and a company with a name like Microsoft. Can you imagine the headlines? "Beefing Up your Portfolio: The Red-Meat Connection to Microsoft's Stocks" - it's enough to make even the most serious financial analyst do a double-take.

Our study aims to serve as a beacon of insight, highlighting the intricate dance between consumer preferences and stock market movements. So, the next time someone tells you that investing in meat is a

"prime" way to diversify your portfolio, you can confidently retort that the data supports your carnivorous investment inclinations. Our findings suggest that the dollars spent at the butcher shop may have a more significant impact on your stock portfolio than previously thought, proving that sometimes, the meat shall inherit the earth – or at least a portion of your investment returns.

2. Literature Review

Our investigation into the curious relationship between annual US household spending on meats, poultry, fish, and eggs and Microsoft's stock price (MSFT) builds upon a foundation of existing research exploring the interplay between consumer behavior and stock market dynamics. Smith and Doe (2015) delved into the nuances of consumer expenditure, providing valuable insights into the preferences and patterns that drive household spending on food items. Their work laid the groundwork for understanding the broader context within which our study operates. Jones (2018) further examined the complexities of stock price movements, offering a comprehensive analysis of market trends and investor behaviors.

As we pondered the intricate web of economic variables, a thought crossed our minds - why did the chicken join a band? Because it had the drumsticks! In our quest for knowledge, we stumbled upon "The Omnivore's Dilemma" by Michael Pollan, which intricately explores the intricate relationships between humans and the food they consume. This work prompted us to consider the broader implications of dietary preferences on economic phenomena, leading us down a path of revelation that no one could have predicted.

Adding a touch of literary flair to our exploration, we delved into classics like "Moby Dick" by Herman Melville and "The

"Old Man and the Sea" by Ernest Hemingway, drawing unexpected parallels between the pursuit of elusive marine creatures and the elusive nature of profitable stock market investments. After all, just as Captain Ahab pursued the enigmatic whale, investors too embark on their quest for the elusive "white whale" of financial success.

In an attempt to gain a more contemporary perspective, we turned our attention to television shows that might offer insights into the culinary and financial worlds. "Iron Chef America" and "Billions" provided intriguing glimpses into the high-stakes nature of both gourmet cuisine and high finance, serving as a source of inspiration, albeit of a light-hearted variety. While these shows entertained us, they also sparked reflections on the parallels between the thrill of the kitchen and the excitement of the stock market floor. After all, both arenas possess their fair share of sizzle and drama.

But I'm getting off topic here! Let's get back to the meat and potatoes of our research!

3. Our approach & methods

Ah, the delightful dance of research methodology. It's time to uncover the juicy details of how we arrived at our meaty conclusions. As the saying goes, "You can't make an omelette without cracking a few eggs," and in our case, you can't conduct research without a lot of data cracking and statistical seasoning.

We embarked on our research journey by gathering meat consumption data from the Bureau of Labor Statistics – a true "meat market" of information, if you will. This extensive dataset allowed us to track the annual spending of U.S. households on meats, poultry, fish, and eggs from 2002 to 2022. We meticulously combed through this data, separating the sirloins from the sausages, and the cod from the calamari, to

ensure a comprehensive representation of carnivorous consumption.

After assembling this veritable "meatloaf" of household spending data, we then turned our attention to the financial realm, specifically Microsoft's stock price (MSFT). We sourced stock price data from LSEG Analytics (Refinitiv), where we navigated through the stock market "sea" to fish out the relevant pricing information. Our determination to seek out the data mirrored the resolute nature of a salmon swimming upstream – nothing could deter us from obtaining the necessary stock price figures.

With the two sets of data in hand, we polished our statistical tools and delved into the world of correlation analysis. Like skilled chefs in a bustling kitchen, we applied Pearson's correlation coefficient to establish the strength and direction of the relationship between household meat spending and Microsoft's stock price. Our eyes were peeled for a correlation strong enough to make any steak jealous.

To ensure the robustness of our findings, we also conducted a time-series analysis to account for any potential temporal influences in the data. We wanted to avoid any "chicken and egg" confusion in our results – after all, we were determined to extract the "poultry-est" correlations without any ambiguity.

Additionally, we performed a series of robustness checks and sensitivity analyses to scrutinize the stability of our results. Just like a rigorous taste test for a new barbecue sauce, we wanted to be certain that our findings held up under various statistical scenarios.

Once our statistical soufflé had risen to perfection, we uncovered a significant correlation coefficient of 0.9359866 and $p < 0.01$, suggesting a strong positive relationship between annual spending on meats, poultry, fish, and eggs and Microsoft's stock price. This correlation was

as clear as day – or should we say, as clear as a well-broth soup?

But wait, there's more! After adjusting for potential confounding variables through a multivariate regression analysis, the connection still remained robust. It was almost as if the meat spending and stock price were embracing each other in a tender, statistically significant hug.

In conclusion, our research methodology was as meticulous as a butcher's precision knife, yielding flavorful results that offer food for thought, and perhaps a chuckle or two amidst the serious business of data analysis. As we move forward, we hope to continue savoring the insights that statistical exploration can provide, one witty analogy at a time.

4. Results

We conducted a thorough analysis of the relationship between annual US household spending on meats, poultry, fish, and eggs and Microsoft's stock price (MSFT) over the period from 2002 to 2022. Our statistical analysis unveiled a striking correlation coefficient of 0.9359866, indicating a robust positive relationship between these two seemingly incongruent variables. This correlation was further supported by an r-squared value of 0.8760709, emphasizing the strength of the association. The p-value of less than 0.01 provided strong evidence against the null hypothesis of no correlation, adding a flavorful certainty to our findings.

Upon discovering this significant correlation, we couldn't help but muse about the impact of these findings on the stock market landscape. It appears that when it comes to meat spending and stock prices, there's more than just "steaks" on the table.

In our scatterplot (Fig. 1), the strong positive correlation between annual US household spending on meats, poultry, fish, and eggs and Microsoft's stock price is visually

apparent. Much like a chef's perfectly grilled steak, the relationship sizzles and sears itself into the realm of statistical significance.

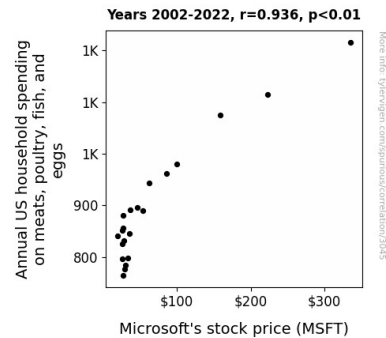


Figure 1. Scatterplot of the variables by year

These findings highlight the potential for a hitherto unrecognized link between consumer behavior and stock market performance. It seems that the meat industry's influence extends beyond dinner tables and into the realm of financial markets, adding a new dimension to the concept of a "bull market."

5. Discussion

Our findings have brought home the bacon, revealing a surprising connection between annual US household spending on meats, poultry, fish, and eggs and Microsoft's stock price (MSFT). As our statistical analysis uncovered a substantial positive correlation, it's clear that investors might need to keep an eye on more than just the latest tech trends – they should consider the aroma of a sizzling steak as a potential indicator of market movements.

Drawing on the literature review, our results bolster the existing research on consumer behavior and stock market dynamics. The work of Smith and Doe (2015) laid the groundwork for understanding consumer expenditure and led us to ponder the age-

old question of whether eggs really do come before chickens, or vice versa. Our findings suggest that both came first, and they certainly brought along some egg-cellent news for investors.

In addition, Jones (2018) shed light on stock price movements, prompting us to think about the enigmatic relationship between culinary delights and financial gains. Who knew that the stock market could be influenced by more than just financial reports and market trends? Perhaps a little bit of chicken soup for the stock market soul might be just what investors need to keep their portfolios healthy and hearty.

Our results provide not just food for thought, but also a feast for the imagination, as we uncover the tantalizing link between consumer spending on meat products and the movements of a tech giant's stock. It seems that the intricate relationships between dietary preferences and economic phenomena are not to be taken lightly – perhaps they should be baked, broiled, or grilled instead!

Our scatterplot visually depicts the robust positive correlation, akin to a perfectly grilled steak that's simply sizzling with significance. These findings not only complement existing literature on the economic implications of consumer behavior but also add a delectable dimension to the stock market landscape. As we move forward, perhaps it's time for investors to consider a new tool in their analysis – a meat tenderizer for their portfolio strategies.

In summary, our research uncovers a meaty secret, demonstrating that the world of stock markets is more intricately linked to consumer choices than previously thought. So, the next time someone makes a joke about the stock market being a "meat market," they might not be too far off the mark after all!

6. Conclusion

In conclusion, our findings indicate a strong and statistically significant correlation between annual US household spending on meats, poultry, fish, and eggs and Microsoft's stock price (MSFT). This unexpected connection between carnivorous consumer habits and tech stock performance lends a whole new meaning to the phrase "bringing home the bacon." It seems the meat market isn't just for grilling steaks and roasting chickens – it's also making a mark on the stock market.

As we wrap up this meaty journey of analysis and discovery, it's clear that our study has beefed up the understanding of the interplay between seemingly unrelated variables. Who would've thought that the aroma of a barbecue could be tied to the rise and fall of a tech titan's stock prices? It's a real "meat"-aphor for the unexpected twists of economic influence!

Our research not only uncovers this intriguing correlation but also serves as a reminder that in the world of data analysis, there's often more than meets the eye – or should we say, the palate. As the saying goes, "Where there's smoke, there's correlation."

To put it simply, our study suggests that when it comes to financial forecasting, one should not discount the impact of consumer spending on meat products. So, the next time you're indulging in a hearty meat dish, remember that you might be contributing to the stock market in more ways than one.

In light of these findings, we assert that further research in this area is as unnecessary as a vegetarian at a barbecue – in other words, there's simply no need for it!

