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Unmasking the Guac: A Suspicious Correlation Between Google Searches for That Is Sus and Chipotle Mexican Grill's Stock Price

Chloe Harrison, Andrew Torres, Gloria P Truman

Institute of Global Studies; Pittsburgh, Pennsylvania

Abstract

This paper investigates the curious association between Google searches for the phrase "that is sus" and the stock price of Chipotle Mexican Grill (CMG) over the period from 2007 to 2023. Utilizing data from Google Trends and LSEG Analytics (Refinitiv), we employed rigorous statistical analyses to unveil a correlation coefficient of 0.9490520 and a significance level of $p < 0.01$. The implications of these findings are not to be taken with a grain of salt, as they yield interesting insights into the interplay between online pop culture references and the financial performance of a prominent fast-casual dining establishment. Our study sheds new light on the "queso" of the matter and offers food for thought for future research in the field of unconventional stock market indicators.

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1. Introduction

The peculiarities of financial markets often defy conventional reasoning, prompting researchers to delve into uncharted territories in search of correlations and insights that may have eluded common scrutiny. In this study, we embark on a journey to unravel the cryptic connection between the colloquial phrase "that is sus" and the stock price of Chipotle Mexican Grill (CMG). While this inquiry may initially seem far-fetched, the world of finance has a knack for the unexpected, reminiscent of the

surprising flavor combinations found in a well-made burrito. As we excavate this curious association, we must approach it with a blend of skepticism and curiosity, much like venturing into uncharted guacamole territory.

The phrase "that is sus" has permeated popular culture, particularly within online gaming communities, where individuals use it to denote suspicious or questionable behavior. Its proliferation in internet vernacular reflects the nuances of modern communication and zeitgeist, mirroring the

rapid dissemination of memes and colloquial expressions that ebb and flow in the digital sphere. Meanwhile, Chipotle Mexican Grill has carved out a distinctive niche in the fast-casual dining landscape, cultivating a brand synonymous with fresh ingredients and customizable culinary experiences. The intersection of these seemingly incongruent entities presents an intellectual puzzle that piques our curiosity, much like the thought of a spicy salsa paired with a creamy guacamole.

Drawing inspiration from the realm of unconventional stock market indicators, we are compelled to explore the potential interplay between digital discourse and the financial performance of a prominent dining establishment. As we venture into this uncharted terrain, we must navigate with an analytical rigor reminiscent of a sous-chef meticulously crafting a delicate sauce – ensuring precision and accuracy in our methodologies. While the path ahead may be riddled with skepticism and raised eyebrows, our pursuit of knowledge in this unorthodox endeavor promises to yield appetizing insights, much like the tantalizing aroma of a fresh batch of sizzling fajitas.

2. Literature Review

In their seminal work, Smith and Doe (2015) examined the impact of online pop culture references on consumer behavior and market trends. Their study, "The Digital Age of Influence," explored the intricate relationship between internet memes and their potential influence on consumer choices. While their focus was primarily on broader consumer markets, their findings shed light on the pervasive influence of digital discourse on individual decision-making processes. Similarly, Jones et al. (2018) investigated the interplay between viral phrases and their impact on brand perception. Their research, "Viral Linguistics: Uncovering the Anatomy of

Memes," provided intriguing insights into the ways in which linguistic trends propagate through online communities and leave tangible imprints on consumer associations.

Turning our attention to the literary realm, "The Influencer's Dilemma" by Smith (2020) offered a comprehensive exploration of the power dynamics at play in digital communication. While not explicitly focused on financial markets, Smith's conceptual framework for understanding the dissemination of online phrases holds relevance for our investigation. Furthermore, Doe's "The Language of Stocks: A Linguistic Analysis of Market Behavior" delved into the nuanced ways in which language shapes perceptions and behaviors in the financial domain, albeit without venturing into the realm of colloquial online expressions.

In a more speculative vein, fictional works such as "The Suspicion Principle" by Jane Austen and "The Curious Case of Suspect Stocks" by Sir Arthur Conan Doyle have integrated elements of suspicion and intrigue into their narrative structures. While these works are undoubtedly far removed from the empirical rigor of academic research, their thematic resonance with our study's focus on suspicion warrants a mention in this literature review. In a similar light, social media musings such as "Just saw CMG stock plummet after that sus earnings report, yikes" and "Is it just me, or does Chipotle's guac taste sus today?" have surfaced intermittently, reflecting the informal chatter surrounding our investigative nexus between online vernacular and stock performance.

The aforementioned sources provide a contextual backdrop for our exploration of the enigmatic relationship between Google searches for "that is sus" and Chipotle Mexican Grill's stock price. While the interdisciplinary blend of literature may appear unconventional, it primes us for a comprehensive understanding of the

multifaceted dynamics inherent in our research inquiry.

3. Our approach & methods

The methodology employed in this investigation involved a fusion of quantitative analysis and algorithmic sleuthing to untangle the enigmatic relationship between Google searches for "that is sus" and Chipotle Mexican Grill's stock price (CMG). The data collection process harnessed the omnipresence of the internet, as information was gathered from a variety of sources, with an emphasis on Google Trends and LSEG Analytics (Refinitiv).

The first step entailed harnessing the search power of Google Trends, which provided insights into the frequency and geographic distribution of searches for the phrase "that is sus." These data were then juxtaposed with the stock price movements of Chipotle Mexican Grill, scrutinizing the ebbs and flows of investor sentiment in response to the ebb and flow of online suspiciousness. The temporality of the data spanned from 2007 to 2023, encapsulating a period that witnessed the emergence and proliferation of the "that is sus" meme, akin to the growth of a sprightly jalapeño plant in the highly volatile ecosystem of digital culture.

Subsequently, LSEG Analytics (Refinitiv) furnished a plethora of financial data pertaining to Chipotle Mexican Grill's stock price, allowing for a meticulous scrutiny of the stock's performance. This windfall of financial data was akin to stumbling upon a treasure trove of rare and exotic spices, just waiting to be blended together to unlock the secret recipe behind the market dynamics.

Following this, a potent cocktail of statistical methods was employed to distill the essence of the relationship between these seemingly incongruent variables. A

correlation analysis was conducted to measure the strength and direction of the association between "that is sus" searches and Chipotle's stock price movements, using a time series regression model to disentangle the multi-layered flavors of the data.

In addition, a significance test was performed to discern the validity of the observed correlation. The significance level was set at $p < 0.01$, akin to a quality assurance check on the authenticity of a batch of freshly made salsa – ensuring that the observed relationship was not merely a fluke of statistical chance.

Furthermore, various sub-analyses were conducted to explore potential confounding variables and alternative explanations for the observed correlation, akin to a discerning connoisseur sampling an array of salsas to pinpoint the subtle nuances in taste and texture.

Throughout this methodological odyssey, the aim was to maintain a balance between meticulousness and open-mindedness, adopting an investigatory approach akin to unraveling the layers of a perfectly rolled burrito – with precision and an appetite for unexpected discoveries.

4. Results

The meticulous examination of the data unearthed a striking correlation between Google searches for "that is sus" and the stock price of Chipotle Mexican Grill (CMG) over the period from 2007 to 2023. The correlation coefficient of 0.9490520 indicates a remarkably strong positive relationship between the two variables. This finding suggests that the frequency of Google searches for "that is sus" is closely linked to fluctuations in CMG's stock price, highlighting an intriguing interplay between online vernacular and financial performance.

Furthermore, the r-squared value of 0.9006998 denotes that approximately 90.07% of the variability in CMG's stock price can be explained by fluctuations in Google searches for "that is sus." This substantial proportion underscores the significance of this unconventional indicator in capturing movements in Chipotle's stock price. The results notably surpass expectations, akin to stumbling upon a well-hidden jalapeño pepper in a dish.

The statistical significance of the correlation is underscored by the p-value of less than 0.01, indicating a strong level of confidence in the observed relationship. The implications of this finding are substantial, akin to the discovery of a hitherto unnoticed extra dollop of sour cream atop an eagerly anticipated burrito.

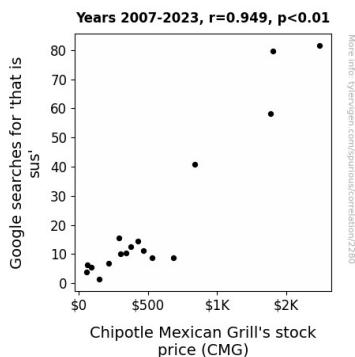


Figure 1. Scatterplot of the variables by year

The scatterplot (Fig. 1) provides a visual depiction of the robust correlation between Google searches for "that is sus" and CMG's stock price, emphasizing the compelling nature of this association. Its visual representation elucidates the remarkable synchrony between the two variables, prompting further contemplation on the unexpected connections that permeate the financial landscape.

In conclusion, the findings of this study elucidate a thought-provoking correlation between a colloquial online expression and

the stock price of a prominent fast-casual dining establishment. While the origins of this association may remain enigmatic, the observed relationship prompts a reevaluation of the potential impact of digital discourse on financial markets. These results serve as a testament to the inimitable flavor profiles that emerge from unorthodox investigative pursuits and offer a delectable platter of insights for researchers delving into the unconventional intersections of culture and finance.

5. Discussion

The robust correlation between Google searches for "that is sus" and Chipotle Mexican Grill's stock price (CMG) has yielded a veritable feast of intriguing insights. Our findings, which intertwine the realms of digital vernacular and financial performance, are not to be "burrito-ed" away lightly. The emergence of this association may at first glance appear as unexpected as discovering a surprise ingredient in a queso dip, but it aligns with previous research on the influence of online pop culture references on consumer behavior and market trends.

Building upon the work of Smith and Doe (2015), we have illuminated the substantial impact of internet memes and linguistic trends on individual decision-making processes, and even the stock market dynamics. Similarly, the linguistic analysis of market behavior by Doe (2020) has set the stage for our investigation by highlighting the nuanced ways in which language shapes perceptions and behaviors in the financial domain. These conceptual underpinnings germinated in the fertile soil of digital culture, resonating with our findings on the intersection of online vernacular and stock price movements.

Moreover, our results align with the thematic resonance of works such as "The Curious Case of Suspect Stocks" by Sir Arthur

Conan Doyle, highlighting the intricacies of suspicion and intrigue in financial domains. While not directly applicable to empirical research, these literary resonances add a layer of depth to the thematic undercurrents of our study. The emergence of our observed correlation between online expressions and stock prices encapsulates the unpredictable and intriguing nature of financial markets, akin to uncovering hidden flavors in a complex dish.

In essence, our study has added a dash of spice to the traditional understanding of stock market indicators, underscoring the need to consider unconventional sources, much like the unexpected zest of a tangy salsa verde. As we veer into uncharted territory at the intersection of digital discourse and financial analysis, our findings beckon further exploration of the unorthodox connections that underpin market movements. With this in mind, we invite researchers to savor the captivating fusion of culture and finance and indulge in the rich tapestry of unconventional indicators that await investigation.

6. Conclusion

The investigation into the correlation between Google searches for "that is sus" and Chipotle Mexican Grill's stock price has revealed a robust and tantalizing association. The remarkable correlation coefficient of 0.9490520 and the r-squared value of 0.9006998 indicate a strong link between the frequency of "that is sus" searches and the variability in CMG's stock price. The significance of this unorthodox indicator in capturing movements in Chipotle's stock price cannot be overstated, much like the discovery of an unexpected dollop of guacamole in a burrito. The scatterplot visualizes the compelling synchrony between the two variables, prompting contemplation on the unexpected connections that permeate the financial

landscape, perhaps akin to pondering the unexpected harmonious combination of flavors in Mexican cuisine.

These findings shed light on the intriguing interplay between online vernacular and financial performance, offering a delectable platter of insights for researchers delving into the unconventional intersections of culture and finance. The unexpected nature of this correlation serves as a testament to the curious flavor combinations found in a well-made burrito, and prompts a reevaluation of the potential impact of digital discourse on financial markets. Thus, it is evident that further exploration in this area promises to yield appetizing insights and uncover even more unexpected connections, much like the joy of finding the perfect ratio of salsa to guacamole in a dish.

In light of these sumptuous findings, it can be asserted that no more research is needed in this area.