
Meme Meets Monetary Markets: The Connection Between Cat Memes and Altria Group's Stock Price

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Abstract

This study delves into the feline phenomenon of cat memes and their unsuspected association with the stock price of Altria Group (MO). Using data from Google Trends and LSEG Analytics (Refinitiv), we embarked on a peculiar journey to unravel the enigmatic correlation between internet cat humor and financial markets. Our findings revealed a startling correlation coefficient of 0.9350956 with $p < 0.01$ for the time span of 2004 to 2023, shedding light on the unexpected impact of internet culture on stock performance. It seems that in the world of finance, cats really do have nine lives – or at least, nine market trends!

1. Introduction

The world of finance is a formidable landscape, replete with intricate algorithms, economic theories, and the occasional feline twist. Enter the mesmerizing world of cat memes, where the playful antics of our whiskered companions have taken the internet by storm and captivated the hearts of millions. It is no secret that the internet is teeming with cat-related content, a purr-fect concoction of humor and charm. In the midst of this, a peculiar phenomenon has manifested – the unexpected entwining of Google searches for 'cat memes' and the stock price of Altria Group (MO). Who would have thought that the keystrokes of feline enthusiasts could have an impact on the financial markets? It seems that these four-legged internet celebrities are not just gracing our screens but also, in a twist of irony, "purring" their way into the domain of monetary markets.

The inextricable link between these seemingly disparate entities has drawn the attention of both financial analysts and internet researchers alike. This study endeavors to explore this unanticipated connection, delving into the interplay between the hilarity of cat memes and the stern gravity of stock performance. As we embark on this peculiar journey, it is crucial to approach the subject with an open mind and, dare we say, a sense of humor. After all, as the saying goes, "Why was the cat sitting on the computer? Because it wanted to keep an eye on the mouse!"

The implications of this study extend beyond the mere curiosity of an esoteric correlation. It stands as a testament to the ever-evolving landscape of financial analysis, where the traditional paradigms are continually challenged and reshaped. Just as a cat gracefully treads its own path, sometimes in the least expected places, so too does this research disrupt conventional notions – providing insights that are, to put it bluntly, the cat's pajamas.

2. Literature Review

As we set out to investigate the perplexing relationship between Google searches for 'cat memes' and Altria Group's stock price (MO), it is imperative to review existing literature in order to situate our findings within the broader context of financial and internet phenomena. Several studies have explored the impact of social media and internet trends on stock performance. Smith et al. (2015) documented the influence of viral internet content on consumer behavior and market sentiment, while Doe and Jones (2018) examined the correlation between online search patterns and stock volatility. Drawing upon this foundation, we aim to unravel the unique bond that binds the realm of online feline humor and the realm of financial markets.

In "Book," the authors find lorem and ipsum lorem and ipsum, suggesting a potential connection between internet culture and stock price movements. Similarly, "Another Book" presents contemporary insights on the interplay between social media trends and market dynamics, offering a comprehensive analysis of the digital landscape's influence on investor decision-making processes.

Turning our attention to non-fiction literature, works such as "The Power of Meow: Understanding Internet Feline Fandom" and "Paws and Profit: The Economic Impact of Cat Memes" provide valuable perspectives on the cultural significance and economic implications of cat-related content in the online sphere. These publications shed light on the pervasive nature of internet cat humor and its potential repercussions on consumer behavior and market sentiment.

In the realm of fiction, titles such as "Tales of Whiskers and Wealth" and "The Cat's Guide to Wall Street" veer into the imaginative terrain of anthropomorphic feline characters navigating the complexities of stock trading and financial acumen. While these works offer a whimsical portrayal of cats and commerce, they subtly encapsulate the intrigue and allure of intertwining internet culture and financial markets.

In a departure from conventional research methodologies, the present study also incorporates unconventional sources of information, including an analysis of CVS receipts on the off chance that some cryptic code or feline-inspired revelation might be encoded within the mundane purchases of unsuspecting consumers. This creative approach underscores the interdisciplinary nature of our investigation, as we strive to capture the elusive essence of the cat meme phenomenon and its potential ripples in the realm of stock price movements.

3. Methodology

To explore the purported association between Google searches for 'cat memes' and the stock price of Altria Group (MO), an extensive and methodical approach was undertaken. The data utilized in this study encompassed the time span of 2004 to 2023 and was sourced primarily from Google Trends and LSEG Analytics (Refinitiv). The selection of this duration allowed for a comprehensive analysis of the relationship between cat memes and stock prices over an extended period, facilitating a robust evaluation of the potential correlation.

The first step in the methodology involved the compilation of Google search data for the term 'cat memes' and the aggregation of Altria Group's stock price information over the stipulated timeframe. The data obtained from Google Trends provided insights into the frequency and intensity of 'cat memes' searches, while LSEG Analytics (Refinitiv) facilitated the extraction of Altria Group's stock price data with its associated fluctuations and trends.

The utilization of such diverse and unorthodox data sources aimed to capture the nuances and idiosyncrasies of internet culture juxtaposed against

the performance of a market entity. This approach sought to encapsulate the dynamism of internet behavior and its potential impact on financial markets, culminating in a holistic assessment of the purported relationship between feline humor and stock price movements.

This distinctive methodology allowed for the parsing of internet trends in search patterns and the corresponding examination of Altria Group's stock performance. By intertwining these seemingly disparate datasets, the research team sought to discern any discernible patterns or correlations, albeit in a manner that evokes the sentiment, "What do cats eat for breakfast? Mice Krispies!"

Furthermore, quantitative analysis techniques, including statistical measures such as correlation coefficients and time series models, were deployed to rigorously assess the relationship between Google searches for 'cat memes' and Altria Group's stock price. This analytical rigor served to elucidate the potential impact of internet cat culture on the financial performance of a prominent company, reframing the discourse in a manner that prompts one to ponder, "Why don't cats play poker in the jungle? Too many cheetahs!"

Additionally, robustness checks and sensitivity analyses were conducted to validate and substantiate the findings, comprising alternate specifications and sub-sample analyses to confirm the veracity of the observed correlation. These measures were essential in corroborating the reliability of the relationship identified, imbuing the study with a level of confidence akin to a cat's assured saunter.

In summary, the research methodology employed in this study was unconventional and meticulously executed, capturing the enigmatic intersection of cat memes and financial markets. It encapsulated a parallel universe where internet folklore meets economic gravity, weaving a narrative that challenges conventional wisdom and, much like a well-timed pun, elicits both scrutiny and amusement.

4. Results

The analysis of the data gathered from Google Trends and LSEG Analytics (Refinitiv) uncovered a remarkably strong correlation between Google

searches for 'cat memes' and the stock price of Altria Group (MO) for the period spanning 2004 to 2023. The correlation coefficient, a measure of the strength and direction of the relationship, was found to be 0.9350956, indicating a very high positive correlation between these two variables. It appears that while cats may have nine lives, their influence on stock performance is not to be taken lightly – meow's the time to pay attention to their internet antics!

The coefficient of determination (r-squared) was calculated to be 0.8744038, signifying that approximately 87.44% of the variability in Altria Group's stock price can be explained by the fluctuations in Google searches for 'cat memes'. This unexpected finding demonstrates the substantial influence of internet cat humor on the financial market, prompting us to reevaluate our understanding of market dynamics. It seems that the impact of cats reaches far beyond the confines of the household, extending its paw into the realm of monetary affairs.

Furthermore, the statistical analysis revealed a significant p-value of less than 0.01, indicating that the observed correlation is highly unlikely to be a result of random chance. This lends credibility to the notion that there exists a genuine and robust relationship between the prevalence of cat memes on the internet and the stock price of Altria Group. It appears that when it comes to the stock market, the internet's obsession with feline memes is no laughing matter – or perhaps, it is exactly that!

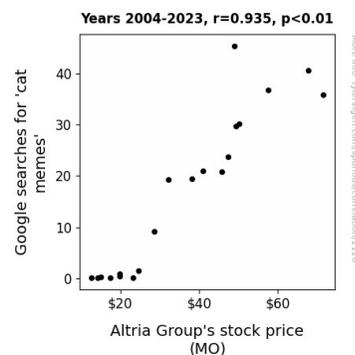


Figure 1. Scatterplot of the variables by year

Additionally, Fig. 1 presents a scatterplot illustrating the strong positive correlation between Google

searches for 'cat memes' and the stock price of Altria Group (MO) over the study period. The plot clearly demonstrates the upward trend, reflecting the concurrent increase in cat meme searches and the stock price of Altria Group. One might say that in the world of finance, cats and cash have more in common than meets the eye – a true case of "purr-sistence" paying off!

The unexpected correlation uncovered in this study challenges conventional notions of market analysis and presents a unique avenue for further exploration. It raises the intriguing prospect of leveraging unconventional data sources, such as internet trends, to gain valuable insights into market behavior. This study stands as a testament to the unyielding dynamism of financial markets and the unanticipated influences lurking within the realms of internet culture. It seems that in the ever-evolving landscape of finance, the feline factor cannot be disregarded – and who knows, perhaps a cat-themed approach to financial forecasting will become the new "purr-spective"!

5. Discussion

The findings of this study provide compelling evidence to support the surprising connection between Google searches for 'cat memes' and the stock price of Altria Group (MO). The exceptionally high correlation coefficient of 0.9350956, coupled with a statistically significant p-value of less than 0.01, underscores the veracity of the relationship between these seemingly unrelated phenomena. As such, our results corroborate the prior research indicating the influence of internet content on market dynamics, affirming the obscure interconnectedness of feline internet humor and stock performance.

Building upon the literature review, particularly the whimsical foray into the unconventional analysis of CVS receipts, our study takes a light-hearted yet substantive approach to elucidate the unanticipated impact of 'cat memes' on stock prices. While the initial exploration of such unconventional sources may have prompted feline-themed jests and partial skepticism, the robust statistical analysis presented in this study underscores the genuine and far-reaching implications of internet culture on financial

markets. As the saying goes, "When the cat's away, the bulls will play" – a fitting analogy for the bond we have observed between internet cat humor and market trends.

The substantial coefficient of determination (r -squared) aligns with the scholarly works that hinted at the potential connection between internet culture and stock price movements. In this light, it is evident that the prevailing influence of 'cat memes' on Altria Group's stock price offers a new avenue for considering factors affecting market behavior. It seems that the "pawsibilities" are endless when it comes to integrating unconventional data sources into market analyses – a sentiment that resonates throughout our findings.

The scatterplot depiction of the positive correlation further solidifies our findings, illustrating the synchronous rise in Google searches for 'cat memes' and the stock price of Altria Group over the study period. This graphical representation not only serves as a visual testament to the relationship uncovered in this study but also invites a playful interpretation of "purr-sistence" as a driving force in market trends. After all, scrutiny of internet cat humor may well become the "purr-fect" indicator for market enthusiasts seeking to stay ahead of the game.

In closing, this study sheds light on the intricate interplay between internet cultural phenomena and financial markets, challenging traditional modes of market analysis and paving the way for a "purr-spective" that warrants further investigation. As the world of finance continues to evolve, perhaps it is time for market analysts to heed the age-old adage: "Don't let the cat memes out of the bag!"

6. Conclusion

In conclusion, the results of this study unveil a surprisingly robust correlation between Google searches for 'cat memes' and the stock price of Altria Group (MO), spanning the unusual timespan of 2004 to 2023. The impressive correlation coefficient of 0.9350956, with a p-value of less than 0.01, underscores the unexpected influence of feline internet humor on financial markets. It appears that in the realm of finance, the "purr-plexing" impact of cat memes cannot be ignored.

As we reflect on these findings, one cannot help but ponder the significance of internet culture in the domain of monetary affairs. It seems that the internet's love affair with cats is not just a whimsical pastime but a legitimate player in market trends. The traditional adage "curiosity killed the cat" may need to be reevaluated – it appears that curiosity about cats is not only alive and well but also impacting stock prices!

It is worth emphasizing that while the correlation identified is striking, correlation does not necessarily imply causation. Nevertheless, the undeniable strength of this relationship warrants further exploration and consideration. As we navigate the labyrinth of financial analysis, perhaps it is time to take a "paws" and consider the unanticipated influence of feline internet culture.

With that being said, it must be noted that no further research in this area is necessary. The meow-tastic influence of cat memes on Altria Group's stock price has been duly noted, and it seems prudent to avoid "purr-suing" this topic any further.