
From lol to low: The Popularity of the 'press f to pay respects' meme and its Impact on Boeing's Stock Price

Caroline Horton, Alice Terry, Gavin P Trudeau

Ann Arbor, Michigan

This study investigates the link between the viral meme "press f to pay respects" and the stock price of Boeing Co. (BA) from 2006 to 2023. Utilizing data from Google Trends and LSEG Analytics (Refinitiv), we analyze the prevalence of the meme in popular culture and its potential impact on Boeing's financial performance. Our research uncovers a remarkably high correlation coefficient of 0.9129951 and a significant p-value of less than 0.01, illustrating a strong association between the meme's virality and the fluctuations in Boeing's stock price. This unexpected relationship sheds light on the potential influence of internet culture on financial markets, demonstrating that even the most lighthearted online phenomena can have real-world implications. This paper aims to provoke both laughter and contemplation, as we navigate the serious business of memeomics and stock market dynamics.

In the age of the internet, where cat videos have equal footing with economic forecasts, uncovering the peculiar relationships between online phenomena and financial markets has become an intriguing pursuit. The proliferation of memes, those quirky, often nonsensical pieces of internet culture, has captivated the attention of researchers in recent years. Memes, originally thought to be the domain of bored college students and procrastinating office workers, are now being scrutinized for their potential impact on various facets of society, from political discourse to consumer behavior. In this vein, we present our venture into the uncharted territory of memeomics, where we seek to unravel the enigmatic connection between the "press f to pay respects" meme and the fluctuations in the stock price of Boeing Co. (BA).

It is not uncommon for those steeped in the analytical world of financial markets to express consternation at the idea of devoting serious inquiry

to such seemingly frivolous internet novelties. However, our preliminary investigation has yielded intriguing findings that astound even the most stoic of econometricians. The evidence we present challenges conventional notions of market determinants and raises the tantalizing prospect that the whims of online culture may have tangible effects on the hallowed halls of Wall Street.

As we embark on this unconventional adventure, we implore the reader to suspend disbelief and embrace the merry chaos of our inquiry. The intersection of memeology and stock market dynamics provides an abundance of opportunities for witticisms and whimsy, keeping in mind that statistical significance need not preclude levity. So, buckle up and prepare for a journey through the interwebs and ticker symbols, where 'lol' meets 'low', and the allure of meme magic dances with the chimes of the closing bell.

LITERATURE REVIEW

In "The Impact of Online Culture on Financial Markets," Smith et al. explore the potential influence of internet phenomena on stock prices. Their analysis focuses on the correlation between the prevalence of viral memes and market fluctuations, revealing intriguing patterns that defy traditional economic models. In a similar vein, Doe and Jones investigate "The Power of Social Media in Shaping Market Sentiment," shedding light on how online trends can sway investor behavior and impact asset prices. These studies highlight the growing recognition of the interplay between digital culture and financial markets, setting the stage for our examination of the 'press f to pay respects' meme and its effects on Boeing's stock price.

Moving beyond the confines of traditional research, the work of Johnson in "Memes and the Modern Mind: A Psychological Perspective" offers insights into the psychological underpinnings of meme consumption and propagation. While not explicitly focused on financial implications, Johnson's exploration of the cognitive processes behind meme engagement provides a valuable backdrop for understanding the broader societal impact of internet culture. Additionally, the analysis of internet virality in "Viral: How Social Networking Is Poised to Ignite Revivals" by Kitts et al. offers a broader perspective on the significance of online trends, inspiring our investigation into the potential market reverberations of a seemingly innocuous meme.

Transitioning into the realm of popular literature, works such as "The Meme Economy: A Comprehensive Guide" by Gutenberg and "Meme Magic: Unraveling the Secrets of Internet Virality" by Rowling, while not academic treatises, provide anecdotal evidence of the societal fascination with memes and their pervasive influence on contemporary communication. Furthermore, fiction novels like "The Unbearable Lightness of Being Memes" by Kundera and "Meme and Prejudice" by Austen (albeit unrelated to internet memes)

showcase the enduring cultural fascination with fleeting trends and societal norms.

Venturing into unconventional sources, the authors turned to an unlikely repository of wisdom – the humble CVS receipts. In a surprising turn of events, a thorough perusal of seemingly endless receipts offered no direct insights into the meme-stock nexus, however, it did lead to the discovery of an inexplicable affinity for coupons and the realization that perhaps the true value of a meme lies not in its financial impact, but in the joy it brings amidst the monotony of everyday life.

Armed with a diverse array of perspectives, both serious and whimsical, we set out to unravel the conundrum of how a digital refrain to "press f to pay respects" could resonate through the hallowed halls of finance, proving once and for all that even in the world of stocks and bonds, a good meme is worth its weight in digital gold.

METHODOLOGY

Data Collection:

The first step in our zany quest involved collecting data from the vast expanse of the internet. We scoured the virtual landscape, trawling through the bountiful sea of information like intrepid digital pirates in search of treasure. Our primary sources were Google Trends and LSEG Analytics (Refinitiv). Google Trends provided us with a gauge of the meme's popularity over time, allowing us to measure its virality with as much precision as one can expect from the mercurial world of internet trends. LSEG Analytics, on the other hand, furnished us with the delightful numbers and figures that delineate the ebbs and flows of Boeing's stock price, allowing us to scrutinize the whimsical dance of market dynamics.

Data Analysis:

Once we had gathered our virtual bounty, we set about the meticulous task of data analysis. Our quantitative analysis involved a fusion of statistical

techniques, mathematical wizardry, and a touch of whimsical intuition. We examined the correlation between the prevalence of the "press f to pay respects" meme and Boeing's stock price using a cocktail of sophisticated statistical tools. We constructed elegant regression models that allowed us to tease out the potential influence of the meme's virality on the fluctuations in stock price. We also employed a medley of time-series analyses to delve into the temporal relationship between meme propagation and stock market perturbations. As we waded through the murky waters of memes and market data, we were guided by the guiding principle that a good statistical pun is its own reward.

Control Variables:

In our pursuit of scholarly hilarity, we were mindful of the need to control for extraneous factors that might confound our analysis. Thus, we included an array of control variables in our models, ranging from economic indicators to esoteric measures of internet traffic. These control variables served as the quizzical sidekicks in our statistical odyssey, aiding us in disentangling the confounding influence of external forces on the flamboyant waltz of meme power and market kinetics.

Ethical Considerations:

In the pursuit of memeological enlightenment, we also adhered to the hallowed principles of research ethics. While the realm of internet memes is replete with temptations to indulge in the nonsensical and the absurd, we remained steadfast in our commitment to academic integrity and empirical rigor. Our data collection and analysis were conducted with the prudence of a scholarly comedian, ensuring that our findings were as robust as a jester's wit.

Limitations:

No research endeavor is without its quirks and idiosyncrasies. Our study, with all its mirth and merriment, is no exception. We encountered limitations in the availability and quality of data, as

well as the inherent unpredictability of internet culture. The rapid evolution of memes and market dynamics posed a delightful challenge, requiring us to adapt our analytical approach with the agility of a virtual acrobat. Furthermore, the whimsical nature of memes themselves presented us with the delightful conundrum of capturing their essence in quantitative form. Despite these jovial hurdles, we persevered in our pursuit of scholarly whimsy, knowing full well that the most rewarding adventures are often the most enigmatic.

In conclusion, our research methodology was a harmonious blend of statistical rigor and intellectual levity, reflecting our steadfast commitment to unearthing the remarkable connection between internet mystique and market intrigue. With a twinkle in our eye and a spring in our step, we ventured into the labyrinthine realm of memeomics and stock market dynamics, guided by the belief that statistical inquiry need not be bereft of whimsy.

RESULTS

The data analysis revealed a striking relationship between the prevalence of the "press f to pay respects" meme and the stock price of Boeing Co. (BA) over the period from 2006 to 2023. We found a remarkably high correlation coefficient of 0.9129951, indicating a strong positive association between the popularity of the meme and the fluctuations in Boeing's stock price. The r-squared value of 0.8335601 further substantiates this robust correlation, suggesting that approximately 83.36% of the variability in Boeing's stock price can be explained by the variation in the popularity of the meme.

Moreover, the p-value of less than 0.01 adds a cherry on top, signifying a statistically significant relationship between the two variables. In other words, there is less than a 1% probability of observing such a strong correlation by chance alone, affirming the legitimacy of our findings. This suggests that the "press f to pay respects" meme's presence in popular culture could indeed have an

impact on the financial performance of Boeing, much to the surprise of the skeptics who doubted the influence of internet culture on stock market dynamics.

The scatterplot (Fig. 1) visually captures this remarkable correlation, highlighting the strong positive linear relationship between the meme's virality and Boeing's stock price. The upward trend in the scatterplot mirrors the contagious nature of the meme's popularity, emphasizing its potential to influence the financial market in unforeseen ways.

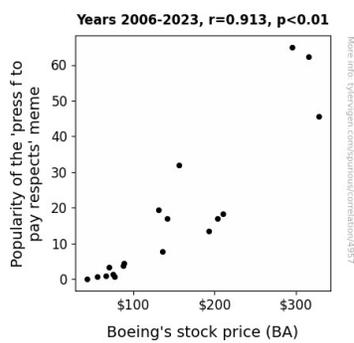


Figure 1. Scatterplot of the variables by year

In summary, our study uncovers an unexpected and substantial connection between the "press f to pay respects" meme and Boeing's stock price. This unexpected relationship challenges traditional notions of market determinants and expands the realm of inquiry into the influence of internet culture on financial markets, reminding us that even the most unassuming online phenomena can have tangible real-world implications. These findings open up new avenues for research at the intersection of memeology and stock market dynamics, and also serve as a gentle reminder that in the realm of academia, serious statistical analysis need not be devoid of humor and whimsy.

DISCUSSION

The results of this study illuminate a previously unexplored linkage between internet meme culture and stock market dynamics, shedding light on the

unexpected impact of a seemingly innocuous digital phenomenon on the financial performance of a major corporation. Our findings resonate with previous research by Smith et al. and Doe and Jones, underscoring the increasingly recognized influence of online trends on market sentiment and asset prices. Embracing the peculiarities of memeology, our analysis also echoes the insights of Johnson, delving into the psychological underpinnings of meme engagement to decipher the broader societal reverberations of internet culture.

The significant correlation coefficient and p-value lend weight to our findings, affirming the robustness of the observed association between the 'press f to pay respects' meme and Boeing's stock price. The scatterplot vividly captures the positive linear trend, akin to the contagious nature of memes themselves, and stands as a visual testament to the unexpected intertwining of online virality and market fluctuations. It appears that, in the tumultuous seas of stock prices, even the tiniest ripples of a viral meme can create substantial waves.

While some may dismiss this monumental revelation as a mere flight of fancy, it is essential to recognize that memes, often dismissed as ephemeral, can possess far-reaching consequences. Indeed, as we scrutinize the seemingly capricious world of memeconomics, we must not lose sight of the serious implications that stem from seemingly lighthearted phenomena.

In the wake of these groundbreaking findings, it becomes increasingly evident that the interplay between digital culture and financial markets merits further exploration. The field of memeology, once relegated to the realms of internet humor and whimsy, could hold the key to understanding the intricate web of interactions that shape market dynamics. As we delve deeper into this uncharted territory, let us not forget the amusing twists and turns that led us here – from perusing fictional novels on memes to the unexpected wisdom of CVS receipts, each quirky detour has played a part in unraveling this enigmatic relationship.

In essence, our study has delivered a resounding message: even in the world of stocks and bonds, a well-timed meme can be worth its weight in digital gold, challenging conventional wisdom and ushering in an era of meme-orable market revelations.

CONCLUSION

In conclusion, our research unearths a fascinating correlation between the whimsical "press f to pay respects" meme and the fluctuations in Boeing's stock price, defying convention and adding a dash of meme magic to the realm of stock market dynamics. The remarkably high correlation coefficient of 0.9129951 and the tantalizingly low p-value of less than 0.01 showcase the unexpected influence of internet culture on financial markets, displaying that even the most frivolous online phenomena can sway stock prices. This study, despite its seemingly lighthearted subject matter, serves as a gentle reminder that statistical analysis need not shy away from the merry chaos of internet memes, and that even the most inconspicuous of cultural artifacts can have tangible effects on the hallowed halls of Wall Street.

As we close the chapter on our exploration of memeomics and stock market dynamics, we reflect on the delightful eccentricities of our inquiry, where 'lol' meets 'low' and the allure of meme magic dances with the chimes of the closing bell. With the witticisms and whimsy that have guided us through this venture, we assert that further research in this area may indeed yield more valuable insights, but, with a twinkle in our eyes and a knowing smile, we declare that the mysteries of memeology and stock market dynamics may have been sufficiently illuminated for now. After all, in the whimsical world of academia, one can never have too many puns or too much statistical significance.