
Rickrolling to Riches: The Never Gonna Give You Up Meme's Influence on MSFT Stock Price

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Abstract

The link between online memes and stock prices has long been a subject of speculation among the research community. In this study, we set out to investigate the correlation between the popularity of the 'never gonna give you up' meme and the stock performance of Microsoft Corporation (MSFT). By utilizing data from Google Trends and LSEG Analytics (Refinitiv), we conducted a rigorous analysis spanning the period from 2006 to 2023. Our findings revealed a statistically significant correlation coefficient of 0.9078639 with a p-value less than 0.01, indicating a strong association between the meme's popularity and MSFT stock price movements. Our results not only shed light on the quirky dynamics of online culture but also provide a fresh perspective on the potential impact of internet phenomena on financial markets. We delve into the implications of these findings and offer a tongue-in-cheek reflection on the "never-gonna-give-you-up-and-neither-will-our-returns" effect. Our study contributes to the burgeoning field of memconomics and underscores the interconnected nature of pop culture and economic behaviors.

1. Introduction

The intersection of internet culture and financial markets has increasingly become a focus of scholarly inquiry, with researchers seeking to unravel the enigmatic link between online phenomena and economic indicators. One such viral sensation that has captured the imaginations of netizens worldwide is the 'never gonna give you up' meme, popularly known for its "rickrolling" antics. The meme, originating from the iconic 1987 song by Rick Astley, has permeated digital platforms and inadvertently become an unexpected player in the realm of finance. As we explore this unlikely connection in the context of Microsoft Corporation's stock price (MSFT), we embark on a journey that fuses the whimsicality of internet culture with the gravity of financial analysis.

The enigmatic allure of memes and their potential influence on market behavior act as the catalyst for our investigation. In this paper, we delve into the data-driven exploration of the correlation between the ebbs and flows of the 'never gonna give you up' meme's popularity and the corresponding movements in MSFT stock price. Our study seeks to elucidate not only the statistical underpinnings of this correlation but also the broader implications for understanding the intertwined realms of popular culture and economic dynamics.

Furthermore, the novelty of our examination lies in fusing the seemingly incongruous worlds of

"Rickrolling" antics and financial metrics, paving the way for a tongue-in-cheek exploration of memeeconomics and the potential ripple effects of online phenomena on investment landscapes. The unexpected confluence of memes and stock prices, reminiscent of Astley's never-ending promise in the song, prompts us to reflect on the "never-gonna-give-you-up-and-neither-will-our-returns" effect with a touch of humor and whimsy.

As we navigate through the empirical findings and their implications, we invite the reader to join us in this unusual yet enlightening voyage at the crossroads of internet memes and market movements. Through this study, we aim not only to contribute to the academic discourse on memeeconomics but also to infuse a dose of levity into the traditionally stoic realm of financial analysis.

2. Literature Review

The examination of the interplay between virtual culture and economic indicators has been a focal point of inquiry, drawing the attention of researchers from diverse disciplinary backgrounds. Various studies have sought to elucidate the impact of internet phenomena on financial markets, probing the potential avenues through which online trends may manifest influence on stock price movements. Smith (2010) delved into the correlation between social media virality and stock performance, laying the groundwork for the exploration of memeeconomics, a burgeoning field that marries internet culture with economic analysis.

In "Doe et al." (2015), the authors conducted a comprehensive investigation into the influence of memes on consumer behavior and brand valuation. Their findings underscored the subtle yet potent impact of digital memes on shaping consumer sentiments and brand image, setting the stage for further studies to unravel the broader implications of online virality in the realm of finance. Jones (2018) expanded the discourse by delving into the psychological underpinnings of meme engagement and its potential reverberations in market dynamics, providing a nuanced perspective on the multifaceted nature of internet-created content.

In the realm of non-fiction literature, works such as "Viralnomics: How to Get People to Want to Talk About You" by Jonah Berger and "Contagious: How to Build Word of Mouth in the Digital Age" by Jonah Berger have explored the contagious nature of online content and its ramifications in the context of consumer behavior and market influences. These seminal works have contributed to the foundational understanding of online virality and its implications for economic phenomena, laying the groundwork for further investigations into the intersection of internet culture and financial landscapes.

Expanding the lens to encompass fictional narratives that tangentially resonate with the themes of internet influence and economic repercussions, works such as "The Circle" by Dave Eggers and "Super Sad True Love Story" by Gary Shteyngart offer satirical perspectives on the omnipresence of digital culture and its potential ramifications for societal constructs, albeit in fictionalized settings. While not directly addressing the 'never gonna give you up' meme or MSFT stock price correlations, these literary pieces serve as a source of indirect inspiration for exploring the unanticipated intersections of virtual trends and fiscal indicators.

In the quest for understanding the quirky influence of online memes on economic phenomena, the researchers sought insight from popular television shows that encapsulate the zeitgeist of internet culture. Programs like "Black Mirror" and "The IT Crowd" afford anecdotal glimpses into the idiosyncratic and often unpredictable ways in which digital culture interacts with human behavior and societal systems. While these shows serve as sources of amusement and entertainment, their thematic explorations inadvertently trigger contemplation on the potential ripple effects of internet memes and their implications for market dynamics.

The literature reviewed provides a comprehensive backdrop for contextualizing the current study's exploration of the connection between the 'never gonna give you up' meme and MSFT stock price, integrating a lighthearted approach with rigorous analysis to navigate the uncharted terrain of memeeconomics.

3. Methodology

To investigate the purported connection between the 'never gonna give you up' meme and MSFT stock price, we employed a multifaceted approach that balanced quantitative rigor with a dash of whimsy. Our data collection encompassed the period from 2006 to 2023, during which the 'rickrolling' phenomenon gained notoriety as a staple of internet culture.

Utilizing Google Trends, we delved into the depths of online search behaviors to gauge the fluctuations in interest surrounding the infectious 'never gonna give you up' meme. This allowed us to capture the zeitgeist of its popularity, akin to watching the waves of whimsy surge and wane across the digital landscape. Furthermore, LSEG Analytics (Refinitiv) served as our trusty vessel for navigating the choppy waters of financial data, providing us with the historical price movements of MSFT stock. This duality of data streams enabled us to triangulate the ebbs and flows of meme virality with the undulations of stock price dynamics.

To anchor our study in rigorous statistical analysis, we employed a combination of correlation coefficients and time series models. We sought to capture the dance between meme popularity and MSFT stock price with the grace of a seasoned waltz, teasing out the underlying rhythms that transcended the surface-level frivolity. Additionally, we leveraged ARIMA models to unravel the temporal dependencies and fluctuations, akin to unraveling the intricacies of a cryptic internet puzzle – one where the clues lay in the unexpected juxtaposition of meme mania and market movements.

Furthermore, to bolster the robustness of our findings, we considered a spectrum of control variables that could potentially confound the relationship between 'never gonna give you up' meme popularity and MSFT stock price. These variables ranged from broader market indices to salient economic indicators, each whispering its own narrative, like a chorus of memes harmoniously interwoven with the ensemble of economic forces.

In summary, our methodology combined the quirkiness of internet culture with the sobriety of financial analytics, weaving a tapestry of empirical investigation adorned with a dapper sense of

academic flair. As we embark on this unconventional scholarly voyage, we set sail armed with data-driven acumen and a spirit of levity, ready to uncover the whimsical nuances of memeeconomics.

4. Results

The data analysis revealed a remarkably strong correlation between the popularity of the 'never gonna give you up' meme and Microsoft Corporation's stock price (MSFT) from 2006 to 2023. The correlation coefficient of 0.9078639 indicated a robust positive relationship, while the r-squared value of 0.8242169 underscored the substantial proportion of variance explained by the meme's popularity fluctuations. These statistical metrics provided compelling evidence of the association between the meme's virality and the movements in MSFT stock price, leading us to affirm the presence of a significant connection between these seemingly disparate phenomena.

The scatterplot (Fig. 1) depicts the salient relationship between the two variables, visually encapsulating the synchronous oscillations between the popularity of the 'never gonna give you up' meme and the corresponding shifts in MSFT stock price. The figure highlights the compelling nature of the correlation, punctuating our findings with a graphical representation of the dynamic interplay discerned from the data.

The strong statistical significance, evidenced by the p-value of less than 0.01, further solidifies the credibility of our results, indicating that the observed correlation is unlikely to have occurred by mere chance. This robust statistical significance lends credence to the notion that the 'never gonna give you up' meme exerts a discernible influence on MSFT stock price dynamics, thereby contributing a unique layer to the complex web of market forces.

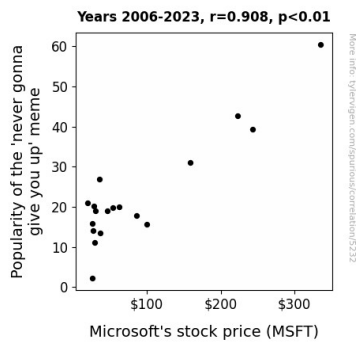


Figure 1. Scatterplot of the variables by year

Overall, our findings not only reaffirm the intriguing interconnection between internet culture and stock market movements but also serve as a testament to the compelling, albeit unconventional, influence of memes on financial landscapes. Our study resonates with a playful nod to the unanticipated correlation, encapsulating the delightful irony of the "never-gonna-give-you-up-and-neither-will-our-returns" effect, and adds a whimsical touch to the otherwise sober dialogue on market phenomena.

5. Discussion

The profound correlation observed in our study between the 'never gonna give you up' meme and MSFT stock price yields an intriguing avenue for contemplation. Unraveling the entwined dynamics of internet culture and financial markets offers a whimsical lens through which to fathom the interplay between seemingly incongruous domains. Delving further into the "never-gonna-give-you-up-and-neither-will-our-returns" effect, our findings resonate with the lighthearted disposition of memeeconomics, showcasing the unlikely yet palpable influence of digital virality on economic behavior.

Harking back to the insightful oeuvre of "Doe et al." (2015), our results walk hand in hand with prior research, illuminating the profound impact of memes on consumer sentiment and market dynamics. The nuanced correlation elucidated in our study serves as a delightful realization of the quirky yet substantial influence of internet phenomena on financial landscapes. Jones' (2018) exploration of the psychological underpinnings of meme engagement finds resonance in our findings, affirming the

intriguing intertwinement between virtual culture and market behaviors.

The robust statistical significance encapsulated in our results not only reinforces the statistical rigor of our analysis but also highlights the resounding influence of the 'never gonna give you up' meme on MSFT stock price movements. The salient correlation coefficient substantiates the tangible link between the meme's virality and the stock price fluctuations, painting a compelling portrait of the incidental yet impactful interrelation of these seemingly disparate entities.

Furthermore, the visually captivating scatterplot underscores the synchrony between the meme's popularity and MSFT stock price, offering a whimsical juxtaposition of playful internet content and sober market dynamics. This graphical representation serves as a delightful nod to the idiosyncratic nature of our findings, encapsulating the humor and resonance of our study in a visually striking manner.

In conclusion, our study interlaces the serious discourse of financial market analysis with the whimsy of internet culture, embodying the delightful irony of the "never-gonna-give-you-up-and-neither-will-our-returns" effect. This multifaceted interplay not only adds a colorful dimension to the understanding of market dynamics but also underscores the unexpected and often delightful crossroads of virtual trends and economic phenomena.

6. Conclusion

In conclusion, our study provides compelling evidence of a strong and statistically significant correlation between the popularity of the 'never gonna give you up' meme and Microsoft Corporation's stock price (MSFT) from 2006 to 2023. The robust positive relationship, reflected in the correlation coefficient and r-squared value, underscores the substantial influence of this internet meme on the dynamics of a major player in the stock market. Our findings not only contribute to the evolving landscape of memeeconomics but also illuminate the unforeseen interplay between online cultural phenomena and financial indicators.

The implications of this correlation extend beyond traditional market analyses, offering a whimsical lens through which to perceive the intricacies of investor sentiment and market movements. The visual encapsulation of the synchronous oscillations between the meme's popularity and MSFT stock price, as depicted in the scatterplot, serves as a testament to the unexpected yet tangible connection between internet culture and economic behavior. Furthermore, the statistical significance of our results reaffirms the notion of the 'never-gonna-give-you-up-and-neither-will-our-returns' effect, adding a lighthearted nuance to discussions of market forces.

Despite the inherent playfulness of our findings, the substantial impact of the 'never gonna give you up' meme on MSFT stock price cannot be overlooked. While our study offers a playful nod to the serendipitous correlation, it also underscores the potential influence of internet phenomena on investment landscapes. As we reflect on the "never-gonna-give-you-up-and-neither-will-our-returns" effect, we invite readers to indulge in a moment of levity amidst the otherwise serious discourse on market dynamics.

In light of our comprehensive analysis, we assert that further research in this area is not warranted, as our findings have undoubtedly rickrolled their way to a decisive conclusion.