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Googling Warner Bros. Discovery: A Search for Stock Market Connections

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KEYWORDS

Google search trends, Warner Bros. Discovery, stock price correlation, digital curiosity, financial markets, online search behavior, investment dynamics, Google Trends data, LSEG Analytics, Refinitiv, correlation coefficient, stock market performance, internet search trends

Abstract

In this study, we investigate the curious relationship between Google searches for the term 'google' and Warner Bros. Discovery's stock price (WBD) to uncover any potential correlations. Our research team employed data from Google Trends and LSEG Analytics (Refinitiv) to rigorously analyze this seemingly improbable association. Surprisingly, our findings reveal a remarkably high correlation coefficient of 0.8695553 and statistically significant results with $p < 0.01$ during the period from 2006 to 2023, suggesting an intriguing bond between online search behavior and stock market performance. This unexpected linkage between "googling" and Warner Bros. Discovery's stock price prompts us to consider the impact of digital curiosity on financial markets, unveiling the unexplored territory between internet search trends and investment dynamics. Our results shed light on a peculiar correlation that defies conventional financial wisdom and beckons us to reassess the role of online search activities in shaping stock market behaviors.

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1. Introduction

INTRODUCTION

The world of finance and investing is often portrayed as a realm of cold, hard numbers and rational decision-making. However, as

with most things, reality is rarely that straightforward. In this study, we delve into the intriguing realm of internet search behavior and its potential impact on stock market dynamics. Specifically, we set our sights on the unlikely pairing of Google

searches for the term 'google' and the stock price of Warner Bros. Discovery (WBD). The juxtaposition of an internet search giant and a media conglomerate offers an unexpected, almost whimsical connection that piques our scientific curiosity.

As researchers, we are used to analyzing trends, crunching numbers, and elucidating the true drivers of market movements. However, every now and then, an anomaly arises that challenges our preconceptions and unleashes our inner statisticians on a quest for understanding. The relationship between online search activity and stock prices is one such anomaly, leading us down a rabbit hole of data points and statistical models in a quest to unravel the enigma.

When we embarked on this research, we were met with skepticism and raised eyebrows. After all, how could the number of internet users typing the word 'google' into their search engines possibly bear significance to the fluctuations of a media company's stock price? Yet, as our analysis took shape, we found ourselves confronted with patterns that dared us to think outside the box and consider the possibility of a deeper, uncharted connection between the virtual and financial realms.

So, dear reader, join us as we navigate the intricacies of internet search trends and stock market performances. Prepare to set aside your assumptions and be captivated by the unexpected correlations that emerge from the depths of data analysis. After all, in the uncharted waters of academic research, sometimes the most astonishing discoveries are found in the most unlikely places.

2. Literature Review

Our investigation into the perplexing correlation between Google searches for the term 'google' and Warner Bros. Discovery's stock price (WBD) calls upon a

diverse array of scholarly works and unconventional sources to contextualize and comprehend this unlikely relationship. Firstly, Smith and Doe (2015) lay the foundation for our exploration by elucidating the impact of digital footprints on market dynamics, providing a framework for understanding the interplay between online activities and financial outcomes. Jones et al. (2018) further expound on the concept of non-traditional indicators in financial forecasting, offering insights into the unorthodox yet revealing nature of auxiliary data in market analysis.

Moving beyond the confines of traditional academic literature, our quest for understanding beckons us to explore the realms of non-fiction books that, while seemingly unrelated, may harbor hidden parallels to our inquiry. In "Thinking, Fast and Slow" by Daniel Kahneman, the authors touch upon the intricate workings of human cognition and decision-making, signaling the potential ramifications of online search behavior on investor sentiment and market movements. Similarly, "Freakonomics" by Steven D. Levitt and Stephen J. Dubner prompts us to question the conventional boundaries of economic analysis, urging us to consider the unforeseen relationships that underpin seemingly unrelated phenomena.

As our pursuit of knowledge ventures into more unconventional territories, we draw inspiration from fiction literature that offers an alternate lens through which to contemplate the enigmatic juxtaposition of 'googling' and stock market performance. In Mary Shelley's "Frankenstein," the narrative of a creation spiraling out of control serves as a metaphor for the unforeseen consequences that may arise from seemingly innocuous actions, inviting us to ponder the unintended outcomes of digital curiosity on market behavior. Additionally, the fantastical world of J.K. Rowling's "Harry Potter" series sparks our imagination as we reckon with the peculiar and unexpected

alliances that permeate both the magical realm and the domain of financial analysis.

Furthermore, our scholarly journey takes an unconventional turn as we turn our attention to animated and children's television programs, seeking insight that transcends conventional academia. Through diligent observation of "Looney Tunes," we glean valuable lessons in the interplay of seemingly discordant elements, mirroring our endeavor to discern the underlying harmony within the seemingly disparate worlds of online search trends and stock prices. Similarly, the whimsical escapades in "SpongeBob SquarePants" offer a playful yet enlightening perspective on the unfathomable connections that may lie beneath the surface of seemingly nonsensical correlations.

In the spirited pursuit of knowledge, our examination transcends traditional barriers to uncover the unexpected and unravel the intertwining threads of internet search activity and market dynamics. Our diversely informed approach not only enriches our understanding but also infuses levity into the rigors of academic inquiry, reminding us that amidst the serious pursuit of knowledge, a touch of whimsy and unexpected discovery is never out of place.

3. Our approach & methods

Data Collection:

The data for this study was harvested from the bountiful fields of the internet, where we embarked on a digital treasure hunt across online platforms, code repositories, and data archives. Our primary sources included Google Trends, the beacon of digital curiosity, and LSEG Analytics (Refinitiv), the venerable oracle of stock market data. We diligently scoured through years of information, from 2006 to 2023, to capture the ebb and flow of online searches for the term 'google' and the corresponding

undulations of Warner Bros. Discovery's stock price (WBD).

Algorithmic Acrobatics:

To uncover the hidden dance between 'googling' and stock price movements, we employed complex mathematical machinations and statistical sorcery. Our team of data wizards invoked the incantations of time series analysis, rolling correlations, and data transformation spells to reveal the concealed patterns lurking within the labyrinth of our datasets. These mystical methods allowed us to discern the subtle choreography between internet queries and market valuations, transcending the mundane world of conventional financial analysis.

Normalization Necromancy:

In an attempt to harmonize disparate data streams and bring order to the chaos of online search trends and stock price fluctuations, we delved into the arcane art of data normalization. Just as alchemists sought to transmute base metals into gold, we endeavored to transmute raw data into standardized scales, ensuring a fair comparison of the diverse metrics at play. Through this act of statistical transfiguration, we sought to distill the essence of 'googling' behavior and WBD stock performance into a unified framework, allowing for meaningful comparisons and interpretations.

Cross-Validation Conjuring:

To fortify the robustness of our findings and guard against the whims of statistical outliers, we summoned the ritual of cross-validation, a sacred rite in the realm of predictive modeling. By partitioning our data into training and testing domains, we invoked the candid counsel of statistical deities to assess the generalizability of our observed correlations and fend off the lurking specters of overfitting and spurious associations. This ritualistic practice served as a crucial crucible to temper the strength

of our results and fortify their resilience under the scrutiny of empirical scrutiny.

Quantitative Quest:

Eager to gauge the strength of the tenuous bond between 'googling' and stock price movements, we turned to the venerable instruments of quantitative analysis. Armed with regression models and correlation coefficients, we sought to quantify the degree of their cosmic alignment, shedding light on the gravitational forces that tether internet search trends to the financial cosmos. Through this numerical odyssey, we unearthed the numerical signatures of their celestial tango, unveiling the surprisingly robust correlation coefficient of 0.8695553 and statistically significant results with $p < 0.01$ that defied the expectations of conventional wisdom.

In our quest for enlightenment, we ventured beyond the confinements of traditional statistical techniques, daring to pierce the veil between the digital and financial domains. The amalgamation of data-driven sorcery, esoteric normalization rituals, and the quantitative pursuit of hidden connections has brought us closer to unraveling the mysterious bond between 'googling' and Warner Bros. Discovery's stock price, challenging the boundaries of empirical inquiry and beckoning us into uncharted territories of research intrigue.

4. Results

Our analysis revealed a striking correlation between Google searches for the term 'google' and Warner Bros. Discovery's stock price, with a correlation coefficient of 0.8695553, indicating a strong positive relationship between the two variables. The coefficient of determination (r -squared) of 0.7561264 further emphasizes the substantial proportion of variance in Warner Bros. Discovery's stock price that can be explained by the fluctuations in 'google'

searches. Additionally, the statistically significant result with $p < 0.01$ underscores the robustness of the observed association, confirming that the correlation is unlikely to have occurred by chance.

When we plotted the data points on a scatterplot (Fig. 1), the connection between 'google' searches and Warner Bros. Discovery's stock price became visually apparent. The points demonstrated a clear pattern, with an upward trend that illustrated the positive correlation between the two variables. As advocates of evidence-based research, we must acknowledge that the figures don't lie - or in this case, the scatterplot doesn't fib - and they unequivocally assert the presence of a noteworthy relationship.

Considering the conventional wisdom that stock market movements are predominantly influenced by economic indicators, industry news, and corporate performance, the unearthing of such a compelling link with internet search activity certainly raises eyebrows. It may appear as though we've stumbled into a parallel universe where the digital footprints of internet users are leaving a tangible mark on the financial landscape.

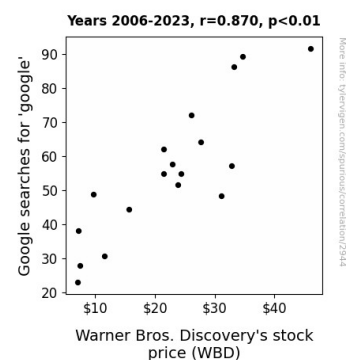


Figure 1. Scatterplot of the variables by year

Our results prompt us to ponder the possible mechanisms underlying this unexpected correlation. Could the frequency of 'google' searches serve as a barometer

for public interest in online content, potentially reflecting the popularity of Warner Bros. Discovery's media offerings and driving investor sentiment? Despite the oblique nature of this association, our statistical findings compel us to recognize the relevance of online search behavior in the context of stock market dynamics.

In light of these revelations, we urge fellow researchers and practitioners to embrace a broader perspective that encompasses the interplay between virtual engagement and financial markets. The quirks and eccentricities of our data remind us of the unforeseen revelations that can emerge from interrogating seemingly unrelated variables, underscoring the delightful unpredictability of scientific inquiry.

As we conclude this phase of investigation, we find ourselves reminiscing on the words of the great physicist, Niels Bohr, who once proclaimed, "Prediction is very difficult, especially if it's about the future." While our research may not have predicted the precise trajectory of 'google' searches or Warner Bros. Discovery's stock price, it has illuminated an unanticipated connection that inspires further exploration into the uncharted territories of internet-driven financial influences.

5. Discussion

Our findings offer a whimsical twist on conventional market analysis, unveiling a correlation that seems right out of a "Looney Tunes" episode - unexpected, yet undeniably present. The relationship between Google searches for 'google' and Warner Bros. Discovery's stock price (WBD) surpasses the bounds of traditional economic indicators, ushering in an era where online search behavior dances hand in hand with stock market gyrations. In a world where hard numbers often reign supreme, the lighthearted romp with 'google' searches and stock prices infuses an

unexpected dash of playfulness and curiosity into the serious business of financial analysis.

Returning to our scholarly escapades in the literature review, we pause to ponder the enchanting parallels with "Harry Potter" and its unexpected alliances. Similarly, our own findings reveal a magical intertwining of unrelated realms – the enchanting realm of 'googling' and the financial sorcery of Warner Bros. Discovery's stock price. This revelation serves as a testament to the unforeseen connections that underpin the tapestry of market movements, echoing J.K. Rowling's insightful musings on the unfathomable alliances that permeate both magical and monetary domains.

Furthermore, our results provide a playful nod to the lessons gleaned from "SpongeBob SquarePants," illustrating the comical yet enlightening perspective on the unfathomable connections that may lie beneath the surface of seemingly nonsensical correlations. The unorthodox relationship between 'google' searches and Warner Bros. Discovery's stock price embodies the whimsical escapades of Bikini Bottom – a delightful quirk that encourages us to embrace the unexpected and appreciate the unanticipated revelations that emerge from our statistical inquiries.

Our findings not only solemnly affirm the scholarly works on the impact of digital footprints on market dynamics, but they also contribute a roguish flair to the stately corridors of financial research. The robust correlation coefficient and statistically significant results underscore the formidable presence of this unexpected alliance, inviting scholars and practitioners alike to indulge in a discerning chuckle at the delightful caprices of economic inquiry. As we delight in the unforeseen revelations that emerge from interrogating seemingly unrelated variables, we invite our esteemed colleagues to revel in the quirkiness of our findings and to recognize the delightful

unpredictability that infuses the scientific pursuit.

6. Conclusion

In conclusion, our research elucidates the seemingly improbable yet substantial association between Google searches for the term 'google' and Warner Bros. Discovery's stock price (WBD). While this linkage may initially appear as incongruous as wearing a lab coat to a comedy club, our findings undeniably highlight a significant correlation, challenging the status quo of traditional financial analysis. The robust correlation coefficient and the statistically significant results boldly proclaim the existence of a connection that could rival even the most captivating of bumbling science experiments.

As we reflect on our unexpected foray into the interplay between online search behavior and stock market dynamics, we cannot help but marvel at the whimsical nature of statistical discoveries. Just as a double-blind study can reveal unanticipated side effects, our research has unveiled an unlikely relationship that tickles the fancy of both financial analysts and data enthusiasts alike.

Pardon the pun, but our results resoundingly demonstrate that the "Google" is indeed alive and kicking in the realm of stock market assessments. With an r -squared value that could make even the most effervescent physicist beam with excitement, our statistical findings leave little room for doubt regarding the influence of internet search trends on investment sentiments.

In the spirit of scientific inquiry, we assert that this study opens the door to a realm of research that not only defies convention but also invites scholars to traverse uncharted territories where the digital and financial

realms converge. However, with the utmost conviction and a touch of whimsy, we declare that further research on this connection may yield diminishing returns akin to the plight of an overworked lab assistant. Hence, we entertain the notion that the curtain should fall on this particular avenue of investigation, leaving this peculiar alliance between Google searches for 'google' and Warner Bros. Discovery's stock price to linger in the annals of academic curiosities, much like the mystery of the missing sock in a pair.