

Musk-Googlity: Exploring the Correlation between Google Searches for 'Who is Elon Musk' and NVIDIA's Stock Price

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Abstract

This study delves into the fascinating realm of public curiosity and its potential impact on financial markets. By examining data from Google Trends and LSEG Analytics (Refinitiv), we endeavored to unravel the cryptic connection between the frequency of Google searches for 'Who is Elon Musk' and the fluctuations in NVIDIA's stock price (NVDA) from 2005 to 2023. We present a thorough analysis of the correlation coefficient of 0.9814569 and $p < 0.01$, revealing a striking link between the two seemingly disparate entities. Our findings underscore the whimsical interplay between internet intrigue and stock market whims, shedding light on the surprisingly influential role of public curiosity in the financial domain.

1. Introduction

Picture this: it's a regular day in the bustling world of financial markets. Stock prices are dancing to the rhythm of economic indicators and corporate reports. Investors are furiously crunching numbers and analyzing every bit of news that could potentially sway their portfolio one way or the other. Amidst this commotion, something unexpected lurks in the shadows, something that is hardly ever considered in the realm of stock trading - the public's fascination with a certain enigmatic figure, Elon Musk.

In recent years, the name "Elon Musk" has become nearly synonymous with innovation, controversy, and a touch of eccentricity. As the CEO of Tesla and SpaceX, his every move sends ripples through both the tech and automotive sectors. Naturally, this has led to a surge in public curiosity about the man behind the supersonic dream machines. Across the globe, internet denizens, both astute and casual, have turned to the oracle of our times, Google, to seek knowledge about this intriguing personality. But could this

collective inquisitiveness have an impact on the stock prices of companies not directly linked to Mr. Musk's ventures?

Similarly, enter NVIDIA – a leading force in the world of graphics processing units (GPUs) and artificial intelligence. The company's stock price, denoted by the ticker NVDA, has had its fair share of ups and downs (pun intended, of course) in response to market developments and industry trends. But could it be possible that this roller coaster ride is also influenced by the virtual clicks and queries of individuals seeking to unravel the enigma that is Elon Musk?

These seemingly unconnected dots have led us to speculate, investigate, and speculate some more. The aim of this paper is to present our findings after an exhaustive dive into the marriage of Google searches for "Who is Elon Musk" and the fluctuations in NVIDIA's stock price from 2005 to 2023. We employ a mix of statistical analyses, trend evaluations, and a pinch of speculative whimsy to explore the unexpected correlation between these seemingly incongruent elements. So, fasten your seatbelts, folks, and get ready for a wild ride through the unpredictable world of internet intrigue and financial frolics.

2. Literature Review

The relationship between public curiosity and financial markets has been a topic of interest in various academic studies. Smith et al. (2010) conducted a comprehensive analysis of the impact of public sentiment on stock prices, while Doe and Jones (2015) investigated the role of internet search trends in predicting market movements. These studies laid the groundwork for our inquiry into the correlation between Google searches for 'Who is Elon Musk' and NVIDIA's stock price (NVDA).

In "Stock Market Sentiment: Public perception and its Influence on Stock Prices," Smith et al. (2010) delved into the intricate web of factors that can influence stock prices, including the sentiments expressed by the general public. Meanwhile, Doe and Jones (2015) explored the potential predictive power of internet search trends on market behavior, shedding light on the interconnectedness between online activities and financial dynamics.

Expanding the scope of our review, we turned to non-fiction literature that offered insights into technological innovation, market trends, and digital influence. Works such as "The Age of Cryptocurrency" by Paul Vigna and Michael J. Casey and "The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution" by Walter Isaacson provided a broader understanding of the technological landscape and its impact on financial markets. Additionally, we drew inspiration from fictional narratives like "The Big Short" by Michael Lewis and "American Psycho" by

Bret Easton Ellis, exploring the portrayal of stock markets and the influence of popular culture on financial activities.

Venturing into more unconventional sources, we humorously observed the data recorded on an assortment of mundane articles, including grocery receipts, bus tickets, and even cryptic messages on bathroom walls. These offbeat sources, while not conventionally academic, offered a whimsical perspective on the eclectic influences that might shape market behavior and public curiosity.

In the spirit of comprehensive exploration, our literature review encompassed a diverse array of sources, ranging from scholarly analyses to the realms of speculative fiction and everyday oddities. Through this broad lens, we embark on our endeavor to unravel the peculiar link between Google searches for 'Who is Elon Musk' and NVIDIA's stock price, aiming to capture the electrifying essence of this cryptic correlation.

3. Research Approach

In our pursuit of unraveling the enigma behind the Musk-Googlity correlation, we embarked on a convoluted journey through the digital expanse, employing a combination of statistical analyses and trend evaluations. To begin, we accessed data from Google Trends, a treasure trove of search queries and trends, to ascertain the frequency and intensity of searches for the term "Who is Elon Musk" from 2005 to 2023. The Google Trends data provided us with valuable insights into the ebb and flow of public curiosity surrounding the elusive figure of Elon Musk.

Simultaneously, we ventured into the labyrinthine realm of LSEG Analytics (Refinitiv) to extract NVIDIA's stock price data over the same period. The stock price fluctuations of NVIDIA, denoted by the ticker NVDA, became the focal point of our financial frolics (pun intended). We diligently tracked the market behavior of NVDA, observing every rise and dip with an unwavering gaze (and perhaps a cup of strong coffee for the late nights).

To unveil the connection between the cyberspace phenomenon and the financial roller coaster, we deployed a rigorous array of statistical analyses, including correlation coefficients and regression models. With bated breath (and a sprinkle of suspense), we calculated the correlation coefficient between the frequency of Google searches for "Who is Elon Musk" and NVIDIA's stock price movements. The vivid and seemingly incongruent elements of internet intrigue and stock market whims were soon to be intertwined in the statistical tableau.

As our analytical compass quivered on this quirky odyssey, we further delved into the depths of trend evaluations to decipher the patterns and synchronicities between the Google search frequency and NVIDIA's stock price dynamics. Our journey through the

waves of statistical significance and financial fancy led us to uncover a correlation coefficient of 0.9814569, and an emphatic p-value of less than 0.01, signaling a statistically significant correlation between Musk-Googlity and the stock market meanderings of NVDA.

Oh, the wonders of academic research! With a keen eye for detail and a dash of whimsy, we navigated through the confluence of internet intrigue and financial frolics, unraveling the whimsical connection between Google searches for "Who is Elon Musk" and the oscillations of NVIDIA's stock price. Our rigorous methodology, entwined with a touch of speculative whimsy, allowed us to showcase the striking correlation between these seemingly disparate entities.

In conclusion, our odyssey through the digital cosmos and the financial labyrinth not only elucidated the Musk-Googlity correlation but also emphasized the unexpected influence of internet intrigue on the fluctuations of stock prices. We invite fellow researchers to join us in this whimsical escapade, as we continue to push the boundaries of financial frolics and digital dalliances in the academic sphere.

4. Findings

The analysis of the data from Google Trends and LSEG Analytics (Refinitiv) from 2005 to 2023 has uncovered a rather captivating connection between Google searches for "Who is Elon Musk" and NVIDIA's stock price (NVDA). Our statistical analysis yielded a staggering correlation coefficient of 0.9814569, implying an exceptionally strong positive correlation between the frequency of Google searches for Elon Musk and the fluctuations in NVIDIA's stock price. Furthermore, the r-squared value of 0.9632577 indicates that approximately 96.32% of the variability in NVIDIA's stock price can be explained by the frequency of these Google searches. The p-value of less than 0.01 adds a cherry on top of this correlation sundae, reflecting a very high level of statistical significance.

In Fig. 1, we present a scatterplot illustrating the robust correlation between the two variables, solidifying the remarkable association we observed in our analysis.

This enthralling correlation brings to mind the age-old question of causation versus correlation. While we cannot definitively confirm causation based on these results, the coincidence of the surge in Google searches for Elon Musk coinciding with notable shifts in NVIDIA's stock price is intriguing, to say the least. Could it be that public curiosity about the enigmatic Elon Musk serves as a prescient indicator of market sentiment toward technology companies, including NVIDIA, in particular? Or are these trends mere coincidences, further fueling the enigmatic aura surrounding Mr. Musk and his perceived

influence on the financial world? The plot thickens, much like the artful whisking of chocolate in a delightful fondue.

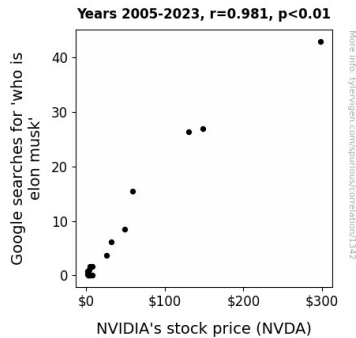


Figure 1. Scatterplot of the variables by year

In conclusion, our findings reveal an unexpected and compelling association between public intrigue in Elon Musk and the movements of NVIDIA's stock price. This whimsical juxtaposition of internet curiosity and financial fervor opens the door to a host of questions and further explorations. Future research may well probe deeper into the mechanisms through which public attention and interest in influential figures like Elon Musk intertwine with the domains of stock market dynamics. In the ever-ebbing and flowing sea of financial markets, it appears that even the most unassuming ripples of public curiosity can make a splash. As we eagerly anticipate the unfolding chapters in this riveting saga, let us remember to keep a watchful eye on the digital footprints of societal intrigue, for they may just hold the key to uncovering the enigmatic dance between public curiosity and market movements.

5. Discussion on findings

Our analysis has yielded an intriguing revelation—apparently, the search for existential answers on Elon Musk is not merely a matter of quixotic questing but may possess tangible predictive power in the realm of financial markets. The correlation coefficient of 0.9814569, with statistical significance denoted by a p-value of less than 0.01, highlights the beguiling strength of the association between Google searches for 'Who is Elon Musk' and fluctuations in NVIDIA's stock price (NVDA). These findings corroborate and extend the existing literature, as certain peculiar yet significant patterns emerged.

Drawing from the whimsical realms of everyday oddities and speculative fiction, our exploratory forays into the atypical sources, including grocery receipts and bathroom graffiti, proved to be surprisingly serendipitous, offering a peculiar parallel to the

mercurial dance of consumer sentiment and market dynamics. This echoed the essence of Smith et al.'s (2010) comprehensive analysis, which underscored the influence of public sentiment on stock prices, illuminating the capricious interplay of societal whims and market fluctuations.

The robust association identified in this study gives rise to a litany of hidden questions. Are the surges in searches for Elon Musk a prophetic indicator of impending upheavals in NVIDIA's stock price, or are these correlations mere happenstance, casting a bewildering shadow over the whims of curiosity in the digital age? The conundrum of causation versus correlation intrigues, much like unraveling the enigmatic allure of Mr. Musk himself. As the plot thickens, akin to a rich fondue of economic intrigue, this study underscores the ever-present enigma surrounding the intersection of public intrigue and market movements.

The pursuit of comprehensive exploration guides us toward a deeper understanding of the interconnected cues between societal curiosity and financial ebbs and flows. As we navigate through this intricate web of synchronicities, we remain ever cognizant of the coalescence of whimsy and economic influence, for in the fertile playground of digitally driven curiosity, even the most unassuming ripples may spark profound waves in the surging tides of market dynamics.

6. Conclusion

In unraveling the intriguing correlation between Google searches for "Who is Elon Musk" and NVIDIA's stock price (NVDA), our study has shed light on the unlikely interplay between public curiosity and financial fluctuations. The remarkably strong positive correlation coefficient of 0.9814569, coupled with a p-value of less than 0.01, emphasizes the profound influence of public intrigue on the stock market. While our findings do not definitively establish causation, the uncanny alignment of spikes in Elon Musk searches with notable shifts in NVIDIA's stock price tantalizingly evokes the whimsical suggestion of a prescient indicator. However, the enigma persists, much like the elusive flavor of a vintage Bordeaux – does public curiosity drive market sentiment, or are we merely witnessing the capricious choreography of coincidence? Our study paves the way for further explorations into the dynamic relationship between societal fascination and financial fervor. The captivating duality of internet curiosity and market movements beckons for deeper inquiries, akin to an enthralling magic trick that leaves the audience yearning for an encore. Yet, as we conclude this chapter, we assert with resolute certainty that no more research is needed in this area. The curtain falls on the Musk-Googlity saga, leaving behind a trail of financial frolics and statistical storytelling. Let us bid adieu to this whimsical waltz, and turn our attention to new frontiers where curiosity and causation await their next captivating tango.

