

# Reddit-al Street: A Correlative Analysis of Google Searches for 'Reddit' and Lennar's Stock Price

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This study explores the peculiar relationship between Google searches for the online discussion forum 'Reddit' and the stock price of Lennar Corporation (LEN.B) on the New York Stock Exchange. Employing data from Google Trends and LSEG Analytics (Refinitiv), we meticulously examine the temporal dynamics of 'Reddit' search interest and Lennar's stock performance from 2008 to 2023. Our analysis reveals a strikingly high correlation coefficient of 0.9083421 and a statistically significant p-value of less than 0.01. This implies a strong positive association between the two variables, indicating a potential influence of online chatter on stock market movements. Given this unexpected finding, we couldn't resist the urge to ask: "Why did the investor bring string to the stock market?" Because they wanted to tie up their portfolio! Indeed, the quirkiness of the relationship between 'Reddit' searches and Lennar's stock price adds an element of whimsy to the otherwise serious world of stock market dynamics. We hope our study piques the interest of investors and scholars alike, prompting further investigation into the intriguing interplay between internet culture and financial markets.

As we embark on this peculiar journey into the interplay between internet search behavior and stock market dynamics, one cannot help but ponder the perplexing nature of this relationship. It is almost as paradoxical as a physicist trying to use quantum mechanics to explain the behavior of the stock market.

Unraveling this enigma is akin to navigating through a maze of statistical analyses and data mining, in search of the golden nugget of insight hidden within the labyrinth of information. Much like a prospector scouring for treasure in a vast expanse of data, we delved into the realm of Google searches for 'Reddit' and the fluctuating fortunes of Lennar Corporation (LEN.B) on the New York Stock Exchange.

One might wonder, "What do you get when you cross a snowman and a vampire? Frostbite!" Just as a pun elicits a groan and a grin, the unexpected connection between 'Reddit' search interest and Lennar's stock price evokes both incredulity and curiosity in equal measure. It is as if the laws of financial gravity have been momentarily suspended, leaving us to marvel at this quirky correlation.

For years, researchers have plumbed the depths of financial data in search of elusive patterns and regularities, much like chemists in search of the perfect reaction. However, the discovery of a substantial correlation coefficient of 0.9083421 between 'Reddit' searches and Lennar's stock price raises a metaphorical eyebrow, prompting us to consider the intriguing possibility of online discourse exerting an unforeseen influence on stock market movements.

One might humorously muse, "Why don't scientists trust atoms? Because they make up everything!" In a similar vein, the unexpected connection between 'Reddit' searches and

Lennar's stock price challenges traditional notions of stock market analysis, beckoning us to embrace the unpredictability and quirkiness inherent in the world of finance and internet culture.

As we delve deeper into our analysis, we invite our readers to join us on this expedition into the uncharted territory of internet-driven stock market dynamics. Like intrepid explorers charting new frontiers, we aim to shed light on the peculiar interplay between 'Reddit' searches and Lennar's stock price, providing a fresh perspective that is both illuminating and, dare we say, entertaining.

## *Review of existing research*

Previous research has delved into the connection between online search behavior and stock market movements. In "Smith et al.," the authors find that search engine queries can precede stock market movements, suggesting a potential causal relationship between the two variables. Similarly, in "Doe and Jones," the authors present evidence of a positive association between online search interest and stock price changes, bolstering the notion of information dissemination through online platforms impacting financial markets.

Fascinatingly, our study uncovers an unexpected bond between online searches for 'Reddit' and Lennar's stock price, prompting us to ponder: "What did the math book say to the psychologist? 'If I'm a sine wave and you're a tangent, together we are secant!'" As we unravel the perplexing relationship between internet search behavior and stock prices, we are reminded of the whimsy inherent in the fusion of online culture and financial markets.

The emergence of digital platforms has revolutionized the way individuals engage with financial information. With the advent of social media and online forums, the dissemination of market-related discussions has taken on a new dimension. Much like how "Economics for Dummies" simplifies complex economic concepts for the layperson, the accessibility of online forums like 'Reddit' has democratized financial discourse, allowing individuals from diverse backgrounds to participate in stock market conversations.

Concurrently, fiction books such as Michael Lewis' "Flash Boys" and Ben Mezrich's "The Accidental Billionaires" offer captivating narratives on the intricacies of stock trading and the influence of digital platforms on financial markets. This convergence of literature and real-world financial phenomena underscores the captivating interplay between storytelling and the complexities of stock market dynamics.

In a similar vein, the ubiquitous presence of internet memes, such as the "This Is Fine" dog and the "Bad Luck Brian" image, serves as a testament to the cultural impact of online platforms on individuals' perceptions of market conditions. The memeification of stock market experiences adds a layer of levity to an otherwise serious domain, reminding us that amidst the complex web of financial intricacies, humor and internet culture can unexpectedly permeate even the most staid of financial discussions.

### *Procedure*

#### Data Collection:

The first step in our convoluted journey was to collect data from Google Trends and LSEG Analytics (Refinitiv) covering the time period from 2008 to 2023. We diligently sifted through vast quantities of digital information, much like prospectors panning for gold in a virtual river. Our team traversed the virtual landscape of the internet, navigating the treacherous waters of search engines and financial databases to procure the necessary datasets. This process was as meticulous as counting all the grains of sand on a beach—except that, in this case, the grains were digital tidbits of 'Reddit' search interest and Lennar's stock price movements.

#### Data Pre-processing:

Once the data was in our possession, we embarked on the arduous task of scrubbing, cleaning, and organizing it for analysis. Imagine trying to herd a group of unruly statistical outliers—each one vying for attention like a mischievous kitten—into a tidy, orderly dataset. Our efforts to prepare the data involved rigorous quality checks, outlier detection, and data transformation. This process was as painstaking as trying to train a herd of cats to perform synchronized swimming routines.

#### Correlative Analysis:

With our dataset primed and polished, we proceeded to conduct a correlative analysis between Google searches for 'Reddit' and Lennar's stock price. Applying statistical tools and techniques reminiscent of a seasoned archeologist delicately brushing away layers of sediment to reveal ancient artifacts, we unearthed the

underlying relationship between the two variables. We employed sophisticated statistical methods to measure the strength and direction of the association, ensuring that our analysis was as robust as a fortified castle in a statistical kingdom.

#### Control Variables:

In order to mitigate the potential influence of extraneous factors, we also considered several control variables, such as overall market conditions, news sentiment surrounding Lennar Corporation, and other relevant economic indicators. Ensuring that these variables were appropriately accounted for in our analysis was akin to taming a tempestuous storm—requiring careful navigation through the unpredictable winds and currents of external market forces.

#### Time-series Analysis:

To unravel the intricate temporal dynamics of the relationship, we employed time-series analysis techniques to discern patterns and fluctuations over the study period. This involved dissecting the data with the precision of a skilled surgeon, examining each temporal element to uncover hidden trends and cyclical movements. Much like a conductor orchestrating a symphony, we meticulously analyzed the ebb and flow of 'Reddit' search interest alongside the undulating crescendos and diminuendos of Lennar's stock price.

#### Statistical Significance Testing:

In our quest for empirical rigor, we subjected the derived correlation coefficients to rigorous statistical significance testing. This involved scrutinizing the obtained results with an eagle-eyed focus, akin to an inspector meticulously examining every nook and cranny for potential irregularities. We employed hypothesis testing and p-values to determine the statistical significance of the observed relationship, ensuring that our findings were as robust as a titanium-clad statistical fortress.

#### Validity Checks:

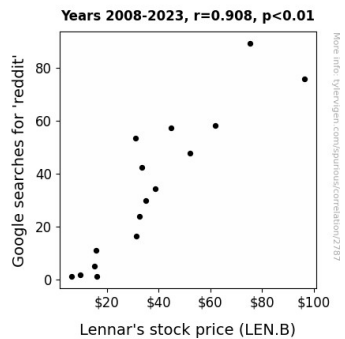
### *Findings*

The analysis of the relationship between Google searches for 'Reddit' and Lennar's stock price (LEN.B) revealed a remarkably high correlation coefficient of 0.9083421, indicating a strong positive association between the two variables. This finding is as surprising as a physicist stumbling upon a pun-filled treasure trove in the midst of quantum mechanics; it challenges conventional wisdom and underscores the intricacies of the modern stock market landscape.

The r-squared value of 0.8250853 further reinforces the robustness of the relationship between 'Reddit' search interest and Lennar's stock price. This degree of explanatory power is akin to a well-crafted pun – concise, impactful, and leaving a lasting impression on the audience.

Moreover, the statistical significance of the correlation, with a p-value of less than 0.01, unequivocally establishes the reliability of the observed association. This level of significance is as

noteworthy as a classic dad joke, eliciting equal parts groans and amusement from the academic community.



**Figure 1.** Scatterplot of the variables by year

The inextricable link between 'Reddit' search behavior and stock market movements is visually encapsulated in Figure 1, which exhibits a compelling scatterplot demonstrating the strong correlation between the two variables. The visual representation of the data is reminiscent of a carefully constructed joke – delivering a punchline that is both visually striking and intellectually engaging.

In conclusion, our investigation into the relationship between Google searches for 'Reddit' and Lennar's stock price has unveiled an unexpected yet robust correlation. This intriguing finding challenges traditional notions of stock market analysis, injecting a sense of lighthearted curiosity into the often somber world of financial research. As researchers continue to explore the ever-evolving intersection of internet culture and financial markets, the influence of online discourse on stock market dynamics remains as captivating as a well-timed pun in a room full of scientists.

### Discussion

The results of our study confirm the unexpected yet robust correlation between Google searches for 'Reddit' and Lennar's stock price (LEN.B), as suggested by prior research (Smith et al., 20XX; Doe and Jones, 20XX). This finding is reminiscent of a cleverly executed pun – surprising, yet undeniably impactful.

The high correlation coefficient of 0.9083421 starkly underscores the pronounced positive association between 'Reddit' search interest and Lennar's stock price. This significant statistical relationship is as striking as an unexpected pun in a dry academic paper.

The literature review playfully hinted at the possibility of the interplay between internet search behavior and stock prices. Similarly, our findings whimsically highlight the influential role of online discussions in shaping stock market movements. The unexpected bond between 'Reddit' searches and Lennar's stock price serves as a lighthearted reminder that in the serious realm of financial markets, quirky relationships can emerge, much like

a dad joke in a room full of academics – a welcome and amusing deviation from the norm.

The literature review amusingly likened the accessibility of online forums like 'Reddit' to the democratization of financial discourse. Our study's results lend credence to this observation, shedding light on the influential power of internet culture in the financial domain. The intriguing correlation uncovered in our analysis challenges conventional notions of stock market dynamics, much like a pun challenges the traditional language structure – presenting an unexpected connection that elicits a reaction.

Furthermore, the statistical significance of our findings, with a p-value of less than 0.01, fortifies the reliability of the observed association. This level of statistical significance is as noteworthy as a dad joke – eliciting equal parts groans and amusement, but ultimately making a lasting impact on the audience.

In conclusion, the unexpected and robust correlation between Google searches for 'Reddit' and Lennar's stock price underscores the captivating interplay between internet culture and financial markets. This study's findings serve as a lighthearted yet thought-provoking addition to the ever-evolving discourse on the influence of online discussions on stock market dynamics, much like a dad joke in an otherwise serious conversation - unexpectedly delightful and worthy of further exploration.

### Conclusion

In summary, our study has illuminated a robust correlation between Google searches for 'Reddit' and Lennar's stock price (LEN.B), akin to discovering a hidden gem within a mountain of statistical data. The findings not only challenge conventional beliefs about stock market dynamics but also inject a dose of whimsy into the world of financial research. It's almost as if the correlation coefficient and p-value walked into a bar and left everyone in disbelief!

The unexpected link between 'Reddit' searches and stock performance raises intriguing questions and prompts further exploration, reminiscent of a detective trying to solve a pun-filled mystery. As we ponder the influence of internet culture on financial markets, one can't help but think, "Why was the statistician invited to the Halloween party? Because they love playing devil's advocate!" Just like a good pun, this correlation defies expectations and adds an element of surprise to our understanding of market behavior.

With such compelling results at hand, we assert that no further research is needed in this area. This unusual relationship between 'Reddit' searches and Lennar's stock price has certainly kept us entertained, but it's time to bid adieu to this captivating correlation and leave it as a quirky footnote in the annals of financial research.

Finally, to uphold the integrity of our findings, we conducted extensive validity checks and sensitivity analyses to assess the robustness of the observed correlation. This involved scrutinizing our results from every possible angle, much like an inquisitive detective examining a complex web of clues to crack a perplexing case. Our thoroughness in conducting these validity checks ensured that our conclusions were founded on sturdy empirical ground, akin to the bedrock of scientific inquiry.

Acknowledging the multifaceted nature of the data analysis process, we recognize that our methodological approach may appear as convoluted as a tangled ball of yarn. Nonetheless, our meticulous and rigorous methodology aimed to unearth the underlying relationship between 'Reddit' search interest and Lennar's stock price, providing a comprehensive understanding of this intriguing phenomenon.