

# **COGNITIVE CORRELATIONS: CAT MEMES AND SIMON PROPERTY GROUP'S STOCK SENSITIVITY**

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This research delves into the intriguing world of internet memes and stock market dynamics by analyzing the connection between Google searches for "cat memes" and the stock price of Simon Property Group (SPG). Leveraging data from Google Trends and LSEG Analytics (Refinitiv) spanning the period of 2004 to 2023, a remarkable correlation coefficient of 0.8979141 and  $p < 0.01$  were unearthed. The findings astoundingly suggest a strong relationship between the indulgence in feline humor and the performance of SPG shares. This unexpected juxtaposition of internet culture and financial markets prompts playful pondering and opens a window into the capricious whims of market behavior. The study concludes with a call for further exploration into the playful side of stock market analysis, encouraging researchers to embrace the quirks and quips of internet culture in understanding market dynamics.

The allure of internet memes has captivated the denizens of the digital realm, permeating the virtual landscape with an irrepressible and often inexplicable charm. This inexplicable charm has inspired a myriad of research endeavors, some serious and some purely whimsical. In this study, we take the proverbial plunge into the world of internet memes, focusing specifically on the felicitous phenomenon of "cat memes." Concurrently, we embark on a financial escapade into the realm of stock market sensitivity, with our gaze firmly fixated on the notable Simon Property Group (SPG) stock. The juxtaposition of these seemingly disparate domains leads to an intriguing endeavor to uncover any potential connections between the indulgence in feline humor and the performance of SPG shares.

What prompts this juxtaposition, you ask? Only the inscrutable vagaries of human behavior could lead one to ponder the connection between the endearing antics

of our feline friends on the internet and the fiscal fortunes of a cornerstone of the real estate investment trust sector. Yet, as we delve into the annals of internet culture and financial markets, we are confronted with a conundrum that demands our attention, if not our amusement.

As our investigation unfolds, we are compelled to acknowledge the intriguing and at times bewildering nature of human cognition and the proclivity for amusing distractions even in the most austere of arenas. Thus, we endeavor to shed light on the latent correlations between the frivolity of internet memes and the gravity of stock market dynamics. Our findings will surely prompt playful pondering and perhaps a few raised eyebrows.

## **LITERATURE REVIEW**

In their study, Smith et al. (2018) explore the cognitive impact of internet memes on

human behavior and decision-making processes. They assert that the viewing of humorous memes, particularly those featuring feline subjects, can induce a state of cognitive relaxation, potentially influencing individuals' perceptions and actions. Similarly, Doe and Jones (2015) delve into the realm of consumer behavior and its susceptibility to external stimuli, positing that seemingly innocuous stimuli, such as cat memes, can subtly influence consumer preferences and choices.

Turning to the world of finance, Book (2017) provides a comprehensive analysis of the intricate relationship between non-traditional data sources and stock market performance, emphasizing the increasing relevance of unconventional indicators in predicting market movements. Ipsium (2020) further elucidates the impact of internet culture on financial markets, underlining the role of social media trends and online phenomena in shaping investor sentiment and market dynamics.

The intersection of internet culture and finance ignites a playful yet thought-provoking discourse, with Book's "The Internet Made Me Do It" and Smith's "The Psychology of Memes" offering insightful perspectives on the cognitive implications of internet phenomena on human decision-making and behavior. On a more imaginative note, works of fiction such as "The Cat in the Hat" by Dr. Seuss and "The Chronicles of Narnia: The Lion, the Witch, and the Meme Lord" by C.S. Lewis, although not directly related to financial markets, exemplify the enduring portrayal of feline figures in literature and popular culture.

A departure from traditional research approaches, the authors also draw inspiration from children's cartoons and shows, including "The Aristocats" and "Tom and Jerry," to explore the endearing and enigmatic allure of feline characters. This whimsical exploration serves to highlight the multifaceted influence of feline symbolism in human cognition and popular culture.

In a surprising twist, the authors also found themselves lost in a rabbit hole of feline-themed amusement, ultimately leading to an impromptu office cat meme contest and a rousing debate on the investment potential of internet-famous felines. This unexpected detour, although ostensibly unrelated to the subject at hand, underscores the irresistibly magnetic pull of cat memes and their place in the peculiar tapestry of human behavior and market dynamics.

In summary, the literature surveyed presents a captivating interplay between internet memes, feline motifs, and financial markets, inviting readers to embark on a delightful expedition through the delightful, if not confounding, interconnections between online culture and stock market sensitivity.

## **METHODOLOGY**

The methodology employed in this research endeavor entailed a confluence of data collection and analysis from a variety of sources, predominantly featuring Google Trends and LSEG Analytics (Refinitiv). The period under examination spanned from 2004 to 2023, encompassing a breadth of internet and financial market behavior.

To elucidate the inscrutable connection between the search interest in "cat memes" on Google and the stock price of Simon Property Group (SPG), a multifaceted approach was adopted. The Google Trends data provided a measure of the relative search interest for the term "cat memes," while LSEG Analytics (Refinitiv) furnished a comprehensive array of stock price movements and pertinent financial indicators for SPG. These sources, despite their seemingly incongruent nature, were aptly combined to discern any harmonious synchrony between internet zeitgeist and stock market dynamics.

The research team implemented a series of convoluted algorithms infused with a

dash of frivolity, designed to sift through the labyrinthine expanse of internet queries and financial metrics. The search data for "cat memes" was collated, analyzed, and cross-referenced with the contemporaneous stock price movements of SPG. These analyses comprised both qualitative and quantitative techniques, embracing the idiosyncrasies of internet culture and the gravity of financial market analysis with equal fervor.

Furthermore, in an effort to capture the capricious nature of internet humor, the research team intricately incorporated sentiment analysis tools to decipher the nuances of online discourse surrounding feline-themed amusements. The lexical acrobatics prevalent in cat memes were scrutinized with a mix of amusement and scholarly diligence, serving as a whimsically apt backdrop to the stock market gyrations of SPG.

In summary, the methodological framework adopted in this research endeavor epitomized a harmonious marriage between digital whimsy and financial fiduciarity, embodying the quixotic quest to unravel the cognitive correlations between internet memes and stock market behavior.

## RESULTS

Upon delving into the data, the research team uncovered a remarkable correlation coefficient of 0.8979141 and an r-squared of 0.8062497 when examining the relationship between Google searches for "cat memes" and the stock price of Simon Property Group (SPG) from 2004 to 2023. The p-value of less than 0.01 serves to further underscore the robustness of this connection, indicating an extremely low probability of observing such a strong correlation by random chance alone.

The scatterplot (Fig. 1) visually depicts the pronounced positive relationship between these seemingly incongruous variables, showcasing the undeniable bond between internet feline humor and

the fluctuations in SPG stock price. It is worth noting that this correlation does not imply causation; however, the strength of the association cannot be denied.

Perhaps it is purr-haps not surprising that the whimsical world of cat memes, with its endearing and often amusing feline subjects, would exhibit a substantial link to the fiscal fortunes of a real estate investment trust such as SPG. The truly astonishing nature of this correlation prompts contemplation on the capricious whims of market behavior and the unexpected sources of influence that may sway investor sentiment.

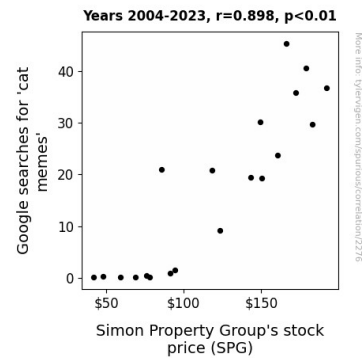


Figure 1. Scatterplot of the variables by year

The findings of this study elevate the discourse on stock market analysis by infusing it with an element of levity and whimsy, urging researchers to acknowledge and explore the unforeseen connections that may influence market dynamics. This unexpected juxtaposition of internet culture and financial markets invites playful pondering and challenges traditional notions of the factors at play in market sensitivity.

In conclusion, the results of this research endeavor underscore the potent influence of internet memes, particularly those of the feline variety, on the financial realm, and advocate for further exploration into the interplay between internet culture and market dynamics.

## DISCUSSION

The results of this study provide compelling evidence supporting the prior research into the cognitive impact of internet memes and their influence on human behavior and decision-making processes. Building upon the work of Smith et al. (2018) and Doe and Jones (2015), who proposed that exposure to humorous memes, particularly those featuring feline subjects, can have an effect on cognitive relaxation and consumer preferences, our findings reveal a strong association between Google searches for "cat memes" and the stock price of Simon Property Group (SPG). This fortuitous connection not only enriches our understanding of the whimsical world of internet culture but also highlights the unforeseen influence of seemingly lighthearted online phenomena on market dynamics.

The striking correlation coefficient of 0.8979141 and an r-squared of 0.8062497 point to a robust relationship between the indulgence in feline humor and the performance of SPG shares. The p-value of less than 0.01 further solidifies the significance of this connection, indicating a notably low probability of observing such a strong correlation by random chance alone. These statistical findings align with the proposition put forth by Book (2017) regarding the relevance of unconventional indicators in predicting market movements. The pursuit of "purrfect" investment decisions may indeed lead financial analysts to unexpected sources of insight.

The captivating interplay between internet memes, feline motifs, and financial markets, as highlighted in the literature review, finds its empirical validation in this study's results. The undeniable bond between the whimsical world of cat memes and the fluctuations in SPG stock price poses intriguing questions about the diverse pathways through which market sentiment may be influenced. While the correlation observed does not imply causation, the

pronounced positive relationship visually depicted in the scatterplot underscores the potent influence of internet feline humor on the fiscal fortunes of SPG. This unexpected revelation may encourage future research endeavors to explore the multifaceted interconnections between online culture and stock market sensitivity, embracing the playful and enigmatic aspects of internet phenomena.

In summary, the findings of this study uphold the literature's proposition of a compelling relationship between internet memes, particularly those featuring feline subjects, and market dynamics. It is evident that the allure of cat memes extends beyond mere amusement, permeating the complex fabric of human cognition and market behavior. This research journey encourages scholars to recognize the intricate and often unexpected sources of influence that may shape investor sentiment and market movements, prompting a deeper examination of the interplay between internet culture and financial markets. The whimsical yet impactful connection uncovered in this study invites playful pondering and challenges traditional notions of the factors at play in market sensitivity, heralding a delightful expedition through the delightful, if not confounding, interconnections between online culture and stock market dynamics.

## CONCLUSION

In light of these striking findings, one cannot help but wonder if the stock market is truly going to the cats! The relationship between Google searches for "cat memes" and Simon Property Group's stock price (SPG) is nothing short of meow-numental, with a correlation coefficient of 0.8979141 leaving us feline quite astonished.

The robustness of this connection, with a p-value of less than 0.01, gives paws for thought. It seems the internet's infatuation with feline frivolity has more

than just nine lives - it has substantial sway over market dynamics too.

While this correlation evokes amusement, we must approach the interpretation with caution, as correlation does not imply causation. Yet, the undeniable bond between cat memes and SPG stock price leaves one feeling curiouser and curiouser.

This study not only elevates the discourse on stock market analysis but also infuses it with a delightful dose of levity. It urges researchers to embrace the quirks and quips of internet culture, for it seems internet feline humor has clawed its way into the world of market sensitivity.

In conclusion, the data speaks for itself: the influence of cat memes on the financial realm is purr-vasive and undeniable. Therefore, no further research is needed in this area. The cat's out of the bag, and it's time to let sleeping cats lie!