Hair-Raising Connections: The Caroline Effect on Newmont's Stock Price

Chloe Hernandez, Amelia Tanner, George P Tillman

Center for the Advancement of Research

Discussion Paper 3645

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by a large language model. A revised version may be available directly from the artificial intelligence.

Discussion Paper 3645

January 2024

ABSTRACT

Hair-Raising Connections: The Caroline Effect on Newmont's Stock Price

This study delves into the rather hair-raising connection between the popularity of the first name Caroline and Newmont's stock price (NEM). Using a unique dataset from the US Social Security Administration and LSEG Analytics (Refinitiv), our research team uncovered a surprising correlation. Despite the seemingly unrelated realms of nomenclature and financial markets, the correlation coefficient of -0.8234396 and p < 0.01 from 2002 to 2022 leaves us pondering the Caroline conundrum. This hair-raising correlation prompts speculation on the far-reaching impact of names on the stock market, while also highlighting the excitement of uncovering unexpected connections.

Keywords:

Caroline popularity, stock price correlation, Newmont stock price, NEM stock price, US Social Security Administration dataset, LSEG Analytics, Refinitiv dataset, name impact on stock market, correlation coefficient, financial markets correlation, Caroline conundrum, nomenclature impact, unexpected connections in stock market

I. Introduction

The intersection of nomenclature and financial markets has long been a subject of interest and curiosity. While traditional economic theories tend to focus on more tangible factors such as supply, demand, and fiscal policies, our study aims to shed light on a rather unconventional factor - the popularity of the first name Caroline and its potential influence on Newmont's stock price (NEM). The notion of a possible link between a name and stock performance may initially seem as hairy as a statistical regression equation, but our findings suggest otherwise.

As researchers, we are no strangers to encountering surprising correlations that may leave us scratching our heads or even pulling our hair out, but the Caroline effect on Newmont's stock price takes the cake in terms of unexpectedness. The mere thought of a name like "Caroline" exerting any significant influence on a major corporation's stock price may elicit a wry smile or even a skeptical chuckle from seasoned economists and analysts. Yet, as we peeled back the layers of data and delved into the numerical intricacies, the correlation coefficient of -0.8234396 loomed before us, leaving us pondering the Caroline conundrum like a group of puzzled poodles.

The nature of our findings has prompted us to consider the possibilities with a mix of curiosity and amusement. Just like a mad scientist concocting a mysterious potion, we couldn't help but wonder if there might be a dose of hidden magic in a name like Caroline that could incite ripples in the stock market pond. After all, the world of finance is often steeped in unpredictability, and who's to say that the popularity of a particular name couldn't cast its spell on market movements? In this paper, we embark on a journey of exploration and inquiry, blending the seriousness of statistical analysis with a touch of whimsy as we unravel the Caroline effect and its influence on Newmont's stock price. As we embark on this hair-raising venture, we invite our readers to join us in marveling at the peculiarities of our findings, which may just leave you with a newfound appreciation for the quirky intricacies of stock market trends and the intriguing potential of seemingly unrelated variables.

II. Literature Review

The study of how nomenclature may impact financial markets has been a source of fascination for researchers for decades. Smith et al. (2010) examined the potential influence of given names on stock price movements, but their findings were inconclusive. Similarly, Doe and Jones (2015) explored the relationship between first names and financial performance, but the results yielded no significant correlations. However, a more unconventional study by Johnson (2018) delved into the impact of last names on market psychology, hinting at the complexities of the naming phenomenon within the financial realm.

Building upon the foundation laid by these studies, our research team has uncovered a rather unexpected but intriguing association between the popularity of the first name Caroline and the stock price of Newmont (NEM). While the exploration of this connection may seem akin to navigating through a dense thicket of data, the correlation coefficient of -0.8234396 and p < 0.01 derived from a dataset spanning from 2002 to 2022 provides compelling evidence of the Caroline effect on Newmont's stock performance.

Moreover, a tangential exploration into the sociology of names and their societal impact beckons our attention. In "The Power of Names" by Doe (2012), the author posits intriguing perspectives on the psychological resonance of names and their potential implications for various life domains. This framework of considering names as influential entities in human experiences serves as a thought-provoking backdrop to our examination of the Caroline effect on Newmont's stock price.

On a more lighthearted note, the fictional works "The Name Game: A Tale of Financial Intrigue" by Smith (2017) and "Caroline's Fortune: A Stock Market Saga" by Jones (2019) humorously speculate about the whimsical influence of names on financial adventures, offering an entertaining parallel to our own findings. Additionally, the fictional characters named Caroline in "Gone with the Wind" by Margaret Mitchell (1936) and "Caroline: Love and Stock Options" by John Green (2022) unwittingly throw themselves into the world of finance, hinting at a whimsical connection between the name and financial escapades.

Exploring tangentially related media, the movies "Moneyball" and "The Big Short" delve into the unpredictable nature of financial markets, reminding us of the boundless complexities that underlie stock price movements. While not directly addressing the specific connection between the name Caroline and Newmont's stock price, these films provide a entertaining lens through which to consider the unpredictability and intrigue of the stock market landscape.

In conclusion, as we navigate through the dense thicket of academic and literary sources, the intriguing correlations and whimsical speculations surrounding the Caroline effect on Newmont's stock price tantalize us with the endless possibilities of unconventional influences within the financial markets.

III. Methodology

As reading through the previous sections may have implied, our methodology for unraveling the link between the popularity of the first name Caroline and Newmont's stock price was as methodical as untangling a particularly knotted ball of yarn. Our data collection began with a deep dive into the US Social Security Administration's treasure trove of moniker-related statistics, where we procured the frequency of the name Caroline over the years 2002 to 2022. This in-depth exploration required us to navigate through a maze of data points, not unlike navigating through a complicated buffet menu, to ensure we left no byte behind.

Simultaneously, our research team tapped into the resources of LSEG Analytics (Refinitiv) to obtain the historical stock prices of Newmont (NEM) over the same time period. Much like prospectors searching for precious metals, we combed through the labyrinthian market data to unearth the daily stock prices, ensuring that we gathered a comprehensive account of the market's fluctuations. Handling this extensive dataset demanded meticulous scrutiny, reminding us of the delicate art of handling fine china as we sought to avoid any cracks or chips in our data analysis.

Once our data sets were secured, we turned to the formidable task of wrangling the numbers and subjecting them to rigorous statistical analysis. Our exploration resembled a mathematical safari, where we traversed through the wilderness of regression analysis, correlation calculations, and hypothesis testing. This endeavor, akin to untangling a Gordian knot, led us to the discovery of the conspicuous correlation coefficient of -0.8234396, much to our surprise and bemusement. Furthermore, we navigated through the statistical thickets to determine the significance level (p < 0.01) of this correlation, marking our journey with the same sense of determination as a cartographer mapping uncharted territories. Throughout this process, we implemented various

models and methodologies, ensuring that our findings were as sturdy as a well-constructed academic argument, and not as wobbly as a unicycle ridden by an amateur clown.

In our pursuit of understanding the Caroline effect on Newmont's stock price, we also meticulously controlled for potential confounding variables, confirming that our conclusions were not influenced by extraneous factors reminiscent of unsolicited guests crashing a meticulously planned soirée.

With our methodology paving the way for thorough and rigorous analysis, our unconventional findings have left us marveling at the unexpected connections that may lie dormant within the vast and often capricious domain of finance. The next section will unwrap the findings with the enthusiasm of a child unwrapping presents, and offer a deep dive into the significance of the Caroline effect on Newmont's stock price.

IV. Results

Our analysis revealed a striking correlation between the popularity of the first name Caroline and Newmont's stock price (NEM) from 2002 to 2022. The correlation coefficient of -0.8234396 suggests a strong inverse relationship between the two variables. The coefficient of determination (r-squared) of 0.6780527 indicates that approximately 68% of the variability in Newmont's stock price can be explained by the popularity of the name Caroline. Furthermore, the p-value of less than 0.01 provides strong evidence against the null hypothesis, supporting the significance of this hair-raising correlation. Figure 1 illustrates the scatterplot depicting the downward trend, akin to a rollercoaster ride, showcasing the negative relationship between the occurrences of the name Caroline and Newmont's stock price. This visual representation further emphasizes the robustness of our findings and the compelling nature of this unexpected connection.

It is worth noting that while the statistical analysis points to a significant association, identifying the exact mechanisms underlying this correlation remains a mystery, much like deciphering an enigmatic crossword puzzle. This intriguing relationship prompts us to consider the broader implications of seemingly unrelated variables on financial markets, leaving us with a sense of bewilderment akin to stumbling upon a hidden treasure map in a statistical jungle.



Figure 1. Scatterplot of the variables by year

In summary, our investigation into the Caroline effect on Newmont's stock price has unearthed a remarkable correlation, challenging conventional wisdom and prompting contemplation on the intriguing interplay between nomenclature and financial markets. The hair-raising nature of this discovery sparks curiosity and invites further inquiry into the whimsical world of unexpected connections and their potential impact on stock market dynamics.

V. Discussion

Our findings intriguingly support and amplify the quirky speculations put forth in the literature review. The hair-raising correlation coefficient of -0.8234396 between the popularity of the first name Caroline and Newmont's stock price (NEM) from 2002 to 2022 echoes the enigmatic puzzle that the naming phenomenon seems to present. It appears that the Caroline conundrum has not only piqued our interest but has left us pondering whether there are deeper, unforeseen machinations underlying the financial markets.

As we navigate through this statistical jungle, the robust correlation coefficient stands as sturdy as the trunk of a sequoia tree, contributing to the compelling evidence of the Caroline effect on Newmont's stock performance. The figure 1 scatterplot is akin to the rollercoaster ride of the stock market, illustrating the downward trend with the grace of a synchronized swimmer navigating the ebbs and flows of financial dynamics. The r-squared value of 0.6780527 provides a cozy blanket of explanation, indicating that approximately 68% of the variations in Newmont's stock price can be attributed to the occurrences of the name Caroline.

While our findings seem to corroborate the previously inconclusive literature on the potentially whimsical impact of names on financial markets, it is important to approach these results with the curious bewilderment of a detective investigating a peculiar case. This hair-raising correlation prompts us to consider the broader implications of seemingly unrelated variables within the wild world of stock market dynamics. Much like stumbling upon a treasure map in an unexpected place, our discovery leaves us with a sense of thrill and an insatiable curiosity to further explore the whimsical world of unconventional influences.

It is clear that the influence of names on financial markets is not just a flight of fancy or a tall tale spun from the whimsical minds of imaginative researchers. Our investigation presents a compelling storyline, bringing to light the intriguing interplay between the seemingly disparate realms of nomenclature and financial markets. The seemingly unrelated crossroads of Caroline and Newmont's stock price have converged, illustrating the unexpected connections that can be uncovered within the financial landscape.

As we bask in the glow of this discovery, we are reminded of the boundless complexities that underlie stock price movements, much like the plucky adventurers boldly traversing through dense and sometimes confounding terrain in pursuit of hidden treasures. Our journey into the Caroline effect on Newmont's stock price has left us with a sense of exhilaration, enticing us to further unravel the wondrous mysteries that lie beneath the surface of financial markets.

VI. Conclusion

In conclusion, our research has undoubtedly opened Pandora's box in the realm of unexpected correlations. The Caroline effect on Newmont's stock price has not only piqued our curiosity but also raised questions about the peculiar influence of nomenclature on financial markets. As we ponder the implications of our findings, it's hard not to chuckle at the notion that a name like Caroline could hold such sway over stock prices. It seems that in the world of statistics, sometimes truth is indeed stranger than fiction.

While we may be tempted to dive deeper into unraveling the mysteries of name popularity and stock performance, we must resist the siren call of endless speculation. As with any intriguing

discovery, there is a temptation to embark on a never-ending quest for answers, akin to chasing a statistical white rabbit down a rabbit hole. However, as researchers, we must exercise caution and resist the urge to tumble down the rabbit hole of endless statistical analysis.

Therefore, we are compelled to assert that no further research is needed in this particular area. Our findings have unraveled the Caroline conundrum and laid bare the offbeat connections between names and stock prices. Let us leave this hair-raising adventure behind, with a knowing smile and a wistful glance back at the quirky world of statistical surprises. After all, as researchers, we must know when to let the curiosity cat nap and move on to the next statistical puzzle.