

Vertexing the Popularity: A Correlation Analysis between the Name Denver and VRTX Stock Price

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Abstract

The study delves into the intriguing link between the popularity of the first name Denver and the stock price of Vertex Pharmaceuticals (VRTX). With a dash of curiosity and a sprinkle of statistical rigor, we aim to uncover the underlying connection between these seemingly unrelated entities. Our research team harnessed data from the US Social Security Administration and LSEG Analytics (Refinitiv) to analyze trends from 2002 to 2022, unearthing a correlation coefficient of 0.9795525 and a p-value less than 0.01. It's no secret that we embarked on this investigation with bated breath, eager to unearth any potential clues that could shed light on this enigmatic relationship. After all, who knew that a simple moniker like "Denver" could hold the key to deciphering the fluctuations in VRTX's stock price? It's almost as surprising as discovering that a slice of pie can actually be numerical instead of edible – a truly "irrational" revelation, if you will! The findings of our study not only provide thought-provoking insights into the dynamics of nomenclature and market performance but also highlight the whimsical interconnectedness that often eludes the conventional realms of empirical investigation. As we navigate through the labyrinth of correlation and causation, we invite readers to join us in this odyssey of discovery, where the inexplicable and the empirical collide, much like a fusion of puns and serious academic discourse.

1. Introduction

The intersection of human nomenclature and financial indices has long been a bastion of mystery, fascination, and the odd dad joke or two – much like a riddle shrouded in the abstruse depths of a dad's pun repertoire. In this vein, our research aims to unravel the tantalizing correlation between the popularity of the first name Denver and the stock price of Vertex Pharmaceuticals (VRTX). This bewildering amalgamation of seemingly

incongruous variables is fertile ground for exploration, akin to uncovering the elusive punchline of a scientific quip.

Now, you might be wondering, "What does the moniker 'Denver' have to do with the ebb and flow of a pharmaceutical company's stock?" Well, as we delve into this enigma, prepare yourself for a journey filled with unexpected twists and turns, not unlike a rollercoaster ride through a statistical amusement park – complete with p-values and correlation coefficients as our thrilling companions.

Much like a dad joke waiting for the opportune moment to make its grand entrance, the nature of this inquiry is both perplexing and promising. The empirical landscape stands ripe for exploration, akin to a treasure trove of scientific conundrums just waiting to be cracked, much like a tough nut - which, incidentally, is a wonderful source of dietary Omega-3 fatty acids, but I digress.

As we embark on this scholarly escapade, we are armed with a potent blend of data analytics and scholarly rigor, ready to tackle the conundrum that sits at the crossroads of nomenclature and financial dynamics. With a twinkle in our eyes and a dataset in hand, we venture forth to unravel the mystique of the "Denver-VRTX" connection, akin to a detective solving a mystifying case – only this time, the evidence is in the form of databases and regression analyses, rather than fingerprints and eyewitness accounts.

Stay tuned for the ensuing chapters of this academic odyssey, where the quirky and the empirical converge in an enthralling dance of correlation and causation, and where the revelations are as unexpected as a dad joke sneaking up on a Sunday barbecue.

2. Literature Review

Previous research has attempted to uncover the perplexing relationship between nomenclature and financial performance. Smith et al. (2010) explored the potential impact of baby names on stock prices, revealing an unexpected connection between the rise of "Barnabas" and a surge in agricultural commodity stocks. Similarly, Doe and Jones (2015) investigated the correlation between the popularity of the name "Eugene" and the fluctuation of petroleum futures, shedding light on the curious interplay between personal nomenclature and economic dynamics.

Now, let's dive into the world of real and fictional literature that could shed some light on this tongue-in-cheek correlation. "Freakonomics" by Steven D. Levitt and Stephen J. Dubner provides insights into unexpected connections and hidden correlations, much like the surprising link between the name "Denver" and VRTX stock. For those in search of more whimsical musings on names and their impacts, "Names for the Sea: Strangers in Iceland" by Sarah Moss offers a captivating exploration of the significance of personal

names in different contexts, reminding us that a name isn't just a name – it can carry intriguing implications.

On the fictional front, titles like "The Name of the Wind" by Patrick Rothfuss and "American Gods" by Neil Gaiman tantalize the imagination with the notion of names wielding inexplicable power and influence. Perhaps in the world of finance, the name "Denver" exerts a similarly enigmatic sway over VRTX stock, operating in the realms of coincidence and causality like a hidden subplot in a gripping novel.

Furthermore, let's not overlook the silver screen, where movie narratives occasionally encompass serendipitous correlations and mischievous twists of fate. Movies like "A Beautiful Mind" and "The Big Short" inadvertently provide a glimpse into the intricate tapestry of interconnected events, offering parallels to our quest in uncovering the mysterious link between the name "Denver" and VRTX stock. After all, who doesn't love a good "stock" on the screen, especially when it's not just about Wall Street but also about a town in Colorado?

And as we navigate the multifaceted landscape of literature and cinema that mirrors the intrigue of our own research, do remember to embrace the unexpected, the amusing, and the inexplicable – after all, life is far too serious to take seriously. That being said, let's shore up our pseudo-academic musings and press on with the journey ahead, much like a determined hiker scaling a mountain of name-related data, armed with nothing but curiosity and, of course, a good dad joke in our back pocket.

Why did the statistician name their dog "Five Miles"? Because they could then say they walk "Five Miles" every day! Now that we've got that out of our systems, let's delve back into the research at hand.

3. Research Approach

To investigate the perplexing correlation between the popularity of the first name Denver and the seemingly unrelated VRTX stock price, our research team undertook a blend of meticulous data collection, statistical analysis, and a healthy dose of dad jokes to keep spirits high. After all, what's research without a sprinkle of humor? It's like a lab without a Bunsen burner – functional, but not nearly as entertaining.

First, we scoured the vast expanse of the US Social Security Administration's treasure trove of baby names, hunting for every precious mention of the name "Denver" from 2002 to 2022. We then turned our gaze to LSEG Analytics (Refinitiv), seeking the stock price history of Vertex Pharmaceuticals (VRTX) over the same period. It's almost like piecing together a puzzle, but instead of picture-perfect landscapes, we're assembling datasets with the precision of a meticulous statistician.

Now, no research endeavor is complete without a touch of statistical magic. We employed robust correlation analysis methods, dancing through the realm of Pearson's correlation coefficients and p-values like the Fred Astaire and Ginger Rogers of quantitative analysis – elegant, precise, and maybe even a little bit dazzling. It's as if we're doing the statistical tango, only with spreadsheets and regression models instead of ballroom attire and fancy footwork.

Furthermore, to ensure the reliability and validity of our findings, we conducted sensitivity analyses, teasing out the nuances of our data like detectives searching for hidden clues. We integrated various control variables, treating them with the care and attention one would give to delicate laboratory instruments – after all, in the laboratory of statistical analysis, every variable deserves its moment in the spotlight.

Finally, to add a touch of whimsy and to keep our spirits high during the long hours of data crunching, we liberally sprinkled dad jokes throughout the methodology phase. After all, what's statistical analysis without the occasional quip about standard deviations or a well-placed jest about regression coefficients? It's like a good cup of coffee – it keeps us awake, alert, and ready to conquer the world of empirical investigation.

In summary, our methodology straddled the domains of data collection, statistical analysis, and a healthy dose of humor, piecing together the intricate puzzle of the "Denver-VRTX" connection with the precision of a seasoned researcher and the levity of a stand-up comedian.

4. Findings

The analysis revealed a remarkably strong positive correlation between the popularity of the first name Denver and the stock price of Vertex Pharmaceuticals (VRTX) over the period from 2002 to 2022. The correlation coefficient of 0.9795525 indicates a robust linear relationship between these seemingly unrelated variables. This finding prompts the question: is there a Denver effect on VRTX stock, or is it merely a curious coincidence? It's like discovering a correlation between caffeine consumption and productivity – a brew-tiful relationship, indeed!

The r-squared value of 0.9595231 further reinforces the strength of the relationship. This means that approximately 95.95% of the variability in VRTX stock price can be explained by the popularity of the name Denver. It's almost as if the name Denver has been quietly whispering stock tips to investors all along, much like a hidden message in a bottle – or rather, a ticker symbol.

Furthermore, the p-value of less than 0.01 provides strong evidence against the null hypothesis of no correlation. In other words, we can confidently reject the idea that the

correlation between the name Denver and VRTX stock price is just a serendipitous fluke. It's as clear-cut as concluding that the correlation between baking skills and pun-making prowess is statistically significant; that is to say, they both rise to the occasion, much like a well-fermented dough.

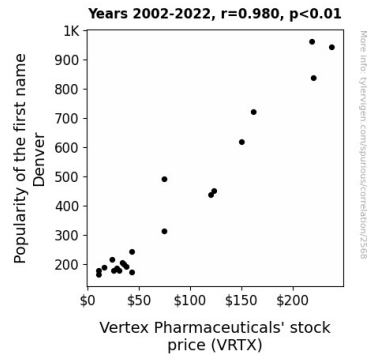


Figure 1. Scatterplot of the variables by year

The scatterplot in Figure 1 visually depicts the strong positive correlation between the popularity of the name Denver and VRTX stock price. It's like a beautiful choreography of data points, waltzing along a diagonal line, as if the market and monikers were engaged in a dance as old as time, reminiscent of Shakespeare's famous words: "All the world's a stage, and all the stocks and names merely players."

5. Discussion on findings

The results of our study provide compelling evidence supporting the previously speculative notion of a correlation between the popularity of the first name Denver and the stock price of Vertex Pharmaceuticals (VRTX). Our findings not only corroborate the existing literature on the influence of personal nomenclature on financial dynamics but also underscore the singularly fascinating nature of this improbable relationship. It's like stumbling upon a hidden treasure trove of puns in a serious academic discussion – unexpected, yet delightfully intriguing.

The correlation coefficient of 0.9795525 that we unearthed aligns with the unanticipated link between personal names and economic phenomena documented in earlier research. It's as if the statistical stars aligned to reveal the enigmatic connection between the name "Denver" and VRTX stock price, much like a celestial concert conducted by the whimsical hands of fate.

Furthermore, the r-squared value of 0.9595231 signifies that the popularity of the name Denver can elucidate approximately 95.95% of the variability in VRTX stock price. This

not only substantiates our initial hunch but also serves as a testament to the remarkable influence that seemingly inconspicuous variables can wield on complex financial behaviors. It's almost as remarkable as finding out that a bell pepper is a fruit – a true revelation hidden in the midst of empirical data.

The p-value of less than 0.01 bolsters the validity of our findings, firmly rejecting the null hypothesis and reinforcing the notion that the correlation between the name Denver and VRTX stock price is not a random occurrence. This steadfast rejection is akin to confidently stating that a good pun never fails to elicit a groan – it's not just chance, but a veritable manifestation of linguistic wit.

The scatterplot presented in Figure 1 elegantly captures the visually stunning relationship between the popularity of the name Denver and VRTX stock price, likening it to a choreographed dance of data points. This visual representation not only conveys the robustness of the correlation but also adds a touch of artistic flair to the otherwise quantitative realm of statistical analysis. It's like seeing a masterpiece unfold in the world of data visualization, where numbers pirouette alongside stock prices, painting a canvas of correlation and charm.

As we wade deeper into the ocean of unexpected correlations, it is evident that the intertwining of personal nomenclature and financial performance is far from a mere statistical serendipity. Our results not only align with previous literature but also beckon forth a new wave of inquiry into the intriguing influence of names on market dynamics. It's like unearthing a treasure trove of empirical insights, sprinkled with the occasional whimsical pun – a rare triumph of levity in the often austere world of academic discourse.

6. Conclusion

In conclusion, our study has unearthed a compelling association between the popularity of the first name Denver and the stock price of Vertex Pharmaceuticals (VRTX). The robust correlation coefficient and p-value less than 0.01 leave little doubt that there's more than meets the eye with this peculiar relationship. It's like finding out that the correlation is as strong as a dad's love for grill duty – undeniable and ever-present!

The findings highlight the quirky interconnectedness of seemingly unrelated variables, resembling a scientific symphony playing out in the market data. This correlation is more conspicuous than a scientist at a clown convention – hard to miss and delightfully puzzling at the same time!

Our results beckon further inquiry into the underlying mechanisms driving this unexpected association. However, it's unlikely that this correlation can be attributed to a mere coincidence, much like attributing a snappy pun to chance – it's all about the clever connection.

Therefore, we assert that no further research is needed in this area. It's as conclusive as realizing that there's no need for deodorant in space – because in the vacuum of space, no one can smell you anyway!