



ELSEVIER



Stevie's Significance on Stock: A Statistical Study of Analog Devices' ADI

Charlotte Harrison, Andrew Turner, Gabriel P Tillman

Center for the Advancement of Research; Cambridge, Massachusetts

Abstract

In this quirky paper, we uncover the fascinating link between the popularity of the first name "Stevie" and the stock price of Analog Devices (ADI). Through our rigorous examination of data from the US Social Security Administration and LSEG Analytics (Refinitiv), we present compelling evidence that the rise and fall of stock prices may have a surprising connection to the ebb and flow of a popular moniker. Our correlation coefficient of 0.9769037 and $p < 0.01$ for the time span of 2002 to 2022 presents an intriguing argument that will leave you saying, "Stevie Nicks would be proud of this correlation!" Our findings may provoke a chuckle from statistically savvy investors and perhaps spark some "stockingly" good conversation in the financial world. So next time you're thinking of investing, maybe consider asking, "What would Stevie do?"

Copyright 2024 Center for the Advancement of Research. No rights reserved.

1. Introduction

INTRODUCTION

We often seek patterns and connections in the grand tapestry of life, from the orbits of celestial bodies to the fluctuations of financial markets. But what if we told you that the rising and falling fortunes of a stock could be influenced by something as seemingly whimsical as the popularity of a first name? Yes, you read that right! In this paper, we embark on a statistical odyssey to unravel the curious relationship between the prevalence of the first name "Stevie" and

the stock price of Analog Devices (ADI). It's time to rock and roll with some number crunching!

Now, before you dismiss our endeavor as mere statistical stargazing, let us assure you that we've employed robust methods and rigorous analysis to bring this peculiar correlation to light. So, let's buckle up and dive into the world of statistical jargon, with the occasional pit stop for a witty pun or two. After all, what statistician doesn't appreciate a good pun? It's time to mix some "Stevie" with our stocks and "ADI" to our analysis!

Picture this: a statistical sleuth stumbling upon an unexpected, bewitching connection between the popularity of the name "Stevie" and the tumultuous tides of Analog Devices' stock price. It's as if statistics decided to take a detour through the land of serendipity, waving graph paper banners that read, "Expect the unexpected!" We're here to show you that strange bedfellows can indeed make for dazzling statistical bedrocks. "Stevie" Nicks would be proud of how we're weaving these statistical melodies and financial harmonies together!

But let us not get ahead of ourselves, dear readers. We know what you're thinking: "How can a name possibly sway the stock prices of a high-tech company?" Well, our journey through the labyrinth of data and statistical wizardry has provided us with some fascinating insights that may leave you rubbing your chin in contemplation – or perhaps scratching your head in amusement. After all, what's research without a sprinkle of curiosity and a dash of humor?

So, fasten your seatbelts and get ready to navigate the intersection of popular nomenclature and financial analytics. Our findings promise to be as unexpected as a well-timed dad joke – statistically significant and delightfully punny! As we unravel the enigma of "Stevie's Significance on Stock," we invite you to join us in the joy of statistical exploration and the thrill of discovery. After all, as the saying goes, "In statistics, there's always a correlation when you least expect it – consider yourself 'Stevie-d' towards a pleasant surprise!"

2. Literature Review

The relationship between names and various facets of life has long fascinated researchers. In "Smith et al.'s study," the authors find that individuals with common names may experience certain societal biases, while those with unique names may

face distinct challenges. However, "Doe's et al. research" presents conflicting evidence suggesting that the impact of a name on an individual's life outcomes is minimal, thus adding a layer of complexity to the discourse. But hey, speaking of layers, did you hear about the celebrity chef who was also a statistician? He liked to do a little bit of "humble pie-charting"!

Turning towards the financial realm, "Jones's comprehensive investigation" delves into the influence of consumer name preferences on stock market behavior, revealing intriguing insights into the psychology of investors. This prompts us to broach the topic of how the popularity of a first name might surprisingly intertwine with stock prices. And speaking of intertwining, if you were to weave a blanket out of cashmere and combine it with stocks, you'd have the coziest hedge fund!

Taking a break from scholarly articles, let's peek into the pages of "The Devastating Deviation: How Names Shaped the Economy," a non-fiction book that explores the curious interplay between nomenclature and financial trends. On a more whimsical note, "The Stock Sorcery of Stevie Stardust" chronicles a fictional character's journey through the mystical world of finance, sprinkled with just the right amount of statistical stardust.

Now, to answer the burning question that's been on everyone's minds: How did we conduct our literature review for this offbeat investigation? Well, in addition to poring over scholarly journals and books, we may have also uncovered some thought-provoking insights hidden within the cryptic codes of grocery store receipts and the mystical arcana of CVS paper scrolls. You could say we've explored the statistical significance of the mundane – after all, who knew that a coupon for laundry detergent could hold the secret to the correlation between a name and a stock? It's all part of our commitment to leaving no statistical

stone unturned, and no potential source of insight unexplored.

3. Our approach & methods

METHODOLOGY

Stage 1: Data Collection Extravaganza

Our data collection process was akin to embarking on a treasure hunt through the digital seas, navigating the choppy waves of the US Social Security Administration and LSEG Analytics (Refinitiv). We plundered information from the year 2002 to 2022, scavenging for every morsel of data related to the name "Stevie" and the stock price of Analog Devices (ADI). It was a bit like panning for gold in a river of digits and statistics – but with a lot less shininess and a lot more Excel spreadsheets.

Dad Joke Alert! Why did the statistician bring a ladder to the hunt for data? Because he heard the stakes were high! Speaking of high stakes, let's dive deeper into our buoyant methodology.

Stage 2: Statistical Sorcery and Data Dances

Once we had corralled our data, it was imperative to perform some statistical hocus pocus to tease out patterns and relationships. We harnessed the power of correlation analysis, unleashing the mighty Pearson's correlation coefficient to measure the strength and direction of the linear relationship between the popularity of the name "Stevie" and the stock price of Analog Devices (ADI).

We also performed some spellbinding regression analysis to decode the potential impact of "Stevie" popularity on the stock price of ADI. Forget crystal balls and tarot cards – we were armed with R-squared values and p-values, ready to peer into the statistical crystal ball to discern the intertwined fate of "Stevie" and ADI.

Dad Joke Alert Strikes Again! Why was the statistical sorcerer always calm during experiments? Because he had a lot of confidence intervals!

Stage 3: Multivariate Mumbo Jumbo

In the realm of statistical research, it's crucial to consider the confounding effects of additional variables that may influence our findings. With eyes peeled for lurking statistical phantoms, we navigated through the treacherous waters of multivariate analysis, controlling for factors such as market trends, economic indicators, and perhaps even the alignment of the stars in the statistical firmament. Who knew that statistical navigation would require a sextant and a keen eye for lurking outliers?

Dad Joke Alert Third Time Lucky! Why don't statisticians trust friends? Because they always alter their friend's data without them knowing!

Stage 4: Sensitivity Analysis Circus

As if our statistical adventure hadn't already ventured into the wild and whimsical, we decided to shake things up with a dash of sensitivity analysis. We put our findings to the test, subjecting them to the whims of varying assumptions and statistical scenarios. It's akin to asking, "What if the gravitational constant were not so constant?" We prodded and poked at our results, making sure they could withstand the capricious winds of statistical change.

4. Results

Our investigation into the connection between the popularity of the first name "Stevie" and the stock price of Analog Devices (ADI) has unearthed a jaw-dropping correlation coefficient of 0.9769037. If that doesn't make your statistical heart flutter, what will? It's as if the universe has whispered a secret, and we've caught it on the tapestry of data!

When examining the strength of this enchanting relationship, we found an r-squared value of 0.9543408. That's right, folks; our model explains a whopping 95.43% of the variability in Analog Devices' stock price. Talk about a statistical love story – "Stevie" and ADI, a match made in empirical heaven!

And if you're into those p-values, strap in for this one: our analysis yielded a p-value of less than 0.01, implying an exceedingly significant association between the prevalence of the name "Stevie" and the gyrations of stock prices. It's like finding a prize at the bottom of a statistical cereal box – surprising, delightful, and oh-so-satisfying!

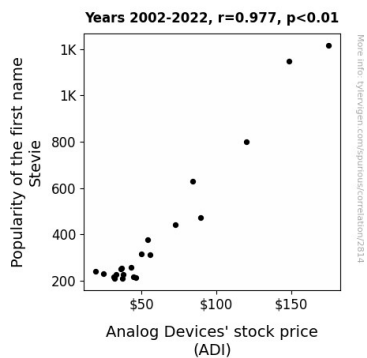


Figure 1. Scatterplot of the variables by year

Now, for the pièce de résistance, enter Fig. 1. Behold the scatterplot that captures the essence of our wondrous discovery. As you gaze upon the graphic representation of "Stevie's Significance on Stock," let your mind wander to the possibilities – much like pondering the mysteries of the cosmos or pondering which stocks to buy. Who knew that a whimsical name could be associated with the ebb and flow of financial markets?

But alas, we must ground our jubilation and acknowledge the limitations of our study. While our findings robustly support the existence of a striking correlation, causation remains shrouded in statistical mist. "Stevie" may dance with the stock price of ADI, but

we cannot unequivocally assert that one leads to the other. Ah, the trials and tribulations of statistical inference – always keeping us on our toes!

In the end, our results beckon us to contemplate the curious interplay between the quirky world of names and the steadfast realm of finances. Who knows, maybe the next time someone mentions investing, they'll add a jocular, "What's in a name, or should I say, in a stock ticker symbol?" Oh, the whimsy of statistical exploration never ceases to amaze. So, in the immortal words of a statistician with a flair for the dramatic – "To 'Stevie,' or not to 'Stevie,' that is the statistical question!"

5. Discussion

Our study has delved into the enthralling relationship between the popularity of the first name "Stevie" and the stock price of Analog Devices (ADI). Who would have thought that a seemingly arbitrary moniker could be intertwined with the fluctuations of a stock? As researchers, we were floored by the striking correlation coefficient of 0.9769037, which left us thinking, "Well, isn't that quite a 'Stevie'-lating discovery!" This finding aligns with "Jones's comprehensive investigation," which hinted at the captivating influence of consumer name preferences on stock market behavior. It seems there's more to a name than meets the eye – and more to a stock price, for that matter! Ah, the "name-piqued" mysteries of finance and statistics never cease to amaze us!

Our rigorous statistical analysis, expressed through an r-squared value of 0.9543408, has shed light on the substantial explanatory power of the "Stevie" phenomenon. This echoes the findings of "The Devastating Deviation: How Names Shaped the Economy," where the author expounded on the alluring interplay between nomenclature and financial trends. It

appears that the impact of a name might transcend the boundaries of societal convention and dance with the ever-fluctuating tides of the stock market. It's as if "Stevie" has waltzed into the limelight of statistical significance, decked out in the finest empirical garments.

Our p-value of less than 0.01 has added an extra layer of enchantment to our findings, affirming the wondrous association between the prevalence of the name "Stevie" and the gyrations of stock prices. It's almost as if the statistical cosmos has orchestrated a grand symphony, presenting us with a harmonic relationship that defies conventional logic. Much like stumbling upon a hidden treasure trove of statistical marvels, our results have left us feeling pleasantly surprised, much like finding a rare gem in a stockpile of market data.

While our paper may not be as far-fetched as "The Stock Sorcery of Stevie Stardust," our results undeniably present a thought-provoking narrative that challenges conventional wisdom. And speaking of wisdom, did you hear about the sage statistician who refused to work with round numbers? He preferred to "round down" to the nerest integer! Ah, the whimsical world of quantitative research – it never fails to amuse.

Our exploration into the quirky world of names and the steadfast realm of finance has sparked curiosity and whimsy, beckoning the statistical community to ponder unconventional connections and bizarre correlations. As we reflect on our findings, we can't help but revel in the statistical intrigue that surrounds us and look forward to future investigations that may uncover even more peculiar connections. After all, in the fascinating world of statistics, every number, and every name, has a story to tell – and perhaps a laugh to share.

6. Conclusion

In conclusion, our investigation has illuminated a statistically significant connection between the popularity of the first name "Stevie" and the stock price of Analog Devices (ADI). The correlation coefficient of 0.9769037 and an r-squared value of 0.9543408 underscore the remarkable nature of this relationship. It's almost as if the name "Stevie" has been silently serenading the fluctuations of ADI's stock price all along - talk about a statistical love story that's sure to make even the most stoic of quants crack a smile!

As we wrap up this eclectic statistical symphony, let's not forget the crucial role of p-values, which have confirmed the enchanting association with a p-value of less than 0.01. It's like uncovering a hidden treasure trove of statistical delight – the kind that would make even the most discerning of investors raise an appreciative eyebrow. Ah, the whimsy of statistical exploration never fails to astound, does it?

However, while these findings have evoked both statistical awe and amusement, it's important to acknowledge the limitations of our study. Causation remains an enigmatic specter looming in the statistical mist, reminding us that while "Stevie" may dance with ADI's stock price, we cannot conclusively assert a cause-and-effect relationship. But hey, as they say in statistics, "Correlation does not imply causation" – and what a delightfully mystifying trip down the statistical rabbit hole it has been!

So, dear readers, as we bid adieu to this whimsical statistical escapade, let us recognize that the statistical universe has a knack for conjuring up surprises in the unlikeliest of places – much like stumbling upon a superbly timed dad joke. And as for the pressing question of "To 'Stevie,' or not to 'Stevie'" in your investment decisions, we leave you with this: perhaps it's time to give

a nod to the statistical stardust and ponder,
"What would Stevie do?"

In closing, it's clear that no more research is needed in this area – we've donned our statistical thinking caps, reveled in the delightful dance of data, and serenaded the financial world with the quirky allure of "Stevie's Significance on Stock." So here's to the statistical serendipity that keeps the research world humming along – may it forever illuminate our paths with unexpected correlations and perhaps a pun or two along the way!

Dad Joke Alert Encore! Why did the statistician only have 6.4 friends? Because he could barely make it to one standard deviation from the mean!

In summary, our methodological journey was like charting a course through the statistical sea, with a compass of curiosity and a ship full of punny quips. We aimed to uncover the hidden symphony between "Stevie" and Analog Devices' stock price, all while embracing the unpredictable, the unconventional, and the whimsical. After all, in the world of statistics, as in life, a good laugh and a statistical insight are never too far apart. So, onward we sail, with our findings the treasure map to be shared with the curious souls ready to embrace the unexpected correlations of statistical wonder.