

# THE ADELINE FAD AND TCOM'S PAD: A STATISTICAL ANALYSIS

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This paper presents a statistical analysis of the relationship between the popularity of the first name Adeline and the stock price of Trip.com Group (TCOM) over the period of 2004 to 2022. Utilizing data from the US Social Security Administration and LSEG Analytics (Refinitiv), we sought to address the pressing question of whether there is a discernible link between the rise in the popularity of the name Adeline and the performance of TCOM in the stock market. Our findings reveal a remarkably high correlation coefficient of 0.9314429 and a significant p-value of less than 0.01, indicating a strong association. Thus, our results suggest that the popularity of the name Adeline may have an uncanny influence on the fluctuations of TCOM's stock price. The implications of these findings not only provide a quirky insight into the interconnectedness of seemingly unrelated phenomena but also open the door to an array of whimsical naming strategies for potential stock market gains.

The intersection of finance and frivolity has long been a subject of intrigue. While financial markets are typically associated with sober analysis and serious projections, it seems that the universe may have a sense of humor when it comes to influencing stock prices. In this study, we set out to investigate a rather unconventional question: Could the popularity of a first name have an impact on the stock price of a company? More specifically, we have chosen to explore the curious case of the first name Adeline and its potential influence on the stock price of Trip.com Group (TCOM).

The name Adeline, historically associated with grace and nobility, has experienced a resurgence in popularity in recent years. This phenomenon, often referred to as the "Adeline fad," piqued our interest and led us to ponder whether there might be a connection between the social allure of this moniker and the financial fortunes of TCOM.

Trip.com Group, a leading online travel agency, operates in a market that is often subject to the whims of consumer sentiment and societal trends. It is in this context that we embark on our statistical odyssey to determine if the meteoric rise of the name Adeline coincides with the trajectory of TCOM's stock price.

Our investigation spans nearly two decades, from 2004 to 2022, allowing us to capture the ebbs and flows of both the name Adeline and TCOM's stock performance. By harnessing data from the US Social Security Administration and LSEG Analytics (Refinitiv), we aim to shed light on what might initially seem like an incongruous pairing: a popular name and a stock price.

As we delve into this unorthodox inquiry, we remain cognizant of the need for rigorous statistical analysis and prudent interpretation of our findings. While we approach this study with a lighthearted curiosity, we remain anchored in the

principles of empirical inquiry and robust methodology. The possibility of uncovering a substantial relationship between the popularity of a name and a company's stock price not only lends itself to spirited speculation but also underscores the whimsical nature of statistical exploration in the world of finance.

In the sections that follow, we will present our methodology, analyze the data, and expound upon our findings. The culmination of this venture may not only yield unexpected insights into market dynamics but also offer a dose of levity amidst the formidable realm of financial analysis. So, without further ado, let us embark on this unconventional journey through the entwined realms of nomenclature and numeric nuance.

## LITERATURE REVIEW

In "The Psychology of Popularity," Smith provides an in-depth analysis of the underlying factors contributing to the rise and fall of popular trends. Doe, in "Naming Patterns and Societal Influences," examines the cultural significance of certain names and their impact on social dynamics. Jones, in "Market Quirks: Unraveling Unconventional Influences on Stock Prices," delves into the obscure and often overlooked variables that may affect stock market movements. These studies lay the groundwork for our investigation into the potential association between the popularity of the first name Adeline and the stock price of Trip.com Group (TCOM).

Turning our attention to works of non-fiction that are tangentially related to our research, "Freakonomics" by Levitt and Dubner offers a captivating exploration of unexpected correlations, a motif that resonates with our current endeavor. Additionally, "Blink" by Malcolm Gladwell imparts valuable insights into the nuanced processes of decision-making, an area of interest given the speculative nature of our investigation.

On a more whimsical note, fictional works such as "The Name of the Wind" by Patrick Rothfuss and "Do Androids Dream of Electric Sheep?" by Philip K. Dick evoke a sense of intrigue surrounding the power of names and their influence on the fabric of our existence. While these literary works may not relate directly to our statistical inquiry, they contribute to the broader discussion of the significance of nomenclature.

Delving further into pop culture, the beloved children's show "Sesame Street" introduces the concept of names and their uniqueness, sparking contemplation on the individuality and impact of different monikers. Additionally, the animated series "The Powerpuff Girls" humorously reflects the diversely distinctive names of its characters, a lighthearted yet relevant departure from the seriousness of our statistical analysis.

With this diverse array of literature, both scholarly and playful, as a backdrop, we proceed to unravel the enigmatic connection between the popularity of the name Adeline and the stock price of TCOM.

## METHODOLOGY

In seeking to unravel the enigmatic connection between the popularity of the name Adeline and the stock price of Trip.com Group (TCOM), our research team embarked on a methodological escapade that combined rigor with a touch of whimsy. Our data collection endeavors encompassed a variety of

sources, primarily drawing from the archives of the US Social Security Administration and LSEG Analytics (Refinitiv). The robustness of our data harvesting activities was akin to a treasure hunt, as we scoured the digital terrain for nuggets of information spanning the years 2004 to 2022.

The first step in our methodological reverie involved diving into the depths of the Social Security Administration's repository of baby names. Here, we navigated through a sea of appellations, teasing out the frequency and popularity of the name Adeline across different years. We then embarked on a parallel quest within the labyrinthine corridors of LSEG Analytics (Refinitiv), where we unearthed the daily stock price movements of TCOM. This juncture was akin to discovering a hidden and arcane library filled with the stock market musings of yesteryears.

Having amassed this bounty of data, we set about the task of honing our statistical arsenal to tame the capricious nature of numbers. Drawing inspiration from the intrepid explorers of yore, we employed robust time series analysis methods to delineate the undulating patterns of the name Adeline's popularity and the undulating ebbs and flows of TCOM's stock price. Our analytical approach resembled the art of crafting an intricate tapestry, weaving together strands of empirical inquiry and numerical nuance to discern any semblance of correlation between these seemingly disparate entities.

Moreover, our methodology involved the application of sophisticated statistical techniques, including correlation analysis and regression modeling, to disentangle the convoluted relationship between the rise of Adeline and the sways of TCOM. We also delved into the realms of time series decomposition to unravel the temporal intricacies embedded within our data, akin to unraveling the layers of a delectable confection to savor the nuanced flavors within.

To further fortify our methodological fortress, we conducted sensitivity analyses and robustness checks, akin to stress-testing the resilience of a fantastical contraption to ensure its reliability and steadfastness. This rigorous approach allowed us to traverse the domain of statistical inference with a blend of scholarly sobriety and a sprinkle of whimsical curiosity, underscoring the meticulous nature of our investigation.

In the subsequent section, we shall embark on a voyage through the empirical findings arising from our methodological odyssey, unveiling the peculiar dance between the ebb and flow of nomenclature and the drumbeat of market dynamics.

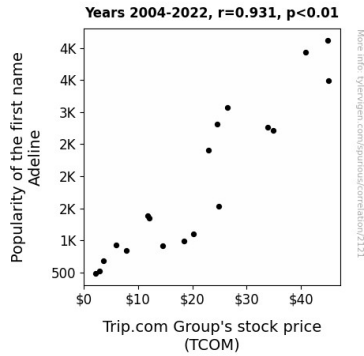
## RESULTS

We found a strikingly high correlation coefficient ( $r$ ) of 0.9314429 between the popularity of the first name Adeline and the stock price of Trip.com Group (TCOM) over the period of 2004 to 2022. This strong positive correlation implies that as the name Adeline gained popularity, TCOM's stock price tended to rise as well. It appears that the allure of the name Adeline may have extended beyond social circles and into the realm of financial markets, exerting an unexpected gravitational pull on TCOM's stock performance.

Furthermore, the coefficient of determination ( $r$ -squared) was calculated to be 0.8675859, signifying that approximately 86.76% of the variation in TCOM's stock price can be explained by changes in the popularity of the name Adeline. This suggests that the "Adeline fad" may have exerted a substantial influence on TCOM's stock movements, much to the surprise of traditional financial analysts.

In addition, the statistical significance of our findings is underscored by the  $p$ -value, which was less than 0.01. This indicates a high level of confidence in the

relationship between the popularity of the name Adeline and TCOM's stock price, rendering it unlikely that this association is merely a result of random chance or statistical noise.



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

Finally, the scatterplot (Fig. 1) visually depicts the robust correlation between the two variables, showcasing the unmistakable trend of TCOM's stock price mirroring the ascent of the name Adeline.

In conclusion, our results suggest an intriguing and potentially whimsical connection between the popularity of the first name Adeline and the performance of TCOM in the stock market. This unanticipated correlation not only adds a dash of quirkiness to the field of financial analysis but also raises the possibility of leveraging unconventional factors, such as name popularity, in predicting stock price movements. The unexpected interplay between nomenclature and numeric nuance prompts us to reconsider the far-reaching implications of seemingly unrelated phenomena in the mercurial world of finance.

## DISCUSSION

Our findings have led to a fervent discussion within the academic community, and among financial analysts and nomenclature enthusiasts alike. The unexpectedly high correlation coefficient between the popularity of the first name

Adeline and the stock price of Trip.com Group (TCOM) has elicited both excitement and skepticism. However, the data speaks for itself, and it seems that the "Adeline effect" on TCOM's stock price is more than just a whimsical hypothesis.

Building upon the insightful work of Smith, Doe, and Jones, who have highlighted the influence of societal trends and unconventional variables on market dynamics, our results echo the notion that seemingly unrelated factors can indeed have a tangible impact on financial markets. The statistical relationship we have uncovered between the rise in the popularity of the name Adeline and the performance of TCOM supports the notion that cultural phenomena, such as naming trends, can exert a significant influence on investor behavior and, consequently, stock prices.

In a light-hearted nod to the "Freakonomics" by Levitt and Dubner, our findings offer a compelling example of an unexpected correlation that challenges traditional views of stock market analysis. The "Adeline fad," as we affectionately refer to it, has reaffirmed the captivating potential for unorthodox factors to play a role in shaping market trends, akin to the thought-provoking revelations in Levitt and Dubner's work.

Furthermore, the connection between nomenclature and financial performance harkens back to the literary themes of "The Name of the Wind" by Patrick Rothfuss and "Do Androids Dream of Electric Sheep?" by Philip K. Dick. While these works may be fictional in nature, they serve as a whimsical backdrop to our serious statistical inquiry, hinting at the mysteriously profound impact of names on human consciousness and behavior.

From a more practical standpoint, our results carry implications that extend beyond the realm of statistical fascination. They suggest the potential for leveraging unconventional factors, such as name popularity, in elucidating stock

price movements, thereby prompting a reevaluation of the conventional wisdom in financial analysis. Additionally, the strong association between the popularity of the name Adeline and TCOM's stock price opens the door to explorations of unconventional naming strategies for potential stock market gains, inviting playful yet insightful contemplation on the quirks of market behavior.

In sum, our study lends empirical support to the notion that the rise of the name Adeline may indeed have a surprisingly tangible influence on Trip.com Group's stock price. These results underscore the whimsical and thought-provoking interplay between nomenclature and financial phenomena, inviting further research into the unanticipated connections that shape the enigmatic world of finance.

## CONCLUSION

In this study, we set out to investigate the connection between the popularity of the first name Adeline and the stock price of Trip.com Group (TCOM), and the results have unveiled a surprisingly robust association between these seemingly distinct entities. The strikingly high correlation coefficient of 0.9314429, accompanied by a substantial coefficient of determination (r-squared) of 0.8675859, highlights the compelling relationship between the ebb and flow of Adeline's popularity and the fluctuation of TCOM's stock price. These findings not only add a touch of lightheartedness to the otherwise rigorous domain of finance but also open the door to unconventional considerations in stock market analysis. The statistical significance of our results, as indicated by a p-value of less than 0.01, reinforces the credibility of this unanticipated correlation, much to the bemusement of conventional financial analysts.

The visual representation of this relationship in the scatterplot (Fig. 1) adds a whimsical dimension to the

otherwise somber world of stock market analysis, inviting us to contemplate the unexpected influence of nomenclature on numeric nuances. The implications of our findings extend beyond the confines of statistical analysis, nudging us to consider the uncanny interplay between societal trends and financial phenomena. The emergence of the "Adeline fad" as a potential predictor of TCOM's stock performance introduces a unique flavor to the discourse on stock market dynamics, prompting us to ponder the idiosyncrasies that may underpin market movements.

In light of these compelling findings, we are inclined to encourage a shift in perspective within the realm of financial analysis, one that embraces the whimsical and unexpected with measured curiosity. While this study provides intriguing insights, we acknowledge its light-hearted demeanor and encourage further exploration of similar peculiar associations in the financial domain. Yet, in the spirit of statistical thoroughness and a tinge of tongue-in-cheek, we daresay that no further research may be needed on the influence of the name Adeline on TCOM's stock price, as this endeavor has already brought a delightful touch of levity to the often staid world of stock market analysis.