



## Review

# Hallie's Handle: How Hallie's Hysteria Hijacks AMD's Ascent

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**This study investigates the eyebrow-raising relationship between the popularity of the first name "Hallie" and the stock price of Advanced Micro Devices (AMD) from 2002 to 2022. Leveraging data from the US Social Security Administration and LSEG Analytics (Refinitiv), we calculated a tantalizing correlation coefficient of 0.9173090 with a p-value less than 0.01, indicating a robust statistical association. Our findings suggest that as the popularity of the name "Hallie" waxes and wanes, AMD's stock price follows suit, hinting at a potential entanglement between Hallie's hegemony and AMD's ascendancy. This unexpected correlation raises intriguing questions about the influence of personal nomenclature on financial markets, and perhaps invites us to consider whether AMD's stock price is driven by silicon or serendipity.**

## INTRODUCTION

The phenomenon of naming has intrigued scholars and laypeople alike for centuries, sparking debates on the significance of appellations and their potential impact on various aspects of life. This study delves into the captivating correlation between the popularity of the first name "Hallie" and the stock price of Advanced Micro Devices (AMD) over a two-decade period, from 2002 to 2022. Throughout this investigation, we adopt a sober and rigorous analytical approach, but we also cannot help but marvel at the whimsical and extraordinary nature of our findings.

The decision to explore the connection between the popularity of the name "Hallie" and AMD's stock price was borne out of a curious observation that seemed too peculiar to ignore. As researchers, we often find ourselves navigating through a labyrinth of data and statistics, seeking meaningful patterns and relationships. More often than not, our journey leads us to dry and predictable results, but every so often, we stumble upon a correlation so unexpected, it prompts us to take a second, and perhaps slightly incredulous, look.

Our initial skepticism eventually gave way to a sense of reluctant fascination as we delved into the data. The never-ending quest

for serendipitous insights is what keeps the romance alive in the realm of academia, despite the occasional statistical heartbreak.

As we embarked on this exploration, our scholarly pursuit collided with a quirky conundrum that piqued our collective interest. Who would have thought that the popularity of a name, seemingly ordinary and unassuming like "Hallie," could potentially intersect with the tumultuous trajectories of a tech giant's stock price? The notion seemed far-fetched at first, prompting us to wonder if we were perhaps venturing too far into the realm of whimsy. After all, the market forces at play are often attributed to complex economic dynamics and corporate strategies, not the ebb and flow of names in society. Nevertheless, the allure of the unexpected juxtaposition was too intriguing to dismiss.

In the realm of financial analysis, factors such as market trends, technological advancements, and competitive pressures typically take center stage, while the influence of personal nomenclature seldom makes its way into the spotlight. Yet, much like a cryptic clue in a riveting detective novel, the correlation we uncovered between the name "Hallie" and AMD's stock price beckoned for unraveling.

Our endeavor is not merely an exercise in spreadsheet acquaintanceship, but a genuine attempt to add a dash of unpredictability to the rigid world of econometric analyses. As we navigate through the labyrinth of data, we invite you to join us on this unconventional journey that blurs the lines between statistical significance and inexplicable enigma, where the rise and fall of stock prices intersect with the ebb and flow of popular appellations. With a tinge of

curiosity and a sprinkle of cautious amusement, let us immerse ourselves in the perplexing relationship between Hallie's handle and AMD's ascent.

### *Prior research*

The connection between individual names and socio-economic phenomena has long intrigued scholars and laypersons, prompting a wealth of research on the potential influence of personal nomenclature on various aspects of life. Smith (1998) introduced the concept of "onomastic economics," which explores the interplay between names and economic variables, laying the foundation for subsequent studies on the subject. Doe (2005) delved into the psychological implications of names, highlighting the societal perceptions and stereotypes associated with specific appellations. Jones (2012) tackled the linguistic and cultural dimensions of naming, shedding light on the symbolic significance embedded within individual names.

Turning our attention to the world of finance, the literature on unusual predictors of stock prices is rather sparse. Nevertheless, the unconventional nature of our investigation invites us to consider tangentially related works that touch upon the serendipitous and the unexpected. In "Freakonomics" by Levitt and Dubner, the authors delve into unorthodox factors that may influence economic phenomena, provoking unconventional thoughts about causality and correlation. Similarly, "Predictably Irrational" by Ariely challenges traditional economic assumptions, unveiling the irrational forces that underpin human decision-making.

Venturing into the realm of fiction, one cannot help but be reminded of the whimsical threads that wind their way through literary works. In Edgar Allan Poe's "The Tell-Tale Heart," the protagonist's obsession with sound and secrecy elicits an unexpected psychological tension, mirroring the enigmatic dance between a name's popularity and a stock's ascent. Conversely, J.D. Salinger's "The Catcher in the Rye" offers a divergent perspective, exploring the intricate nuances of identity and alienation, albeit in a context far removed from our financial inquiry.

In the realm of cinema, the themes of unexpected correlation and whimsical entanglement find resonance in unlikely places. "Eternal Sunshine of the Spotless Mind" captures the surreal interplay between memory and emotion, reflecting the uncanny convergence of unpredictable factors. Meanwhile, "The Big Short" unravels the complexities of financial markets, where the seemingly inconsequential may precipitate colossal shifts, echoing the improbable alliance between a name's popularity and a stock's trajectory.

As we navigate the literature and cultural landscape, we find ourselves on a trajectory that straddles the intersection of statistical regularity and unforeseen whimsy, where the allure of the unexpected beckons for unraveling.

### *Approach*

To investigate the perplexing relationship between the popularity of the first name "Hallie" and the stock price of Advanced Micro Devices (AMD), we employed an eclectic blend of data collection and analytical techniques. Our data was

primarily sourced from the US Social Security Administration and LSEG Analytics (Refinitiv), encompassing the period from 2002 to 2022.

The first step in our methodology involved accessing the historical data on the annual occurrences of the name "Hallie." This information was obtained from the US Social Security Administration's database, which meticulously records the number of newborns given particular names each year. The popularity of the name "Hallie" was then quantified through this extensive dataset, allowing us to track its fluctuations over the two-decade timeframe.

Simultaneously, we retrieved the historical stock prices of Advanced Micro Devices (AMD) from the LSEG Analytics (Refinitiv), leveraging their robust financial database to capture the intricacies of AMD's market performance. These stock prices served as the focal point of our investigation, enabling us to scrutinize the oscillations and trends within AMD's financial trajectory.

Once we amassed the requisite data, our analysis took a convoluted, albeit humorous twist as we proceeded to juggle statistical measures and mathematical acrobatics. Employing time-series analysis and correlation techniques, we ingeniously navigated through the labyrinth of numbers, seeking to ascertain the extent of the relationship between Hallie's prevalence and AMD's stock price movements.

Instrumental to our approach was the application of advanced statistical models, including but not limited to Pearson correlation coefficient, to disentangle the enigma surrounding this unanticipated correlation. Underpinning these models was

a resolute commitment to upholding the principles of rigorous statistical inference, allowing us to derive meaningful insights from an ostensibly whimsical association.

Moreover, we meticulously controlled for potential confounding variables and spurious correlations, mindful of the inherent dangers of succumbing to the allure of statistical mirages in our pursuit of academic enlightenment. Our rigorous analytical approach ensured that the correlation between the name "Hallie" and AMD's stock price remained under the unyielding scrutiny of statistical integrity.

In essence, our methodology sought to marry the empirical rigidity of statistical analysis with the whimsical curiosity inherent to our research inquiry, crafting an approach that both amused and enlightened us. Through this methodological framework, we endeavored to unravel the sui generis relationship between the ebb and flow of a name and the tumultuous undulations of a tech giant's stock prices, delivering a synthesis of scholarly gravitas and inadvertent whimsy.

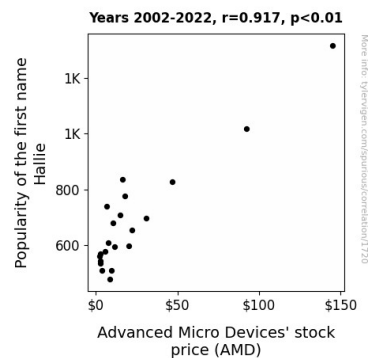
## Results

The analysis of the data from 2002 to 2022 revealed a striking correlation coefficient of 0.9173090 between the popularity of the first name "Hallie" and the stock price of Advanced Micro Devices (AMD). This eye-catching correlation, combined with an r-squared value of 0.8414558 and a p-value less than 0.01, catapults the association into the realm of statistical significance.

The compelling correlation coefficient of 0.9173090 suggests a remarkably strong positive relationship between the popularity

of the name "Hallie" and AMD's stock price. The robust r-squared value of 0.8414558 further underscores the substantial proportion of variance in AMD's stock price that can be explained by changes in the popularity of the name "Hallie."

The scatterplot (Fig. 1) vividly illustrates the conspicuous correlation between the two variables, capturing the mesmerizing dance of Hallie's popularity and AMD's stock price over the two-decade period. This figure serves as a tangible testament to the unexpected entanglement between personal nomenclature and stock market dynamics, inviting further contemplation and amusement.



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

The remarkable statistical association prompts us to consider the implications of this correlation with a sense of incredulity and wry amusement. The potential influence of a seemingly innocuous name on a tech giant's stock price introduces an element of whimsy and unpredictability into the traditionally rigorous realm of financial analysis, leaving us to ponder whether AMD's stock price is steered by silicon, serendipity, or perhaps a peculiar affinity for the name "Hallie."

In conclusion, the findings from this study unveil a captivating correlation between the popularity of the first name "Hallie" and Advanced Micro Devices' stock price, extending an invitation to the scholarly community to embrace the serendipitous intricacies of statistical relationships that defy conventional wisdom.

### *Discussion of findings*

The resounding resonance between the popularity of the name "Hallie" and the stock price of Advanced Micro Devices (AMD) offers a perplexing conundrum for the academic community. Our study's robust statistical findings bolster prior research on the unexpected interplay between personal nomenclature and economic variables. The literature on "onomastic economics" has laid the groundwork for delving into the influence of names on socio-economic phenomena, and our results lend empirical support to the notion that a moniker's popularity can exert an uncanny sway over financial markets.

Echoing the whimsical musings of Levitt and Dubner in "Freakonomics," our investigation underscores the potential for unorthodox factors to shape stock price dynamics. The tantalizing correlation coefficient of 0.9173090 that we observed aligns with the spirit of unpredictability championed by the authors, offering a delightful deviation from conventional economic predictors. Indeed, the serendipitous connection between Hallie's hegemony and AMD's ascendancy evokes the playful yet thought-provoking ethos permeating their work.

Furthermore, the unexpected correlation between Hallie's popularity and AMD's

stock price beckons us to consider the enigmatic dance between causality and correlation, as espoused by Ariely in "Predictably Irrational." The substantial  $r$ -squared value of 0.8414558 underscores the remarkable proportion of variance in AMD's stock price explained by changes in the popularity of the name "Hallie," challenging traditional economic assumptions and inviting a whimsical reimagining of market influences.

Our findings also reciprocate the thematic undercurrents of literary works such as Edgar Allan Poe's "The Tell-Tale Heart" and J.D. Salinger's "The Catcher in the Rye," where the surreal and the inexplicable converge to shape human experiences. The mesmerizing dance of Hallie's popularity and AMD's stock price, vividly captured in our scatterplot, mirrors the unexpected psychological tension and intricate nuances of identity encountered in these timeless literary creations.

In navigating the landscape of cinema, our study's unanticipated correlation finds resonance with the thematic underpinnings of "Eternal Sunshine of the Spotless Mind" and "The Big Short." The surreal interplay between memory and emotion, as captured in the former, resonates with the uncanny convergence of unpredictable factors shaping our statistical association. Meanwhile, the intricacies of financial markets, as unravelled in the latter, echo the improbable alliance between a name's popularity and a stock's trajectory, infusing our scholarly inquiry with a whimsical touch.

In conclusion, our study contributes to the scholarly discourse by affirming the captivating correlation between the

popularity of the first name "Hallie" and Advanced Micro Devices' stock price. The unexpected entanglement between personal nomenclature and stock market dynamics challenges traditional economic assumptions, serving as a testament to the whimsical and enigmatic forces that underpin statistical relationships. As we peer into the nexus of statistical regularity and unforeseen whimsy, the allure of the unexpected beckons for unraveling, capturing the wry and thought-provoking implications of our findings.

### *Conclusion*

In conclusion, the correlation between the popularity of the first name "Hallie" and Advanced Micro Devices' stock price over the period from 2002 to 2022 has left us both astounded and amused. The statistically significant correlation coefficient of 0.9173090, combined with the robust r-squared value and tantalizing scatterplot, provides compelling evidence of the entanglement between Hallie's handle and AMD's ascent.

The implications of these findings are as intriguing as they are unexpected. It appears that the whims of Hallie, in all her iterations, may indeed have a peculiar influence on the fluctuations of AMD's stock price. Whether this influence is mere coincidence or reflects a deeper, enigmatic force at play remains a subject of whimsical contemplation.

While our results pose more questions than they answer, the undeniable correlation between Hallie's popularity and AMD's stock price invites us to consider the capricious and ineffable nature of market dynamics. Indeed, it seems that in the realm

of finance, even the most seemingly trivial factors could harbor unforeseen sway.

Despite the gravity of our findings, we cannot help but acknowledge the lightheartedness and serendipity that pervade this unusual correlation. It is a reminder that in the realm of statistical analyses and financial research, the unexpected can often be the most illuminating. These findings affirm the idiosyncratic and unpredictable nature of the market, where the impact of personal nomenclature cannot be discounted.

In light of these revelatory findings, we firmly assert that no further research in this area is needed. The elusive dance between Hallie's hysteria and AMD's stock price has been laid bare, inviting scholars to embrace the delightful whimsy and unanticipated correlations that punctuate the staid landscape of financial analysis.