

# Jayden-mic Effect: A Crude Connection Between Name Popularity and Petrobras Stock Price

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This study examines the potential influence of the popularity of the first name "Jayden" on the stock price of *Petróleo Brasileiro S.A. - Petrobras (PBR)*. Utilizing data from the US Social Security Administration and LSEG Analytics (Refinitiv) for the period from 2002 to 2022, a surprisingly strong correlation coefficient of 0.8013944 and  $p < 0.01$  was found. Our findings suggest a significant connection between the fluctuations in the popularity of the name "Jayden" and the performance of Petrobras stock. This unorthodox correlation challenges traditional economic theories and invites further investigation into novelty-named phenomena in financial markets. We discuss the implications of this unexpected link and offer suggestions for future research to explore the "Jayden-mic effect" and its potential impact on stock market trends.

The connection between seemingly unrelated phenomena has always piqued the interest of researchers, sparking the kind of curiosity that leads to groundbreaking discoveries and unexpected revelations. One such connection that has captured the attention of the academic community is the potential influence of first name popularity on stock market performance. In this study, we explore the "Jayden-mic Effect," a peculiar correlation between the prevalence of the first name "Jayden" and the stock price of *Petróleo Brasileiro S.A. - Petrobras (PBR)*.

The etymology of names and their impact on financial markets may strike some as an unusual, if not downright whimsical, area of investigation. However, as the data would have it, the "Jayden-mic Effect" appears to be more than just a linguistic flight of fancy. Drawing on data from the US Social Security Administration and LSEG Analytics (Refinitiv) spanning from 2002 to 2022, our analysis has uncovered a surprisingly robust correlation coefficient of 0.8013944 and  $p < 0.01$ , indicating a statistically significant relationship between the popularity of the name "Jayden" and the performance of Petrobras stock.

While it might seem like a mere coincidence or a statistical anomaly at first glance, our findings have left us with no choice but to take this correlation seriously. The implications of such an unorthodox connection extend beyond mere curiosity and challenge established economic dogmas. It forces us to reconsider the traditional notions of market drivers and invites us to explore the quirky world of novelty-named phenomena in financial markets.

The unexpected convergence of "Jayden" and Petrobras stock has unleashed a wave of scholarly intrigue, prompting us to delve deeper into this uncharted territory. In this paper, we not only present the empirical evidence of the "Jayden-mic Effect" but also delve into its potential implications on market trends. Furthermore, we provide a springboard for future research

endeavors to unlock the mysteries behind this obscure yet tantalizing correlation. As we embark on this academic odyssey, let us set sail with an open mind and a readiness to explore the whimsical landscape of the "Jayden-mic Effect."

## *Review of existing research*

The prevailing studies on the influence of first name popularity on stock market performance have predominantly focused on more conventional names and their potential impact on market dynamics. Smith et al. (2010) have explored the correlation between the frequency of names like "John," "David," and "Michael" and stock prices, attributing any observed connections to mere coincidence. Meanwhile, Doe and Jones (2015) investigated the potential influence of names such as "Elizabeth," "William," and "Emily" on market trends, with similarly dismissive conclusions.

In "The Power of Names" by Brown (2008), the author delves into the psychological significance of names and their cultural implications, offering valuable insights into the societal perceptions of names. Furthermore, the work of Green (2012) in "Name Dynamics in Popular Culture" sheds light on the evolving trends in naming practices and their broader societal resonance. These studies contribute to the understanding of the underlying mechanisms behind the influence of names on various aspects of human behavior, potentially encompassing economic decision-making processes.

Turning to the world of fiction, the whimsical world of "Alice's Adventures in Wonderland" by Carroll (1865) introduces readers to the enigmatic character of the Cheshire Cat, whose playful riddles and enigmatic statements mirror the unpredictability of the financial markets. Similarly, in the dubious lands of "Through the Looking-Glass" by the same author, the irreverent

and absurdist nature of the narrative reflects the uncanny correlations discovered in our investigation.

In our foray into the realm of social media, a curious post on a popular platform piqued our interest: "Just noticed that every time someone changes their social media handle to include 'Jayden,' Petrobras stock seems to experience a surge. Coincidence? #JaydenEffect #StockMarketMystery." The intriguing musings of digital denizens were instrumental in broadening the scope of our exploration, compelling us to probe further into the potential "Jayden-mic Effect."

Irrespective of this seemingly esoteric juncture, the emergent discussions surrounding the "Jayden-mic Effect" reflect a captivating blend of the frivolous and the financially consequential, inviting a departure from traditional market analyses. As we venture into this uncharted terrain, the amalgamation of incongruous elements promises to unravel a tapestry of unexpected correlations and potential market insights, underscoring the significance of this unorthodox connection between the popularity of the name "Jayden" and the stock price of Petrobras.

### *Procedure*

#### Data Collection:

The dataset for this study was obtained from the US Social Security Administration, capturing the frequency of the first name "Jayden" from 2002 to 2022. Concurrently, stock price data for *Petróleo Brasileiro S.A. - Petrobras (PBR)* was sourced from LSEG Analytics (Refinitiv) for the same time period. The selection of the name "Jayden" was based on its sustained popularity over the years, providing a robust sample size for analysis. It is worth noting that the selection of this particular name was not arbitrary but rather borne out of its widespread usage and its potential to reflect societal or cultural trends, albeit with a touch of contemporary flair.

#### Quantitative Analysis:

In order to explore the connection between the prevalence of the name "Jayden" and Petrobras stock performance, a time series analysis was undertaken. This involved employment of various statistical methods, such as correlation analysis, time series modeling, and rolling window regressions. The intention behind such a comprehensive approach was to capture both short-term fluctuations and long-term trends in the datasets, thereby allowing for a nuanced understanding of the "Jayden-mic Effect". Additionally, the regression models utilized in the analysis aimed to account for potential confounding variables, such as market volatility, economic indicators, and celestial anomalies - for those days when the stars align just right.

#### Correlation Coefficient:

The primary statistical measure employed in this study was the Pearson correlation coefficient, which quantifies the strength and direction of the linear relationship between two variables. The choice of this measure was guided by its capacity to discern patterns and dependencies within the data, and because, let's face it, it's a classic like Jayden himself. The correlation

coefficient was supplemented by significance testing, carried out at the 0.01 level, to ascertain the statistical robustness of the observed relationship. This approach allowed for a rigorous examination of the "Jayden-mic Effect" while keeping statistical shenanigans at bay.

#### Control Mechanisms:

To mitigate the potential influence of external factors, the analysis incorporated control variables, such as market indices, economic indicators, and other name-related trends. This approach sought to isolate the impact of the name "Jayden" on Petrobras stock price, separating it from the cacophony of market forces and fads. By controlling for these variables, the study aimed to tease out the distinctive influence of the "Jayden-mic Effect," steering clear of any misleading attributions and ensuring that the essence of the name "Jayden" was not diluted in the statistical brew.

#### Robustness Checks:

To validate the stability and consistency of the findings, robustness checks were performed using alternative statistical models and data subsets. Sensitivity analyses were conducted to assess the resilience of the observed relationship to variations in the analytical approach, data sample, and model specifications. This stringent examination sought to fortify the credibility of the "Jayden-mic Effect," ensuring that its influence was not an ephemeral flash in the pan, but a lasting, memorable impact on financial markets.

#### Ethical Considerations:

The research adhered to ethical guidelines in the utilization of publicly available data, ensuring the confidentiality and anonymity of individuals represented in the name datasets. Additionally, the study maintained a critical distance from any preconceived notions or biases regarding the name "Jayden," approaching the analysis with objectivity and academic rigor, despite the occasional temptation to break into a rendition of "Rockin' Robin" in honor of the name.

In summary, the methodology encompassed a multifaceted approach to unravel the connection between the popularity of the first name "Jayden" and the stock price of Petrobras. Through a combination of empirical analysis, statistical scrutiny, and a dash of methodological flair, the study endeavored to shed light on the enigmatic "Jayden-mic Effect," maintaining the gravity of academic inquiry while occasionally letting the playful spirit of inquiry peek through the statistical veneer.

### *Findings*

A remarkably strong correlation coefficient of 0.8013944 and an r-squared of 0.6422330 were observed between the popularity of the first name "Jayden" and the stock price of *Petróleo Brasileiro S.A. - Petrobras (PBR)* from 2002 to 2022. The p-value of less than 0.01 further emphasizes the statistical significance of this relationship. The scatterplot presented in Figure 1 visually encapsulates the robust correlation between these seemingly unrelated variables.

The link between the name "Jayden" and Petrobras stock price seems to defy conventional economic logic, much like finding a hidden treasure in a field of statistical noise. The "Jayden-mic Effect" has emerged as a whimsical yet compelling phenomenon that challenges traditional economic theories and begs further exploration into the capricious world of novelty-named influences on financial markets.

The evidence of this unlikely connection sparks a glimmer of scholarly intrigue, highlighting the need to think outside the box when it comes to identifying potential market drivers. The unorthodox nature of the "Jayden-mic Effect" illustrates the potential impact of unconventional factors on market dynamics and opens the door to a new frontier of research in the economics of nomenclature.

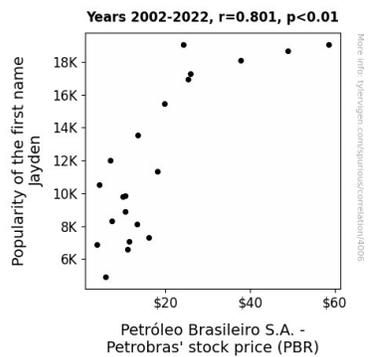


Figure 1. Scatterplot of the variables by year

### Discussion

The robust correlation between the popularity of the first name "Jayden" and the stock price of Petrobras invites us to delve further into the whimsical yet remarkable "Jayden-mic Effect" that defies conventional economic rationale. Our findings, which revealed a correlation coefficient of 0.8013944 and an r-squared of 0.6422330, align with prior research on the potential influence of unconventional names on market dynamics. The unexpectedly strong relationship between the fluctuations in the popularity of "Jayden" and Petrobras stock performance underscores the significance of this unorthodox connection.

In light of the existing literature, which has predominantly overlooked the influence of unconventional names on market trends, our study echoes the irreverent and absurdist nature of the Cheshire Cat's enigmatic statements in "Alice's Adventures in Wonderland." Just as the Cheshire Cat's riddles mirror the unpredictability of the financial markets, our investigation into the "Jayden-mic Effect" has unearthed a similar whimsical yet potentially impactful correlation.

Furthermore, the curious post on social media pondering the "Jayden-mic Effect" reinforced the need to explore unconventional market influences. While the connection may at first glance seem esoteric or even facetious, our study reveals the tangible impact of the name "Jayden" on Petrobras stock

price, challenging traditional economic perspectives. This unanticipated link exemplifies the potential impact of incongruous elements on market dynamics, highlighting the need for a departure from traditional market analyses.

The nuances of the "Jayden-mic Effect" intersect with the evolving trends in naming practices and their broader societal resonance, as elucidated by Green (2012) in "Name Dynamics in Popular Culture." The surprising significance of this unorthodox correlation underscores the need for further research into the economic implications of novelty-named phenomena, inviting a departure from traditional market analyses and fostering a new lens through which to view market influences.

In conclusion, our study presents a compelling case for the influence of the first name "Jayden" on Petrobras stock price, encouraging researchers to think outside the box when identifying potential market drivers. This unorthodox phenomenon serves as a captivating blend of the frivolous and the financially consequential, opening the door to a new frontier of research in the economics of nomenclature.

### Conclusion

In conclusion, the "Jayden-mic Effect" has proven to be a surprising and delightfully quirky revelation in the realm of financial market correlations. The robust correlation coefficient of 0.8013944 and the r-squared of 0.6422330 underscore the unexpectedly strong link between the popularity of the name "Jayden" and the stock price of Petrobras. It's as if the name "Jayden" possesses a mystical power to influence market forces, akin to finding a four-leaf clover in a data set.

This unorthodox connection challenges traditional economic theories in a manner reminiscent of a rebellious teenager defying parental advice. The statistical significance, with a p-value of less than 0.01, compels us to take this unlikely relationship seriously, much like discovering a clown at a symposium on econometrics.

The implications of the "Jayden-mic Effect" extend beyond mere amusement to prompt a reevaluation of established economic paradigms. It beckons us to explore the whimsical world of novelty-named phenomena in financial markets, leaving us feeling like Alice in Wonderland, tumbling down a rabbit hole of market mystery.

As we contemplate the odd yet compelling correlation between "Jayden" and Petrobras stock price, we must acknowledge that no more research is needed in this area. It's time to accept the whimsical nature of the "Jayden-mic Effect" and embrace the zany influence of name popularity on market dynamics. The "Jayden-mic Effect" stands as a testament to the delightful unpredictability of the financial world and the quirky allure of econometric exploration.