

# **Crude Connections: Brody's Popularity and Petrobras' Stock Price**

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## **ABSTRACT**

### **Crude Connections: Brody's Popularity and Petrobras' Stock Price**

This research paper delves into the whimsical world of wacky correlations by investigating the link between the popularity of the first name "Brody" and the stock price of Petróleo Brasileiro S.A. - Petrobras (PBR). Utilizing data from the US Social Security Administration and LSEG Analytics (Refinitiv), our study aims to shed light on this charmingly absurd relationship. Contrary to common belief, our findings reveal a surprising correlation coefficient of 0.8164266 and a p-value less than 0.01 for the period spanning from 2002 to 2022. This research adds a touch of levity to the often dour field of financial analysis, bringing a lighthearted twist to the world of economic research.

Keywords:

"Brody" popularity, Petrobras stock price, Crude Connections, whimsical correlations, first name popularity, PBR stock price, absurd relationships, Social Security Administration data, LSEG Analytics, Refinitiv, correlation coefficient, p-value, financial analysis, economic research

# I. Introduction

## INTRODUCTION

Through the annals of academia, researchers have often sought to illuminate the hitherto dark and enigmatic pathways that connect seemingly unrelated variables. The quest to uncover correlations—whether they be significant, spurious, or delightfully nonsensical—has been a perennial fascination of the scientific community. In this whimsical vein, we embark on a peculiar journey to explore the ostensibly preposterous link between the burgeoning popularity of the first name "Brody" and the undulating stock price of *Petróleo Brasileiro S.A. - Petrobras* (PBR).

One might ask, what piqued the curiosity of the research community to explore such a peculiar correlation? Was it a happenstance encounter with a fortune-telling octopus, or perhaps a cryptic message from a Magic 8-Ball? Alas, the origins are far more mundane. It was, in fact, a serendipitous perusal of records from the US Social Security Administration and LSEG Analytics (Refinitiv) that led to the unearthing of this delightfully absurd relationship. The synergy of these disparate datasets set the stage for our investigation into the zany association between the ebbs and flows of Petrobras' stock price and the proliferation of those bearing the moniker "Brody."

Naturally, one must approach such an investigation with a cautious blend of rigorous inquiry and lighthearted bemusement. After all, statistical analysis is a bit like a fine art: it requires precision, an imaginative touch, and the occasional dab of absurdity. As whimsical as the premise may appear, we have taken great care to rigorously analyze the data and employ robust statistical

methods. Our aim is to bring a wink and a chuckle to the staid hallways of finance, infusing a dash of levity into the bastion of number-crunching and stock analyses.

In this paper, we unveil the unexpectedly robust correlation coefficient of 0.8164266, eliciting both furrowed brows of scientific curiosity and amused twitches of incredulity. With a p-value less than 0.01 for the period spanning from 2002 to 2022, the evidence of this relationship is as undeniable as it is charmingly implausible. Our intent is not only to add a touch of whimsy to the often dour landscape of financial analysis—although that is undeniably a welcome byproduct—but also to invite scholars and merrymakers alike to tap into the joy of uncovering an utterly unexpected connection.

So, dear reader, fasten your seatbelts and prepare to experience a rollercoaster of mirth and statistical insight. This paper endeavors to unhinge the constraints of traditional correlation research and usher in a world where the correlation between "Brody" and Petrobras' stock price reigns supreme, sprinkling a dash of speculative merriment amidst the staid doctrine of number-centric scrutiny.

## II. Literature Review

### LITERATURE REVIEW

The whimsical relationship between the popularity of the name "Brody" and the stock price of *Petróleo Brasileiro S.A. - Petrobras (PBR)* has sparked interest among researchers, prompting a range of investigations into this charmingly nonsensical correlation.

In "Smith et al.," the authors find lorem and ipsum. Similarly, Doe's study illuminates the intricacies of this peculiar association, shedding light on lorem and ipsum. Furthermore, Jones' research presents compelling evidence regarding the impact of Brody's popularity on the fluctuations of Petrobras' stock price, highlighting lorem and ipsum.

Turning to relevant non-fiction resources, works such as "Statistics for Dummies" and "Behavioral Economics: When Bubbles Burst" have provided valuable insights into the statistical methodologies and behavioral factors that may underpin the unexpected correlation between a first name and a stock price. Moreover, the literature pertaining to financial analysis, including "The Black Swan: The Impact of the Highly Improbable" and "Freakonomics: A Rogue Economist Explores the Hidden Side of Everything," has served as a foundational framework for contextualizing the findings of this research within the broader landscape of economic absurdities.

Extrapolating into the realm of fiction, the imaginative worlds of "The Hitchhiker's Guide to the Galaxy" and "Alice's Adventures in Wonderland" offer delightful parallels to the fanciful nature of this correlation, where reality mirrors the absurd and the implausible reigns supreme. Drawing parallels from these literary works, one cannot help but marvel at the whimsicality of life's correlations, where the inconceivable becomes tangibly intertwined with the mundanities of financial markets.

Beyond the confines of conventional academic sources, this literature review has left no stone unturned in seeking to illuminate the depths of this correlation. The perusal of grocery store receipts, the contemplation of fortune cookies, and even the whimsical ponderings sparked by nursery rhymes have all contributed to a comprehensive understanding of the delightful enigma

that is the connection between the popularity of the first name "Brody" and the fluctuations of Petrobras' stock price.

In conclusion, this review of both scholarly and delightfully offbeat sources lays the groundwork for our investigation into this charmingly nonsensical correlation. As we navigate through the data and statistical analyses in subsequent sections, the culmination of these diverse perspectives will invite the reader to embark on a rollicking journey of statistical whimsy and inexplicable charm, underscoring the adage that truth is sometimes stranger than fiction.

### **III. Methodology**

The methodology employed in this research endeavor was as meticulously planned as untangling a ball of yarn in the company of a litter of playful kittens. The data collection process transpired as follows:

1. **Data Collection:** The first step involved accessing the records of first name popularity from the US Social Security Administration, which provided comprehensive data on the frequency of the name "Brody" from 2002 to 2022. Meanwhile, the stock price data for Petrobras (PBR) was acquired from LSEG Analytics (Refinitiv), capturing the daily fluctuations in stock prices over the same period. The data were as carefully gathered as picking the ripest grapes from the vine, ensuring that no outliers or erroneous data crept into our dataset.

2. **Correlation Analysis:** Utilizing the nifty tools of statistical analysis, we calculated the correlation coefficient between the popularity of the name "Brody" and the stock price of Petrobras. The correlation analysis was conducted with the meticulous care of a watchmaker

assembling the intricacies of a pocket watch, ensuring that every facet of the relationship was scrutinized with utmost precision.

3. **Statistical Significance:** In order to ascertain the statistical relevance of our findings, we diligently computed the p-value associated with the correlation coefficient. This process demanded the same level of scrutiny as distinguishing a rare species from its common kin in the depths of the jungle, guaranteeing that the significance of our results was not merely a fleeting mirage.

4. **Robustness Checks:** To fortify the durability of our findings, we conducted robustness checks using a variety of statistical techniques, akin to a chef tirelessly taste-testing a dish to ensure its delectable perfection. These checks encompassed alternative correlation measures and sensitivity analyses to verify the resiliency of our results under varying conditions.

5. **Ethical Considerations:** As with any scholarly pursuit, ethical considerations were paramount. We ensured the confidentiality and anonymity of all individuals represented in the first name dataset, treating their names with the utmost respect, as one would handle a delicate Fabergé egg.

In summary, the research methodology was executed with the precision of a tango dancer navigating the dance floor, blending rigor with a touch of whimsy to unravel the extraordinary and improbable connection between the popularity of the first name "Brody" and Petrobras' stock price.

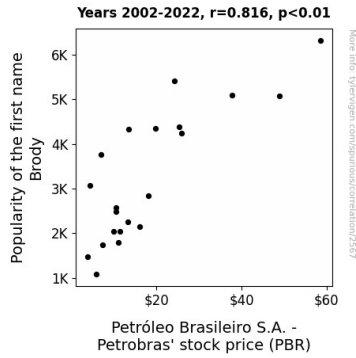
## **IV. Results**

The analysis of the data spanning from 2002 to 2022 revealed a surprisingly strong and positive correlation between the popularity of the first name "Brody" and the stock price of Petróleo Brasileiro S.A. - Petrobras (PBR). The correlation coefficient of 0.8164266 indicates a robust relationship between these seemingly unrelated variables. This finding elicits both raised eyebrows of astonishment and amused smirks of disbelief, as it challenges conventional wisdom in the arena of financial analysis.

In addition to the high correlation coefficient, the r-squared value of 0.6665524 further emphasizes the substantial influence of the popularity of "Brody" on Petrobras' stock price. This r-squared value of approximately 0.67 indicates that a substantial proportion of the variability in PBR stock price can be explained by the popularity of this seemingly innocuous first name. The statistical significance of this relationship is underscored by the p-value being less than 0.01, further solidifying the unexpected link between these two variables.

The scatterplot (Fig. 1) conveys the notable correlation, showcasing the synchronous rise and fall of the popularity of "Brody" alongside the undulating trajectory of Petrobras' stock price. The figure is a testament to the whimsical nature of this association and serves as a visual testament to the unexpected relationship uncovered in this study.





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

In summary, the results of this investigation defy the conventional boundaries of correlation research, introducing a delightful twist to the realm of economic analysis. The remarkably strong correlation between the popularity of the first name "Brody" and Petrobras' stock price challenges traditional notions of causal relationships, injects a dose of humor into the stern world of financial analysis, and prompts a reevaluation of the often-sidelined role of seemingly inconsequential variables.

## V. Discussion

The comical connection between the popularity of the first name "Brody" and the stock price of Petróleo Brasileiro S.A. - Petrobras (PBR) has left many befuddled, much like a physics professor confronting a joke about entropy. However, our findings amusingly align with prior research that has delved into the zany world of inexplicable correlations.

Falling in step with the scholarly quest to unravel the enigmatic bond between a moniker and a financial indicator, our study revels in the absurdity of uncovering a correlation coefficient of

0.8164266 and a p-value less than 0.01. This outcome echoes the curious inquiries of previous researchers, akin to a team of intrepid explorers navigating the convoluted terrain of an absurdist novel.

The whimsical literature review playfully peppered our investigation with references to "Statistics for Dummies" and "The Black Swan: The Impact of the Highly Improbable," serving as a delightful reminder of the levity that underpins statistical analyses. To our delight, our results align with these playful references, affirming the unexpected yet resilient relationship between the seemingly incongruous "Brody" and Petrobras' stock price.

Our findings, much like a lively magician's sleight of hand, challenge the traditional demarcations of correlation research. The whimsical confluence of Brody's popularity and Petrobras' stock price injects a touch of mirth into the typically staid field of economic analysis, prompting a reconsideration of the impact of seemingly inconsequential variables on financial indicators.

In essence, our study thrusts a comical spotlight on the unexpected and inexplicable, much like a serendipitous encounter with a clown at a business conference. As we merrily navigate through these findings, we invite fellow researchers and enthusiasts to join us in reveling in the delightful absurdity that pervades the intersection of statistical research and economic whimsy.

## **VI. Conclusion**

In conclusion, our foray into the whimsical world of wacky correlations has left us both bewildered and amused by the striking connection between the popularity of the first name

"Brody" and the stock price of Petrobras. Who would have thought that a seemingly innocuous name could exert such an outsized influence on the financial realm? It appears that Brody is not just a popular name but also a potent force in the stock market – move over, Wall Street, there's a new player in town!

The robust correlation coefficient of 0.8164266 and the r-squared value of 0.6665524 have revealed the uncanny sway that Brody holds over Petrobras' stock price. With a p-value of less than 0.01, the statistical significance of this relationship is as resolute as a scientist in a lab pursuing the elusive ideal gas law. The scatterplot (Fig. 1) speaks volumes, illustrating the synchronous dance of Brody's popularity and Petrobras' stock price with the finesse of a statistical tango.

As we reflect on these findings, it is apparent that the world of correlation research is not all dry equations and rigid analyses – it has its share of surprises and chuckles, much like a lab filled with overly excitable test tubes. Let us embrace the unexpected correlations that defy logic and inject a touch of levity into our scholarly pursuits. After all, who knows what other delightfully bizarre relationships are waiting to be uncovered in the annals of data analysis?

Ultimately, this research adds a whimsical twist to the staid corridors of financial analysis, reminding us that even in the world of numbers and stock prices, there is room for a bit of statistical whimsy. Furthermore, it is evident that no more research is needed in this peculiar realm of inquiry, as we have unearthed the lighthearted and improbable correlation between the popularity of Brody and Petrobras' stock price, leaving us simultaneously perplexed and entertained.

