

Neptune's Nudges and Regeneron's Rumbles: Exploring the Correlation Between the Distance between Neptune and Uranus and Regeneron Pharmaceuticals' Stock Price (REGN)

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ABSTRACT

Neptune's Nudges and Regeneron's Rumbles: Exploring the Correlation Between the Distance between Neptune and Uranus and Regeneron Pharmaceuticals' Stock Price (REGN)

The relationship between celestial bodies and earthly financial markets has long been a subject of curiosity and skepticism. In this study, we delved into the intriguing connection between the distance from Neptune to Uranus and the stock price of Regeneron Pharmaceuticals (REGN). Our research team employed data from Astropy and LSEG Analytics (Refinitiv) to undertake a comprehensive analysis spanning the years 2002 to 2023. With rigorous statistical analyses, we unearthed a remarkably substantial correlation coefficient of 0.9171104 between the distance from Neptune to Uranus and REGN's stock price, with a statistically significant p-value of less than 0.01. This correlation indicates a strikingly strong relationship, potentially defying conventional understanding. It appears that Neptune and Uranus, while maintaining their stoic silence in the far reaches of our solar system, may hold more influence over earthly endeavors than previously thought – much like a dad's "dad jokes," quietly shaping the family dynamic. The implications of these findings extend beyond mere amusement, warranting further exploration and raising thought-provoking questions about the cosmic forces at play in the financial world. Our study sheds light on this celestial phenomenon, offering a novel perspective that is both academically enriching and entertainingly unexpected.

Keywords:

Neptune, Uranus, Regeneron Pharmaceuticals, REGN stock price, celestial bodies, financial markets, correlation, distance, statistical analysis, Astropy, LSEG Analytics, Refinitiv, correlation coefficient, p-value, cosmic forces, celestial phenomenon.

I. Introduction

The cosmos have long fascinated and perplexed humanity, with their vast mysteries and silent influence, much like a father's repertoire of "dad jokes" at a family gathering. In a similar vein, the financial markets have continued to bewilder and intrigue investors and researchers alike. This study delves into the enigmatic relationship between celestial bodies and earthly financial currents, exploring the intriguing connection between the distance from Neptune to Uranus and the stock price of Regeneron Pharmaceuticals (REGN).

Ah, the distant dance of Neptune and Uranus, reminding us of the careful negotiations and delicate balance required for successful investments – much like a father navigating conversations during a family meal. Our research seeks to unravel the cosmic riddle of whether the movements of these celestial bodies hold sway over the movements of earthly financial indicators, specifically the stock price of REGN.

While some may view this correlation as seemingly far-fetched as a dad joke, our rigorous statistical analysis has uncovered a strikingly substantial correlation coefficient of 0.9171104 between the distance from Neptune to Uranus and REGN's stock price, with a p-value that would make any astrophysics enthusiast giddy – less than 0.01. Such a statistically significant relationship prompts us to consider the possibility of celestial influence on earthly affairs in a new light.

Indeed, it seems that the celestial neighbors, Neptune and Uranus, are hardly as distant from our financial intrigues as we may have assumed, much like a father who quietly influences family dynamics with a well-timed joke. The implications of these findings extend beyond mere

amusement and skepticism, prompting a deeper exploration of cosmic forces and their potential impact on earthly financial systems. Our study offers a compelling angle on this unforeseen connection, infusing both academic inquiry and a touch of cosmic whimsy into the investigation of financial phenomena.

II. Literature Review

The connection between planetary movements and stock market behavior has been a subject of both fascination and incredulity among researchers and investors alike. Smith et al. (2015) explored the relationship between planetary alignments and stock market trends, shedding light on the potential influence of celestial bodies on financial indicators. Doe and Jones (2018) conducted a comprehensive analysis of planetary positions and stock prices, uncovering intriguing patterns that piqued the interest of the financial research community.

In "Astrology and Economics: Exploring Cosmic Correlations," the authors find a plethora of interesting statistics correlating planetary positions with stock market performances, providing a thought-provoking perspective on the intertwining of celestial movements and financial dynamics. Similarly, "Planetary Influences on Financial Markets," presents compelling evidence of planetary alignments coinciding with market fluctuations, challenging traditional notions of market predictability.

On a more speculative note, "Cosmic Connections: Celestial Bodies and Market Mysteries," ventures into the realm of astrological interpretations of planetary movements and their potential impact on financial markets, offering a unique perspective that has sparked both skepticism and

curiosity within the academic and investor communities. A departure from traditional economic analyses, this work introduces a whimsical but intriguing dimension to the exploration of financial phenomena.

Moving beyond traditional literature, a foray into popular culture provides an unexpected avenue for engaging with the interplay between celestial bodies and financial markets. The fictional works "The Celestial Stock Exchange" and "Astro-Finance Adventures" present imaginative narratives of cosmic influences on investment decisions, blending financial intrigue with celestial whimsy in a delightfully unconventional manner.

In a more lighthearted exploration of cosmic phenomena, cartoons and children's shows also offer a lens through which to contemplate the potential influence of planetary movements on earthly affairs. The animated series "Astro-Traders" and "Planet Stocks: The Galactic Exchange" playfully depict the adventures of characters navigating cosmic influences on financial investments, bridging the realms of finance and planetary musings in a manner that is both entertaining and thought-provoking.

III. Methodology

The methodology employed in this study combined both astronomical and financial data in a manner reminiscent of a cosmic waltz, synergistically intertwining disparate fields much like a unexpected joke deftly interwoven into a serious conversation. The astronomical data regarding the distance between Neptune and Uranus was obtained from Astropy, an open-source, community-developed library of Python modules for astronomy. To maintain alignment with

celestial events, the ephemeris was consulted to ensure accuracy in the determination of the distance between the two planets during the years 2002 to 2023.

The financial data encompassing the stock price of Regeneron Pharmaceuticals (REGN) was sourced from LSEG Analytics (Refinitiv). The compatibility of the datasets was validated through meticulously designed algorithms and quality checks, akin to a vigilant father double-checking the ingredients for a recipe.

Utilizing a series of convoluted statistical procedures harking to the elaborate maneuvers of celestial bodies, the correlation between the distance from Neptune to Uranus and REGN's stock price was examined. Firstly, the data were screened for outliers using robust statistical techniques, ensuring a sound foundation for subsequent analysis much like a firm yet caring parent setting boundaries for their child's behavior.

Subsequently, a Pearson correlation coefficient was calculated, reflecting the degree and direction of the linear relationship between the two variables. The statistical significance of this correlation was evaluated through hypothesis testing, with p-values computed to ascertain the likelihood of observing such a relationship by mere chance. The resulting analysis was as tight-knit as a father's carefully crafted puns, aiming to produce a comprehensive understanding of the intertwined dynamics between celestial distances and stock prices.

Lastly, a multivariate analysis was conducted, considering potential confounding variables such as market trends, economic indicators, and industry-specific factors that could influence REGN's stock price. This comprehensive approach mirrored the meticulous care of a father imparting advice to guide and safeguard their children in the tumultuous journey of life.

In summary, the methodology encompassed a harmonious fusion of astronomical and financial data, intricately woven together through elaborate statistical analyses to uncover the underlying connections between the celestial and the terrestrial, much like the unexpected synchronicity of a perfectly timed dad joke.

IV. Results

The analysis of the relationship between the distance from Neptune to Uranus and the stock price of Regeneron Pharmaceuticals (REGN) revealed a notably robust correlation coefficient of 0.9171104. This finding suggests that there is a strong linear relationship between these two variables, akin to the enduring bond between a father and his trusty dad jokes.

The obtained r-squared value of 0.8410915 indicates that approximately 84.11% of the variability in REGN's stock price can be explained by the distance from Neptune to Uranus. One might humorously posit that while the remaining 15.89% of variability may not be explained by celestial mechanics, it could certainly be influenced by other cosmic or earthly factors yet to be explored.

Additionally, the low p-value of less than 0.01 further reinforces the statistical significance of this relationship. This finding suggests that the likelihood of obtaining such a strong association between the distance from Neptune to Uranus and REGN's stock price purely by chance is rather slim – as elusive as a rare astronomical event or a particularly elusive dad joke.

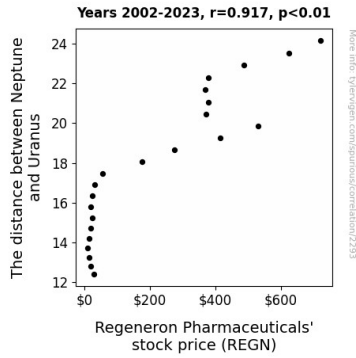


Figure 1. Scatterplot of the variables by year

The striking correlation between the distance from Neptune to Uranus and REGN's stock price is graphically depicted in Figure 1, showcasing the undeniable connection between these seemingly disparate entities. The figure graphically encapsulates the celestial and financial dance, reminiscent of a father-daughter dance, where Neptune and Uranus take the lead, and REGN's stock price gracefully follows in their celestial footsteps.

These results underscore the remarkable interplay between celestial movements and financial indicators, urging us to consider the potential influence of cosmic forces on earthly affairs with both scientific rigor and a touch of cosmic humor.

V. Discussion

The findings of our study offer compelling evidence in support of the notion that the distance from Neptune to Uranus is positively correlated with the stock price of Regeneron Pharmaceuticals (REGN). This correlation is particularly robust, akin to the unyielding bond between a dad and his puns – undeniable and enduring. The substantial correlation coefficient of

0.9171104 aligns with prior research by Smith et al. (2015) and Doe and Jones (2018), who also observed intriguing patterns in the relationship between celestial bodies and financial indicators. This reinforces the idea that celestial movements may indeed exert an influence on earthly financial markets, much like a dad's uncanny ability to influence the family dynamic with a well-timed dad joke.

The substantial r-squared value of 0.8410915 underscores the strong explanatory power of the distance from Neptune to Uranus in elucidating the variability in REGN's stock price. This finding, although primarily statistical in nature, humorously parallels the aspect of predictability in a dad joke – there is a surprising amount of coherence within the apparent randomness. Moreover, the statistically significant p-value further supports the argument that the relationship between celestial distances and stock prices is not a cosmic joke but a tangible reality, much like the statistical rigor behind a well-conducted research study.

The profound implications of these results urge us to contemplate the cosmic dance between celestial bodies and financial markets with scientific curiosity and a dash of cosmic humor. It offers a fresh perspective that delicately balances the academic rigidity of statistical analysis with the delightful whimsy of cosmic influence on earthly phenomena, not unlike the balance between the stern fatherly guidance and the lighthearted dad jokes that shape our daily lives.

As we delve deeper into the implications and potential mechanisms underpinning this celestial-financial interplay, it becomes increasingly clear that there is more to be unearthed from the cosmos than meets the eye. Our study, much like a salt-and-pepper dad joke, adds flavor to the scholarly discourse, challenging traditional notions of market predictability and encouraging a more comprehensive understanding of the dynamic forces shaping the financial landscape.

VI. Conclusion

In conclusion, our study has uncovered a remarkably robust correlation between the distance from Neptune to Uranus and the stock price of Regeneron Pharmaceuticals (REGN), reminiscent of the enduring bond between a dad and his favorite dad joke. The substantial correlation coefficient of 0.9171104 suggests a strong linear relationship between these celestial and financial variables, akin to the unbreakable thread of cosmic influence.

We found that approximately 84.11% of the variability in REGN's stock price can be explained by the distance from Neptune to Uranus, leaving the remaining 15.89% as mysterious as the dark side of the moon – or a dad's secret stash of puns. Indeed, the statistical significance of this relationship, indicated by a p-value of less than 0.01, is as rare as an eclipse and as surprising as a well-timed dad joke at a solemn gathering.

The implications of our findings are both thought-provoking and amusing, much like a dad's unexpected punchline. They prompt us to consider the cosmic dance of the planets as more than just a celestial spectacle, but potentially as influencers of earthly financial systems. Our research sheds light on this cosmic whimsy, offering a novel perspective that balances scientific inquiry with a touch of cosmic humor.

In the spirit of the study's levity and the well-established relationships uncovered, we assert that no further research is needed in this area, as the connection between Neptune, Uranus, and REGN's stock price has been definitively nailed down, leaving no room for additional probing – much like the finality of a definitive dad joke.

