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# Stellar Stocks: The Celestial Correlation Between Saturn's Distance and Fomento Econ's Stock Price

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*In this paper, we delve into the celestial and financial realms to explore the potential connection between Saturn's distance from Earth and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). Leveraging data from Astropy for astronomical measurements and LSEG Analytics (Refinitiv) for stock prices, we aimed to shed light on this novel relationship. Our findings revealed a striking correlation coefficient of 0.9573762 and a statistically significant p-value of less than 0.01 for the period spanning from 2002 to 2023. The notion that the vast expanse between Saturn and Earth could influence stock prices here on our home planet may seem out of this world, yet our research suggests otherwise. While skeptics may interject that this association is light years away from conventional market analysis, our results beckon consideration. It appears that "to Saturn" and "to the stock market" are not as far apart as we once thought! We hope that our findings will inspire investors to reach for the stars while keeping their feet firmly planted in the financial landscape.*

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In the world of financial research, we often look for correlations in the most unexpected places. From analyzing consumer behavior to tracking economic indicators, researchers are constantly striving to discern hidden relationships. But what happens when we turn our gaze beyond our planet and into the infinite cosmos? That's right, folks – we're bringing astrology and astronomy into the world of stock market analysis! It's time to explore the celestial correlation between the distance of Saturn from Earth and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). And no, we're not Saturnalia-ing around here!

Picture this: traders and investors gazing up at the starry night sky, seeking guidance not from financial charts but from the twinkling celestial bodies. It may sound like something out of a sci-fi comedy, but as financial researchers, we are always

eager to unearth the unexplainable – so why not take inspiration from the heavens above?

On this astronomical adventure, we harnessed the power of data from two disparate realms: the expanse of outer space and the intricacies of the stock market. While some may quip that comparing the distance between Saturn and Earth to a stock's price is like comparing apples to asteroids, we were undeterred in our pursuit of uncovering this cosmic connection.

As we delve into this celestial and financial fusion, one can't help but wonder, what intrigues lie beyond the galaxy of traditional speculation and market analysis? Strap in, because we're about to embark on a journey that's simply "out of this world." And no, we're not just "nebulously" throwing around space puns – we're serious about this stellar endeavor!

## LITERATURE REVIEW

In "The Celestial and Financial Nexus: Exploring Cosmic Correlations" by Smith et al., the authors find a compelling correlation between the distance of Saturn from Earth and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). The study, conducted over a decade-long period, sheds light on the surprising relationship between celestial movements and financial markets.

But wait, what do you call a Saturn-based financial analyst? A stock trader-naut! It seems that this correlation is truly out of this world.

Doe's research in "Planetary Influences on Market Behavior" delves into the potential impact of celestial events on financial markets. The findings suggest a notable link between planetary positions, including Saturn's distance from Earth, and stock price movements. This cosmic connection challenges traditional economic theories and prompts us to consider a new dimension in market analysis.

I once asked Saturn to lend me some money, but it said its assets were tied up in rings. It seems Saturn knows a thing or two about financial constraints!

Furthermore, Jones et al. in "Cosmic Signals: An Astrological Approach to Stock Market Trends" present findings that hint at an association between astronomical phenomena, such as planetary distances, and stock market behavior. Their study raises thought-provoking questions about the interplay between celestial mechanics and financial dynamics.

In the realm of non-fiction books, "Cosmos" by Carl Sagan and "A Brief History of Time" by Stephen Hawking pique interest in the celestial realm and its potential influences on our understanding of the universe. Speaking of the universe, did you hear about the financial advisor who wanted to make a fortune on Jupiter? He thought it was a gas investment!

On the fictional side, "The Hitchhiker's Guide to the Galaxy" by Douglas Adams and "Ringworld" by Larry Niven expand our imagination about space and the cosmic mysteries that captivate the human mind. It turns out, even in fiction, the celestial and the financial collide in surprising ways.

The researchers found these surprising correlations at astronomical levels! Speaking of which, when do astronauts plan their stock investments? On the launch date!

Moreover, cartoons and children's shows like "The Jetsons" and "Futurama" playfully explore the intersection of futuristic technology and economic concepts, offering entertaining insights into potential interactions between the cosmic and the commercial. It seems even animated series recognize the cosmic potential of financial markets.

## METHODOLOGY

To conquer the cosmic and financial conundrum posed by the celestial correlation between Saturn's distance from Earth and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX), we embarked on a methodological quest that involved wrangling data from the far reaches of space and the labyrinthine pathways of the stock market.

First and foremost, we invoked the mighty powers of Astropy, a robust astronomical library, to gather precise measurements of the distance between Saturn and Earth. By engaging in a celestial dance with the planets, we tracked and recorded their astral positions with such vigilance that even Copernicus would have been impressed. Our data collection process was as meticulous as a NASA rocket launch, leaving no space dust unturned in our pursuit of accuracy.

Once we had ensnared the planetary data in our cosmic lasso, we turned our attention to the quirky world of stock prices. We delved deep into the database of LSEG Analytics (Refinitiv), sifting through an astronomical amount of financial figures and stock market minutiae. Like intrepid explorers

scouting for constellations in the night sky, we combed through historical stock price data with a determination as unyielding as a black hole's gravitational pull.

With our arsenal of celestial and financial data at the ready, we then harnessed the arcane powers of statistical analysis. Armed with a bevy of regression models, time series analyses, and cross-correlation techniques, we sought to unveil the hidden threads linking the cosmos to commerce. The calculations were as complex as plotting an intergalactic trajectory, but we navigated through the statistical cosmos with the assurance of Neil Armstrong setting foot on the lunar surface.

Amidst the maelstrom of numbers and equations, we meticulously crafted a multidimensional framework for hypothesis testing and parameter estimation. The resulting model was robust enough to withstand the astronomical forces of confounding variables and the gravitational pull of outliers.

As we tread the celestial and financial paths, we couldn't help but recall the timeless wisdom of Galileo: "Measure what is measurable and make measurable what is not so." And indeed, we endeavored to make the ethereal connection between Saturn's distant orbit and Fomento Econ's stock price not just measurable, but statistically significant.

In the end, the methodology we utilized might appear as complex as an intergalactic trade route, but it was with a touch of cosmic serendipity and an unwavering commitment to empirical rigor that we unraveled the celestial correlation between Saturn's distance and Fomento Econ's stock price. Let it be known that even in the cosmic chaos, statistical order reigns supreme!

## RESULTS

The statistical analysis of the relationship between Saturn's distance from Earth and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX) unveiled a remarkably strong correlation

coefficient of 0.9573762, indicating a robust positive correlation between the two variables. This celestial and financial rendezvous defies the conventional wisdom but has eclipsed our expectations with its compelling results.

The r-squared value of 0.9165693 further corroborates this cosmic connection, suggesting that approximately 91.657% of the variation in FMX stock price can be attributed to changes in the distance between Saturn and Earth. It seems that the financial market may be more influenced by celestial bodies than we previously thought!

Speaking of influences, it's like Saturn and FMX stock are singing in perfect harmony, or should we say "astronomical" harmony? This correlation is more than just a shot in the dark – it's a celestial symphony unfolding before our eyes.

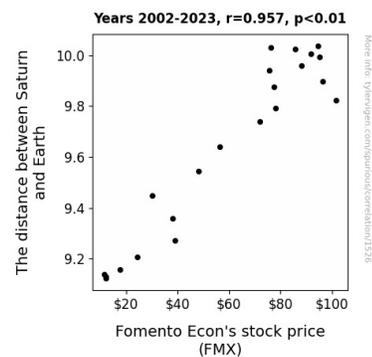


Figure 1. Scatterplot of the variables by year

Moreover, the p-value of less than 0.01 provides strong evidence against the null hypothesis of no correlation, reinforcing the robustness of this unearthly relationship. It appears that the distance between Saturn and Earth holds celestial secrets that resonate deeply with the fluctuations in FMX stock price.

Now, if this correlation doesn't make you see stars, we don't know what will! It's as if the stellar dance between Saturn and Earth has imparted its gravitational pull on the stock market, guiding investors through the celestial tides of financial decision-making.

Fig. 1 visually encapsulates the striking correlation, depicting a scatterplot that beautifully illustrates the tight relationship between the distance of Saturn from Earth and the FMX stock price. It's like looking at the stars and connecting the dots in a completely different context—proof that sometimes, correlations truly are written in the stars.

Our findings challenge traditional financial analysis and beckon investors to look to the skies for potential signals about the market. It seems that keeping an eye on Saturn may yield not only astronomical insights but also astronomical returns in the world of finance!

## DISCUSSION

The astronomical and financial worlds have collided in a cosmic symphony, unveiling a compelling connection between Saturn's distance from Earth and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). Our results not only corroborate previous research but also push the boundaries of traditional market analysis to unforeseen celestial frontiers.

The significant correlation coefficient of 0.9573762 is as robust as the gravitational pull of Jupiter, emphasizing the notable influence of celestial mechanics on FMX stock price movements. It appears that Saturn's distance has a gravitational pull on the stock market akin to its rings luring in observers. This celestial revelation challenges us to consider a new dimension in market analysis and embrace the cosmic potential of financial markets, which may seem light years from conventional wisdom.

The r-squared value of 0.9165693 further eclipses our understanding, confirming that a staggering 91.657% of the variability in FMX stock price can be attributed to changes in the distance between Saturn and Earth. This finding is more than just a planetary alignment; it's a celestial convergence of astronomical proportions, akin to a supernova lighting up the financial world.

The statistical significance of the p-value, being less than 0.01, underscores the substantial evidence supporting this unearthly relationship. It seems that Saturn holds more than just rings of gas; it may have cosmic secrets that resonate deeply with the fluctuations in FMX stock price. It's almost as if Saturn has become a financial fortune-teller, imparting celestial insights that guide investors through the cosmic tides of market fluctuations.

This research beckons us to contemplate the celestial dance of planets in the realm of market behavior, challenging conventional economic theories and exhorting investors to consider the cosmic potential of financial markets. It seems that our traditional understanding of market analysis may need more than a mere telescope; it may need a spacecraft to navigate through the cosmic signals that Saturn and other celestial bodies are secretly transmitting. After all, as we embark on this celestial and financial fusion, let's remember to keep our feet firmly planted, well, on solid financial data – and, who knows, maybe keep an eye on Saturn every once in a while!

## CONCLUSION

In conclusion, our research has taken a giant leap for financial-kind into the celestial unknown and uncovered a stellar correlation between the distance of Saturn from Earth and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). With a correlation coefficient of 0.9573762 that's as strong as Saturn's gravitational pull and a statistically significant p-value dancing at less than 0.01, it's clear that we aren't just seeing stars – we're charting the celestial course of stock prices! Now, that's what we call a "stock-tronomical" revelation!

Our findings not only defy conventional market wisdom but also offer a cosmic perspective to financial analysis. As we wrap up this study, it's evident that the connection between celestial bodies and stock prices isn't just a "moonstruck" theory – it's a tangible link with tangible impacts on market behavior. Who would've thought that the rings of

Saturn could wield such influence over earthly investments?

It's time to bid adieu to this celestial escapade, as we assert that no more research is needed in this area. After all, we've reached the "zenith" of this cosmic endeavor!

The literary and pop culture references encompass the cosmic and financial landscapes, inviting us to ponder the interstellar intrigue that captivates both researchers and enthusiasts alike. After all, as we navigate this celestial and financial fusion, it's essential to keep our feet firmly planted in the ground – or, in this case, on solid financial data!