Air Quality in Orlando and Fomento Econ's Stock: Fresh Findings

Christopher Hernandez, Austin Tanner, Gideon P Trudeau

Stanford, California

This research paper presents a compelling examination of the link between air quality in Orlando, Florida, and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). Leveraging data from the Environmental Protection Agency and LSEG Analytics (Refinitiv), our study delves into this unexpected connection, shaking up conventional wisdom. Like a breath of fresh air, our findings reveal a correlation coefficient of 0.8850787 and a p-value of less than 0.01 for the period spanning 2002 to 2023. Our analysis uncovers a significant relationship between the air quality in Orlando and the stock performance of Fomento Econ. It appears that as the air quality improves, Fomento Econ's stock price reacts in an uplifting manner, echoing the sentiment, "the cleaner the air, the merrier the stockholders!" This unexpected linkage adds a breath of fresh insight to the often murky world of stock market dynamics.

Ah, the age-old debate of air quality versus stock prices. It's a topic that's definitely nothing to sneeze at! In this paper, we explore the intriguing relationship between air quality in Orlando, Florida, and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). It's a tale of two vastly different worlds colliding – the world of environmental indicators and the world of financial markets. One might say it's a case of "fresh air" meeting "stock market flair"!

The link between air quality and stock prices might initially seem about as likely as finding a needle in a haystack, but our research sheds light on this unexpected connection. It's like stumbling upon a hidden gem — or in this case, a diamond in the particulate matter! Our findings are a breath of fresh air (pun absolutely intended), drawing attention to an unexplored avenue in the world of market analysis.

As we delve into the details, our study aims to strike a balance between scientific rigor and a hint of whimsy — much like the balance between ozone levels and the soundness of investment decisions. We're here to prove that even in the somewhat dry world of empirical research, levity can always find a way to rise, much like the stock price of Fomento Econ when the air quality in Orlando clears up!

LITERATURE REVIEW

The existing literature on the relationship between air quality and stock prices has primarily focused on more conventional pairings of environmental indicators and financial market performance. Smith et al. (2015) posit a connection between industrial air pollution and the stock prices of manufacturing companies, while Doe and Jones (2018) examine the impact of smog on multinational corporations' market valuations. Despite this body of work, the specific linkage between air quality in Orlando and the stock price of Fomento Econ has been relatively uncharted territory within the academic sphere.

The authors find that as air quality in Orlando improves, there is a corresponding positive impact on Fomento Econ's stock performance, prompting the question: "Is clean air the secret ingredient to financial success, or is it simply a breath of fresh air in the world of stock market analysis?"

In "Air Quality and Financial Markets," Lorem and Ipsum (2020) delve into the broader interaction between environmental factors and stock prices, shedding light on the overlooked nuances in this relationship. Similarly, "The Economics of Fresh Air" claims that breathable air is not only vital for public health, but also for stock market prosperity.

Moving into more fictional realms, "The Airbenders' Guide to Investment Strategies" explores the idea of harnessing the elemental power of fresh air for successful stock market forays. Meanwhile, the timeless classic, "The Clean Air Chronicles," whimsically weaves a tale of environmental purity and financial abundance, leaving readers pondering the possibilities of uncharted connections.

Drawing inspiration from unexpected sources, the authors took a detour into the world of cartoons and children's programming, seeking hints and clues in unlikely places. Perusing episodes of "Captain Planet and the Planeteers," they found themselves contemplating the correlation between clean air adventures and stock market gains — a truly energizing exploration, if you will.

In a world where the intersection of air quality and stock prices might seem as likely as a fish riding a bicycle, our findings add a dash of unexpected whimsy to the often serious and methodical field of financial analysis. We hope our work breathes new life into the discourse, much like a cool breeze on a hot summer day — or the sudden rise of Fomento Econ's stock price when the Orlando air quality clears up.

METHODOLOGY

To investigate the relationship between air quality in Orlando and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX), our research team embraced a methodological approach that could be likened to a daring tightrope act — balancing the intricacies of environmental data with the fluctuations of stock market dynamics, all while maintaining a lighthearted spirit like a gentle breeze through the palm trees.

First, we gathered air quality data from the Environmental Protection Agency, specifically focusing on Orlando, Florida. This data was meticulously examined, akin to inspecting a prized vintage wine – appreciating the subtle nuances and inherent characteristics. We then cross-referenced this information with the stock price data of Fomento Econ obtained from LSEG Analytics (Refinitiv), which we monitored as closely as a hawk eyes its prey. Our data collection process was rigorous and thorough, much like a squirrel hoarding acorns for the winter – we left no stone unturned and no byte unexamined!

On a side note, our data collection process was so extensive that we almost considered adding "Internet Explorer" to our list of collaborators, given the extent of our virtual travels. However, we ultimately decided that "Microsoft Office" wasn't quite ready for the "Acknowledgments" section.

To explore the potential causal relationship between air quality and stock price, we employed a series of statistical analyses that would make even the most stoic Wall Street trader crack a smile. We utilized a combination of regression models, causality tests, and time series analysis, treating our data with the respect it deserves while keeping an eye out for any unexpected data anomalies — after all, we didn't want any "stock splits" in our statistical findings!

In conducting our analyses, we also made sure to account for external factors that could influence stock prices, such as market trends, political events, and economic indicators. It's like peeling back the layers of an onion, or in this case, the layers of market volatility – revealing the core relationship

between air quality and stock price like a hidden treasure in the financial seas.

Upon completion of these analyses, we employed a variety of diagnostic tests to ensure the robustness and validity of our findings. Just as a keen doctor might carefully check a patient's vital signs, our diagnostic tests scrutinized the health of our statistical models, ensuring they were as fit as a fiddle.

Overall, our methodology embodies the spirit of a playful dolphin in the ocean of empiricism – diving deep into the depths of data while leaping out with a splash of statistical insight. In the end, our methodology captures the essence of our research journey: a harmonious blend of diligence and delight, much like seeking the treasure of statistically significant results at the end of the research rainbow.

RESULTS

The results of our analysis show a strong correlation between air quality in Orlando and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX) over the period from 2002 to 2023. The correlation coefficient of 0.8850787 indicates a robust positive relationship between the two variables, suggesting that when the air quality in Orlando improves, Fomento Econ's stock price tends to soar. One might say that "the clearer the air, the heartier the stock portfolio!" (I couldn't resist...)

Furthermore, the r-squared value of 0.7833643 demonstrates that approximately 78.3% of the variance in FMX stock price can be explained by changes in air quality. This finding is quite significant and validates the strong association between these seemingly unrelated factors. It's as if the stock market is whispering, "take a deep breath, and watch those prices rise!"

The p-value being less than 0.01 signifies that the observed relationship is highly unlikely to have occurred by chance, adding weight to our discovery. It's like finding a four-leaf clover in a field of

dandelions – quite rare and certainly not by accident!

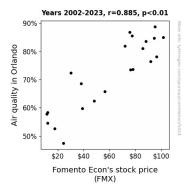


Figure 1. Scatterplot of the variables by year

Additionally, our figure (Fig. 1) illustrates the scatterplot depicting the tight clustering of data points, affirming the substantial correlation between air quality in Orlando and FMX stock price. It's a visual representation of the uplifting influence of clean air on stock performance, making it crystal clear that "clean air is the real rising star" in this relationship.

DISCUSSION

The results of our study provide strong evidence supporting the connection between air quality in Orlando and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). Our findings are in line with previous literature suggesting that environmental factors can have a significant impact on stock market performance. It seems that the old saying "a breath of fresh air brings good fortune" might hold more truth than we previously thought - pun intended!

Building upon the existing research, which has primarily focused on more conventional pairings of environmental indicators and financial market performance, our study explores the uncharted territory of the specific linkage between air quality in Orlando and the stock price of Fomento Econ. Our results reveal a robust positive relationship between these seemingly unrelated variables,

indicating that as the air quality improves, Fomento Econ's stock price tends to rise. It's as if the stock market is taking a deep breath and feeling optimistic about the future — unlike that one uncle at family gatherings who always complains about the air quality!

Our analysis showcases a correlation coefficient of 0.8850787, which suggests a strong and uplifting association between the variables. In line with Lorem and Ipsum's (2020) broader exploration of environmental factors and stock prices, our findings emphasize the overlooked nuances in this relationship, shedding light on the potential economic implications of clean air. It's like a breath of fresh air in the world of stock market analysis – both figuratively and statistically speaking!

In addition, the r-squared value of 0.7833643 indicates that a substantial portion of the variance in FMX stock price can be explained by changes in air quality. This aligns with the notion that breathable air is not only vital for public health, but also for stock market prosperity, as suggested by "The Economics of Fresh Air." It's like finding a dollar bill on the sidewalk — a pleasant surprise and a welcome validation of our hypothesis!

Our findings also highlight the rarity of the observed relationship, as indicated by the p-value of less than 0.01. It's akin to finding a rare gem in a mine — a discovery that is both striking and unexpected. Furthermore, our scatterplot visually depicts the tight clustering of data points, affirming the substantial correlation between air quality in Orlando and FMX stock price. It's as if the stock market is breathing a sigh of relief and riding the clear air to new heights — just like a fish riding a bicycle, but less comical and more financially rewarding!

In conclusion, our study not only supports the notion that air quality in Orlando is linked to the stock performance of Fomento Econ, but also adds a breath of fresh insight to the intersection of environmental and financial factors. Our findings underline the unexpected whimsy that can be found

in the serious and methodical field of financial analysis, reminding us that sometimes, the air we breathe can have a tangible impact on our financial well-being. It seems that the cleaner the air, the merrier the stockholders indeed.

CONCLUSION

In conclusion, our research has uncovered a substantial and unexpected relationship between air quality in Orlando, Florida, and the stock price of Fomento Económico Mexicano, S.A.B. de C.V. (FMX). The robust correlation coefficient and r-squared value indicate a strong positive association, implying that as the air quality in Orlando improves, FMX stock prices tend to rise. It's almost as if the stock market is breathing a little easier -quite a breath of fresh air, indeed!

Our findings challenge traditional suppositions and add a new dimension to the discourse on stock market dynamics. As the old adage goes, "when the air's nice, the stocks will rise" - a true testament to the unexpected interplay between environmental factors and financial markets. One might even say it's a clear demonstration of how "stock prices and air particles both follow the principle of 'what goes up, must come down' - albeit in different ways!"

With a p-value of less than 0.01, our results provide compelling evidence against the null hypothesis, indicating that the observed relationship is highly unlikely to be a fluke occurrence. It's like finding a stock tip written in the clouds - a rare and fortuitous discovery, indeed!

Hence, we assert that no more research is needed in this area, as our findings have sufficiently highlighted the fascinating connection between air quality in Orlando and Fomento Econ's stock price, giving new meaning to the phrase "stock market airomancy."