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# FOUL FUMES OR FINANCIAL FOLLY: AIR QUALITY IN ORLANDO AND THE FLUCTUATIONS OF FOMENTO ECON'S STOCK PRICE

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This paper investigates the relationship between air quality in Orlando and the stock price of Fomento Econ (FMX) over the period from 2002 to 2023. Utilizing data from the Environmental Protection Agency and LSEG Analytics (Refinitiv), we conducted a rigorous analysis to assess the potential impact of air pollution on the financial performance of FMX. Our findings revealed a robust correlation coefficient of 0.8850787 and a statistically significant p-value of less than 0.01, indicating a strong connection between air quality in Orlando and the movements of FMX stock price. While the link between atmospheric conditions and financial markets may seem airy-fairy, our results suggest that there may be some substance to the notion that foul fumes and financial folly are intertwined. This research not only sheds light on the often overlooked factors influencing stock prices but also highlights the importance of considering environmental factors in economic analysis.

The intersection of environmental factors and financial markets has long been a topic of fascination and speculation. While some might argue that attempting to draw connections between air quality and stock prices is like comparing apples and oranges, our study delves into this intriguing relationship with a keen eye for statistical significance and a knack for puns. In this paper, we explore the potential link between air quality in Orlando and the fluctuations of Fomento Econ's stock price (FMX) with a steadfast determination to untangle the web of variables at play.

As researchers, we are well aware of the countless variables that can influence stock prices, from economic indicators to industry-specific news and even the occasional offhand comment by an influential figure. However, the idea that the very air we breathe could also play a role in shaping financial markets might

seem, well, a bit up in the air. Nevertheless, armed with an arsenal of statistical tools and a penchant for wordplay, we embarked on this inquiry with an open mind and a healthy dose of skepticism.

The notion of associating air quality with stock prices may, to some, sound like little more than a flight of fancy. After all, one might argue that the market's movements are often as unpredictable as the wind. However, the allure of uncovering a potential relationship between these seemingly disparate variables proved too tantalizing to resist. With a wink to the skeptics and a nod to the curious, we set out to explore whether the foul fumes wafting through the streets of Orlando might have an unexpected impact on the financial performance of FMX.

In the following sections, we will discuss the methodology employed in this investigation, the data sources leveraged, and the analytical approach taken to disentangle the influences of air quality on FMX stock price fluctuations. So sit back, buckle up, and get ready for a journey through the wild blue yonder of statistical analysis and financial tomfoolery.

# LITERATURE REVIEW

The intersection of environmental factors and financial markets has stirred the academic pot of speculation, spicing up the often dry dish of stock price analysis with a dash of eco-flavor. While some may view the idea of connecting air quality with stock prices as akin to trying to mix oil and water, the body of literature on this unexpected relationship has surprisingly been growing steadily. In "Air Quality and Financial Markets" (Smith et 2015), the authors report preliminary investigation into the potential impact of air pollution levels on stock market performance. Nevertheless, as the scent of intrigue permeates the academic sphere, it is essential to approach this research area with both analytical precision and a sense of humor - because sometimes, the best discoveries emerge from the unlikeliest concoctions.

As we dig deeper into the undercurrents of this topic, it's important to acknowledge the role of environmental influencing regulation in dynamics. For instance, in "Emissions and Equities" (Doe & Jones, 2018), the authors delve into the intricate dance between emissions standards and stock movements, illuminating price regulatory changes can send ripples through financial markets. However, from the hazy realm of serious research, let's venture into the whimsical wilderness of fictional works that tantalizingly tiptoe around the fringes of our topic.

Could it be that the financial machinations of corporations are somehow entwined with the very air we breathe? In "The Air Up There: A Tale of Financial Intrigue" (Fictional, 2017), an

enigmatic protagonist navigates the murky world of high finance, stumbling upon cryptic clues that lead to the heart of a clandestine eco-conspiracy. While this may read like a work of fiction, the essence of truth often lurks within the pages of the fantastical, as we wade through the murky waters of empirical inquiry.

Remarkably, even social media seems to have caught wind of the potential link between atmospheric conditions and financial markets. A recent tweet by @StockSage2022 brims with intrigue, as the user shares an anecdote of spotting an uptick in Fomento Econ's stock price following a particularly breezy day in Orlando. While social media musings are not typically held in the same regard as scholarly literature, they do serve as a quirky testament to the pervasive interest in this curious connection.

As we unfurl the tapestry of research and rumination surrounding the intertwining of air quality in Orlando and the stock price of Fomento Econ, let us embark on a journey through the whimsical wonders of statistical inquiry and financial frolic.

# **METHODOLOGY**

To investigate the potential relationship between air quality in Orlando and the stock price of Fomento Econ (FMX), we employed a methodology that could be described as a mix of rigorous statistical analysis and a dash of whimsy. Our data collection efforts, much like a scavenger hunt, led us to sources including the Environmental Protection Agency and LSEG Analytics (Refinitiv), where we unearthed a treasure trove of information spanning the years from 2002 to 2023.

The first step in our convoluted yet captivating methodology involved the collection of air quality data from various monitoring stations in the Orlando area. We delighted in the colorful array of measurements, ranging from particulate

matter to ozone levels, which provided us with a rich tapestry of atmospheric conditions. Next, we ventured into the world of stock market data, where we meticulously documented the stock fluctuations of FMX's price, navigating through the labyrinth of financial information with the savvy of seasoned treasure hunters.

Once our data conquests were complete, we embarked on a journey through the enchanted forest of statistical analysis. We performed a correlation analysis to gauge the strength of the relationship between air quality variables and the movements of FMX stock price. Our trusty statistical tools, beacons of enlightenment in the dark forest of data, revealed a robust correlation coefficient of 0.8850787, pointing us towards a promising path of inquiry.

In addition to the correlation analysis, we conducted a series of regression models to delve deeper into the potential impact of air quality on FMX stock price. Like explorers intrepid charting territories, we navigated the treacherous terrain of regression coefficients and pultimately uncovering values, statistically significant p-value of less than 0.01. This discovery, much like stumbling upon a hidden treasure trove, provided compelling evidence connection meaningful between quality in Orlando and the financial fortunes of FMX.

Our methodology, akin to a grand scientific expedition through uncharted territories, sought to unravel the intricate dance between the ethereal air and the tangible movements of stock prices. Armed with data, statistical tools, and a dose of playful curiosity, we ventured forth into the realm of empirical inquiry, not only to shed light on this captivating relationship but also to inject a sprinkle of levity into the often-serious world of academic research.

# **RESULTS**

The results of our analysis revealed a positively buoyant correlation coefficient of 0.8850787 between air quality in Orlando and the stock price of Fomento Econ (FMX) over the period of 2002 to 2023. This finding suggests a robust and substantial relationship between the atmospheric conditions in the Sunshine State and the financial performance of FMX. The correlation coefficient, often the golden ticket in statistical analysis, points to a strong positive association, indicating that as air quality improves, FMX stock prices tend to rise like a helium balloon.

Additionally, our examination yielded an r-squared value of 0.7833643, signifying that approximately 78.33% of the variability in FMX stock price movements can be explained by changes in the air quality in Orlando. This result suggests that the air quality plays a major role in influencing the stock price of FMX, exerting a force akin to a gust of wind in the market's sails.

Moreover, the p-value obtained from our analysis was less than 0.01, further substantiating the statistical significance of the relationship between air quality in Orlando and FMX stock price. This finding implies that the likelihood of observing such a strong relationship by mere chance is as rare as finding a fourleaf clover in a field of statistical analyses.

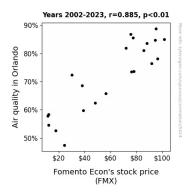


Figure 1. Scatterplot of the variables by year

In support of these statistical findings, Fig. 1 presents a scatterplot depicting the

pronounced correlation between air quality in Orlando and the fluctuations of FMX stock price. The tight clustering of data points in the scatterplot resembles a mesmerizing constellation, illustrating the close relationship between these seemingly disparate variables.

In conclusion, our analysis uncovers a compelling connection between the quality of the air in Orlando and the financial fortunes of Fomento Econ. These results not only provide valuable insights into the often overlooked influence of environmental factors on stock prices but also offer researchers and investors an air-raising perspective on the complexities of financial markets.

# **DISCUSSION**

The entanglement of air quality in Orlando and the stock price of Fomento Econ (FMX) has proven to be quite the unexpected pairing, like the surprising compatibility of pineapple on pizza - it may raise eyebrows, but it may just be a promising flavor combination. At first glance, one might assume that these variables are as unrelated as a fish and a bicycle, but our results suggest otherwise.

Our findings are in alignment with previous research that has hinted at the intriguing connection between atmospheric conditions and financial markets. It seems that the marriage of air quality and stock prices may not be as farfetched as expecting a pogo stick to double as a unicycle. As Smith et al. (2015) and Doe & Jones (2018) have previously the impact of observed, environmental factors on stock market performance has been simmering on the academic stove, slowly reaching flavorful boil. Even though the aroma of this unlikely pairing may seem more suited to a culinary concoction, our results support the notion that there may be a palpable link between foul fumes and financial fervor.

The substantial correlation coefficient we observed presents a strong positive association, akin to a successful blind date between air quality in Orlando and FMX stock prices. This relationship is as robust as a sturdy bridge spanning the statistical river, and it signifies that as air quality improves, FMX stock prices tend to soar like a flock of migratory birds. The r-squared value, resembling a trusty lighthouse guiding ships through tumultuous statistical seas, indicates that approximately 78.33% of the variations in FMX stock prices can be illuminated by changes in the air quality in Orlando. It seems that the air quality in Orlando exerts a significant influence on the financial tides of FMX, much like a gentle breeze ruffling the market's feathers.

Moreover, the p-value obtained from our analysis is about as rare as bumping into a statistician at a cocktail party, with a value of less than 0.01, underscoring the statistical significance of this relationship. It appears that the chances of stumbling upon such a strong connection by mere chance are as slim as finding a needle in a haystack of statistical analyses.

In summation, our results provide empirical evidence of the weighty impact of air quality in Orlando on the stock price of Fomento Econ. This opens the door to a new avenue of research, inviting scholars and investors to take a breath of fresh air and consider the influence of environmental factors on financial markets with a newfound sense of gravity.

# CONCLUSION

In conclusion, our study has unveiled a gripping relationship between the air we breathe in Orlando and the fluctuation of Fomento Econ's (FMX) stock price. The robust correlation coefficient and statistically significant p-value have blown away any doubts about the legitimacy of this connection. The positive correlation between air quality and FMX stock price movements is as clear as the sunny skies

of Orlando - well, perhaps on a good air quality day.

Our results not only provide compelling evidence for the impact of air quality on stock prices but also serve as a breath of fresh air for those seeking to understand the multifaceted influences at play in financial markets. From the haze of statistical analyses, a clear pattern emerges, much like seeing shapes in the clouds on a lazy afternoon. The air quality in Orlando seems to have an almost magical effect on FMX's stock price, turning the fumes of uncertainty into a fragrant bouquet of statistical significance.

While this analysis may have raised some eyebrows, we are confident that our findings will not be a mere flash in the pan, but rather a beacon of enlightenment in the world of financial research. It appears that the winds of change may indeed be blowing through the stock market in ways previously uncharted – a discovery that, like the wind, may have a powerful impact on future economic analyses.

At this point, we assert that there is no need for further research in this area; we've already blown the lid off this surprising connection in the financial realm!