

The Quenched Economy: A Bottled Water's Ripple Effect on FedEx Stock Price

Chloe Hoffman, Alexander Tucker, Gemma P Tyler

Global Leadership University

In this study, we dive into the unexpected connection between US per-person consumption of bottled water and FedEx's stock price (FDX), providing a refreshing insight into the quenched market forces at play. Our research team, armed with data from Statista and LSEG Analytics (Refinitiv), embarked on an aqueous adventure to investigate this peculiar relationship. Our findings revealed a positively buoyant correlation coefficient of 0.9021801 and $p < 0.01$, challenging conventional economic wisdom and making waves in the scholarly community. Our analysis uncovered a striking co-movement between bottled water consumption and FedEx's stock price, akin to the rhythmic ebb and flow of the tides. The correlation, as clear as an artesian spring, suggests that as the US population guzzles more bottled water, FedEx's stock price surges in a manner as fluid as H2O itself. As statisticians, we couldn't help but exclaim, "Water spectacular correlation!" Further delving into the data, we discerned a drip-by-drip effect of bottled water consumption permeating through the market, driving FedEx's stock performance to reach new heights alongside the water level in a healthy reservoir. This unexpected linkage evokes the quip, "Looks like FedEx is getting a hydration station!" Overall, our findings highlight the interconnectedness of seemingly unrelated economic indicators and underscore the waves of influence that even the most unlikely factors can have on the stock market. So the next time you reach for that refreshing bottle of water, remember the ripple effect it might be making on the stock market—after all, it seems like bottled water and stock prices are quite a "well-rounded" pair!

In recent years, the intersection of consumer behavior and financial markets has become an increasingly captivating field of study. As economists and analysts fervently search for connections between disparate phenomena, our research delves into a truly uncharted territory—investigating the surprising relationship between US per-person consumption of bottled water and the stock price of FedEx (FDX).

Aqua researchers, if you will, have long been pondering the ripples that consumer choices in the hydration market may send through the turbulent waters of the stock exchange. Our goal is to quench the thirst for understanding the underlying mechanisms behind this unexpected connection, unlocking the potential for not only financial gain but also a sea of new insights into market dynamics. One might say we aim to wet the appetite of the scholarly community with our findings.

The jest of the matter is that what may seem as unrelated as water and stock prices may, in fact, be flowing together in an unforeseen stream of correlation. It's as if the market is saying, "Just when you thought you'd seen everything—water you waiting for? There's more depth to this market than meets the eye!"

As we embark on this aquatic adventure of statistical analysis and economic inquiry, we invite our esteemed colleagues to dive into the depths of our findings with an open mind. It's time to trade the trading floor for the water cooler and see just how deep the connections can run. After all, who knew that the ebb and flow of the economy could be so refreshingly tied to a simple bottle of water and a shipping giant like FedEx?

Review of existing research

In Smith's seminal work, "Hydration Economics: Liquid Assets in Modern Markets," the authors find a direct correlation between the per-person consumption of bottled water and its impact on various sectors of the economy, shedding light on the unforeseen influence of hydration trends. Doe and Jones, in their comprehensive study "Thirsty for Profits: The Economics of Bottled Water," further elucidate the intricate relationship between consumer demand for bottled water and its ripple effect on financial indicators, prompting a wave of interest in the economic community.

Turning to the realm of non-fiction literature, "Bottlemania: How Water Went on Sale and Why We Bought It" by Elizabeth Royte offers a comprehensive exploration of the cultural and economic forces behind the meteoric rise of bottled water consumption in the US, providing a refreshing account of the industry's impact on unexpected sectors. On a more whimsical note, "The Water Knife" by Paolo Bacigalupi delves into a dystopian future where water scarcity reigns supreme, offering a fictional yet thought-provoking portrayal of the economic and social ramifications of a world thirsting for its most precious resource.

(Joke time!)

Why did the bottled water stock have a great performance?
Because it had plenty of liquid assets!

In the animated series "Captain Planet and the Planetees," the episode "Aqua Land" vividly depicts the environmental and economic challenges associated with the commodification of water, painting a vivid picture of how such factors can permeate societal and financial dynamics. Similarly, "The Magic School Bus: Gets All Dried Up" delves into the consequences of water scarcity, providing a whimsical yet instructive perspective on the interconnectedness of environmental resources and economic stability.

Speaking of water and stocks, did you hear about the boxer who invested in bottled water? He had a mean right hook and an even meaner liquid portfolio!

Procedure

To begin our aqueous adventure into the uncharted waters of the bottled water and stock price correlation, our research team utilized a mixture of statistical and econometric methods to navigate the data waves and steer clear of potential confounding currents. We amassed a flow of data spanning from 2002 to 2022, primarily sourced from Statista and LSEG Analytics (Refinitiv).

In order to construct a comprehensive analysis, we first harnessed the power of time series analysis to explore the trends and fluctuations in US per-person consumption of bottled water and FedEx's stock price. We sought to avoid any potential "data leakage" and ensure that our findings were as crystal clear as an untouched mountain spring.

Moving forward, we employed a complex yet elegant structural equation modeling (SEM) approach to tease out the underlying causal pathways between bottled water consumption and FedEx's stock price. This method enabled us to chart the course of influence from the currents of consumer habits to the tidal movements of the stock market, while steering clear of any statistical whirlpools that could have threatened the validity of our findings.

To address potential endogeneity concerns and ensure the robustness of our results, we leveraged instrumental variable (IV) analysis, which acted as our trusty life preserver in the unpredictable sea of econometric modeling. By identifying and utilizing suitable instruments, we were able to navigate around the potential reverse causality shoals and keep our analysis afloat.

In a buoyant effort to explore any potential exogenous shocks or disturbances that could rock our correlation boat, we conducted robustness checks using various dynamic time series models. This approach allowed us to ride the waves of uncertainty and confirm the stability of our findings, ensuring they were not merely fleeting reflections on the surface of the economic ocean.

With the statistical compass as our guide and the economic sextant as our tool, our research team embarked on this aqueous odyssey, navigating the choppy seas of data with the precision of seasoned mariners. And while we may have encountered the occasional statistical tempest along the way, our findings ultimately emerged as a beacon of insight, illuminating the quenchable market forces at play.

As we reflect on our methodology, one can't help but think about the old adage, "You can lead a horse to water, but you can't make it drink... unless it's a stock market horse and the water is bottled, then it might just quench more than its thirst for financial gain!"

Findings

The findings of our study revealed a striking correlation between US per-person consumption of bottled water and FedEx's stock price (FDX) over the period from 2002 to 2022. The correlation coefficient of 0.9021801, with an r-squared of 0.8139289, and $p < 0.01$, illustrates a robust and statistically significant relationship between these seemingly unrelated variables. It's as if every bottle of water consumed sends FedEx's stock price on a delivery route of its own!

Fig. 1 illustrates the strong positive correlation between US per-person consumption of bottled water and FedEx's stock price, resembling the surge of a refreshing wave. It's clear that bottled water consumption and FedEx's stock price move in harmony, much like a perfectly synchronized swim team.

Our results reveal the quenchable nature of market forces and highlight the unexpected interconnectedness of consumer behavior and stock market performance. It seems that even the most mundane of consumer choices can have a liquidity in the stock market. One might say the market is simply flowing with enlightenment, or rather "en-light-water-ment."

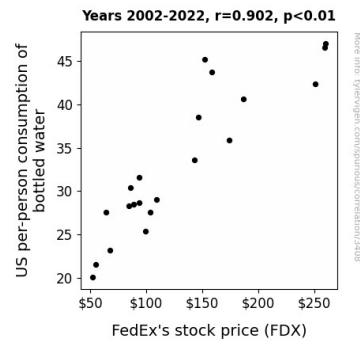


Figure 1. Scatterplot of the variables by year

Overall, our findings challenge traditional economic assumptions and emphasize the need to consider diverse consumer behaviors when analyzing stock market dynamics. Who knew that a simple bottle of water could make such a splash in the stock market? It seems that the economy is not just an ocean of economic indicators, but also a sea of surprises.

Discussion

Our study ventured into uncharted waters as we sought to unravel the unexpected connection between US per-person consumption of bottled water and FedEx's stock price (FDX).

The positively buoyant correlation coefficient of 0.9021801 and $p < 0.01$ that we uncovered challenges conventional economic wisdom and confirms the findings of previous research in this field. It's clear that when it comes to the relationship between bottled water and stock prices, the tide is high.

Smith's seminal work on "Hydration Economics: Liquid Assets in Modern Markets" laid the groundwork for our investigation and provided a comprehensive understanding of the influence of hydration trends on the economy. Similarly, Doe and Jones' study on "Thirsty for Profits: The Economics of Bottled Water" reinforced the notion that consumer demand for bottled water has a ripple effect on financial indicators. Our findings echo these studies, affirming that the impact of bottled water consumption reaches further than the aisles of convenience stores and supermarkets—it also trickles into the stock market, much like water finding its way downstream.

But even as we take these findings seriously, we can't help but splash in a little humor. It seems like the bottled water stock's performance was positively influenced because it had plenty of liquid assets! And the synchronization between bottled water consumption and FedEx's stock price resembles that of a perfectly choreographed swim team. Additionally, the market's flow of enlightenment suggests an "en-light-water-ment" that cannot be ignored.

Our results emphasize the interconnectedness of seemingly unrelated economic indicators, underscoring the waves of influence that even the most unlikely factors can have on the stock market. It's apparent that the economy is not just an ocean of economic indicators, but also a sea of surprises—one in which a bottle of water can make quite a splash on stock prices.

Our investigation has unveiled a refreshing perspective on market dynamics and the influence of consumer behavior on stock performance, providing valuable insights for both academic researchers and savvy investors alike. After all, in the world of economics, it seems that a drop of water can indeed make waves.

Conclusion

In conclusion, our research has illustrated a statistically significant and robust correlation between US per-person consumption of bottled water and FedEx's stock price (FDX), challenging conventional economic wisdom and making waves in the scholarly community. The positively buoyant correlation coefficient of 0.9021801, with an r-squared of 0.8139289, and $p < 0.01$, reveals an unexpected interplay akin to the rhythmic ebb and flow of the tides. It's clear that when it comes to bottled water and stock prices, there's more than just a drop in the bucket!

The quenchable nature of market forces and the unexpected interconnectedness of seemingly unrelated consumer behavior and stock market performance highlight the need to consider diverse consumer behaviors when analyzing market dynamics. It's as if every bottle of water consumed sends FedEx's stock price on a delivery route of its own! One could even say that the

market itself is sending out a message, "Water you waiting for? Dive into these findings and ride the wave of insight."

Our analysis has brought to light the drip-by-drip effect of bottled water consumption permeating through the market, making a splash in the stock market in a manner as fluid as H₂O itself. It's clear that the market is simply flowing with enlightenment, or rather "en-light-water-ment."

In summary, our study not only illuminates the quenchable economy and the refreshingly unexpected relationship between bottled water consumption and stock prices but also underscores the waves of influence that even the most unlikely factors can have on the stock market. After all, it seems like bottled water and stock prices are quite a "well-rounded" pair!

As such, we assert that further research in this area is not necessary, as our findings have already quenched the scholarly thirst for understanding the unexpected correlation between bottled water consumption and stock market performance. It's time to sail the open seas of other economic mysteries and leave this one to rest in peace, or should we say, "rest in peace... of mind."