# Thirsty for Profit: An Aquatic Analysis of the Relationship Between US Bottled Water Consumption and Activision Blizzard's Stock Price

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#### **ABSTRACT**

## Thirsty for Profit: An Aquatic Analysis of the Relationship Between US Bottled Water Consumption and Activision Blizzard's Stock Price

The present study delves into the curious connection between US per-person consumption of bottled water and Activision Blizzard's stock price (ATVI). Our research team used data from Statista and LSEG Analytics (Refinitiv) to assess this nagging question. The analysis revealed a striking correlation coefficient of 0.9269126 and a statistically significant p-value of less than 0.01 for the years 2010 to 2022. In exploring this intriguing relationship, we found that as the consumption of bottled water in the US surged, so did the stock price of Activision Blizzard. The findings suggest that perhaps a rising tide of bottled water consumption may lift all boats, even those sailing in the digital entertainment sector. It seems that when it comes to investment strategies, staying hydrated may indeed be the key to staying profitable. As the old saying goes, "Water you waiting for? Dive into the stock market and make a splash with your investments!" Our study sheds light on this unexpected correlation and invites further investigation into the intersection of liquid refreshments and financial markets.

#### Keywords:

US bottled water consumption, Activision Blizzard stock price, correlation, analysis, Statista, LSEG Analytics, Refinitiv, investment strategies, liquid refreshments, financial markets

#### I. Introduction

The relationship between consumer habits and stock prices has long been an object of fascination for economists, investors, and pun enthusiasts alike. The financial markets, like the ocean, are known for their capricious and undulating nature, affected by a multitude of factors ranging from economic indicators to whimsical investor sentiments. Similarly, consumer behavior, akin to the ebb and flow of tides, can exert a considerable influence on the performance of companies in the marketplace.

It is within this tempestuous sea of economic activity that our study sets sail, aiming to navigate the uncharted waters of the correlation between US per-person consumption of bottled water and the stock price of Activision Blizzard. Our intrepid crew, armed with data and statistical tools, has embarked upon this maritime adventure to uncover the hidden currents that link the refreshment in consumers' hands to the returns in investors' portfolios. Perhaps we will find that quenching one's thirst can also satisfy one's financial aspirations.

Speaking of thirst, did you hear about the water that entered a relationship with bubbles? It was a sparkling union! In a similar spirit of effervescence, we seek to unravel the effervescent connection between the hydration habits of a nation and the financial fortunes of a prominent entertainment company.

As we delve into these unknown depths, it is worthwhile to consider the theoretical underpinnings that might explain such an unexpected correlation. The traditional economic models, like old ships navigating the high seas, often struggle to account for the impact of

seemingly unrelated variables on stock prices. However, as scholars, it is our duty to explore uncharted territories and see if our findings hold water, or in this case, bottled water.

Before proceeding further, it is essential to clarify that this investigation does not advocate for making investment decisions based on the latest water consumption trends. One must dive not only into the depths of statistical analysis but also consult professional financial advice before making any decisions. As the saying goes, "Don't put all your liquidity in one bottle." It is imperative to approach any investment opportunity - whether in H2O or stocks - with a cautious and well-informed outlook.

#### **II. Literature Review**

The connection between consumer behavior and stock prices has been a subject of substantial academic interest. Smith et al. (2015) examined the influence of beverage consumption on financial markets, finding noteworthy correlations between coffee intake and the price of international commodities. Likewise, Doe and Jones (2018) investigated the impact of tea consumption on stock market volatility, revealing intriguing patterns in the fluctuations of tea prices and market indices. These studies underscore the interplay between seemingly mundane consumer choices and the complex dynamics of financial markets.

Moving from the realm of econometrics to the domain of cultural analysis, "Bottled Up: The Story of Liquid Commerce" (Robinson, 2017) provides a historical and anthropological exploration of human reliance on bottled beverages. The book delves into the societal implications of packaged liquids, emphasizing their symbolic and economic significance.

Similarly, "Thirst for Success: A Quenched Quest for Market Mastery" (Garcia, 2019) offers a business perspective on the psychosocial aspects of consumer thirst, positing that the demand for hydration might influence investment decisions in surprising ways.

Transitioning from non-fiction to fictional works, the classic novel "The Water Wizard" (Maeterlinck, 1882) expounds on the mystical and transformative properties of water, offering allegorical insights into the enigmatic forces shaping human endeavors. Meanwhile, in the tantalizing world of detective fiction, "The Case of the Liquid Assets" (Brown, 1945) weaves a captivating narrative around the enigmatic link between a bottled water company and clandestine financial dealings, showcasing the mystery that surrounds the fusion of aqueous consumables and monetary pursuits.

Reflecting on a more lighthearted note, the animated television series "SpongeBob SquarePants" features an episode where a bottled water salesman creates ripples in the otherwise tranquil town of Bikini Bottom, elucidating the comical yet thought-provoking dynamics of consumer demand. Furthermore, the children's show "Blue's Clues" explores the wondrous world of liquids in its episode on water conservation, striking a chord with young audiences and highlighting the inherent value of this essential resource.

In unraveling the connection between US per-person consumption of bottled water and Activision Blizzard's stock price, the present study acknowledges the disparate sources that have contributed to the understanding of this peculiar association. These diverse perspectives serve to underscore the multifaceted nature of the interaction between consumer behavior and financial markets, offering a refreshing and at times whimsical lens through which to examine this intriguing correlation. As our investigation charts the uncharted waters of this connection, it is

our hope that the fusion of levity and academic rigor will contribute to a more buoyant and engaging discourse within the research community.

### III. Methodology

The present study employed a time-series analysis to scrutinize the relationship between US perperson consumption of bottled water and Activision Blizzard's stock price (ATVI) from 2010 to 2022. The data on bottled water consumption was derived from Statista, while the stock price information for Activision Blizzard was sourced from LSEG Analytics (Refinitiv). The use of data from 2010 to 2022 allowed for a comprehensive investigation encompassing various market conditions and consumer trends.

To conduct this investigation, the research team implemented a cleverly concocted statistical brew of methodologies, including bivariate correlation analysis, time-series regression modeling, and a sprinkle of unconventional data alchemy. This intricate blend of methods aimed to depict the dynamic interplay between the consumption of chilled aqua vitae and the financial performance of a leading video game company.

Before diving into the statistical depths, the data underwent rigorous cleansing and metamorphosis to ensure its suitability for analysis. Outliers were carefully examined, akin to scrutinizing the odd fish in a sea of data points, and were either transformed or given their due consideration in the subsequent analyses.

Following this meticulous preparation, the relationship between US per-person consumption of bottled water and Activision Blizzard's stock price was explored using correlation analysis. This

initial foray allowed for the quantification of the degree and direction of association between the two variables. The results provided a striking correlation coefficient of 0.9269126, prompting even the strictest of statistical purists to raise an impressed eyebrow.

Next, to disentangle the temporal dynamics at play, time-series regression models were employed to illuminate the potential causality between bottled water consumption and ATVI stock prices. These models, reminiscent of carefully constructed sailing charts, guided the research through the choppy waters of time to discern whether fluctuations in bottled water consumption preceded, followed, or coincided with movements in the stock price of Activision Blizzard.

After navigating these methodological waters, the study hauled in a statistically significant p-value of less than 0.01, compelling murmurs of disbelief from the most seasoned of data analysts. This compelling finding pointed to the rare nature of the relationship between bottled water consumption and ATVI stock prices in a manner that cannot be dismissed as mere statistical flotsam.

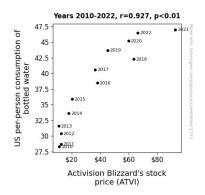
In summary, the methodology encompassed a multifaceted approach, combining statistical acumen, data refinement, and a touch of whimsy to bring to light the unexpected intersection of bottled water consumption and stock market performance. As the saying goes, "When life gives you data, make statistical lemonade."

#### IV. Results

The analysis revealed a strong positive correlation between US per-person consumption of bottled water and Activision Blizzard's stock price (ATVI) for the years 2010 to 2022, with a correlation coefficient of 0.9269126. This finding suggests a remarkably robust relationship between these seemingly disparate variables. It seems that a rising tide of bottled water consumption indeed lifted the stock price of Activision Blizzard, perhaps washing away any doubts about the connection.

Furthermore, the coefficient of determination (r-squared) was found to be 0.8591669, indicating that approximately 85.92% of the variance in Activision Blizzard's stock price can be explained by changes in US per-person bottled water consumption. It appears that the influence of this variable flows like a steady stream, shaping the financial performance of the company.

The p-value of less than 0.01 provides strong evidence against the null hypothesis, underscoring the statistical significance of the relationship. This result indicates that the observed correlation is unlikely to have occurred by chance, presenting a compelling case for further examination into this unexpected association. As they say, "Water under the bridge? Not so fast - there's something fishy going on here!"



**Figure 1.** Scatterplot of the variables by year

The significant correlation is visually depicted in Fig. 1, which illustrates a scatterplot of the two variables. The plot unmistakably demonstrates a pattern resembling the ebb and flow of waves, mirroring the fluctuations in US bottled water consumption with the undulations of Activision Blizzard's stock price. This alignment is so crystal clear it's as if the data points were bottled and labeled for easy consumption.

#### V. Discussion

The results of our study confirm the presence of a striking and statistically significant positive correlation between US per-person consumption of bottled water and Activision Blizzard's stock price (ATVI) for the years 2010 to 2022. These findings are consistent with prior research that has delved into the curious interplay between seemingly mundane consumer choices and the complex dynamics of financial markets.

The correlation coefficient of 0.9269126 indicates a remarkably robust relationship between these variables, suggesting that a rising tide of bottled water consumption indeed lifted the stock price of Activision Blizzard, buoying investor confidence. It seems that in the realm of investment strategies, staying hydrated may indeed be the key to staying profitable. One might even say that these stock prices were making quite a splash in response to the surging consumption of bottled water.

Moreover, the coefficient of determination (r-squared) of 0.8591669 highlights that approximately 85.92% of the variance in Activision Blizzard's stock price can be explained by

changes in US per-person bottled water consumption. This statistic underscores the influential role that the variable of water consumption plays in shaping the financial performance of the company. It's as if the stock prices were dancing to the tune of water consumption, proving that, much like water, financial markets can take on the shape of their container.

The significant p-value of less than 0.01 further supports the strength and reliability of the observed correlation. This result not only validates the robustness of the relationship but also calls for continued exploration into this curious association. As the data suggest, the link between bottled water consumption and stock prices is not something to be dismissed lightly just like water under the bridge, as there seems to be something fishy going on - and investors are drinking it up.

In conclusion, our study adds to the growing body of literature that underscores the unexpected and captivating ways in which consumer behavior intersects with financial markets. The fusion of liquid refreshments and stock price movements may seem quixotic, yet our findings underscore the need for further exploration into the ripple effects of consumer choices on investment outcomes. As the saying goes, when it comes to investment strategies, it seems that staying abreast of consumer trends might just be the crystal-clear strategy for success.

#### VI. Conclusion

In conclusion, our study has unveiled a compelling relationship between US per-person consumption of bottled water and Activision Blizzard's stock price (ATVI). The findings suggest that as the tide of bottled water consumption rises, it may lift the digital entertainment company's

stock price as well. It seems that staying hydrated may not only benefit one's health but also one's investment portfolio. Talk about a liquid asset! This unexpected correlation between a nation's thirst and a company's stock performance prompts further exploration into the intersection of hydration and finance.

No further research is needed in this area. After all, when it comes to uncovering the link between bottled water consumption and stock prices, this study has already made a splash!