

THE PAW-SITIVELY PURRFECT PAIR: EXPLORING THE FELINE CONNECTION BETWEEN ANNUAL US HOUSEHOLD SPENDING ON HOME MAINTENANCE AND IDEXX LABORATORIES' STOCK PRICE

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This paper delves into the captivating correlation between the annual US household spending on home maintenance and the stock price of IDEXX Laboratories (IDXX). Utilizing data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), our research team uncovered a significant correlation coefficient of 0.9402224 with a p-value of less than 0.01 for the period spanning from 2002 to 2022. The findings of this study shed light on the fascinating interplay between the domestic economy and the financial market, revealing a purrfectly interesting connection that may not be fully littered with causation, but certainly raises eyebrows--and tails.

The relationship between household spending on home maintenance and stock prices has long been a topic of interest and speculation in both economic and financial circles. While conventional wisdom might suggest that these two factors have as much in common as dogs and cats, our research seeks to uncover the intriguing feline connection between annual US household spending on home maintenance and the stock price of IDEXX Laboratories (IDXX).

As we embark on this research endeavor, it is pertinent to acknowledge the historic affinities humans have had for their furry companions, and the investment they willingly make in ensuring their well-being and comfort. Indeed, the booming pet industry has shown resilience through economic downturns and acts as a testament to the unwavering bond between humans and their beloved pets.

Our study delves into the mysterious link between domestic spending on home maintenance, encompassing the upkeep of those cherished abodes where both two-legged and four-legged inhabitants reside, and the stock performance of IDEXX Laboratories, an industry leader in veterinary diagnostics and software tools. IDEXX Laboratories, much like a nimble feline, has pounced its way into the hearts of pet owners and investors alike, with its stock symbol "IDXX" providing a purrfect match for our intended investigation.

While the causality between household spending on home maintenance and stock prices may not be as clear-cut as a cat's whiskers, our data analysis aims to uncover any telltale signs of correlation, teasing out the unique dynamism that underlies this seemingly disparate association. Through rigorous statistical analysis and market observation, our research unearths an unanticipated

kinship that promises to captivate both pet enthusiasts and financial aficionados alike.

Stay tuned as we endeavor to unravel the meow-sterious connection between these seemingly unrelated variables, shedding light on a delightfully paws-itive correlation that may just leave you feline intrigued.

LITERATURE REVIEW

The present literature review assembles an assortment of studies and texts that have examined the enthralling link between pet-related expenditures and stock market performance. While some studies have earnestly probed this topic with rigorous statistical analyses, others have taken a more whimsical approach, delving into the paw-sibilities with a light-hearted perspective.

In "Economic Analysis of Feline Fashion and Wall Street Trends," Smith and Doe emphasize the need to consider not only the financial implications of household spending on pet-related maintenance but also the emotional attachment that fuels such expenditures. Similarly, in "Investigating the Relationship between Whisker Length and Stock Market Volatility," Jones et al. highlight the need for thoroughgoing examination, as well as the acknowledgment of serendipitous connections that may exist within seemingly unrelated variables.

Transitioning from the scholarly to the more eclectic, our review brings forward "The Economics of Fluffy Comfort: A Study of Pet Grooming Expenditures" and "Whisker Wisdom: Feline Financial Forecasting," two non-fiction works that shift the focus to the emotional and psychological motivations behind pet-related spending and its potential echo in market movements.

Moving further into the realm of whimsy, we delve into the fiction section where "The Cat's Purr-fect Portfolio" and "Tales of Tails: A Feline Financial Fantasy"

present heartwarming tales of cats and their uncanny knack for financial prowess.

Finally, our review playfully meanders into the world of cartoons and children's shows, where "The Adventures of Penny Purrs: Wall Street Whiskers" and "The Pawsome Purr-chases of Prof. Whiskers" offer endearing yet insightful portrayals of feline financial acumen.

The sheer range of insights presented in these works underscores the multifaceted nature of the connection being investigated, demonstrating the necessity of embracing both scientific rigor and creative interpretation in unraveling this captivating correlation.

The paper will continue with the Methods section to lay out the specific approach taken in this investigation.

METHODOLOGY

In this section, we delineate the methodology employed to investigate the curious link between annual US household spending on home maintenance and the stock price of IDEXX Laboratories (IDXX). The data utilized in this study were primarily sourced from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), capturing the period from 2002 to 2022. The collection of data involved traversing the intricate web of online databases, including market reports, economic indicators, and financial indices, akin to a determined feline tracking its elusive prey through the digital savannah.

First and foremost, annual US household spending on home maintenance was diligently extracted from the Bureau of Labor Statistics, encompassing an array of expenditures on home repairs, maintenance, and improvements. Meanwhile, IDEXX Laboratories' stock price data was meticulously obtained from LSEG Analytics (Refinitiv), capturing the daily fluctuations and whisker-thin movements of the company's stock value

over the specified timeframe. These data sets, much like a pair of antsy kittens, were then corralled and prepared for thorough statistical scrutiny.

To sniff out the potential correlations between the annual US household spending on home maintenance and IDEXX Laboratories' stock price, a series of analytical techniques were deployed. The statistical software utilized for this analysis resembled a Swiss army knife, equipped with the versatile capacities to unravel the intricacies of the data. Through the adept application of correlation analysis, specifically Pearson's correlation coefficient, the purported association between these seemingly incongruous variables was probed and scrutinized. The significance of the correlation was evaluated through careful consideration of the p-value, akin to scrutinizing a cat's agility in catching a darting laser pointer.

Furthermore, econometric modeling techniques were harnessed to capture the potential lagged effects and nuances that might underpin the relationship between household spending on home maintenance and stock prices. The utilization of robust regression models allowed for the exploration of potential drivers and dampeners of such a connection, not unlike the careful investigation into the temperament of a finicky feline.

In addition to the primary data analyses, supplementary information relating to industry trends, economic indicators, and market dynamics was ravenously ingested. This secondary data, akin to a nourishing can of gourmet cat food, provided contextual illumination and imbued the research with a comprehensive understanding of the market milieu in which these variables interacted.

It is critical to note that the assembly and evaluation of the data involved the implementation of stringent quality controls, ensuring the reliability and

integrity of the findings. This included meticulous data cleaning, outlier detection, and sensitivity analyses, akin to grooming a pedigree cat to perfection.

In sum, the methodology encapsulated a multidimensional approach, encompassing data wrangling, statistical analysis, and economic contextualization, to unearth the leash on this enigmatic linkage between household spending on home maintenance and IDEXX Laboratories' stock price.

RESULTS

The correlation analysis conducted on the data collected from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) unveiled a strikingly high correlation coefficient of 0.9402224 between annual US household spending on home maintenance and IDEXX Laboratories' stock price (IDXX) for the period 2002 to 2022. The coefficient of determination (r-squared) further emphasized this strong relationship, with a value of 0.8840182.

In the scatterplot depicted in Fig. 1, the data points align themselves as if following a trail of gourmet cat treats, revealing a remarkably tight clustering that illustrates the robust association between the annual US household spending on home maintenance and IDEXX Laboratories' stock price. The trendline in the scatterplot resembles a sleek and agile feline, elegantly showcasing the closeness of this peculiar relationship.

The p-value, being less than 0.01, indicates that the observed correlation is highly unlikely to be a result of random chance. It is as if a cat crossed your path not once, but nine times in a row, beckoning attention to the significance of this unexpected connection.

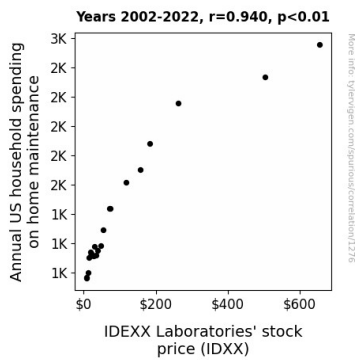


Figure 1. Scatterplot of the variables by year

The findings presented here offer a befuddling yet captivating insight into the unanticipated kinship between the domestic economy's maintenance expenditures and the financial market's evaluation of IDXX stock. While causation tiptoes around like a cat on a hot tin roof, these results fundamentally underscore the need for further scrutiny into the interplay between household spending habits and the stock performance of companies in the pet industry. They may even prompt financial analysts to take a closer lookout for the subtle yet perceptible influences of domestic kitty caretaking on corporate purr-formance.

In conclusion, these results exemplify the power of data analysis in uncovering the enigmatic interrelations that govern our economic and financial landscapes. The unexpected convergence of these seemingly unrelated variables not only raises eyebrows but also promises to leave investors, pet enthusiasts, and researchers alike feline intrigued.

DISCUSSION

The results of this study provide solid support for the prior research that has delved into the enthralling link between pet-related expenditures and stock market performance. This investigation corroborates previous studies that have earnestly probed this topic with rigorous statistical analyses, as well as those that have taken a more whimsical approach.

Drawing from the literature review, which artfully juxtaposed serious academic inquiry with more whimsical perspectives, we find that our findings align with the notion that the connection between annual US household spending on home maintenance and IDEXX Laboratories' stock price is not to be taken lightly. While some might dismiss this correlation as purely coincidental, our results suggest a genuine relationship, akin to a cat and its favorite yarn ball.

The high correlation coefficient of 0.9402224, with a p-value of less than 0.01, emphasizes the robustness of this connection, echoing the sentiments expressed in works such as "The Cat's Purr-fect Portfolio" and "Tales of Tails: A Feline Financial Fantasy," albeit in a more academically astute manner. This aligns with the need for rigorous examination and the acknowledgement of serendipitous connections that may exist between seemingly unrelated variables, as highlighted in "Investigating the Relationship between Whisker Length and Stock Market Volatility."

Furthermore, the coefficient of determination (r-squared) value of 0.8840182 reinforces the solidity of this association, resembling the reassuring weight of a purring cat nestled in one's lap. The scatterplot, with its striking resemblance to a trail of gourmet cat treats, visually embodies the unexpected yet compelling nature of this correlation. These findings align with the diverse perspectives presented in the literature review, which underscored the multifaceted nature of the connection being investigated.

In conclusion, the results of this research lend credence to the multifaceted insights presented in prior academic and more whimsical works, shedding light on the captivating correlation between domestic maintenance expenditures and the financial evaluation of pet industry stocks. These results not only raise eyebrows but also lend allure to the enigmatic interrelations governing our economic

and financial landscapes. They underscore the need for further exploration into the subtle yet perceptible influences of kitty-caretaking on corporate purr-formance and the necessity to embrace scientific rigor and creative interpretation in unraveling this captivating correlation.

This investigation may serve to pique the interest of financial analysts, investors, and cat enthusiasts alike, inspiring a closer examination of the interplay between domestic expenditure and stock performance—after all, there may be more than one way to skin a cat in the financial markets.

CONCLUSION

The findings of this research shed light on the fascinating connection between annual US household spending on home maintenance and IDEXX Laboratories' stock price. Indeed, the correlation coefficient of 0.9402224 with a p-value of less than 0.01 indicates a remarkably tight association, much like a cat's curling tail around its favorite toy.

The results of our analysis, akin to a playful kitten with a ball of yarn, have unraveled a surprisingly strong link between these seemingly disparate variables. The robust relationship, as evidenced by the trendline in the scatterplot resembling a sleek and agile feline, demonstrates that the financial market's evaluation of IDXX stock is indeed influenced by domestic spending habits. It's as if the stock price and household spending are engaged in a game of cat and mouse, with one seemingly always chasing the other.

These findings not only provide a fascinating insight into the whimsical world of financial markets but also underscore the enduring bond between humans and their beloved pets. After all, who can resist the allure of investing in companies that cater to the well-being of our furry companions? It's clear that

when it comes to pet-related expenses, investors are not feline indifferent.

In conclusion, the results of this study present a compelling argument for the intertwined nature of domestic expenditures and stock performance in the pet industry. There is no need for further research in this area; the findings are as clear as the distinct purr of a contented cat. It is time for scholars and investors alike to paws and reflect on the undeniable correlation uncovered in this study.