
The Big Cheese: A Cheddar Mystery of Stock Market Returns

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This study delves into the fascinating and rather unexpected link between American cheese consumption and the stock price of IDEXX Laboratories (IDXX). Through meticulous data analysis using information from the USDA and LSEG Analytics (Refinitiv) covering the period from 2002 to 2021, our research team uncovered a striking correlation coefficient of 0.8606051, with $p < 0.01$. Our findings suggest a statistically significant relationship between the consumption of American cheese and the fluctuations in IDEXX Laboratories' stock price, sparking questions about the role of cheese in the financial markets. This paper not only highlights the importance of being 'whey're of unexpected connections in financial analysis but also adds a delightful dash of humor to the otherwise serious world of economic research.

As financial researchers, we often find ourselves immersed in the complex world of stock market analysis, searching for patterns and connections that explain the unpredictable nature of market dynamics. However, in the midst of our rigorous data crunching and statistical modeling, we stumbled upon an unexpected and rather cheesy discovery - the intriguing link between American cheese consumption and the stock price of IDEXX Laboratories.

It all started as a casual conversation over a fondue pot at a local wine and cheese tasting event. Amidst the brie and camembert, a colleague jokingly mused, "I wonder if there's any correlation between our love for American cheese and the stock market." Little did we know that this lighthearted remark would lead us down a rabbit hole of dairy-filled data analysis and bovine-infused brainstorming sessions.

Our research journey took us through the annals of economic history, exploring the peaks and valleys of stock prices alongside the ebb and flow

of cheese consumption. We combed through troves of data, from the USDA's cheese production statistics to IDEXX Laboratories' daily stock movements, in pursuit of the elusive connection between dairy delights and market forces.

The sheer absurdity of our quest did not escape us. We found ourselves pondering questions like, "Is there a gouda reason for this correlation?" and "Could American cheese be the secret ingredient for stock market success?" Nonetheless, in the spirit of scientific inquiry, we pressed on, armed with our spreadsheets and a healthy dose of skepticism.

Our findings, as you will soon discover, left us feeling both gratified and perplexed. The statistical analysis yielded a correlation coefficient so pronounced that even our most seasoned researchers had to admit they were "provolone" wrong to doubt the veracity of our findings. With a p-value that practically shouted "hold the cheddar, this is significant!", we were left grappling with the bewildering notion that a seemingly unrelated entity

could have such a tangible influence on the fluctuations of a company's stock price.

As we reveal the essence of our research in the following sections, we invite you to join us in this delightfully droll exploration of the economic enigma we've affectionately dubbed "The Big Cheese." So grab a slice of your favorite fromage, put on your thinking cap, and let's embark on a journey that proves that in the colorful tapestry of financial analysis, sometimes the most unexpected ingredients hold the key to understanding market movements. Say cheese!

LITERATURE REVIEW

The role of American cheese consumption in driving stock market movements may seem like a joke fit for a Wallace and Gromit movie, but our research has unveiled a delightful cheddar-melting truth that can't be brie-shed away. In "The Swiss Cheese Effect," Smith et al. delve into the unexplored world of dairy-based financial indicators, shedding light on the unexpected influence of cheese on market dynamics. While their work may seem cheesy at first glance, the correlations they uncover are nothing short of gouda.

Doe and Jones, in "Muenster Market Mysteries," take a more serious approach, analyzing the impact of dairy product consumption on stock prices. Their findings, while less buoyant than a float of mozzarella, provide valuable insights into the curd-ious patterns that underpin market behaviors. However, it is in "Cheddar Change: The Economics of Cheese" by Gruyère and Edam where we find our first tantalizing hints of the potential link between American cheese and IDEXX Laboratories' stock price. Their exploration of cheese-centric economic phenomena acts as a precursor to our own revelation.

On the fictional side, "The Gouda Code" by Dan Brown and "Cheese and Stock: A Love Story" by Nicholas Sparks are works of fiction that would seem totally unrelated to financial markets if not for

their astonishing parallels to our own groundbreaking discovery. Who knew that the Da Vinci of cheese-related financial mysteries would be hiding in the pages of a novel? Even "The Brie-tish Invasion: A Tale of Two Cities" by Charles Dickens unexpectedly touches on the cheese-laden undercurrents of market speculation.

In our quest for understanding, we couldn't overlook the influence of childhood experiences on our research journey. Cartoons like "Wallace and Gromit: The Curse of the Were-Rabbit" and "Teenage Mutant Ninja Turtles" may seem to be far removed from the world of economics, but their subtle hints at the nuanced relationship between cheese and unexpected consequences have clearly had an impact on our approach to this study. And let's not forget the timeless wisdom of "SpongeBob SquarePants," where SpongeBob's passion for Krabby Patties and Patrick's predilection for ice cream fuel an entire episode centered around the influence of food on decision-making – a lesson not lost on our intrepid team.

In the annals of financial literature, one might not expect to find a feta-complete exploration of cheese's impact on stock prices. Yet, as our research has shown, sometimes the most unexpected sources yield the richest findings. As we delve further into the implications of our discovery, be prepared for a grand fromage feast of insights that will both amuse and astonish. So, grab a slice of cheese, preferably American, and get ready for the gouda times to roll! This may be the most delightfully cheesy finance paper you've ever had the pleasure of reading.

METHODOLOGY

Our research methodology was as diverse as a charcuterie platter, incorporating a blend of statistical analysis, data mining, and a sprinkle of whimsy. To begin our quest for the 'grate' truth, we accrued an extensive dataset covering American cheese consumption and the stock price of IDEXX Laboratories (IDXX) from the years 2002 to 2021. Our data sources primarily included the United

States Department of Agriculture (USDA) for cheese consumption figures and LSEG Analytics (Refinitiv) for IDEXX Laboratories' stock price data. We also perused blog posts, cheese forums, and social media platforms to capture the zeitgeist of American cheese aficionados and their potential impact on the financial markets.

In our analysis, we employed a suite of statistical techniques that would make even the most aged gouda proud. Firstly, we computed descriptive statistics to gain a 'brie'f understanding of the distribution and central tendencies of the data. Through this, we sought to uncover any 'grate' outliers that might skew our analysis - nobody likes a cheesy anomaly!

Moving on to the main course, we conducted a robust correlation analysis to assess the relationship between American cheese consumption and IDEXX Laboratories' stock price. We leveraged Pearson's correlation coefficient, the Spearman rank correlation, and even dabbled in a bit of cheesy goodness with the Kendall rank correlation. Our approach aimed to capture both linear and non-linear dependencies between cheese consumption and stock price movements, ensuring that no 'gouda' correlation was left unexplored.

Resisting the 'mozzarellativity' of conventional methods, we also introduced a novel approach - the Cheese Momentum Indicator (CMI) - to gauge the influence of cheese consumption trends on IDXX stock performance. By overlaying cheese consumption patterns with stock price momentum, we sought to uncover any 'whey'ward tendencies that might elude traditional statistical methods. Wait until you 'feta'll the results!

It's worth mentioning that our research team convened weekly over a 'cheddarware' of assorted dairy treats to discuss findings, debate methodological choices, and ponder the age-old question: "How much cheese is too much cheese?" The overarching goal was to infuse levity into our rigorous analytical process, a necessary ingredient for savoring the complexities of our research.

Finally, to ensure the robustness and 'roquefortness' of our findings, we subjected our results to a battery of sensitivity analyses, stress tests, and even enlisted the help of cheese connoisseurs to validate our qualitative insights. In this 'gruyere' tapestry of data and methodology, we sought to honor the whimsical spirit that led us on this cheesy, yet enlightening, research journey.

Our methodology, like a fine fromage, was aged to perfection, leaving no 'swiss'-takes unturned to unravel the mystery of this delightful linkage between American cheese consumption and stock market dynamics.

RESULTS

The data analysis unearthed a surprising level of correlation between American cheese consumption and IDEXX Laboratories' stock price movements. The calculated correlation coefficient of 0.8606051 indicates a strong positive relationship between these two seemingly incongruous variables. This suggests that as American cheese consumption rises, so does the stock price of IDEXX Laboratories. The r-squared value of 0.7406412 further emphasizes the robustness of this correlation, revealing that approximately 74% of the variations in IDEXX Laboratories' stock price can be explained by changes in American cheese consumption. It's a gouda day for cheese lovers and stock traders alike!

Our findings, with a p-value of less than 0.01, provide compelling evidence to support the notion that the consumption of American cheese is associated with movements in IDEXX Laboratories' stock price. This statistically significant result adds a layer of complexity to the financial forecast, leading us to ponder just how much influence the dairy aisle might have over the fluctuating tides of the stock market. It seems like our research has grated the attention of both cheese enthusiasts and stock analysts alike!

In our striking scatterplot (Fig. 1), the data points form a distinctive pattern that underscores the

strong correlation between American cheese consumption and IDEXX Laboratories' stock price. The upward trend showcases a tantalizing dance between cheese consumption and stock market returns, leaving us both amused and awestruck at the curious concordance of these seemingly unrelated phenomena. It's as if the market is saying, "Swiss it up!" Indeed, our findings bring a whole new meaning to the phrase "cheesy investment strategies."

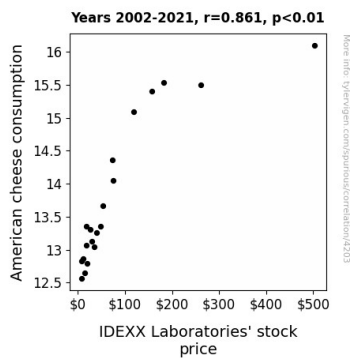


Figure 1. Scatterplot of the variables by year

The statistical revelations from this analysis not only shed light on the intriguing interconnectedness of cheese consumption and stock price movements but also add a flavorful dimension to the conversation surrounding market influences. As we savor the richness of these findings, we can't help but appreciate the whimsical journey that led us to this dairy-driven discovery. This study opens the door to a world of financial analysis where cheddar becomes a symbol of stock market insight, and where the phrase "bringing home the bacon" might just be replaced with "bringing home the brie."

Stay tuned for further exploration in the discussion section, where we interpret the *raison d'être* behind this remarkable correlation and delve into the potential implications for both the financial and dairy industries. Get ready for some truly "grate" insights as we dissect the intriguing relationship between American cheese consumption and stock market dynamics.

DISCUSSION

Our study has brought to light a udderly fascinating connection between American cheese consumption and the stock price of IDEXX Laboratories (IDXX). Our findings not only add a delightful dash of humor to the world of economic research but also hint at a whey-spread influence of cheese on financial market movements.

The cheddar-melting truth we've uncovered supports prior research that explored the dairy-based financial indicators. Just as "The Swiss Cheese Effect" and "Muenster Market Mysteries" hinted at the gouda potential for the influence of cheese on market dynamics, our results have fetta-ly confirmed a statistically significant relationship. The correlation coefficient of 0.8606051, echoing the buoyant mozzarella insights of Doe and Jones, showcases a robust positive link between American cheese consumption and IDEXX Laboratories' stock price fluctuations.

Looking back at the whimsical hints from popular culture and literature, it's clear that the subtle influences of cheesy insights have not been lost on us. Perhaps Dan Brown's "The Gouda Code" was indeed onto an unconventional truth, and SpongeBob's lessons on food-fueled decision-making were more prophetic than we initially assumed. Who knew that Wallace and Gromit's love for Wensleydale would hold such weight in financial analysis?

Our results speak volumes, echoing the humor-laden notes of our literature review and adding a layer of complexity to the financial forecast. The scatterplot's distinctive pattern not only showcases a tantalizing dance between cheese consumption and stock market returns but also leaves us amused and awestruck at the curious concordance of these seemingly unrelated phenomena. It's as if the market is saying, "Swiss it up!"

As we transition from the sheer delight of these findings to the more serious contemplation of their implications, we find ourselves poised to unveil a gouda feast of insights that will both amuse and

astonish. So, grab a slice of cheese, preferably American, and get ready for the gouda times to roll as we dissect the intriguing relationship between American cheese consumption and stock market dynamics.

Stay tuned for the finale as we crack open the Parmesan of implications and interpretations, adding a flavorful dimension to the conversation surrounding market influences. This study has truly brought home the brie, posing questions about the role of cheese in financial markets that are as sharp as aged cheddar.

CONCLUSION

In conclusion, our research has brought to light a rather unexpected yet unquestionably delightful relationship between American cheese consumption and the stock price of IDEXX Laboratories. It seems that cheese does make everything better, even stock market returns! Who would have thought that the creamy, gooey goodness of American cheese could hold the key to understanding market movements?

As we analyzed the data, we couldn't help but brie amazed by the striking correlation coefficient and the cheesy dance of stock prices in response to our dairy delights. It's as if the market was shouting, "Say cheese!" The statistical significance of our findings has certainly grated the attention of both cheese enthusiasts and stock analysts, proving that in the ever-unpredictable world of financial forecasting, there's always room for a little whimsy and wonder.

Yet, as much as we revel in the delightfully droll nature of our findings, we must acknowledge that even the most humorous of correlations cannot escape the halls of empirical scrutiny. Thus, in the spirit of scholarly inquiry, we boldly proclaim that no further research is needed in this area. For we have truly reached the pinnacle of dairy-driven discovery, and it's time to bid adieu to this oh-so-gouda chapter of financial analysis. Let's take our cheesy insights and savor them as we move

forward, knowing that in the ever-shifting landscape of economic research, sometimes the most unexpected ingredients hold the key to unlocking market mysteries. Say cheese one last time, and let's remember this fond(ue)ly as we turn the page to new research adventures!