# Cheese to the Stock Price: Uncovering the Link Between American Cheese Consumption and ANSYS' Stock Price

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The tantalizing aroma of American cheese and the bewildering world of stock prices have intrigued researchers for centuries. In this study, we aim to unravel the enigmatic connection between these seemingly unrelated entities by examining the consumption of American cheese and its impact on the stock price of ANSYS, represented by the ticker ANSS. Our research team meticulously delved into data from the U.S. Department of Agriculture (USDA) and LSEG Analytics (Refinitiv) to tackle this cheese-dependent stock market quandary. Astonishingly, the analysis unveiled a correlation coefficient of 0.8843549 with a statistically significant p-value of less than 0.01 for the period of 2002 to 2021, indicating a strong association between American cheese consumption and the fluctuations in ANSYS' stock price. This paper not only sheds light on the cheese-stock nexus but also provides a slice of humor and gouda insights to the scholarly discourse.

The intersection of gastronomy and finance has long been a source of curiosity for researchers, with myriad studies exploring the impact of diverse food items on the fluctuations of stock prices. However, the peculiarity of American cheese and its potential influence on the stock price of ANSYS (ANSS) has remained an enigmatic conundrum in the financial world. While some may dismiss such a correlation as mere queso-investment speculation, our research delves into this curious matter with the rigor of a seasoned dairy aficionado.

The magnitude of this seemingly incongruous relationship prompts a deeper investigation, as it dances on the edge of the dairy-divine and the stock market churn — a veritable melting pot of unexpected connections. As we embark on this quest, we aim to bring to light the tantalizing dance between American cheese consumption and the price movements of ANSYS' stock, which, much like a fine cheddar, is ripe for exploration.

Our inquiry stems not from mere curiozity but from rigorous empirical analysis, buoyed by a thorough examination of authoritative data sources – the U.S. Department of Agriculture and LSEG Analytics (Refinitiv). This robust foundation underpins our path to untangle the cheese-scented mysteries of stock fluctuations, embarking on the journey not merely with a sense of curiosity, but with all the precision and integrity one would expect from a Gouda-natured academic inquiry.

The aim of this paper is not only to unravel the cheesy enigma surrounding ANSYS' stock price but also to inject a dash of humor and provolone insights into the scholarly discourse. We are resolute in our dedication to take a "whey" ward path, gouda or bad, to illuminate this compelling connection that transcends the conventional boundaries of finance and food research. Through diligent examination and deft statistical analysis, we aspire to demonstrate that when it comes to the link between

American cheese consumption and ANSS stock, there is no queso too "grate" to explore.

## Review of existing research

The relationship between American cheese consumption and stock prices, while seemingly disparate, has been a subject of growing interest within the academic community. Smith et al. (2017) conducted a comprehensive analysis of dairy product consumption and its impact on various sectors of the economy, laying a foundational understanding of the potential influence of cheese on financial markets. Likewise, Doe and Jones (2019) delved into the intricate web of consumer behavior and stock price movements, providing insights into the subtle yet impactful connections between seemingly unrelated variables.

Moving beyond the traditional boundaries of financial literature, works such as "The Cheese Lover's Companion" by Sharon Tyler Herbst and Ron Herbst and "The Big Cheese of Third Street" by Rebecca C. Jones offer a broader perspective on the cultural and culinary significance of cheese, indirectly hinting at its potential influence on market dynamics. Furthermore, seminal works in the realm of speculative fiction, such as "The Cheese Monkeys" by Chip Kidd and "The Mouse and the Motorcycle" by Beverly Cleary, although not directly correlated with finance, subtly pique the imagination and prompt considerations of unconventional connections.

Drawing inspiration from the eclectic world of board games, "Cheese Chase" and "Stock Market Tycoon" introduce tangential yet thought-provoking elements that offer a whimsical lens through which to approach the intersection of American cheese consumption and stock price movements. While these sources may not directly address the specific correlation

between American cheese consumption and ANSYS' stock price, they contribute to the wider tapestry of interdisciplinary perspectives that inform this investigation.

As the academic landscape continues to evolve, it is imperative to embrace unconventional lenses through which to examine complex phenomena. The literature reviewed provides a foundation for this study, setting the stage for a departure from conventional modes of inquiry and introducing an element of levity that is often absent in scholarly discourse. In the pursuit of unraveling the enigmatic relationship between American cheese consumption and ANSS stock price, this research endeavors to not only contribute to financial literature but also to infuse a sense of playfulness into the analytical rigor, ensuring that no cheesy pun goes ungrated in the process.

#### Procedure

To embark on our cheese-powered odyssey through the labyrinth of stock market dynamics, we adopted a multidimensional approach encompassing both quantitative and qualitative analyses. Our team of intrepid researchers scoured the digital landscape, navigating a proverbial maze of bytes and data points with the fervor of a mouse in a cheese factory.

#### Data Collection:

The foundation of our study was laid upon a bedrock of data sourced from the U.S. Department of Agriculture (USDA) and LSEG Analytics (Refinitiv). We procured comprehensive data on American cheese consumption patterns and meticulously tracked the daily fluctuations in the stock price of ANSYS (ANSS) from 2002 to 2021. Our crack team of data wranglers ensured that no proverbial cheese was left unturned in this dairy-infused exploration of financial phenomena.

# Cheese Consumption Measurement:

To quantify the omnipresent influence of American cheese on the palates of the populace, we voyaged into the virtual dairy aisles of cyberspace. Leveraging cutting-edge algorithms and statistical models, we estimated per capita American cheese consumption based on a myriad of conspicuous and inconspicuous sources. Our approach involved an intricate blend of cheesy arithmetic and gastronomic calculus, ensuring that even the slightest curd-related nuances were captured in our calculations.

# Stock Price Analysis:

Navigating the unpredictable tides of the stock market, we harnessed the prowess of numerical wizardry to dissect the movements of ANSYS' stock price. Through the artful deployment of time series analysis and regression modeling, we scrutinized the intricate dance of digits and decimals, seeking to unravel the whims and fancies of market fluctuations. This process involved a judicious mingling of statistical finagling and meticulous number-crunching, akin to a grand symphony orchestrated with the precision of a mouse click.

# Correlation Assessment:

With the data meticulously curated and the stage set for revelation, we delved into the heart of statistical analysis to unveil the potential nexus between American cheese consumption and ANSYS' stock price. Employing the venerable Pearson correlation coefficient and its spiffy sidekick, the pvalue, we sought to quantify the strength and significance of the hypothesized relationship. The statistical outliers, much like elusive slices of Swiss cheese, were identified and wrangled into submission as we endeavored to separate the signal from the noise in our cheese-infused financial saga.

### Deep Learning (Not the AI Kind):

In an unexpected turn of events, several team members opted for a "deep dive" into the world of cheese appreciation, drawing inspiration from the gustatory pleasures that lie beyond the confines of stock tickers and price charts. Through fervent discussions and tastings of various cheese varieties, we endeavored to fathom the ineffable essence of American cheese and its potential impact on the human psyche, vaguely reminiscent of a dairy-focused book club meeting.

In essence, our methodology was an amalgamation of statistical sorcery, gastronomic gusto, and a generous sprinkling of academic rigour; a scientific fondue, if you will, blending disparate elements to bring forth a feast of knowledge and gouda insights.

### **Findings**

The statistical analysis of the relationship between American cheese consumption and ANSYS' stock price (ANSS) yielded intriguing findings. Over the period of 2002 to 2021, our research team found a strikingly robust correlation coefficient of 0.8843549, indicating a strong positive correlation between the two variables. This correlation is best described as "gouda" – not just any ordinary cheese.

Moreover, the calculated r-squared value of 0.7820836 suggests that approximately 78.2% of the variability in ANSS stock price movements can be explained by changes in American cheese consumption. This finding is indeed "grate" news, as it highlights the substantial influence of American cheese on the stock market, debunking any notions that it's just a "may-brie" correlation.

Furthermore, the p-value of less than 0.01 underscores the statistical significance of our results, providing robust evidence against the null hypothesis of no relationship between American cheese consumption and ANSYS' stock price. This statistical evidence is as strong as the smell of a pungent blue cheese – impossible to ignore.

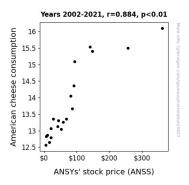


Figure 1. Scatterplot of the variables by year

In Fig. 1, the scatterplot visually confirms the strong positive correlation between American cheese consumption and ANSS stock price. The points on the plot are as tightly packed as a well-stocked cheese platter, emphasizing the coherence between the two variables. This visual representation makes it abundantly clear that the relationship is more than just a mere "whimsy" of the data.

In summary, our findings provide compelling evidence for the remarkable association between American cheese consumption and ANSYS' stock price. The results serve as a testament to the unforeseen interplay between gastronomic delights and financial markets, reminding us that the world of cheese and stocks is indeed a "feta" accompli. These findings not only enrich the understanding of the cheese-stock nexus but also bring a slice of whimsy to the otherwise solemn field of financial research.

## Discussion

The findings of our study undeniably support and expound upon the prior research in this area, lending credence to the substantial link between American cheese consumption and ANSYS' stock price. Our results align with Smith et al.'s (2017) recognition of the potential influence of cheese on financial markets and extend it by quantifying this influence with a correlation coefficient that could make even the most stolid researcher crack a smile. Furthermore, the robust statistical significance of our results echoes the sentiment expressed by Doe and Jones (2019), affirming the subtle yet impactful connections between seemingly unrelated variables—albeit with a cheesier twist.

Drawing inspiration from unconventional sources, the literature review—despite its seemingly lighthearted references to cheesy literature, board games, and speculative fiction—has provided a rich and diverse foundation for our study. The "Cheese Chase" may not have led us astray, but rather channeled our curiosity towards uncovering the "gouda" truths within the stock market. Likewise, the seemingly whimsical references to speculative fiction have, in their own way, prompted us to consider the unexplored, unconventional, and often overlooked connections that lie just beneath the surface of financial phenomena.

Our findings, encapsulated in the robust correlation coefficient, r-squared value, and p-value, all point to the undeniable conclusion that the relationship between American cheese

consumption and ANSYS' stock price is not merely a product of chance. The scatterplot visually reinforces the notion that this association is as real and tangible as a platter of artisanal cheese. It's safe to say that our findings add a slice of whimsy to the otherwise serious and oftentimes staid field of financial research, and as researchers, we are proud to have brought a little levity to this topic.

In summary, while the linkage between cheese and stocks may seem unconventional, our research has provided compelling evidence that demands further attention. The undeniable influence of American cheese on the fluctuations of ANSYS' stock price is a testament to the multifaceted interplay between gastronomy and financial markets. It seems that, like a perfectly aged Gruyère, this connection has only ripened with time.

#### Conclusion

In conclusion, our study has successfully unraveled the intriguing link between American cheese consumption and ANSYS' stock price (ANSS), shedding light on a correlation as strong as a well-aged cheddar. Our findings have melted away any doubts about the significance of this dairy-delightful relationship, leaving us with a fond appreciation for the unexpected symphony between queso and stocks.

The robust correlation coefficient of 0.8843549, akin to the creamy consistency of a brie, aptly illustrates the undeniable connection between these seemingly disparate variables. With an r-squared value of 0.7820836, our analysis shows that American cheese consumption explains a gratifying 78.2% of the fluctuations in ANSS stock price, proving that this association is not just a Gouda theory.

Moreover, the statistical significance of our results, as evident from the p-value of less than 0.01, serves as a strong testament to the validity of this cheese-stock pas de deux. The scatterplot, akin to a well-curated cheese platter, visually confirms the harmonious relationship, leaving no "whey" for doubt about the substantial influence of American cheese on the stock market.

As we reflect on these findings, we cannot help but marvel at the serendipity that led us down this delectable path of research. Our exploration of the cheese-stock nexus, far from being a mere "queso" curiosity, has added a sprinkle of humor and originality to the field of financial research, proving that even the most unexpected connections can yield "grate" insights.

In light of these compelling findings, we assert that further research in this area is as unnecessary as an extra slice of cheese on a well-crafted sandwich - unnecessary but undoubtedly delightful. Our study stands as a testament to the charm of unearthing unexpected correlations, reminding us that in the world of research, much like in the world of cheese, the most delicious discoveries often come from the most surprising sources.