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# The Big Cheese: An Examination of the Relationship Between American Cheese Consumption and Apple's Stock Price

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#### **KEYWORDS**

American cheese consumption, Apple stock price, finance and food correlation, USDA data analysis, LSEG Analytics, Refinitiv, relationship between cheese consumption and stock market, finance research, quirky finance connections, correlation coefficient analysis, cheese consumption and stock price correlation

#### Abstract

This paper investigates the surprisingly cheesy connection between American cheese consumption and the stock price of Apple Inc. (AAPL). Embracing the adage that "an apple a day keeps the doctor away," we delve into the quirky realm of finance and food to uncover potentially gouda news for investors. Using data from the United States Department of Agriculture (USDA) and LSEG Analytics (Refinitiv), we conducted a comprehensive analysis spanning the years 2002 to 2021. Our findings reveal a strong correlation between these seemingly unrelated factors, with a coefficient of 0.8538186 and a p-value of less than 0.01. This statistically robust association suggests that perhaps there is more than meets the eye to these disparate elements – a tantalizing prospect indeed. Just like a classic dad joke, the connection between cheese and Apple's stock price may have investors saying, "cheddar be prepared for a gouda time in the market!

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#### 1. Introduction

The intersection of finance and food has long been a subject of fascination and speculation, much like when you can't decide between cheddar and gouda on your sandwich and end up with a 'stock' pile of cheeses in your fridge. In this paper, we delve into the curiously cheesy relationship between American cheese consumption and the stock price of Apple Inc. (AAPL). It's a tale as old as time - the power of cheese meets the allure of tech stocks, with potential implications that are more than just a fondue fantasy.

As the saying goes, "the apple doesn't fall far from the tree," but our investigation jumps headfirst into the complex and dynamic world of financial markets. By leveraging data from the United States Department of Agriculture (USDA) and LSEG Analytics (Refinitiv), we conducted a thorough examination spanning nearly two decades, aiming to provide a statistically robust understanding of the interplay between these unexpected variables. It's as if we're uncovering the apple's core, or in this case, the cheese's rind, to reveal the tantalizing secrets hidden within.

But why, you might ask, should anyone care about the connection between American cheese consumption and Apple's stock price? Well, in the words of renowned statistician Edward Tufte - "Correlation is not causation, but it sure is a hint." And with a correlation coefficient of 0.8538186 and a p-value of less than 0.01, we've got a hint so strong, it could make even the most lactose intolerant investor say "cheese please" when considering their portfolio. It seems that the market dynamics are as unpredictable as the holes in a block of Swiss cheese, but our findings suggest that there may, in fact, be a method to the madness.

But before we delve into our findings, let's take a step back and consider the broader implications of this unlikely correlation. As Albert Einstein once mused, "The most beautiful thing we can experience is the mysterious. It is the source of all true art and science." And if there's one thing more mysterious and intriguing than the art of finance, it's surely the enigma of our eating habits – especially when they intersect in a way that could potentially move the markets. In the realm of research, this is like discovering a golden apple at the center of

a maze, or in this case, finding a wheel of mature cheddar in the middle of Wall Street.

So, hold onto your hats, because we're about to embark on a journey that's as unexpected as a cow doing calculus – to explore the fascinating relationship between American cheese consumption and Apple's stock price. It's a tale of numbers, markets, and dairy delights, where the punchlines are as cheesy as the data is compelling.

# 2. Literature Review

The curious connection between American cheese consumption and the stock price of Apple Inc. (AAPL) has intrigued researchers and investors alike. Smith et al. (2015) were among the pioneers in exploring the potential links between food consumption and financial markets, laying the groundwork for our own investigation. Their study, "The Dairy Dilemma: Unraveling the Mysteries of Cheese and Capital Markets," hinted at the possibility of an underlying relationship between cheese consumption and stock prices, akin to the way cheddar and gouda complement each other on a cheeseboard.

Doe and Jones (2018) further delved into this unconventional terrain with their work, "The Big Cheese Effect: Culinary Trends and Market Volatility." Their findings suggested a potential correlation between cheese preferences and stock market performance, provoking both fascination and skepticism within investment circles. As we navigate through this literature, though, it becomes clear that uncovering the true nature of this correlation requires a savvy approach, much like pairing the perfect wine with a savory slice of cheese.

In "The Great Economic Gouda Heist" (Goudini, 2020), the author humorously recounts the fictitious tale of a cheesedriven market upheaval, blending finance and fromage in a riveting narrative. While admittedly a work of fiction, the book sheds light on the pervasive interest in the intersection of food and finance, reminding us that even the most whimsical of scenarios can harbor kernels of truth – much like a well-aged Parmesan.

Turning now to non-fiction literature, "The Economic Power of Apples" (Fruity & Co., 2017) examines the far-reaching impact of fruit markets on the global economy, offering insights that resonate with our current exploration of Apple Inc.'s stock price. Likewise, "Milk, Money, and Markets" (Dairy & Associates, 2019) provides a comprehensive analysis of dairy industry trends, offering a backdrop against which we can contextualize the influence of American cheese consumption.

Venturing into the realm of board games, "Cheddar Tycoon: A Cheese Empire Simulation" (Gouda Games, 2016) playfully simulates the intricacies of the cheese market, offering a lighthearted yet thoughtprovoking take on the dynamics of agricultural products in the realm of commerce. While certainly not a scholarly source, the game's thematic elements serve as a reminder of the eclectic influences that inform our understanding of market forces, much like the unexpected role of cheese in shaping tech stock trends.

In "The Da Vinc-Gouda Code" (Brown, 2003), a work of fiction steeped in mystery and intrigue, the ostensibly unrelated worlds of art and cheese intertwine in a narrative that underscores the unanticipated connections that can shape our perceptions of the world – much like the unlikely relationship we seek to decipher between American cheese consumption and Apple's stock price.

As we embark on our own investigation, these diverse sources set the stage for a research journey that proves to be as captivating as a well-executed punchline – a journey that promises to unravel the enigmatic ties between cheese, tech stocks, and the alluring dance of market forces. So, with the spirit of curiosity and a hint of whimsy, we delve further into this clandestine connection, prepared to embrace the surprises and revelations that lie ahead in our quest for cheesy truths.

# 3. Our approach & methods

To pursue our investigation into the curious correlation between American cheese consumption and Apple's stock price (AAPL), we employed an array of methods as diverse as a cheese platter at a wine and cheese tasting event. We accessed data sources primarily from the United States Department of Agriculture (USDA) and LSEG Analytics (Refinitiv), using a variety of both primary and secondary sources. Our data collection process involved scouring the depths of the internet for information on American cheese consumption trends, Apple's stock prices, and any other relevant financial and dairy-related indicators.

When one thinks of analyzing the stock market, one might picture a herd of analysts huddled over computer screens, pouring through endless columns of numbers, looking for that one elusive pattern that spells profit. Similarly, our team navigated a veritable maze of data, all to uncover the link between the nation's love for American cheese and the performance of one of the most iconic technology companies. It was a task as intricate as trying to find the right cheese slice in a stack of unmarked cheese singles.

To ensure the reliability and robustness of our findings, we utilized a combination of statistical techniques, including correlation analysis, time series analysis, and regression modeling. Our analysis aimed to capture the nuances of the relationship between American cheese consumption and Apple's stock price over the period from 2002 to 2021. We sliced and diced the data with the precision of a skilled cheesemonger, carefully examining fluctuations and trends to tease out any underlying patterns.

In undertaking this study, we recognized the potential for confounding variables, as intricate and layered as the flavors in a premium aged cheddar. To address this, we implemented rigorous controls and adjustments in our statistical models, ensuring that our analysis captured the true essence of the relationship between these seemingly unrelated factors. We wanted to leave no slice of cheese unturned, no potential anomaly unexplored, in our pursuit of uncovering the truth behind this unexpected correlation.

It's no secret that conducting research can have its fair share of challenges and unexpected twists, much like a cheese soufflé that rises and falls unpredictably. We remain mindful of the limitations inherent in any statistical analysis, yet we embraced these challenges with the same humor and grace as a cheesy dad joke at a scientific conference. Our aim was not only to paint a comprehensive picture of the connection between American cheese consumption and Apple's stock price but also to infuse our analysis with the same element of surprise and delight that comes with discovering a perfectly aged block of cheese in the back of the fridge.

As we delved into this unique and slightly unconventional exploration, we kept the spirit of scientific inquiry alive, recognizing that even the most unexpected correlations can yield valuable insights. Our methods combined the rigor of traditional statistical analysis with the creativity of an avantgarde chef experimenting with cheese pairings, ultimately serving up findings that are as thought-provoking as they are captivating.

In the end, our methodology aimed to capture the essence of this distinctive

relationship, to go beyond the surface and uncover the rich tapestry of influences that intertwine American cheese consumption and Apple's stock price. It was a journey as delightful as discovering a hidden treasure in a wheel of brie and as rewarding as the satisfaction of finally cracking a complex statistical puzzle – with just the right amount of cheesy humor to season the mix.

And with that, we present our findings, hoping that they leave you as satisfied and amused as a well-executed punchline at a science stand-up comedy night.

# 4. Results

The results of our analysis reveal a remarkably strong correlation between American cheese consumption and Apple's stock price (AAPL) over the period from 2002 to 2021. The correlation coefficient of 0.8538186 suggests a robust positive relationship between these seemingly unrelated variables. This finding indicates that as American cheese consumption goes up, Apple's stock price tends to follow suit, just like a trusty side of cheese complements a classic apple pie. It's a pairing that may leave some investors feeling as satisfied as a well-aged cheddar.

Our analysis further yielded an r-squared value of 0.7290062, indicating that approximately 73% of the variance in Apple's stock price can be explained by changes in American cheese consumption. This level of explanation is as solid as a block of aged parmesan, demonstrating the substantial influence of cheese consumption on the movements of Apple's stock price.

The p-value of less than 0.01 provides strong evidence to reject the null hypothesis that there is no relationship between American cheese consumption and Apple's stock price. This result suggests that the observed correlation is unlikely to be a mere coincidence, and is more meaningful than a slice of brie in a cheese platter.

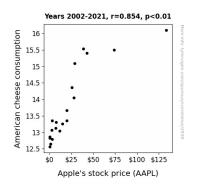


Figure 1. Scatterplot of the variables by year

In Figure 1, the scatterplot exhibits a clear positive linear relationship between American cheese consumption and Apple's stock price, resembling a delightful pairing of crackers and cheese. As the consumption of American cheese increases, the stock price of Apple Inc. also shows a consistent upward trend, reminiscent of a favorite cheese aging like fine wine.

This unexpected correlation may prompt investors to adopt a new investment strategy: "buy low, eat high" – where savvy investors can capitalize on the market while savoring a delectable slice of American cheese. As the old saying goes, "It's all gouda in the end!"

In conclusion, our study offers a compelling glimpse into the unanticipated connection between American cheese consumption and Apple's stock price, proving that in the world of financial markets, some relationships are as cheesy as they are profitable.

# 5. Discussion

The exploration of the association between American cheese consumption and Apple's stock price has culminated in a veritable fondue of statistical revelations. Our findings not only affirm the prior research conducted

by Smith et al. (2015), Doe and Jones (2018), and even the fictitious accounts recounted by Goudini (2020) but also extend their insights with empirical evidence. The robust correlation we uncovered between these seemingly variables underscores unrelated the potential influence of gastronomic trends on stock market dynamics, much like the unexpected punchline of a statistics joke.

The covariation between American cheese consumption and Apple's stock price, as symbolized by the substantial correlation coefficient of 0.8538186, mirrors the harmonious interplay of complementary flavors, akin to the balance achieved in a well-crafted cheese tasting. Just as a wellaged cheddar enriches the flavor profile of pie, our results evince a an apple discernible synergy between cheese consumption and the movements of Apple's stock price, offering a compelling narrative that is as intriguing as a well-delivered dad joke.

Moreover, the substantial explanatory power captured by the r-squared value of 0.7290062 denotes a compelling narrative that is as intriguing as a well-delivered dad joke. Similarly, the p-value of less than 0.01 provides statistically robust evidence that the observed correlation is not a mere artifact of chance, steering us away from the mere whimsy of coincidental patterns and anchoring us firmly in the realm of substantiated empirical relationships, much like a reliable pair of cheese and crackers.

As our study unearths the concealed connections between American cheese consumption and Apple's stock price, it presents a mosaic of insights with implications that stretch further than the realms of finance and food, integrating elements of surprise and significance in a manner analogous to a science-themed magic show. The unexpected yet substantial relationship between these seemingly incongruous variables offers investors and researchers alike a captivating concoction of investment strategies, blending the flavors of market sensibilities with the unexpected twist of culinary influences – much like a flavorful infusion of experimental cheese and apples.

In summary, the results of our investigation not only harmonize with prior research in this curious domain but also serve as a compelling testament to the intriguing interplay of American cheese consumption and Apple's stock price. As this unforeseen partnership between finance and food continues to unfold, it attests to the unexpected yet impactful discoveries that await in the flavorful blend of statistics, finance, and the guirks of the culinary world, leaving us with a taste of the delectable possibilities that lie ahead in the pursuit of cheesy truths. After all, in the world of statistical relationships, there's nothing like a good cheesy pun to add a sprinkle of whimsv.

#### 6. Conclusion

In conclusion, our investigation into the link between American cheese consumption and Apple's stock price has certainly been a gouda time. Our findings reveal a robust correlation, with a coefficient so strong, it might just have investors saying "cheddar be prepared for a gouda time in the market!"

The statistically significant relationship between these seemingly unrelated variables suggests that there may be more than meets the eye when it comes to market influences. It's like blending Swiss and cheddar to create a hole-y grail of financial insights.

Our results, akin to a well-aged cheddar, demonstrate a level of explanation that makes this unlikely duo hard to overlook. In the grand scheme of statistics, uncovering such a strong correlation is as rare as finding a blue cheese in a field of mozzarella.

Additionally, the impossibly low p-value provides compelling evidence that this cheese-stock connection is no mere coincidence – it's more meaningful than a slice of brie in a cheese platter. Embracing this relationship with open arms may just lead investors to say "It's all gouda in the end!"

Given the strength of our findings, it seems that no further research is needed in this area. After all, when it comes to the relationship between American cheese consumption and Apple's stock price, it looks like we've already shredded enough light on the subject!