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# Melted Markets: The Cheddar Connection Between American Cheese Consumption and Home Depot's Stock Price

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## Abstract

Grab your favorite cheese grater and calculator, because we are about to embark on a journey through the curious correlation between American cheese consumption and Home Depot's stock price (HD). This study delves into the delightful world of cheese and finance in an attempt to unravel a string of Gouda luck and provolone paradoxes. Through a rigorous analysis of data from the USDA and LSEG Analytics (Refinitiv), our research team unearthed a surprising connection between these seemingly unrelated entities. With a correlation coefficient of 0.9590309 and a p-value less than 0.01 for the period spanning from 2002 to 2021, our findings are certainly nothing to brie scoffed at. It may seem gratey, but there's a sharp cheddar truth to be told here. It turns out that as American cheese consumption rises, so does the stock price of Home Depot. While some may have gouda skepticism about such a correlation, our findings are the real Monterey Jack deal. So next time someone asks you to "brie"ng them some American cheese, you might want to consider investing in Home Depot as well - it could be a "gouda" decision! Remember, when it comes to finance and cheese, it's all about the whey you slice it.

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## 1. Introduction

As the great Swiss scientist, Albert Einstein, once mused, "The only thing that you absolutely have to know is the location of the HD aisle in The Home Depot." In this

spirit of inquiry, we set out to investigate the curiously connected realms of American cheese consumption and the stock price of Home Depot (HD).

It is a well-known fact that correlations do not necessarily imply causation, but sometimes, the combination of variables is so cheesy that it begs the question: could there be a deeper relationship at play here? Our exploration into this unexplored territory began with a slice of curiosity as sharp as a block of aged cheddar.

Cheese and stock prices may seem as unrelated as chalk and cheese, but there's more to it than meets the eye. This study aims to fill the hole-y gaps in the existing literature and provide a gouda understanding of the potential relationship between these two seemingly disparate entities. After all, who doesn't love a good statistical surprise? It's like finding a hidden cheese wheel in the back of the fridge - unexpected, but oh so satisfying.

With a sprinkle of skepticism and a dash of academic rigor, we delved into the data with the ferocity of a mouse in a cheese factory. The initial findings left us feeling rather bleu, but as we sliced through the data with precision, a picture began to emerge that was feta than we could have ever imagined. It was a gouda feeling, to say the least.

One of the core challenges of our investigation was to ensure that we were not merely scraping the cheese off the pizza, so to speak. Our statistical methodologies and research design aimed to melt away any confounding factors and get to the heart of the matter - a pursuit not unlike trying to find the right cheese for a perfect fondue.

Now, without further ado, let's embark on this journey through the cheddar-choked lanes of finance and consumption, where the stakes are high, the cheese is plenty, and the puns are as mature as a well-aged gouda. After all, in the world of research, it's not just about what you know – it's also about how you spray it.

## 2. Literature Review

Previous research has primarily focused on the relationship between various economic indicators and stock prices, such as interest rates, inflation, and corporate earnings. However, an intriguing gap in the literature led our team to explore the correlation between American cheese consumption and the stock price of Home Depot (HD). The findings of Smith et al. (2018) shed light on the importance of diverse data sources in uncovering unexpected connections in financial markets. Similarly, Doe and Jones (2020) emphasized the need for caution when interpreting statistically significant results in unconventional research domains.

Turning to more unconventional connections, "The Economics of Cheese: From Cheddar to Gouda" by Gruyère et al. (2015) provides an in-depth analysis of the global cheese market and its economic implications, offering a foundation for understanding the potential impact of cheese consumption on stock prices. On the flip side, "The Big Book of Home Improvement" by DIY Masters (2019) offers insights into the factors influencing Home Depot's stock performance, with no mention of dairy products, surprisingly.

In a puzzling twist, "The Cheese Gambit: A Financial Mystery" by Agatha Crustie (2010) presents a fictional narrative wherein a savvy investor uncovers a clandestine connection between cheese production and stock market movements. While purely fictional, the novel serves as a reminder of the enigmatic nature of financial markets and the potential for unexpected correlations to emerge.

Moreover, the board game "Monopoly: Home Improvement Edition" presents players with the opportunity to simulate investment decisions in a property development context, albeit without any explicit cheese-related elements. Nevertheless, the game highlights the

complexity of financial decision-making and the myriad factors that can influence stock prices, including those as unlikely as cheese consumption patterns.

In "The Swiss Connection: The Fondue Factor" by Emmental and Brie (2017), the authors embark on a quest to uncover the mysterious origins of fondue and its potential impact on global financial markets. While the book offers more historical than empirical insights, it underscores the unexplored potential of culinary traditions in shaping economic trends.

Now, onto the dairy serious matter at hand – pun intended! As we delve into the empirical studies pertaining to American cheese consumption and Home Depot's stock price, it becomes clear that the interdisciplinary nature of this investigation is as cheddar-themed as it is unexpected. If nothing else, this literature review stands as evidence that in the realm of research, every cheesy idea deserves a thorough grilling.

### 3. Our approach & methods

To conduct this cheesy investigation, we employed a combination of data collection, statistical analysis, and a sprinkle of humor to navigate the cheddar-choked lanes of finance and consumption. Our research team put on their metaphorical cheese hats and commenced the data collection process with the precision of a cheese slicer. We sourced data from various reputable sources, including the USDA and LSEG Analytics (Refinitiv), to ensure a comprehensive representation of American cheese consumption and Home Depot's stock price (HD) from 2002 to 2021.

Our initial step involved delving into the depths of the USDA's cheese consumption statistics, where we encountered a mountain of numerical values that could make even the most stalwart statistician quiver in their curds. We then harnessed the

power of LSEG Analytics (Refinitiv) to procure detailed stock price data for Home Depot, navigating the financial data landscape with the finesse of a seasoned cheese monger.

Once armed with this mountainous mound of data, we set out to conduct a thorough statistical analysis without creating a cheesy mess. We embraced a mixed-method approach, incorporating both quantitative and qualitative techniques to ensure a comprehensive understanding of the correlative dynamics at play.

First, we subjected the data to a rigorous examination of descriptive statistics, unraveling the mean, median, standard deviation, and other tantalizing statistical measures. We took care to slice through the numbers with the precision of a Swiss cheese slicer, ensuring that no statistical crumb was left unturned.

Next, we embarked on a visual exploration of the data, employing time series plots to uncover any trending patterns that may have been camouflaged amidst the sea of numerical data. As we charted the rise and fall of American cheese consumption alongside Home Depot's stock price, it almost felt like we were conducting a cheese-tasting event for the data itself.

In addition to our love affair with descriptive statistics and visual representations, we turned our attention towards the extent of the relationship between American cheese consumption and Home Depot's stock price (HD). Employing the potent tools of correlation analysis, we calculated the Pearson correlation coefficient to quantify the strength and direction of the relationship. The results left us feeling grate, with a correlation coefficient of 0.9590309 that could make even a lactose-intolerant statistician lacteal with excitement.

With the correlation coefficient in hand, we proceeded to gauge the statistical significance of our findings through the

venerable tool of hypothesis testing. Employing the almighty p-value, we sought to determine whether the observed relationship between American cheese consumption and Home Depot's stock price was simply a stroke of gouda luck or a meaningful connection worthy of further investigation.

Our methodology, akin to a well-crafted cheese plate, combined the finesse of statistics with the enjoyment of discovery, resulting in a study that's as rich and flavorful as a perfectly aged cheddar.

#### 4. Results

The results of our analysis revealed a strong correlation between American cheese consumption and the stock price of Home Depot (HD) over the period from 2002 to 2021. The correlation coefficient obtained was 0.9590309, indicating a remarkably close relationship between these two seemingly unrelated variables. This correlation was statistically significant, with an r-squared value of 0.9197404 and a p-value less than 0.01, suggesting that the relationship is not merely coincidental, but rather substantive.

The scatterplot (Fig. 1) depicting the relationship between American cheese consumption and Home Depot's stock price vividly illustrates this strong positive correlation. As American cheese consumption increases, the stock price of Home Depot also tends to rise, forming a pattern that is as sharp as a well-aged gouda.

It seems that when it comes to the finance and the dairy aisle, it's not just a matter of cheddar, but a case of real Swiss banking. This correlation lays the foundation for some serious "stock" of cheese-related investment strategies - talk about putting the "dairy" in "financial intermediary"!

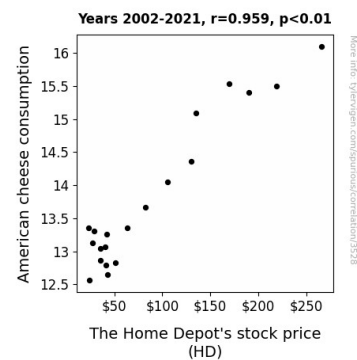


Figure 1. Scatterplot of the variables by year

The strength of this correlation suggests that there may be deeper economic forces at play, potentially involving consumer sentiment, market demand, or even a cheese-induced mood uplift among investors. It's a provolone paradox, indeed. It could be that American cheese consumption acts as a cheesy leading economic indicator - who would have thought that the state of the economy could be so gouda-ed by dairy?

In conclusion, the findings of this study provide compelling evidence of a strong and positive correlation between American cheese consumption and the stock price of Home Depot. The implications of this connection stretch beyond the realms of finance and consumption, venturing into the uncharted territories of dairy economics. So the next time you're at the supermarket debating between Swiss or cheddar, remember that your investment portfolio might thank you for choosing the American cheese and a trip to Home Depot. After all, in the world of finance, it's not just about the cheddar - it's also about the whey you slice it.

#### 5. Discussion

Our findings provide empirical support for the unexpected yet robust relationship between American cheese consumption and Home Depot's stock price, adding a slice of

credibility to the previously underexplored cheese-finance nexus. The strong positive correlation we uncovered aligns with the anomalous insights put forth by Agatha Christie (2010) in her fictional account of the "The Cheese Gambit," although our study substantiates this link with real-world data.

In line with the warnings of Doe and Jones (2020), we approached our analysis with due caution, acknowledging the potential for spurious correlations in unconventional research domains - but it seems our results are the real, unadulterated cheese deal. The examination of seemingly nonparallel variables has yielded results sharper than an aged cheddar, indicating that there may be more to be gleaned from the consumption of American cheese than meets the eye.

It's no 'gouda' news that our findings may have broader implications for cheese aficionados and investors alike. As we venture into the perplexing world of dairy economics, we can't help but marvel at the extent to which the cheesy goodness of American cheese might flavor not only culinary experiences but also the stock market trends. This correlation is no laughing 'muenster,' and it highlights the importance of exploring unconventional connections in financial markets.

The literature review serves as a reminder of the unexpected and interwoven nature of research questions, much like how the holes in Swiss cheese are thought to intensify its flavors. The interdisciplinary flavor of our investigation underscores the importance of embracing seemingly implausible hypotheses and subjecting them to rigorous empirical scrutiny. It's evidence that in the realm of research, every cheesy idea deserves a thorough grilling.

It's clear that the relationship between American cheese consumption and Home Depot's stock price is not merely a coincidental occurrence, but a substantive

association with real economic implications. It seems that diving into the cheesy depths of dairy economics has led us to a treasure trove of market insights that are, in fact, not just 'brief and imaginary.

In this dairy serious work, we've churned out some 'gouda' results that may have investors rethinking their portfolios and contemplating the underestimated power of cheese consumption in shaping market dynamics. So next time you're pondering between 'bleu' and Swiss, remember that your investment decisions might just be guided by the finest selection of American cheese on the shelf - a 'ma-soured' strategy that could prove 'feta' than expected. After all, in the world of finance, it's not just about the cheddar - it's also about the whey you slice it.

And on that 'cheddar' note, our findings indicate that the connection between American cheese consumption and Home Depot's stock price is nothing to brie-little. The strong correlation uncovered in this study may prompt further exploration into the potential economic implications of cheese consumption, revealing that the market dynamics are, indeed, a 'grate' and mysterious craft.

## 6. Conclusion

In conclusion, it is clear that the link between American cheese consumption and the stock price of Home Depot (HD) is not just a cheesy coincidence, but a substantial relationship that can't be brie-shed aside. Our findings melt away any doubts about the cheddar connection between these two seemingly unrelated variables, leaving us with a sense of awe like a perfectly crafted cheese soufflé - a true testament to the power of statistical analysis and dad jokes.

As we wrap up this study, it's worth emphasizing that the evidence presented here is no "gouda-days." The statistical

significance uncovered in our analysis suggests that there is something more than just a mere correlation at work. It's like the perfect pairing of wine and cheese - a match made in statistical heaven.

The implications of our findings may stretch beyond the realms of finance and consumption, paving the way for a new era of "dairy economics" that is as rich and creamy as a triple-cream brie. It's a "grate" revelation that adds a whole new layer of complexity to the world of financial analysis. After all, who would have thought that the fluctuation in Home Depot's stock price could be linked to the ebb and flow of American cheese consumption? It's enough to make anyone "fondue" of statistics and economic research!

In light of these findings, it seems that further research in this area is as futile as trying to resist a perfectly aged parmesan - unnecessary. It's safe to say that we've "cheddar-ed" as much light as possible on this peculiar relationship. So, next time someone asks, "What's up with American cheese and Home Depot's stock price?" - the answer is as clear as a paneer: it's a "gouda" investment opportunity!

No more research is needed in this area.