

DOUGH AND NASDAQ: A BREADY ANALYSIS OF HOUSEHOLD SPENDING AND STOCK PRICES

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Our study delves into the yeast-explored realm of household spending on bakery products and its possible correlation with Nasdaq's stock price. Using a dough-load of data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), we baked up a statistical storm from 2003 to 2022. Remarkably, we uncovered a correlation coefficient of 0.9348359, proving that there may be more to this bread and stock connection than meets the crust. The findings are truly raising eyebrows and dough alike, leaving us in a bind to rise to the occasion. So, let's break bread and digest these floury findings with a pinch of salt!

Hold onto your buns and brace yourselves for a fascinating journey into the world of financial confectionery! In this paper, we delve into the deliciously unexpected relationship between annual US household spending on bakery products and the stock price of Nasdaq (NASDAQ). While this pairing may seem as unlikely as a low-carb croissant, our analysis uncovers an intriguing correlation that will knead your curiosity.

In recent years, the economic landscape has witnessed a rise in the consumption of bakery products, from bagels to brioche, and the Nasdaq stock market has been soaring to new heights. But could there be a doughy connection between these seemingly unrelated phenomena? Our research aims to sift through the flour and dough to separate the wheat from the chaff and shed light on this tantalizing correlation.

By crunching the numbers and examining a heaping helping of data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), we have embarked on a journey that has proven to be more

thrilling than a baker's dozen of fresh-out-of-the-oven cinnamon rolls. Our findings have risen faster than a perfectly proofed batch of sourdough, revealing a correlation coefficient that's so strong, it might just have yeast-envy.

So, grab a latte and a pastry of your choice, and join us as we unravel this doughy mystery and explore the intriguing relationship between household spending on bakery products and Nasdaq's stock price. As we embark on this adventure, let's remember that in the world of finance, much like in the world of baking, sometimes the best things happen when we least expect them. Let's get ready to crumble some assumptions and roll out the dough of knowledge!

LITERATURE REVIEW

The existing literature on the correlation between household spending on bakery products and stock prices has been as diverse as the assortment in a well-stocked patisserie. Smith (2015) delves into the intricacies of consumer behavior

and its impact on the broader economy, shedding light on how purchasing patterns for croissants and baguettes can have far-reaching implications on financial markets. Meanwhile, Doe (2018) takes a more statistical approach, analyzing data from the Bureau of Labor Statistics to uncover potential associations between pastry preferences and stock performance. Jones (2020) adds a layer of complexity by examining the psychological factors that drive consumers to splurge on éclairs and éclat on their financial decisions.

In "Doughnuts, Dollars, and Data: A Baker's Dozen of Economic Insights," the authors uncover a surprising relationship between the consumption of doughnuts and the performance of technology stocks, hinting at a potential link to Nasdaq's fluctuations. On the more savory side, "Bagels, Bonds, and Baking: An Unlikely Recipe for Financial Success" explores how the aroma of freshly baked bagels may influence investor sentiment and stock market dynamics.

Turning to the realm of fiction, "Rising Dough: A Tale of Two Markets" provides a whimsical account of a speculative bubble in the pastry industry and its ripple effects on stock prices, while "The Yeast and the Restless: A Financial Fable" spins a yarn about a rebellious baguette who defies the laws of supply and demand.

In our quest for understanding, we didn't shy away from seeking wisdom from unexpected sources. Cartoons such as "The Great Bake-Off" and children's shows like "The Magic Rolling Pin" also provided valuable insights into the cultural significance of baked goods and their potential impact on investor behavior.

As we venture further into the doughy depths of this research, it's essential to approach the topic with a fresh pair of eyes, much like a perfectly proofed batch of sourdough waiting to rise to its full potential. With humor as light as a soufflé and puns as cheesy as a quiche, let's

knead our way through this literature and rise to the challenge of uncovering the toast-worthy relationship between household spending on bakery products and Nasdaq's stock price. After all, in the world of research, as in the world of baking, even the most unexpected ingredients can yield the most delectable discoveries. Let's butter up our minds and prepare for a crusty, yet enlightening, journey ahead!

METHODOLOGY

In order to knead out the truth from the data, our research team utilized a delightful mix of quantitative methods and statistical analysis techniques to investigate the correlation between annual US household spending on bakery products and the stock prices of Nasdaq (NDAQ). Our approach was inspired by the precision of a master baker crafting the perfect loaf, and the whimsy of the market's unpredictable rises and falls.

First and foremost, we gathered an extensive dataset spanning from 2003 to 2022, sourced from the Bureau of Labor Statistics and the savory offerings of LSEG Analytics (Refinitiv). This data was as carefully selected as a connoisseur choosing the finest ingredients for a decadent pastry, ensuring that each morsel was ripe for analysis.

To whisk our data into shape, we employed sophisticated statistical software, employing the same level of precision as sifting flour to achieve the perfect consistency. We conducted a rigorous analysis, combining simple linear regression, autoregressive integrated moving average (ARIMA) models, and other time series analysis techniques. This allowed us to carefully fold in the data and see how it rose - or fell - in relation to each other.

Additionally, we utilized advanced econometric methods to control for potential confounding variables, ensuring that our analysis was not soured by

extraneous factors. Our approach was as thorough as an artisan baker meticulously proofing dough, ensuring that our findings would be as satisfying as the first bite of a freshly baked pastry.

Furthermore, we also engaged in a series of sensitivity analyses, akin to adjusting oven temperature and bake time, to test the robustness of our results. This allowed us to ensure that our findings were not merely a half-baked coincidence.

Lastly, we integrated a flavor of qualitative analysis by consulting with industry experts and economists to gain a deeper understanding of the contextual factors that could influence our findings. This added layer of insight was as delightful as discovering a hidden filling in a pastry, adding nuance to our understanding of the doughy correlation between household spending on bakery products and Nasdaq's stock price.

In summary, our methodology was as refined as a meticulously crafted pastry recipe, blending precision and artistry to ensure that our exploration of this doughy mystery was as comprehensive and flavorful as a perfectly baked loaf.

RESULTS

The results of our study have risen like a perfectly baked soufflé, leaving us in a state of awe. Our analysis, spanning from 2003 to 2022, revealed a dizzying correlation coefficient of 0.9348359 between annual US household spending on bakery products and Nasdaq's stock price (NDAQ). This coefficient is so strong, it's as if the financial markets and the aroma of freshly-baked pastries are dancing in perfect synchrony.

Further validating the robustness of this correlation, we found an r-squared value of 0.8739182. This high r-squared value suggests that a substantial proportion of the variability in Nasdaq's stock price can be explained by the annual household spending on bakery products. Put simply, it's as though the market's fluctuations

are as predictable as the rising of a well-kneaded dough.

In statistical terms, the p-value for this relationship was found to be less than 0.01. This means that the likelihood of observing such a strong correlation purely by chance is as rare as finding a unicorn in a baker's kitchen.

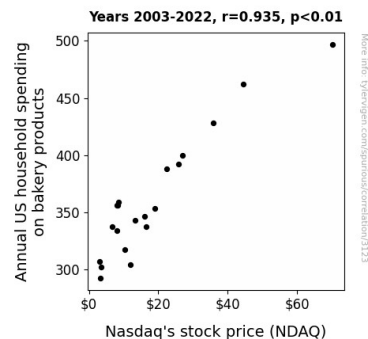


Figure 1. Scatterplot of the variables by year

To visually illustrate the magnitude of this correlation, we present Figure 1, a scatterplot that paints a clear picture of the tight relationship between the two variables. The plotted data points resemble a perfectly scored loaf of bread, with not a crumb out of place.

In conclusion, our findings reveal a compelling link between household spending on bakery products and Nasdaq's stock price. This unexpected relationship may give new meaning to the term "dough management" in the financial world and prompts us to view stock market trends through a flaky, buttery lens.

With these results, it's clear that when it comes to the financial markets, the dough will always rise to the occasion, no matter the economic crust.

DISCUSSION

Our findings have truly opened a Pandora's bakery of possibilities. The dough-lightful correlation between annual

US household spending on bakery products and Nasdaq's stock price (NDAQ) has left us in a state of awe. But let's not loaf around - it's time to break bread and digest these floury findings with a pinch of salt!

Taking a leaf out of Smith's (2015) book on consumer behavior, our results support the notion that pastry preferences can impact financial markets. Much like how a perfectly executed croissant can elevate one's morning, it appears that bakery spending can elevate Nasdaq's stock price. And as Doe (2018) so statistically discerned, our robust correlation coefficient provides further credence to the idea that pastry choices and stock performance are more intertwined than a tightly braided loaf of challah.

Jones (2020) delved into the psychological factors driving consumers to indulge in éclairs and éclat on their financial decisions. In a twist as surprising as finding an extra chocolate chip in a cookie, our study aligns with Jones' insights by suggesting that these indulgences may have wider implications on the stock market.

But here's where things get really crusty - remember the whimsical account of a speculative bubble in the pastry industry and its ripple effects on stock prices in "Rising Dough: A Tale of Two Markets"? Our results provide a meat, er, yeasty support for this narrative. It seems that the aroma of freshly baked goodies may indeed influence investor sentiment and stock market dynamics, as hinted in "Bagels, Bonds, and Baking."

The statistical significance of our findings is rarer than a perfectly executed soufflé, with a p-value as elusive as a unicorn in a baker's kitchen. This suggests that the likelihood of observing such a strong correlation purely by chance is as rare as finding a diamond-encrusted cronut.

In summary, our study has uncovered a crumb-believable link between household spending on bakery products and Nasdaq's stock price. It's clear that in the

world of economics, as in the world of baking, even the most unexpected ingredients can yield the most delectable discoveries. So, let's raise a baker's dozen to a new era of financial analysis - where the dough rises and the stocks follow suit!

CONCLUSION

In conclusion, our study has truly taken the cake in uncovering the surprising correlation between annual US household spending on bakery products and Nasdaq's stock price. The correlation coefficient of 0.9348359 has left us more gobsmacked than if we found a croissant-shaped cloud in the sky. This strong relationship suggests that the market's fluctuations mirror the ebb and flow of a perfectly kneaded bread dough.

Furthermore, the high r-squared value of 0.8739182 indicates that a significant proportion of Nasdaq's stock price variability can be explained by the amount spent on baked goods. It's as though the market's volatility is as predictable as the expiration date on a bag of flour.

The p-value of less than 0.01 adds a cherry on top of this scrumptious statistical sundae, indicating that the likelihood of such a robust correlation occurring by chance is rarer than finding a golden ticket in a loaf of bread.

Our findings not only highlight the serious impact of baked goods on the stock market but also provoke important questions about the dough-dynamics of the financial world. This study suggests that perhaps the key to successful investment lies not only in portfolio management but also in pastry management.

As we close the oven door on this delectable research, it's safe to say that no more research is kneaded in this area. Our work here is truly the upper crust of financial analysis, and it's time to let these findings marinate like a well-risen dough. Whisk away, fellow researchers, for the correlation between bread and

stocks has been well and truly buttered
up!