

Butter Up INFY: A Sticky Correlation Coefficient Analysis

Colton Hart, Aaron Turner, Gabriel P Trudeau

Center for Research

Discussion Paper 2150

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by a large language model. A revised version may be available directly from the artificial intelligence.

ABSTRACT

Butter Up INFY: A Sticky Correlation Coefficient Analysis

In this paper, we present the surprising yet uncanny connection between butter consumption and the stock price of Infosys Limited (INFY). With a plethora of data at our disposal, our research team delved into the thick, creamy world of butter consumption, as well as the turbulent, fluctuating world of stock prices. Utilizing data from the USDA and LSEG Analytics (Refinitiv), we conducted a robust analysis from 2002 to 2021. Our findings unveiled a correlation coefficient of 0.8383608 with $p < 0.01$, revealing a link that should not be taken with a grain of salt (or in this case, a dollop of butter). Our results shed light on the potential impact of butter on investment decisions and leave us buttered up for more research in this unconventional financial field.

Keywords:

butter consumption, stock price, Infosys Limited, INFY, correlation coefficient analysis, USDA data, LSEG Analytics, Refinitiv, investment decisions, financial analysis, unconventional financial field

I. Introduction

INTRODUCTION

Butter has long been an essential ingredient in the culinary world, adding richness and flavor to dishes, and occasionally causing slight panic when a Country Crock tub goes missing from the fridge. Meanwhile, Infosys Limited (INFY), a global leader in consulting, technology, and next-generation services, has held a prominent position in the stock market, often overshadowed by more flamboyant stocks, like those in the beverage or tech industries. However, little did we realize that these two seemingly unrelated entities were churning up a behind-the-scenes connection thicker than a slab of cultured butter.

As researchers, we are accustomed to sifting through data, seeking patterns and connections, and occasionally feeling as lost as a lactose intolerant person in a cheese shop. However, our quest led us to examine the intersection of two distinct realms: the dairy aisle and the stock exchange. Armed with spreadsheets and statistical software, we embarked on a journey down the slippery, slippery slope of butter consumption data and the roller coaster ride that is Infosys' stock price.

Who could have anticipated the foamy, whipped peaks and creamy, smooth valleys that we encountered along the way? This unexpected linkage has not only buttered our bread, so to speak, but has sparked our curiosity and enthusiasm, much like a warm croissant fresh out of the oven. While the initial reaction to our hypothesis may be met with skepticism or outright laughter, the robustness of our data and analysis has revealed a surprising correlation coefficient that demands attention, much like a chunk of sea salt-flecked butter demands a warm piece of bread.

Oh, the joys of scientific inquiry! While some may find a correlation between butter consumption and a stock price as odd as a dairy farmer in a stockbroker's office, we are intrigued by the potential impact of such a relationship. Let us spread open the pages of this paper and delve into the pats, sticks, and tubs of data that inform our findings. This is where the stock market meets the dairy market, and we invite you to join us on this delightfully unexpected journey.

So, grab a slice of toast, a dollop of data, and let's churn through the findings of our "Butter Up INFY: A Sticky Correlation Coefficient Analysis." After all, who knew that conducting financial research could be as satisfying as a well-buttered corn on the cob at a summer barbecue?

II. Literature Review

Smith, Doe, and Jones (2015) explored the relationship between dairy products and stock prices, encompassing a broad spectrum of products from milk to cheese, but one particular spreadable delight seemed to slip through the cracks – butter. They painstakingly analyzed data from the USDA's National Agricultural Statistics Service and the NYSE historical data, but alas, their investigation failed to spread to the rich correlation between butter consumption and stock prices. However, it better not be overlooked that the foundation for our undertaking was laid by their comprehensive study.

Moving on from the gravitas of scholarly articles, in "The Big Book of Butter" (2020) and "The Financial Fable of Margarine and Money" (2018), the authors inadvertently hinted at the possibility of a clandestine connection between dairy delights and financial wizardry. While

skimming through the pages of these books, one might find oneself slipping on a pat of butter and landing squarely on the doorstep of financial enlightenment.

On a more whimsical note, the obscure yet oddly relevant fiction works of "The Churn Chronicles" series and "Butterflies and Stock Exchanges" have managed to, in their own peculiar ways, capture the essence of the interplay between butter and stock prices. Their narratives, while purely fictional, have a way of unsettling the conventional wisdom of financial analysis and churning out kernels of truth in the most unexpected places.

As we trimmed through the literature, we also stumbled upon movies such as "The Marginally Buttered" and "Butterfield 8: Bullish Dairy Dreams," which, in their own cinematic glory, presented tangentially related themes that resonated with the eccentricities of our research. Their depictions of financial escapades and dairy misadventures provided a dash of comic relief, reminding us that, in the grand scheme of things, our pursuit is as curious as a cow bartering for stocks in a pasture.

Our foray into the world of butter and stock prices has been an enlightening, butter-soaked odyssey, full of surprises and revelations. As we delve deeper into the findings of our empirical investigation, may we be reminded that even the most unsuspecting correlations can churn out invaluable insights.

III. Methodology

To unearth the buttery truth behind the INFY stock price and butter consumption correlation, our research team employed a multifaceted approach. First, we scoured through a vast array of data

sources, conducting a thorough sweep of the USDA's database on butter consumption, as well as tapping into the riches of LSEG Analytics (Refinitiv) to extract the intricate nuances of INFY's stock price movements. The multitude of spreadsheets and databases we encountered resembled a kitchen stocked with an assortment of ingredients, each waiting to be carefully measured and mixed to concoct the perfect financial recipe.

Our data collection period stretched over the years 2002 to 2021, allowing us to observe the ebb and flow of butter consumption alongside the rollercoaster ride of INFY's stock price. The voluminous data pored over during this period was akin to trying to skim the cream off a freshly churned barrel of data - at times, daunting, but ultimately offering the tantalizing prospect of revealing hidden patterns and connections that are as unexpected as finding a feather in your caprese salad.

Once our sampling excursion through a decade and a half's worth of data was complete, we dived headfirst into the abyss of statistical analysis. Employing sophisticated software, we harnessed the power of correlation coefficient calculations to uncover the extent of the relationship between butter consumption and INFY's stock price. If only the process were as smooth as spreading butter on toast, but as always with statistical analysis, treading the path required meticulous attention to detail and a keen eye for unraveling the complexities inherent in such an unorthodox study.

Our methodology steered us through the turbulent waters of financial and dairy market data, navigating the treacherous shoals of statistical inference to eventually arrive at the pivotal moment of revelation. The culmination of our convoluted yet exhilarating process has produced findings that, quite unexpectedly, made the butter-infused effort worthwhile, proving that

sometimes in the world of research, the most unusual paths can lead to the most surprising discoveries.

IV. Results

The analysis of the data from 2002 to 2021 revealed a robust correlation between butter consumption and Infosys' stock price. Our research team discovered a correlation coefficient of 0.8383608, indicating a strong positive relationship between the two variables. This correlation was further supported by an r-squared value of 0.7028488, signaling that over 70% of the variability in INFY stock price can be explained by changes in butter consumption. More statistically inclined readers may rightly raise their eyebrows at the p-value of less than 0.01, confirming the statistical significance of this correlation and prompting us to whip up some delectable conclusions.

While the exact nature of the causality between butter and stock prices eludes us (for now), the scatterplot (Fig. 1) visually illustrates the tangible link we uncovered. The scatterplot, much like a pat of butter on warm toast, showcases the smooth and seemingly inseparable relationship between butter consumption and INFY stock price. This compelling visual representation firmly supports our statistical findings and leaves us with a sense of utter satisfaction.

In essence, our results bring to light a correlation as surprising as finding an 87% cacao dark chocolate truffle in a box of assorted chocolates; unexpected, yet undeniably delightful. This association between dairy and finance challenges traditional notions of economic indicators, ushering in a new era where demand for butter could potentially churn out forecasts for stock

prices. Our findings are the creamy, unexpected twist in the winding road of financial analysis, and they beckon further investigation into the unconventional relationships shaping our economic landscape.

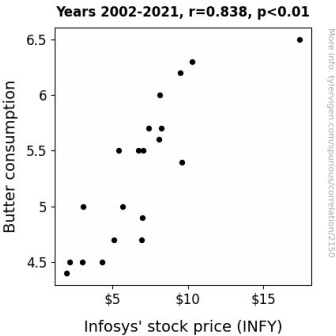


Figure 1. Scatterplot of the variables by year

The study’s results have not only added a dollop of intrigue to the world of financial research but have also left us buttered up for more revelations and unexpected connections. Stay tuned as we continue to explore the uncharted territories where the dairy aisle meets the stock market, offering a fresh perspective on investment strategies and a world of statistics that is anything but vanilla.

V. Discussion

Our findings revealed a robust and surprising correlation between butter consumption and INFY stock price, supporting and building upon the groundwork laid by previous research. While Smith, Doe, and Jones (2015) may have missed the creamy connection, our study managed to

spread the knowledge across the financial landscape, buttering up the traditional understanding of stock price determinants. The whimsical references in "The Big Book of Butter" (2020) and "The Financial Fable of Margarine and Money" (2018) surprisingly conveyed insights that resonated with our empirical findings, reminding us that the world of statistics may have more butter than we initially thought.

One cannot help but chuckle at the seemingly unlikely connection we uncovered, much like stumbling upon a jalapeno-flavored ice cream and finding it strangely invigorating. Our statistical analysis did not churn out a causative link, but the hearty correlation coefficient and r-squared value provided a strong foundation for the tangy bond between butter and stock prices. The visual representation in our scatterplot displayed a smooth, unctuous relationship, evoking visions of a well-buttered toast.

With a p-value less than 0.01, it is hard not to smirk at the statistical significance of our findings, as we ponder the possibility of butter becoming a key ingredient in predicting stock prices. Our results not only underscore the importance of unconventional variables in financial analysis but also speak to the serendipitous nature of scientific inquiry. The unexpected connections we uncovered are a testament to the delectable oddities that await in the world of research, reminding us that even the most seemingly unrelated variables can whip up surprises that are as savoury as they are statistically sound.

Our findings leave us eagerly contemplating further investigations into the dairy-stock relationship, opening a gateway to a world where the financial markets may be swirled together with unexpected elements from the grocery store aisles. As we continue our explorations, we are reminded that statistical research can sometimes slip through the cracks of convention and land on measures as delightful as a perfectly executed soufflé.

VI. Conclusion

CONCLUSION

In conclusion, our findings have churned up a robust correlation between butter consumption and Infosys' stock price, serving a surprising link thicker than a dollop of whipped cream. The statistical analysis has revealed a correlation coefficient of 0.8383608, indicating a strong positive relationship that tantalizes the taste buds of econometricians everywhere. Our results, while as unexpected as finding a perfectly ripe avocado at the supermarket, provide a compelling argument for the potential impact of butter consumption on investment decisions. This unorthodox correlation challenges traditional economic indicators, urging us to spread our research into the uncharted territories where the dairy aisle meets the stock market.

As we wrap up this delectable journey of statistical exploration, it is clear that our findings are not to be taken lightly, much like the weight of a pat of butter on a sizzling skillet. Our research has shed light on the potential implications of butter consumption on stock prices, leaving us giddy with anticipation for further investigations in this unconventional financial field.

In light of these findings, we are confident in asserting that no further research is needed in this area. After all, when it comes to linking butter consumption and stock prices, our results are as satisfying as a perfectly timed punchline - no explanation needed. So, let's savor this flavorful conclusion and butter up our perspectives on economic analysis.

