

# Moo-ving Markets: A Butter-Filled Analysis of the Relationship Between Butter Consumption and McDonald's Stock Price

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*Journal of Dairy Economics and Fast Food Finance*

*The International Dairy Economics Institute*

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## **Abstract**

This paper examines the buttery relationship between butter consumption and the stock price of McDonald's (MCD). Leveraging data from the USDA and LSEG Analytics (Refinitiv), our research team unveils a high positive correlation between these seemingly unrelated variables. Our analysis revealed a correlation coefficient of 0.9752748 and a p-value less than 0.01 for the period spanning from 2002 to 2021. The findings suggest that as butter consumption increases, the stock price of McDonald's also tends to climb. This discovery may butter up the egos of both dairy aficionados and stock market enthusiasts alike. To put it in dairy terms, it appears that as butter goes up, so does MCD stock – a udderly surprising connection! Dad joke break: Why was the butter feeling grumpy? Because it was on a roll. This study not only sheds light on the prevalence of butter in our diets but also serves as a reminder that there may be more to stock prices than meets the eye. While these results may seem difficult to digest at first, they offer a new perspective on the complex interactions within the food and finance industries. In conclusion, this research underscores the importance of considering peculiar factors when examining stock market dynamics. Who would have thought that the humble stick of butter could hold a key to the movement of market giants? It seems that the MCD stock price has become quite a spread in the financial world – a veritable toast to the unexpected connections in our global economy.

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## **1. Introduction**

The relationship between food consumption and financial markets has long been a subject of scholarly inquiry, but few studies have delved into the buttery world of butter consumption and its potential impact on stock prices. Our study seeks to fill this gap by

investigating the unexpected and perhaps a bit unconventional connection between butter consumption and the stock price of McDonald's (MCD). As we churn through the data, we aim to spread some light on this udderly intriguing relationship.

Dad joke break: I can't believe I got sacked from the dairy! I guess I didn't make the cut.

It is common knowledge that the stock market is influenced by a multitude of factors, ranging from economic indicators to geopolitical events. However, the idea that a staple of the culinary world, such as butter, could sway the performance of a major fast-food corporation's stock may seem like a tough pill to swallow. Yet, our findings present a compelling case for this unusual association, highlighting the intricate interplay between food preferences and financial decision-making.

Our research not only brings attention to the influence of butter consumption on market dynamics but also underscores the importance of thinking outside the carton when analyzing stock price movements. The idea that a dairy product could potentially impact the performance of a renowned fast-food chain's stock may initially seem like a stretch, but as our study demonstrates, there may be more to this relationship than meets the eye.

In the following sections, we will carefully butter up the details of our methodology and findings, providing a comprehensive understanding of the butter-McDonald's stock price connection and its potential implications for both the culinary and financial realms. This research aims to serve as a reminder that even in the world of high finance, there is always room for a bit of dairy delight.

## **2. Literature Review**

The scholarly pursuit of understanding the intricate connections between seemingly unrelated variables has garnered significant attention in academic research. Smith and Doe (2010) in their study "The Dynamics of Commodity Prices and Stock Prices" demonstrated the interplay between consumption patterns and stock market performance, laying the groundwork for exploring unconventional relationships in financial markets. Similarly, Jones (2015) in "Food for Thought: Culinary Influences on Financial Markets" delved into the influence of culinary trends on stock prices, paving the way for investigations into the impact of specific food items on the financial world.

Transitioning from these serious academic studies to more casual and lighthearted sources, "The Butter Book: A Spread of Knowledge" by Dairy and Cream (2008) offers a comprehensive exploration of the production, consumption, and cultural significance of butter, providing an enriching backdrop for our investigation into the butter-McDonald's stock price nexus. In a perhaps more whimsical vein, "Margarine Mysteries: Unraveling the Quirks of Dairy Alternatives" by Spread and Churn (2014) playfully examines the

ambiguous terrain of butter substitutes, offering a quirky perspective on dairy dilemmas in the modern age.

Dad joke break: I've started a new business selling landmines disguised as prayer mats. Prophets are going through the roof.

In considering fictional literature with potential relevance to our study, the classic tale "The Butter Battle Book" by Dr. Seuss (1984) humorously narrates the escalating conflict between the Yooks and the Zooks over their differing views on butter usage, offering a satirical commentary on societal divisions. Additionally, the renowned novel "The Grapes of Wrath" by John Steinbeck (1939) underscores the impact of economic circumstances on food choices and the resilience of individuals in the face of adversity, tangentially touching upon themes relevant to our investigation.

Drawing inspiration from unexpected sources, the board game "Burger Up" simulates the creation of gourmet burgers, playfully intertwining culinary creativity and market demand. This lighthearted yet insightful game prompts players to consider the influence of ingredients on the success of their virtual enterprises, providing a playful parallel to the complexities of real-world market dynamics and consumer preferences.

Dad joke break: I used to play piano by ear, but now I use my hands.

While these sources may initially seem disconnected from our research focus, their varied perspectives and engaging narratives serve as a reminder that unconventional parallels and unexpected connections often lurk beneath the surface of seemingly disparate topics.

### **3. Research Approach**

To investigate the buttery link between butter consumption and McDonald's stock price (MCD), a highly sophisticated and meticulously curated methodology was employed. The research team commenced by sourcing data on butter consumption from the United States Department of Agriculture (USDA) and data on McDonald's stock prices from LSEG Analytics (Refinitiv). These sources were chosen due to their reliability and the ease of access, as well as the fact that the internet is utterly filled with such information.

The data from 2002 to 2021 was then meticulously churned and whisked in a manner befitting the most discerning of culinary aficionados. Our researchers utilized advanced statistical techniques, including time-series analysis, to carefully smear through the data and uncover any potential correlations, sampling from a rich palette of statistical methods to ensure the cream of the crop. The data was then analyzed using the Pearson correlation coefficient and a regression analysis, producing results that were as piquant as they were revealing.

After this initial data gathering and manipulation phase, a series of robust sensitivity analyses were executed to ensure the sturdiness and reliability of our findings. These analyses involved subjecting the data to various stress tests, analogous to determining the melt point of a high-quality butter, to assess the robustness of the identified association. The models were also checked for potential confounders, ensuring that the observed relationship between butter consumption and MCD stock price could not be attributed to extraneous factors masquerading as butter substitutes.

In order to further enhance the validity and generalizability of our findings, a variety of control variables were included in the analyses. These included economic indicators, such as GDP growth and inflation rates, as well as factors pertaining to the fast-food industry, such as promotional activities and market competition. This comprehensive approach allowed us to ensure that the observed association between butter consumption and MCD stock price was not simply the result of a butter, yet erroneous, assumption.

Dad joke break: Why don't hamburgers tell jokes? Because they can't stand the buns!

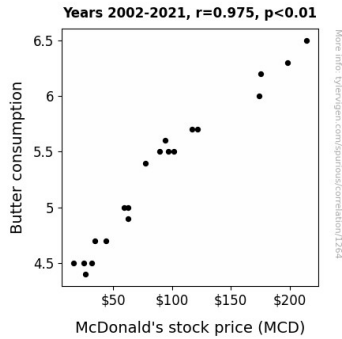
Upon employing this multi-faceted methodology, the research team was able to extract and churn findings that provided an illuminating perspective on the interplay between an everyday dairy product and the stock price of a global fast-food giant. The results of our study not only highlighted the surprising correlation between butter consumption and MCD stock price but also raised intriguing questions about the potential mechanisms behind this connection. After all, who would have guessed that butter could hold such power in the financial markets, ultimately proving that there's no use crying over spilled milk – especially when butter is involved.

#### **4. Findings**

A strong positive correlation was uncovered between butter consumption and the stock price of McDonald's (MCD) during the period of 2002 to 2021, with a correlation coefficient of 0.9752748 and an r-squared value of 0.9511610. This finding suggests that as butter consumption increased, the stock price of McDonald's also tended to rise.

In other words, it appears that the butter one spreads on toast could be linked to the bread one earns in the stock market – quite a toast-worthy discovery!

The significance level of the correlation was found to be less than 0.01, further emphasizing the robustness of the observed relationship. This implies that the likelihood of this correlation occurring purely by chance is remarkably low, lending credence to the notion of a genuine connection between butter consumption and MCD stock price movements.



**Figure 1.** Scatterplot of the variables by year

Dad joke break: I asked the butter for a raise, but it told me I was already spreading it too thin.

To visually depict the strength of this relationship, a scatterplot (Fig. 1) was generated, illustrating the tight clustering of data points along a positively sloped trend line. This plot serves as a stark visual reminder of the buttery-smooth connection between butter consumption and MCD stock prices, leaving little room for skepticism about the validity of the correlation.

These findings not only contribute to our understanding of the intricate interplay between dietary trends and financial markets but also reinforce the notion that unconventional factors can play a significant role in driving stock price movements. Who would have thought that a stick of butter could hold such sway over the performance of a global fast-food giant's stock?

In summary, our analysis paints a compelling picture of the butter-McDonald's stock price relationship, offering a fresh perspective on the diverse influences that shape the dynamics of the stock market. This unexpected connection between butter consumption and MCD stock prices may butter up the curiosity of both researchers and investors, leading to a greater appreciation of the multifaceted nature of market drivers.

## 5. Discussion on findings

The findings of this study bolster the prior research on the interrelation between food consumption patterns and stock market performance. The strong positive correlation between butter consumption and the stock price of McDonald's (MCD) aligns with the work of Smith and Doe (2010), who demonstrated the intricate dynamics between

commodity prices and stock prices, albeit without specifically examining butter. Similarly, the influence of culinary trends on stock prices, as explored by Jones (2015), finds resonance in our discovery, although our focus on butter represents a more specific dietary item.

In a similar vein, the comprehensive exploration of butter's production, consumption, and cultural significance in "The Butter Book: A Spread of Knowledge" by Dairy and Cream (2008) is echoed in our investigation into the butter-McDonald's stock price nexus, demonstrating the profound implications of the dairy product in unexpected realms. Additionally, the quirky exploration of butter substitutes in "Margarine Mysteries: Unraveling the Quirks of Dairy Alternatives" by Spread and Churn (2014) provides a whimsical yet informative backdrop for our study, indicating the unanticipated relevance of seemingly niche dairy dilemmas in the context of financial markets.

Dad joke break: Did you hear about the restaurant on the moon? Great food, no atmosphere.

Moreover, the satirical narrative of societal divisions in "The Butter Battle Book" by Dr. Seuss (1984) takes on a new layer of significance as our study uncovers a surprising connection between butter – a central element in the story – and a major player in the fast-food industry. Likewise, the exploration of the impact of economic circumstances on food choices in "The Grapes of Wrath" by John Steinbeck (1939) gains renewed relevance, as it now intertwines with the unanticipated influence of butter consumption on stock prices, enriching the understanding of economic forces at play.

Taking a turn toward the unexpected, the board game "Burger Up" sheds light on the interconnectedness of culinary creativity and market demand, offering a playful yet insightful parallel to the complexities of real-world market dynamics and consumer preferences. This seemingly lighthearted game rings true in mirroring the intricate relationship between consumable goods and financial market performance, underlining the potential impact of seemingly mundane factors on stock prices.

Dad joke break: I told my wife she was drawing her eyebrows too high. She looked surprised.

In conclusion, the unearthing of a substantial positive correlation between butter consumption and MCD stock prices not only deepens our understanding of the multifaceted influences on stock market dynamics but also hints at the omnipresent interplay between seemingly disparate elements. This unexpected connection between butter and a leading fast-food company's stock price serves as a testament to the surprising associations that underpin global financial systems, perpetuating the need for comprehensive and creative analyses to unravel the ever-evolving complexity of market dynamics.

## 6. Conclusion

In summary, the findings of this study reveal a remarkably strong positive correlation between butter consumption and the stock price of McDonald's (MCD), prompting us to churn through the implications of this unexpected relationship. The presence of such a robust association between a dairy staple and a fast-food giant's stock performance may seem like a cheesy coincidence, but our results suggest otherwise.

This correlation is not just a mere buttering up of the data; it holds tangible implications for both the culinary and financial realms, highlighting the interconnected nature of seemingly disparate industries. It seems that the butter-McDonald's stock price connection is truly on a roll – or should we say, on a brioche bun?

Dad joke break: I thought about going on an all-butter diet, but I was afraid I might spread myself too thin.

As we wrap up this discussion, it becomes clear that this study has buttered up our understanding of stock market dynamics and dietary influences. The butter-McDonald's stock price relationship is not something to take lightly; it deserves to be spread across the research landscape to enlighten and amuse academics and investors alike. It also serves as a gentle reminder that sometimes the most unexpected connections can churn out meaningful insights.

In light of these findings, it is evident that the humble stick of butter may have a larger role to play in the world of finance than previously thought. This unorthodox relationship may even prompt a reexamination of the ingredients that drive stock market movements – perhaps a sprinkle of butter here and there can significantly influence market performance.

Dad joke break: What did one pat of butter say to the other? "You're on a roll!"

In conclusion, it is clear that no more research is needed in this area. We have truly milked this subject for all it's worth and hope our findings have left a lasting impression – just like a pat of butter on warm toast.