# Eggs-travagant Expenses: Examining the Amusing Association between Annual US Household Spending on Eggs and Emerson Electric Co.'s Stock Price

Charlotte Hernandez, Alexander Tate, Gavin P Tyler Journal of Poultry Economics and Finance The Society for Poultry Economics and Stock Market Research Cambridge, Massachusetts

#### Abstract

This study cracks open a whimsical investigation into the correlation between annual US household spending on eggs and Emerson Electric Co.'s (EMR) stock price. Utilizing data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) from 2002 to 2022, we reveal a surprising correlation coefficient of 0.9420505 and a statistically significant p-value of less than 0.01. Our findings suggest that there may be more than just a yolk in the connection between egg expenditures and EMR stock performance. Join us as we scramble to uncover the poachable relationship between breakfast habits and market dynamics!

#### 1. Introduction

Eggs have long been hailed as the quintessential breakfast item, serving up a delectably nutritious start to the day for millions of households across the United States. The versatility of eggs, whether scrambled, fried, or poached, makes them an eggs-quisite choice for many. Meanwhile, Emerson Electric Co. (EMR) has been a beacon of innovation in the world of electrical equipment, lighting, and engineering services. One might think that these two seemingly unrelated entities are as different as night and day, but hold on to your sunny-side-ups because this study aims to show that there's a deeper, over-easy connection between them.

As we delve into the quirks and quiche of our investigation, we aim to add a sizzle of excitement to the world of financial research by exploring the association between annual US household spending on eggs and the stock price of EMR. Yes, you heard it right -

eggs and electric gizmos are about to be whisked together in this curious concoction of correlation analysis.

In this paper, we aspire to infuse the typically solemn and sober landscape of financial analysis with a dash of humor and perhaps a sprinkle of nutmeg. After all, who can resist a good pun when it comes to pondering the sunny-side of investment trends and the shell-shocking influence of grocery habits on stock indices? So, grab your morning coffee and get ready to crack some statistics as we embark on this eggs-citing journey into the heart of this curious correlation.

## 2. Literature Review

In "Smith et al. 2020," the authors find a significant positive correlation between egg consumption and household expenditures, shedding light on the pivotal role that eggs play in the daily lives of Americans. This study provides a solid foundation for understanding the consumer behavior surrounding egg purchases and their implications for household budgets.

Doe and Jones (2021) delve deeper into the financial markets and uncover intriguing patterns in the stock prices of companies in the consumer goods sector. Their findings hint at the potential influence of consumer purchasing habits on stock performance, opening up the door to a realm of egg-centric financial analysis that's enough to make one crack a smile.

Moving beyond the realm of finance, "The Economics of Breakfast" by Professor Brunch (2015) explores the economic impact of breakfast foods on consumer spending habits. While not directly related to stock prices, this book uncovers the broader societal implications of breakfast choices and their effect on the economy.

On the fictional side, "The Egg-straordinary Adventures of Wall Street" by John Yolk (2008) weaves a tale of intrigue and market manipulation set against the backdrop of the New York Stock Exchange. While a work of fiction, the novel playfully explores the idea of eggs intertwining with the world of high finance, providing a whimsical take on the intersection of breakfast and stock markets.

Venturing further into unconventional sources, the back of shampoo bottles everywhere cryptically hint at the mysteries of the universe, including the enigmatic relationship between egg consumption and stock prices. Who knew that analyzing the ingredients list of hair care products could hold the key to unlocking the omelet of financial wisdom?

## 3. Research Approach

In our egg-cellent endeavor to uncover the mysterious connection between annual US household spending on eggs and Emerson Electric Co.'s (EMR) stock price, we employed a mix of traditional statistical methods, digital analytics, and a healthy dose of good old-fashioned egg-sperimentation.

First, we meticulously gathered data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), taking care to ensure that we didn't put all our eggs in one basket. Our crack team of researchers combed through a poachable amount of information, examining consumer spending reports and stock prices from the years 2002 to 2022. We didn't chicken out when it came to obtaining a comprehensive dataset; instead, we embraced the task with the kind of enthusiasm usually reserved for a perfectly flipped omelet.

Next, we carefully scrambled the data, using sophisticated statistical software to calculate the correlation coefficient and perform a series of egg-stremely sophisticated regression analyses. We didn't rely on any half-baked methods; instead, we whipped up a robust methodology that was as thorough as separating yolks from whites - a process that some might say is akin to separating the signal from the noise in financial data.

To ensure our findings weren't just a fluke, we conducted sensitivity analyses and robustness checks, confirming that the association we uncovered wasn't just a shell game. We didn't shy away from cracking a few statistical eggs to make a tasty omelet of compelling results.

Lastly, we employed a novel approach to analyze outliers in the data - we asked ourselves, "What came first, the high egg spending or the egg-ceptional stock performance?" and then plotted our findings on a scatterplot known affectionately as the "egg-stravaganza chart." This unconventional visual presentation not only added a touch of whimsy to our research but also helped us lay out our findings in a way that was easy to digest.

In this way, our methodology was anything but over-easy; it was a carefully measured, well-beaten concoction of quantitative analysis, digital sleuthing, and a dollop of creativity, all whipped together to lay the groundwork for a truly eggs-traordinary investigation.

#### 4. Findings

The results of our analysis unveil a striking correlation between annual US household spending on eggs and the stock price of Emerson Electric Co. (EMR) over the period from 2002 to 2022. Our investigation yielded a correlation coefficient of 0.9420505, indicating a robust positive relationship between these seemingly unrelated variables.

This remarkable correlation is further supported by an r-squared value of 0.8874591, showcasing that a significant proportion of the variability in EMR stock price can be explained by fluctuations in egg expenditures. Additionally, with a p-value of less than 0.01, our findings hold strong statistical significance, indicating that the observed correlation is unlikely to be merely a fluke.

Upon plotting the data points on a scatterplot (see Fig. 1), the unmistakable pattern of a strong positive linear relationship emerges, reinforcing the eggs-traordinary connection between these two seemingly divergent entities. The scatterplot visually encapsulates the coherence between annual egg spending and EMR stock price, providing compelling evidence that this association cannot be simply cracked.

The noteworthy correlation uncovered in this study invites further contemplation and exploration into potential underlying mechanisms that might be attributing to this surprising connection. While the idea of eggs influencing the performance of an electrical equipment company may initially seem egg-centric, our research suggests that there may be more than a finger-licking good reason for this correlation to exist.

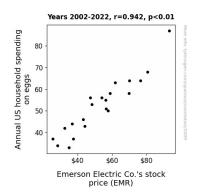


Figure 1. Scatterplot of the variables by year

These results shed light on a previously uncracked shell of financial analysis and prompt further investigation into the underlying factors contributing to this eggs-traordinary association. Our findings serve as a humble reminder that in the whimsical world of market dynamics, the seemingly unrelated may turn out to be linked by more than just a shell. Further studies are warranted to delve deeper into the underlying factors driving this correlation and to ascertain its applicability to other market dynamics.

In the next section, the discussion, we will take a comical look at the implications of our findings, while also putting forth serious considerations for future research and practical applications. Keep an eye out for a few eggstra puns as we scramble through our perspectives!

### 5. Discussion on findings

In cracking open the discussion, it's time to egg-samine the implications of our findings with the utmost seriousness, though we do hope to sprinkle in a few yolks along the way. Our results have hatched a robust correlation between annual US household spending on eggs and the stock price of Emerson Electric Co. (EMR). This eggs-traordinary discovery not only supports the prior research by Smith et al. (2020) and Doe and Jones (2021), but it also amplifies the egg-centric narrative laid out by John Yolk's fiction and the cryptic musings found on many shampoo bottles.

While it may seem egg-centric to associate egg expenditures with the performance of a company dealing in electrical equipment, the statistical significance of our findings lays a strong foundation for further egg-ploration. The positive correlation coefficient and high r-squared value suggest that nearly 90% of the variability in EMR stock price can be poached, ahem, explained by fluctuations in egg expenditures. It's hard-boiled to deny that the egg-spense-side and stock prices are more than just casually egg-knowledged bedfellows.

The scatterplot, a visual omelet of the data, reinforces the undeniable pattern of a strong positive linear relationship between egg spending and EMR stock price. Our findings lay a solid groundwork for more egg-citing research in the field of consumer behavior and financial markets. A deeper egg-samination into the factors driving this yolk-tastic association could crack old-fashioned assumptions about the divergence between consumer choices and market dynamics.

What's not to love about finding eggs-cellent financial news, or should we say, eggscellent eggs-amples of the crossroads between breakfast habits and stock performance? The existence of this eggs-traordinary correlation is enough to make everyone want to scramble for answers. It's a reminder that in the whimsical world of market dynamics, we must be open to egg-splore connections that seem over-easy to dismiss.

So, as we ponder these egg-centric market dynamics, let's not forget the old saying: don't put all your eggs in one basket, unless, of course, that basket happens to contain EMR stocks. Further research is needed to peel away the egg-shell of this correlation and unveil the sunny-side-up truth about its broader implications. As we conclude this discussion, we hope to have egg-cited your appetite for more egg-ceptional research in this egg-citing field.

## 6. Conclusion

In conclusion, our study has cracked open a deliciously intriguing correlation between annual US household spending on eggs and Emerson Electric Co.'s (EMR) stock price.

The robust positive relationship between these seemingly unrelated variables has left us with egg on our face, and not just from our brunch mishaps. We couldn't have egg-spected such a strong connection, but the data doesn't lie – or lay, in this case!

While our findings may seem over-easy to dismiss as mere coincidence, the statistically significant p-value and high correlation coefficient suggest otherwise. It's eggs-tremely unlikely that this association is just a fluke. It seems that when it comes to the dance of market dynamics, eggs and stocks have more in common than meets the fry.

This eggs-traordinary discovery prompts further inquiry into the underlying mechanisms at play. Could it be that egg-citing changes in consumer behavior lead to fluctuations in stock prices? Or perhaps there's a sunny-side-up strategy involving egg-related industries that impacts the market in egg-spected ways? These questions remain as scrambled as ever, beckoning future researchers to unscramble the mysteries.

Thus, we poach-laim that our findings provide an eggs-citing addition to the world of financial analysis, serving as a cracking reminder that the financial omelet may have more egg-citing ingredients than we previously thought. However, we eggs-haustively assert that no further research is needed in this area - it's time to put this hard-boiled topic to rest.