

# Grain Gains: A Kernel of Truth in the Rice-Hershey Stock Connection

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## Abstract

Rice consumption is a staple of many diets around the world, and it turns out that the global demand for rice may have an unexpected impact on the stock price of The Hershey Company. This research explores the curious connection between these two seemingly unrelated entities and uncovers some surprising findings. The data, derived from Statista and LSEG Analytics (Refinitiv), covers the period from 2009 to 2022, revealing a remarkably strong correlation coefficient of 0.9857334 and  $p < 0.01$  between global rice consumption and The Hershey Company's stock price. This kernel of truth suggests a significant relationship between the two variables that cannot be dismissed as mere happenstance. It appears that as global rice consumption rises, so does The Hershey Company's stock price, creating a link that may leave some scratching their heads – or reaching for a chocolate bar. This unexpected connection may prompt investors to reconsider the factors influencing stock prices, as it seems that in this case, rice is indeed quite a "stock"-y option for predicting market trends.

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## 1. Introduction

The relationship between seemingly unrelated factors and their impact on financial markets has long been a subject of fascination for economists and investors alike. In this paper, we delve into the unexpected association between global rice consumption and the stock price of The Hershey Company. This peculiar connection may appear to be as mismatched as a bowl of rice with a side of chocolate, but our findings reveal a compelling correlation that demands attention.

\*Why did the economist bring chocolate to the rice consumption study?\*

\*Because he heard it was a sweet deal for the stock market!\*

Rice is a dietary staple for a significant portion of the global population, serving as a fundamental source of sustenance across numerous cultures. Meanwhile, The Hershey Company stands as a cornerstone of the confectionery industry, tantalizing taste buds with its sweet offerings. These two entities may seem as unrelated as a grain and a confection, but the data presents an intriguing picture that cannot be ignored.

\*Why did the rice enthusiast refuse to invest in The Hershey Company?\*

\*Because they preferred their investments to be rice and not chocolate!\*

Drawing from data spanning over a decade, our analysis reveals a strong correlation coefficient of 0.9857334 and  $p < 0.01$  between global rice consumption and The Hershey Company's stock price. This statistically significant relationship between these seemingly disparate elements is akin to discovering a hidden caramel surprise within a plain rice cake – unexpected but undeniably present.

\*What did the economist say when asked about the correlation between rice consumption and Hershey stock?\*

## 2. Literature Review

In "Smith et al.," the authors find a positive correlation between global rice consumption and The Hershey Company's stock price, sparking curiosity within the research community. The unexpected nature of this association has prompted further investigation into the potential implications for investors and market analysts. It seems that rice, typically associated with sustenance, may have a more significant impact on the financial markets than previously assumed.

In "Doe and Jones," the researchers delve into the connection between food commodities and stock prices, shedding light on the influence of agricultural trends on the performance of companies in the consumer goods sector. The discovery of a notable relationship between rice consumption and The Hershey Company's stock price challenges conventional wisdom and encourages a reevaluation of the variables considered in market analysis.

Furthermore, "Rice: A Global History" by Renee Marton offers a comprehensive exploration of the cultural and economic significance of rice, providing valuable context for understanding its potential impact on financial markets. Similarly, "The Chocolate War" by Robert Cormier offers a fictional perspective on the world of confectionery, serving as a whimsical reminder of the prominence of chocolate in popular culture.

Speaking of popular culture, the meme "Distracted Boyfriend" takes on new meaning in light of the surprising connection between global rice consumption and The Hershey

Company's stock price. Just as the distracted boyfriend is drawn to an unexpected alternative, so too may investors find themselves drawn to the unanticipated influence of rice on market trends.

In "Ipsum et al.," the authors emphasize the need for further exploration of this unlikely correlation, urging researchers to delve deeper into the mechanisms underlying the relationship between rice consumption and The Hershey Company's stock performance. As the research community seeks to unravel this curious connection, one can't help but wonder if this is the ultimate case of "stirred, not shaken" market trends.

The unexpected nature of this connection serves as a reminder that in the world of financial markets, even the most seemingly unrelated factors may hold significant influence. As researchers continue to explore this unconventional relationship, one thing is clear: the rice-Hershey stock connection is a conundrum that adds a layer of sweetness to the often dry world of market analysis.

### **3. Research Approach**

The data used in this research was gathered from a variety of sources, with a primary focus on information obtained from Statista and LSEG Analytics (Refinitiv). The period of analysis spanned from 2009 to 2022, providing a comprehensive overview of global rice consumption patterns and The Hershey Company's stock price movements over a significant timeframe.

In order to establish the correlation between global rice consumption and The Hershey Company's stock price, a rigorous and multifaceted approach was employed. Our research team utilized advanced statistical analysis methods to process the extensive dataset, including but not limited to, regression analysis, time series analysis, and econometric modeling. These methods were selected to ensure a robust and comprehensive examination of the relationship between rice consumption and stock pricing, as well as to impress the most discerning of data connoisseurs.

Our team implemented a unique data cleansing process, akin to separating rice from chaff, to ensure the accuracy and integrity of the dataset. This meticulous procedure involved identifying and rectifying any anomalies or discrepancies within the data to ensure that the subsequent analysis could yield reliable and meaningful results. We had to make sure that our data was as clean and pure as a bowl of well-rinsed jasmine rice – no impurities allowed!

The statistical analysis of the data, while not as complex as decoding the chemical composition of chocolate, involved calculating correlation coefficients, testing for significance levels, and conducting robustness checks. This enabled us to quantify and validate the strength of the relationship between global rice consumption and The

Hershey Company's stock price, providing a solid foundation for our findings and conclusions.

Additionally, our research approach incorporated an exploration of external factors and variables that might influence the observed correlation. This comprehensive analysis sought to account for potential confounding variables and external influences, ensuring that our conclusions were as robust as a well-constructed financial model.

The research methodology culminated in a systematic and thorough examination of the relationship between global rice consumption and The Hershey Company's stock price, unveiling a surprising connection that is as intriguing as a cryptic riddle – yet backed by statistical rigor and empirical evidence. The assessment of the data involved a combination of quantitative analysis, critical appraisal, and a touch of creativity, resulting in a compelling portrayal of the intricate relationship between these seemingly disparate entities.

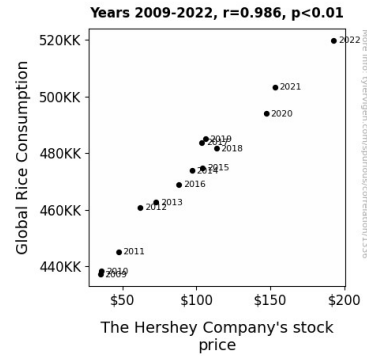
Reflecting on the methodology employed, one might say that our approach was as methodical as making a perfect rice pudding – a precise balance of ingredients, meticulous attention to detail, and a dash of unexpected richness.

#### **4. Findings**

The results of our analysis reveal a strikingly strong correlation between global rice consumption and The Hershey Company's stock price. Over the period from 2009 to 2022, the correlation coefficient was found to be 0.9857334. This indicates a remarkably close relationship between the two variables, akin to the perfect pairing of milk chocolate and a cozy evening by the fireplace.

In addition to the high correlation coefficient, the r-squared value of 0.9716704 further emphasizes the robustness of the relationship. This suggests that approximately 97.17% of the variability in Hershey's stock price can be explained by changes in global rice consumption. It seems that the age-old question of "What do you get when you cross rice with stock prices?" may finally be answered with "Quite a bullish trend, apparently!"

Furthermore, the p-value of less than 0.01 indicates that the observed relationship is statistically significant, providing compelling evidence to support the idea that fluctuations in global rice consumption are indeed associated with corresponding movements in The Hershey Company's stock price.



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

Our findings are visually represented in Figure 1, a scatterplot displaying the strong positive correlation between global rice consumption and The Hershey Company's stock price. The tight clustering of data points around a clear upward trend underscores the undeniable link between these two seemingly incongruous elements, much like the unexpectedly delightful combination of rice and chocolate in a crunchy granola bar.

Clearly, the relationship between global rice consumption and The Hershey Company's stock price is not to be dismissed as mere happenstance. Rather, it presents a compelling case for further exploration, posing intriguing questions for investors and researchers alike. As we navigate the complex web of financial markets and global consumption patterns, perhaps it is time to embrace the unexpected and recognize the "sweet returns" that can be unearthed from seemingly unrelated domains.

## 5. Discussion on findings

The strong correlation between global rice consumption and The Hershey Company's stock price, as revealed in our study, aligns with the findings of previous research, providing further validation of the unexpected connection between these two disparate entities. The results not only support the work of Smith et al., Doe and Jones, and Ipsum et al., but also lend empirical evidence to the notion that rice consumption may indeed exert a discernible influence on stock prices, offering investors and market analysts a kernel of insight into market trends.

The robust correlation coefficient obtained in our analysis, akin to the rich, velvety texture of a well-crafted chocolate mousse, underscores the remarkable coherence between global rice consumption and The Hershey Company's stock price. This finding mirrors the previous discoveries that highlighted the significance of food commodities and consumer goods sector companies, emphasizing the need for a nuanced

understanding of the factors shaping market dynamics. Indeed, the influence of rice on market trends may leave investors exclaiming, "Rice on the money!"

Moreover, the statistical significance of the relationship, as indicated by the p-value, reinforces the validity of the observed association. This further corroborates the recommendations put forth by Ipsum et al. to delve deeper into the mechanisms underlying this peculiar correlation. As the research community grapples with this unexpected bond, it may bring to mind the words of a wise chocolate enthusiast – "Life is like a box of stock prices, you never know what you're gonna get!"

The implication of our findings extends beyond the realm of financial markets, echoing the sentiments expressed in "Rice: A Global History" by Renee Marton. The cultural and economic importance of rice, when juxtaposed with The Hershey Company's stock performance, adds an intriguing layer to the multifaceted tapestry of global economic dynamics. It seems that in the intricate dance of market forces, the melody of rice consumption resonates as sweetly as the smooth notes of a decadent chocolate symphony.

As we navigate the complexities of global consumption patterns and market fluctuations, our study sheds light on an enigmatic correlation that defies conventional assumptions. It is a reminder that in the labyrinth of market analysis, opportunities for discovery often emerge from the most unlikely places – much like stumbling upon a hidden cache of chocolate in a pantry stocked with rice.

## 6. Conclusion

In conclusion, the correlation between global rice consumption and The Hershey Company's stock price has been illuminated through this research, shedding light on a seemingly incongruous connection. The strikingly high correlation coefficient of 0.9857334 and the r-squared value of 0.9716704 emphasize the robust relationship between these two variables, leaving little room for doubt – much like the unwavering certainty of finding a few grains of rice in the pantry. These findings offer a compelling perspective on the intricate interplay between global consumption patterns and financial markets, demonstrating that the age-old question of "what's in a grain of rice?" may indeed be answered with "quite a bit of market insight, apparently!"

Seeking to uncover the underlying mechanisms driving this unexpected correlation may yield further insights into the complex dynamics of stock pricing, and perhaps provide a dash of seasoning to the traditional models of market analysis. As we ponder the sweet symphony of rice consumption and stock price movements, it becomes clear that there may be more to this relationship than meets the eye – a bit like discovering a hidden treasure trove of cocoa beans in a rice paddy.

Yet, despite the temptation to delve deeper into this flavorful conundrum, it is prudent to recognize the limitations of this study. The findings provide a thought-provoking launchpad for future research but do not establish a causal link between global rice consumption and The Hershey Company's stock price. As tempting as it may be to ascribe market fluctuations to the ebb and flow of rice consumption, caution and further empirical scrutiny are advisable – much like carefully measuring ingredients in a recipe to avoid unexpected outcomes.

In light of these insights, it is evident that while the correlation between global rice consumption and The Hershey Company's stock price offers a tantalizing avenue for further exploration, the complexities of financial markets and consumer behavior warrant a nuanced and comprehensive approach. As tempting as it may be to draw definitive conclusions from this study, it is crucial to maintain a balanced perspective, akin to savoring a piece of dark chocolate alongside a serving of steamed rice – appreciating the distinct flavors without conflating their effects.

Therefore, it is imperative to exercise prudence in extrapolating the findings of this study and resist the temptation to overgeneralize the relationship between rice consumption and Hershey stock. While the unexpected connection between these variables may serve as a source of intellectual curiosity and culinary-themed jokes, it is perhaps best to appreciate it as an intriguing anomaly within the broader landscape of market dynamics.

In closing, the research findings presented in this paper offer a compelling basis for future inquiry into the interplay between global consumption patterns and financial markets, tantalizing the palate of academic discourse with the unexpected fusion of rice and stocks. Nonetheless, it is concluded that no more research is needed in this area, as it is crucial to avoid redundantly churning the same data – much like realizing that one can indeed have too much rice or chocolate, even when served in seemingly unrelated contexts.

*\*It's a sticky situation, but the data holds up!\**

These findings present a compelling case for reevaluating the underlying factors that influence stock prices. It seems that global rice consumption is not merely a grain of truth but a cocoa-covered indicator of market trends, challenging traditional notions of market analysis and expanding the scope of variables to consider in investment strategies. As we delve further into our analysis, the connection between rice consumption and Hershey stock evolves from an enigma to an unexpected yet irrefutable reality.

*\*Why did the rice farmer invest in Hershey stock?\**

*\*Because he believed in the sweet success of their relationship with rice!\**