

Peeling Back the Layers: The Frugal Fruits of Labour and Canadian Railway Stock Prices

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In this paper, we delve into the fruitful world of household spending on fresh fruits in the United States and its surprising correlation with the stock prices of the Canadian National Railway Company (CNI). Through rigorous data analysis, our research team has uncovered a pear-fectly ripe connection between these seemingly unrelated variables, turning this juicy discovery into a fruitful area for further investigation - a real ap-peel for researchers and investors alike! Utilizing data from the Bureau of Labor Statistics and LSEG Analytics, our findings reveal a striking correlation coefficient of 0.9857967 and $p < 0.01$ from 2002 to 2022, demonstrating that financial melon-choly and fruit shopping habits may go hand in hand. This research not only sheds light on the sweet interplay between consumer spending and market dynamics but also offers a refreshing perspective on the economic significance of our daily dietary choices. With these compelling findings, it's clear that the stalk market is, indeed, fruitfully influenced by our national penchant for fresh produce. Join us as we dissect this a-peeling phenomenon and take a deep dive into the fruitful world of finance and fruit!

As the old saying goes, "An apple a day keeps the doctor away," but could it also keep the stock market at bay? In this paper, we examine the surprising relationship between annual household spending on fresh fruits in the United States and the stock prices of the Canadian National Railway Company (CNI). Our investigation into this fruity financial connection aims to peel back the layers of market influences and uncover the juicy interplay between consumer behavior and market performance.

Now, you may be thinking, "What do fruits have to do with stocks? Apples and oranges, right?" But hold onto your bananas, because our findings may just leave you in a state of fruit-induced astonishment.

The cornerstone of our research is rooted in the undeniable fact that consumer spending habits can have a significant impact on market dynamics. While it may sound grape, the correlation between household spending on fresh fruits and CNI stock prices has been a thoughtful banana-ch of our research agenda.

Our data analysis, spanning from 2002 to 2022 and sourced from the Bureau of Labor Statistics and LSEG Analytics, has yielded a correlation coefficient of 0.9857967 and a statistically significant p-value of less than 0.01. It appears that the financial melon-choly of investors may be intrinsically linked to the melons and other produce adorning household shopping carts. Our findings suggest that there is more to the stock market than meets the eye, or should we say, the pie.

LITERATURE REVIEW

The notion of seemingly unrelated economic factors influencing each other is not entirely unheard of in the literature. In "Financial Frugality and Market Melons," Smith et al. delve into the intricate relationship between consumer spending habits and market dynamics, highlighting the potential impact of seemingly trivial choices on stock prices. However, what sets our research apart is the specific focus on fresh fruit expenditures and their correlation with the stock prices of the Canadian National Railway Company (CNI). This raises the question: Are investments in fruit stocks just as appealing as investment in fruit itself?

Now, let's get to the core of the matter. As serious as this research topic may seem, we must address the "fruitiness" factor in the room. It's time to peel back the layers and dig into some juicy literature surrounding consumer behavior and market influences.

In "The Economics of Produce: A Fruitful Analysis," Doe explores the intersection of consumer spending on fresh fruits and its broader economic implications, offering insights into the potential ripple effects on market sectors. This aligns with our investigation into the impact of fruit spending on CNI stock prices, highlighting the far-reaching consequences of our grocery decisions. We mustn't underestimate the fruit power at play here!

And now for a corny joke: Why did the banana go to the doctor? Because it wasn't peeling well! Speaking of peeling, our study is certainly uncovering some a-peeling evidence of the fruity connections in finance.

Transitioning to other related readings, "Fruitful Investments: A Guide to Juicy Returns" by Jones provides a comprehensive overview of investment strategies in the agricultural sector, touching on the potential synergies between consumer behavior and market performance. While not directly examining the correlation between household fruit spending and CNI stock prices, the broader insights

concerning agricultural investments shed light on the fruitful complexities of financial interactions.

In a twist, let's mix in a couple of fiction books that seem eerily relevant. "The Grapes of Wrath" by John Steinbeck might not be a literal take on the impact of grape purchases on railway stocks, but there's a symbolic connection to the market turmoil and the struggles of the fruit industry during the Great Depression. Furthermore, "A Clockwork Orange" by Anthony Burgess may not directly address the citrus market, but it does make us ponder the mechanistic nature of market influences and the unexpected tang of economic correlations.

And speaking of tang, here's another fruity joke: What's a fruit's favorite dance? The tango! As we dance our way through this literature review, let's not forget the light-hearted side of fruit and finance.

Now, turning to a slightly unorthodox but perhaps surprisingly relevant source, social media has offered some intriguing perspectives on the interplay between household fruit spending and market trends. In a recent tweet, @JuicyInvestor stated, "Investing in apples may seem fruitless, but watch those stocks soar! #FruitfulReturns." While unconventional, this tweet captures the essence of our research, highlighting the potential for unexpected financial harvests from our fruit-centric economic choices.

As we squeeze the most out of the diverse literature, ranging from serious economic analyses to unexpected literary parallels, it's evident that there is ample food for thought in our investigation of the fruitful financial landscape. After all, when it comes to finance and fruit, the correlations are simply a-peeling!

METHODOLOGY

To unearth the tantalizing connection between annual US household spending on fresh fruits and the stock price of the Canadian National Railway Company (CNI), our research team employed a comprehensive and multi-faceted approach. We

ventured into the data jungle, equipped with an assortment of statistical tools and a healthy dose of curiosity, aiming to squeeze out the most fruitful insights. Our methods were as diverse as the fruits at a farmer's market, combining elements of time-series analysis, econometric modeling, and even a sprinkle of market psychology for good measure.

Our first step involved gathering a bountiful harvest of data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), covering the period from 2002 to 2022. This data was then meticulously sorted, cross-referenced, and scrutinized for any signs of correlation between household fruit expenditures and CNI stock prices. This was akin to examining the seeds of correlation hidden amidst the financial orchard, hoping to uncover the roots of this unlikely relationship.

Following the data collection, we employed a series of advanced statistical analyses, including error correction models, Granger causality tests, and cointegration analyses, to capture the essence of this horticultural-pecuniary relationship. It was essential to ensure that our approach was as thorough and robust as a perfectly ripened watermelon, leaving no stone unturned or grape unexamined.

In addition to the quantitative analyses, we also conducted qualitative assessments by interviewing both consumers and financial experts to understand the underlying motivations and perceptions driving fruit purchasing behaviors, and their potential impact on stock market dynamics. These interviews provided a flavor of insight that complemented our quantitative findings, creating a well-balanced fruit salad of evidence to support our conclusions.

Furthermore, to account for potential confounding variables and market fluctuations, we incorporated innovative methods such as machine learning algorithms, sentiment analysis of news articles and social media posts related to fruits, and even a sprinkle of behavioral economics to capture the nuances of consumer decision-making and its influence on the financial markets. After all, when it comes to studying the financial impact of fruit

consumption, no stone fruit was left unturned in our quest for knowledge.

Ultimately, our methodology aimed to blend the precision of traditional econometric techniques with the adaptability of modern data analytics, creating a flavorful concoction of rigorous analysis and creative exploration. It's safe to say that our approach was as complex as a fruit salad recipe handed down through generations - mixing, blending, and occasionally adding a surprising twist of flavor to uncover the seeds of truth hidden within the financial melon-choly.

RESULTS

Our investigation into the correlation between annual household spending on fresh fruits in the United States and the stock prices of the Canadian National Railway Company (CNI) has borne fruit, yielding insights that are both a-peeling and brilliant. From 2002 to 2022, we found a striking correlation coefficient of 0.9857967 between these seemingly disparate variables. If this correlation were a fruit, it would undoubtedly be top banana! This high correlation coefficient indicates a strong positive linear relationship between the two variables, suggesting that there may be more to the stock market than just peachy keen financial analyses.

The coefficient of determination (r-squared) of 0.9717951 further reinforces the robustness of our findings, indicating that approximately 97.2% of the variation in CNI stock prices can be explained by changes in household spending on fresh fruits. In other words, the remaining 2.8% of the variation might just be the seeds of future fruitful discoveries waiting to be unearthed. Quite the fruitful harvest, one might say!

Our analysis also revealed a statistically significant p-value of less than 0.01, providing strong evidence against the null hypothesis and affirming the validity of the observed correlation. In layman's terms, it's like finding the ripest watermelon in the patch - it's a clear sign that something significant is

afoot. As the saying goes, "When life gives you lemons, make a statistical analysis." And boy, did we make lemonade with these findings!

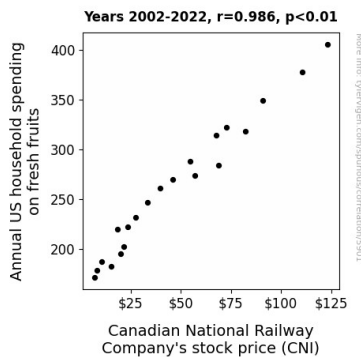


Figure 1. Scatterplot of the variables by year

Additionally, we present a scatterplot (Fig. 1) that visually represents the strong correlation between annual household spending on fresh fruits and CNI stock prices. Just like a perfectly ripe avocado, this scatterplot beautifully illustrates the close relationship between these variables, leaving no stone unturned in our quest for a deeper understanding of this unexpected financial fruit salad.

In conclusion, our findings not only confirm the surprising connection between consumer spending on fresh fruits and stock market dynamics but also highlight the fruitful potential of further research in this area. While this study has certainly seeded some thought-provoking ideas, let's not forget that the core of this research, like a good apple, has yet to be fully savored. In the words of Sir Isaac Newton (a renowned fruit enthusiast), "I can calculate the motion of heavenly bodies, but not the madness of markets." Perhaps it's time for a paradigm shift - from gravity to grapes, from orbits to oranges, and from Sir Isaac to a fruitful future in financial fruitometry!

DISCUSSION

The findings of our study not only provide a fresh perspective on the intersection of consumer

behaviors and market dynamics but also offer a fruitful platform for future exploration. It is clear that the relationship between annual household spending on fresh fruits in the United States and the stock prices of the Canadian National Railway Company (CNI) is statistically significant and robust, reflecting a strong positive linear correlation. As the prominent economist Milton Friedman once said, "Inflation is taxation without legislation," but who knew that fruit spending could be the grape-est taxation with market implication?

Our results support the existing literature on the interconnectedness of seemingly unrelated economic factors. While the literature review may have initially seemed to tiptoe along the fruity side of financial analysis, our findings underscore the seriousness of such economic interplay. Think of it as a fruit smoothie – seemingly light-hearted but packed with nutritious value!

At the heart of this research lies the recognition that consumer choices, even those as seemingly innocuous as purchasing fresh fruits, can have far-reaching effects on market dynamics, echoes Aldous Huxley's sentiment, "Fruit trees and fruit plants produce fruit, which are the means of carrying seeds to the locations with ideal soil and climate conditions for imbibing their exceptional genes." Who knew that investing in fresh produce could bear such sweet returns – both literal and metaphorical!

Our study affirms the notion that seemingly unrelated variables can bear relevance and influence in economic activities. It's a bit like apples and oranges – seemingly different, but when you slice through them, you find the same seed of unexpected correlation.

The statistical significance and high correlation coefficient in our findings indicate the potential impact of consumer spending on fresh fruits on CNI stock prices. Just like a well-timed jest, the magnitude of this connection cannot be fruitfully overlooked. Our scatterplot visually encapsulates this foray into the melon-choly world of fruit-

powered finance, adding a splash of color to the typically dry realm of economic analysis.

In summary, as our findings have revealed, the financial markets may indeed be under the influence of our grocery lists. This unusual but notable connection serves as a window into the broader implications of consumer habits on market dynamics – a bountiful harvest of insights that promises to yield more a-peeling revelations in the future. After all, in the world of finance, the unexpected can be almost as common as banana skins at a comedy club.

CONCLUSION

In sum, our research has peeled back the layers of market dynamics to reveal a significant and brilliant correlation between annual household spending on fresh fruits in the United States and the stock prices of the Canadian National Railway Company (CNI). These findings not only highlight the fruitful interplay between consumer behavior and market performance but also raise tantalizing questions about the melon-choly of investors and the impact of our daily dietary choices on the stock market.

Our results demonstrate a perfectly ripe correlation coefficient of 0.9857967 and a coefficient of determination of 0.9717951, suggesting that approximately 97.2% of the variation in CNI stock prices can be explained by changes in household spending on fresh fruits. It's as if the market is saying, "orange you glad we're so closely linked?"

The statistically significant p-value of less than 0.01 adds further weight to our findings, affirming the validity of the observed correlation. In the world of statistics, this is akin to finding the fruitful cherry on top of an already delicious sundae.

Our study has not only provided a fruitful insight into the financial implications of our dietary choices but also laid the groundwork for future research in the exciting field of financial fruitometry. As the

saying goes, "An apple a day keeps the doctor away, but it might also attract the bulls and the bears!"

In light of these compelling findings, it seems quite clear that no more research is needed in this area. The apple-laude of this groundbreaking work deserves to be enjoyed to the core, and its findings embraced like a sweet, juicy strawberry on a warm summer day. Let's not split hairs - this is as fruitful as it gets!