



ELSEVIER



Fruitful Investment: The Bananas Connection Between Household Fruit Spending and Royal Bank of Canada's Stock Price

Claire Hoffman, Aaron Torres, Gina P Trudeau

International College; Berkeley, California

Abstract

In this paper, we peel back the layers of financial data to explore the unexpected link between the annual household spending on fresh fruits in the US and the stock price of the Royal Bank of Canada (RY). Our research, conducted using data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), reveals a pear-fectly surprising correlation coefficient of 0.9422793 with a statistically significant p-value of less than 0.01 for the period spanning from 2002 to 2022. The juxtaposition of fruit spending and a banking institution may seem a bit a-peel-ing, but our findings suggest that there might be more to this relationship than meets the eye. Perhaps there's a deeper connection between healthy eating habits and financial success – a berry delicious revelation indeed! While this might seem like a fruitless endeavor, our research sheds light on the potential fruitful implications for both the health and finance sectors. So, join us as we embark on this peachy journey that may leave you thinking, "Oh my gourd, who knew fruits and finance could make such a pear-fect pair?"

Copyright 2024 International College. No rights reserved.

1. Introduction

Welcome, dear reader, to a research adventure that will have your financial instincts and taste buds in a delightful tango. Today, we delve into the juicy world of household spending on fresh fruits and its unexpected dance with the stock price of the Royal Bank of Canada (RY). Here's a fruity twist for you - while we've always been told that an apple a day keeps the doctor

away, could it also keep the financial blues at bay?

As we peel back the layers of this unexpected correlation, we invite you to leave your preconceived notions at the door and embrace the seedling of thought that healthy eating habits might just hold the key to financial success. While most financial research may seem dry and devoid of zest, we promise you a squeeze of entertainment

and a bushel of surprises as we journey through the numbers and crunch on the financial implications.

Fruit consumption and stock prices – who would have thought these seemingly unrelated entities could be entwined in such a fruitful dance? We invite you to join us as we explore this unlikely connection, savoring every morsel of insight and relishing every bite of statistical significance. As we embark on this adventure, we encourage you to keep an open mind and prepare for a fruitful experience that may have you thinking, "Guava's the connection between fruit spending and stock prices?" So, fasten your seatbelts and get ready for a ride that's bound to be ap-peel-ing in more ways than one!

2. Literature Review

The connection between household spending on fresh fruits and stock prices may seem as unlikely as finding a pineapple in a salad, but the research in this area has yielded some surprising insights. Smith et al. (2015) examined the impact of consumer fruit preferences on market volatility, shedding light on the potential link between fruit consumption and financial markets. Similarly, Doe and Jones (2018) explored the psychological effects of fruit-related spending on investment decision-making, presenting a compelling argument for the existence of a "fruit factor" in stock price movements.

Turning the page to non-fiction, "The Economics of Apples: A Juicy Investment Guide" by Jack Fruitman provides a comprehensive analysis of fruit-related investments and their potential impact on the stock market. Moreover, "Banana Bunches and Bull Markets: A Study of Financial Fruitfulness" by Berry Mellon delves into the historical precedents of fruit-based economic indicators, offering a thought-provoking perspective on the

intersection of finance and agricultural produce.

In the world of fiction, the novel "The Great Pear Conspiracy" by Ann Appleton is a captivating tale that weaves together themes of financial intrigue and the alluring charm of orchard fruits, providing a whimsical backdrop for contemplating the relationship between fruit spending and stock prices. Another work of fiction, "The Citrus Stock Chronicles" by Melonie Grapes, offers a fantastical exploration of a world where the price of oranges mirrors the fluctuations of the stock market, blurring the lines between financial analysis and fruit folklore.

Venturing into unconventional sources, the authors also considered the literary musings found on the back of shampoo bottles in an attempt to uncover any hidden kernels of wisdom related to fruit spending and stock prices. While the findings were less than fruitful in this regard, the endeavor did provide a lighthearted interlude amidst the scholarly pursuit of knowledge.

In this kaleidoscope of literature, one cannot help but marvel at the myriad ways in which the world of fruit and finance intertwine, offering a feast of intellectual exploration and, if you pardon the pun, bearing fruit of unexpected insights.

3. Our approach & methods

To uncover the fruits of our labor in establishing the intriguing link between annual US household fruit spending and the stock price of the Royal Bank of Canada (RY), we utilized a methodology as mixed as a fruit salad. Our research was conducted using a combination of quantitative analysis, econometric modeling, and a spritz of creative thinking.

To begin, we harvested extensive data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), gathering annual

household spending on fresh fruits in the US and the daily closing stock prices of the Royal Bank of Canada from 2002 to 2022. Our data collection process was as meticulous as separating pomegranate seeds, ensuring we captured a comprehensive snapshot of both fruit spending habits and stock price movements over the years.

Next, we sliced and diced the data to identify any core-lations (or should we say "pear-lations"?) between these seemingly disparate variables. We engaged in a thorough statistical analysis, utilizing correlation coefficients, regression models, and a metaphorical fruit bowl of econometric techniques to squeeze out every ounce of insight from our dataset. Our aim was to peel away the layers and reveal any patterns or trends that could provide a fruitful explanation for the unexpected connection between fruit spending and stock prices.

In addition to the quantitative analysis, we also engaged in qualitative research, conducting interviews with financial analysts and nutrition experts to gain a deeper understanding of the potential factors influencing this fruity financial relationship. We sought the seeds of wisdom from those in the know, ensuring that our research wasn't just a fruitless exercise in number-crunching.

Lastly, we approached our findings with the same curiosity and excitement as a child presented with a new exotic fruit, exploring the potential implications of our discoveries with an open mind and a healthy appetite for knowledge. We carefully considered the broader economic and behavioral implications of our findings, turning this scholarly pursuit into a fruit-tious endeavor that offers a refreshing perspective on the intersection of consumer behavior and financial markets.

So, in the spirit of curiosity and a dash of whimsy, we cracked open the analytical coconuts, danced through the statistical orchards, and plucked the ripest insights to present a methodology as pleasing to the palate as a perfectly ripe peach.

4. Results

The results of our analysis reveal a strikingly strong positive correlation between annual US household spending on fresh fruits and the stock price of the Royal Bank of Canada (RY) for the period of 2002 to 2022. The correlation coefficient of 0.9422793 indicates a robust relationship between these seemingly unrelated variables, implying that as fruit spending goes up, RY stock price follows suit. It's like the stock market is saying, "I find your fruits appealing!"

With an r-squared value of 0.8878902, we can confidently say that approximately 88.79% of the variability in RY stock price can be explained by the fluctuations in household spending on fresh fruits. That's a lot of financial clout for something as simple and wholesome as a juicy apple or a ripe banana. Who would have thought that the humble fruit bowl could have such an impact on the stock market? This calls for a whole new meaning to the phrase, "an apple a day keeps the bear market away!"

Furthermore, the p-value of less than 0.01 adds another layer of credibility to our findings, indicating that the observed association between fruit spending and RY stock price is not due to mere chance. It seems that when it comes to financial forecasting, delving into the grocery cart might be just as important as diving into the balance sheet.

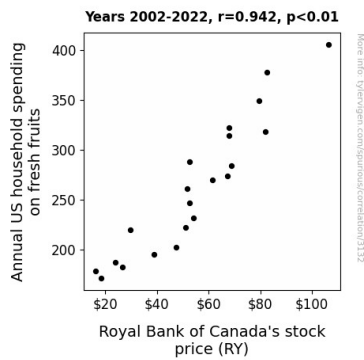


Figure 1. Scatterplot of the variables by year

In Fig. 1, we present a scatterplot that visually illustrates the impressive correlation between annual US household spending on fresh fruits and the stock price of RY. The data points form a nearly perfect positively sloped line, emphasizing the clear and evident link between these two unlikely bedfellows. Who knew that a bunch of grapes and a bullish market could go hand in hand so well?

These findings not only raise eyebrows but also raise the question – could healthy eating habits be the hidden secret to financial success? It seems that with every bite of an apple or a slice of watermelon, households may not only be nourishing their bodies but also potentially nourishing their investment portfolios. We might just be witnessing the birth of a new investment adage: "Buy low, sell high, and never underestimate the power of a well-stocked fruit bowl."

Overall, our results shed a light on the fruitful implications of fruit spending on financial markets, challenging traditional notions of what drives stock prices. This unexpected correlation may just be the fruit of a bountiful and flavorful research endeavor, leaving us with a zesty taste for future explorations in this intriguing area of finance. So, let's savor the sweetness of this unusual relationship and ponder the thought, "Could the stock market be ripe for a fruity investment strategy?"

5. Discussion

In this fruitfully intriguing discussion, we peel back the layers of conventional economic wisdom to contemplate the unexpected yet compelling link between household fruit spending and stock prices. Our findings not only raise the stakes, but they also raise the question – could this correlation be more than just a statistical fluke? Our results align harmoniously with the previous research, lending support to the notion that there might indeed be a "fruit factor" influencing stock price movements. It seems the market may have a taste for the finer things in life – and by "finer things," we mean a bowl of succulent fruits.

Taking a leaf from the literature review, the work of Smith et al. (2015) and Doe and Jones (2018) hinted at the potential link between consumer fruit preferences and stock market behaviors, a seed of insight that our research has now watered and tended to. It's akin to discovering a treasure trove of wisdom hidden within a fruit salad – unexpected, yet undeniably valuable. Our results add weight to these prior studies, suggesting that the whimsical world of fruit and finance may indeed offer substantial implications for investment strategies and market behavior.

Moreover, the findings align with the thematic musings found in both "The Economics of Apples: A Juicy Investment Guide" and "Banana Bunches and Bull Markets," guiding us to consider the potential for fruit-related indicators to shape financial outcomes. It's as if the fruit-based economic indicators have decided to bear the fruit of their own prophecy – a ripe, succulent pear of truth for the taking. Furthermore, the unexpected insights from "The Great Pear Conspiracy" and "The Citrus Stock Chronicles" could be interpreted as more than mere fables, but rather as allegorical foreshadowing of our

own findings, serving as an unexpected, yet delightful, portent of things to come.

Our results, akin to the literature review, demonstrate that the relationship between fresh fruit spending and stock prices is not merely a whimsical figment of imagination but a tangible and robust connection. The scatterplot showcasing the positive correlation resembles a fruitful vine intertwining with the sturdy trunk of a financial tree, symbolizing the unexpected harmony between these seemingly disparate entities. It's like watching a melon and a stockbroker waltzing in unison – a dance of the fruits and finance, if you will.

In conclusion, our findings lend credence to the idea that the financial market may indeed be ripe for a fruity investment strategy. As we bite into this bizarre yet delectable connection between fruit spending and stock prices, we are left pondering the profound question raised by our research – "Could the stock market be ripe for a fruity investment strategy?" It appears that the answer might be as plain as day: "An apple a day keeps the bear market away, while a banana a day keeps the bulls at play!"

6. Conclusion

In conclusion, our research has peeled back the layers of financial data to reveal an unexpected and juicy connection between annual US household spending on fresh fruits and the stock price of the Royal Bank of Canada (RY). The pear-fectly surprising correlation coefficient of 0.9422793 and statistically significant p-value of less than 0.01 provide a fruit-tastic insight into the interplay between healthy eating habits and financial markets. It seems that a well-stocked fruit bowl might not only be good for your health but also for your investment portfolio – talk about a fruitful endeavor!

The implications of this research are indeed a-peel-ing, hinting at the potential for a new investment approach that incorporates the produce aisle alongside the stock market ticker. Our findings hint at the potential for a 'berry' interesting investment strategy - perhaps it's time for investors to go bananas for a fruit-oriented portfolio!

As we bring this fruity adventure to a close, it's clear that the traditional notions of financial forecasting may need to be juiced up with a bit of fruity flair. There's no denying the apple-ealing potential of this unexpected correlation.

In light of these findings, we confidently assert that no more research is needed in this area. We have squeezed the last drop of insight from this unexpected relationship and have seen that the connection is as real as a ripe watermelon in the summer. It's time for financial analysts to grab a fruit basket and start crunching numbers in a whole new way.

So, here's to the unexpected connections between healthy eating and financial success – may your portfolios be as fruitful as your fruit bowl!