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# Cross-Pollinating Stock Market Trends: The Corny Connection Between GMO Usage in Indiana and RCI Stock Price

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#### Abstract

This paper investigates the unlikely relationship between the usage of genetically modified organisms (GMOs) in corn cultivation in Indiana and the fluctuation of Rogers Communications Inc. (RCI) stock price. Utilizing data from the USDA and LSEG Analytics, our research team rigorously examined the correlations between these two seemingly disparate factors. Surprisingly, a robust correlation coefficient of 0.9258997 and p < 0.01 was established for the period spanning from 2003 to 2023. Our findings not only shed light on the corny impact of GMOs on stock market trends but also underscore the importance of considering unexpected linkages in financial analysis. Get ready to embrace the kernel of truth in this unconventional, kernel-based research endeavor!

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#### **1. Introduction**

#### INTRODUCTION

As the famous saying goes, "when life gives you corn, make stock market predictions." Okay, maybe that's not exactly how the saying goes, but our research has found a surprisingly strong connection between the usage of genetically modified organisms (GMOs) in corn cultivation in Indiana and the stock price of Rogers Communications Inc. (RCI). Now, you might be wondering what on earth GMO corn in the Midwest has to do with a Canadian telecommunications company's stock. Trust us, we were scratching our heads too, but the numbers don't lie (unlike some of those market analysts, are we right?). Our investigation delves into this uncharted territory, where the stalks of corn and the stocks on Wall Street intersect in a way that would make even the most seasoned financial analyst do a double take.

But before we jump into the cornfield, let's take a step back and ponder the sheer absurdity - er, we mean, the intricacies - of the financial world. Every day, investors sift through a veritable cornucopia of data (see what we did there?) in search of insights that could make or break their portfolio. Traditional factors like interest rates, GDP growth, and company earnings often take center stage, while corn – well, let's just say it usually doesn't make the cut. But as our research will reveal, sometimes the most unexpected variables can kernel - sorry, we meant "kettle" \_ significant market movements.

Βv embracing this unconventional approach, our study aims to elevate the status of GMOs from just mere corn crops to potential influencers of financial markets. We hope to demonstrate that even in the seemingly unrelated domains of agriculture and telecommunications, there may be unseen threads connecting them – threads that, when pulled, could unravel new insights for investors, researchers, and anyone else who's curious enough to ponder the wild, wonderful world of market dynamics.

So grab a figurative cob of curiosity, and let's venture into this unconventional, kernel-based research journey together. But be forewarned – you may never look at a cornfield the same way again.

# 2. Literature Review

The connection between genetically modified organisms (GMOs) in corn cultivation and stock market trends sounds about as strange as a cow trying to trade but research stocks. the literature surprisingly offers some insight into this unlikely relationship. Smith and Doe (2015) explored the impact of GMOs in agriculture on financial markets, and while their findings were eye-opening, they couldn't guite "cornvince" us that there was a direct connection to specific stock prices. Jones (2018) took a different approach, focusing on the broader implications of GMO usage, but we think they may have missed the kernel – sorry, "neural" – connection to stock market dynamics.

But wait, before you start picturing corn stalks doing the hustle on Wall Street, let's take a detour into some related literature. In "The GMO Deception" by Jeffrey M. Smith, the authors delve into the controversies surrounding GMOs, but unfortunately, they don't touch upon their potential to influence stock prices. On the fictional side, "Corn y Corners: Tales from the Midwest" by Agatha Cornchristie sounds like it could offer some suspenseful twists and turns, but we doubt it contains any stock market secrets hidden among the cornfields.

Let's not forget the delightful world of board games, where titles like "Cornopoly" and "Stocks and Stalks" might lead one to believe there's some connection between corn and finance, but we suspect those games are more about having some corny fun than providing serious financial insights.

It seems that the literature falls short of directly addressing the corny connection we're investigating, but fear not – our research aims to unearth the hidden truths in the maize of financial data. Get ready for a-maize-ing discoveries ahead!

# 3. Our approach & methods

To undertake this unconventional yet corny research endeavor, we employed a robust methodology that involved a kaleidoscope of data collection, statistical analysis, and a sprinkle of humor to keep things lively.

First off, we scoured the vast expanse of the internet, trawling through virtual cornfields and financial databases alike. We primarily relied on data sourced from the United States Department of Agriculture (USDA) and the LSEG Analytics (Refinitiv) for our corn-related and stock market price data, respectively.

Our data collection spanned the years from 2003 to 2023, giving us a generous harvest (pun intended) of information to work with. We fancied ourselves as modern-day data farmers, planting the seeds of inquiry and reaping the statistical bounty of our labor.

Now, onto the crux of our statistical analysis. We jested, we mean, we tested the relationship between the prevalence of GMO usage in corn cultivation in Indiana and the stock price of Rogers Communications Inc. (RCI). To do this, we unleashed the formidable arsenal of correlation analysis, conjuring up Pearson's correlation coefficient to measure the degree of association between these two seemingly unrelated variables. And behold, what did we find? A correlation coefficient of 0.9258997, with a p-value less than 0.01, robust indicating а and statistically significant The connection correlation. between GMOs and RCI stock price was as clear as a crisp autumn day - or should we say, as clear as a stalk of corn standing resolute in the wind.

But we didn't stop there. To ensure the integrity of our findings, we further engaged in a time series analysis, constructing not a mere sandcastle but rather a towering edifice of graphs, charts, and statistical wizardry. We delved into the ebb and flow of GMO usage in Indiana cornfields and the undulating rollercoaster ride of RCI stock prices, seeking patterns and trends that might otherwise have remained hidden in the husk of conventional financial analysis.

In tandem with these quantitatively driven endeavors, we also engaged in qualitative research, conducting interviews with farmers, analysts, and the occasional financial clairvoyant (kidding) to glean insights into the real-world implications of our findings. Our qualitative exploration allowed us to peel back the layers of financial jargon and agricultural enchantment, revealing the genuine impact of GMO usage on corn growth and, amusingly enough, its surprising ripple effect on stock market dynamics.

In conclusion, our methodology spared no effort in plumbing the depths of this peculiar relationship between GMO-laden cornfields and RCI stock prices. We wielded statistical tools with finesse, channeled the wisdom of corn-growing communities, and perhaps even had a few good laughs along the way. The end result? A research endeavor that's as informative as it is, dare we say, corny.

Remember, dear readers, in the world of research, just like in a corn maze, the path may be convoluted, but the surprise at the end makes it all worthwhile. Or at least, that's what we like to tell ourselves.

# 4. Results

The results of our analysis revealed a striking correlation between the usage of genetically modified organisms (GMOs) in corn cultivation in Indiana and the stock price of Rogers Communications Inc. (RCI). Our study, spanning from 2003 to 2023, uncovered a robust correlation coefficient of 0.9258997, an r-squared of 0.8572903, and a statistically significant p-value of less than 0.01.

We present our findings in Fig. 1, which depicts a scatterplot showcasing the strong relationship between the two variables. It's like they say, "corn there, done that" – but we couldn't have predicted this surprising connection without the power of data analysis.

So what does this all mean? Well, for one, it suggests that GMO corn may truly be "stalking" the stock market in ways we never anticipated. It's a-maize-ing to think that something as seemingly unrelated as corn cultivation practices could sow trends in the financial world. But that's the cornundrum we find ourselves in – sometimes the most unexpected variables can pop up in the most unexpected places.



Figure 1. Scatterplot of the variables by year

Our results not only highlight the influence of GMO usage in corn production on stock market dynamics but also open new doors for research into unconventional factors impacting financial markets. Who would have thought that GMOs and stock prices could be like two peas in a pod – or should we say, two kernels on a cob?

In closing, our research serves as a reminder that in the ever-evolving landscape of financial analysis, we should always keep our eyes peeled for unexpected linkages, even when they seem as unlikely as a teleporting cornstalk. After all, as our findings demonstrate, even the most unexpected variables can "stalk" the stock market scene and kernel - oops, we "kindle" meant \_ new avenues of exploration.

Stay tuned for more exciting developments as we continue to peel back the layers of this perplexing, yet utterly fascinating, GMO-corn-and-stock-market saga. We promise, there's plenty more corny humor where that came from!

5. Discussion

Well, folks, it seems our research has unveiled a kernel of truth in the corn fields of financial analysis. As we whimsically waded through corny jokes and unexpected connections, our results corn-vincingly supported the prior literature's half-serious, half-teasing suggestions. Who would have thought that the GMO-laden cornfields of Indiana could have such a stalk-ing impact on RCI stock prices? It's like they say, "corn done that" - but we hadn't there. cornsidered the potential implications until now!

Our robust correlation coefficient and pvalue that's less than 0.01 got us popping like popcorn in excitement. It's a-maize-ing to think that GMO usage in corn cultivation could husk a statistically significant relationship with stock prices. The 'ear'resistible scatterplot in Fig. 1 showed a strong and un-"corn"-y association, leaving us kerned with questions and puns aplenty.

Jones (2018) may have missed the kernel – sorry, "neural" – connection, but our findings demonstrate that GMOs in cornfields aren't just 'cobbing' around when it comes to stock market dynamics. It's like these variables are locked in a game of "Stocks and Stalks" that board game enthusiasts have been playing all along, without even realizing it. And who would have thought "Cornopoly" was actually a stock market crash in disguise?

So, what's the takeaway from our cornmazing discoveries? Well, first and foremost. it's a reminder that financial analysis can be as strange and unpredictable as a teleporting cornstalk. The maize of financial data frequently holds kernel - ahem, I meant, "kernels" - of truth where we least expect them. Who would have thought that GMOs and stock prices could be like two peas in a pod or, dare we say, two kernels on a cob?

As our research unfolds, we invite you to join us in peeling back the layers of this

perplexing yet utterly fascinating GMO-cornand-stock-market saga. Get ready for amaize-ing developments ahead – we promise, there's plenty more corny humor where that came from! So, stay tuned for the next chapter of this stalk-ing revelation. Remember, in the financial world, sometimes the most unexpected variables can 'stalk' the stock market scene and "kernel" new avenues of exploration.

# 6. Conclusion

In conclusion, the compelling correlation between GMO usage in Indiana corn cultivation and Rogers Communications Inc. (RCI) stock price has certainly left us cornfused, to say the least. Who would have thought that the kernel of truth in financial markets could be found in a cornfield? Our findings have undoubtedly popped the lid on a-maize-ing new possibilities in the world of stock market analysis.

The significance of this study cannot be cob-verlooked. It acts as a stern reminder to always husk for unexpected connections in financial datasets. It's corny, but hey, that's the stalk market for you! As we bid adieu to this uncharted territory of GMO-corn-andstock-market correlation, it's apparent that further research in this area might seem just as out of place as finding a kernel in a haystack. Therefore, in the spirit of full disclosure, we assert that no more research is needed in this area. But hey, if you do decide to hop on the GMO-stock correlation bandwagon, just remember – stalk responsibly!

And remember, we can learn a lot from corn. After all, it's an ear-resistible subject!