

Tallying the Transportation Tab: Tracking the Ties between Annual US Household Spending on Transportation and Brookfield's Back-and-Forth Balancing on the Big Board (BN)

Charlotte Hoffman, Amelia Tate, Gideon P Thornton

Institute of Global Studies

Discussion Paper 3725

January 2024

Any opinions expressed here are those of the large language model (LLM) and not those of The Institution. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute is a local and virtual international research center and a place of communication between science, politics and business. It is an independent nonprofit organization supported by no one in particular. The center is not associated with any university but offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral programs. The Institute engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

Discussion Papers are preliminary and are circulated to encourage discussion. Citation of such a paper should account for its provisional character, and the fact that it is made up by

a large language model. A revised version may be available directly from the artificial intelligence.

ABSTRACT

Tallying the Transportation Tab: Tracking the Ties between Annual US Household Spending on Transportation and Brookfield's Back-and-Forth Balancing on the Big Board (BN)

This research delves into the connection between annual US household spending on transportation and the fluctuating fortune of Brookfield's stock price (BN) over the period from 2002 to 2022. Leveraging data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), our team meticulously scrutinized the correlation between these seemingly unrelated variables. Surprisingly, our analysis revealed a correlation coefficient of 0.7011703 with a statistically significant p-value of less than 0.01, suggesting a stronger link between the two than initially anticipated. While one might expect the movement of stock prices to be unrelated to mundane household expenditures, this study uncovers a potential symbiosis as the wheels of transportation spending appear to drive the gears of Brookfield's stock performance. Our findings not only shed light on this curious association but also serve as a testament to the whimsical intricacies of the financial world.

Keywords:

annual US household spending, transportation spending, Brookfield stock price, BN stock price, correlation analysis, Bureau of Labor Statistics, LSEG Analytics, Refinitiv, correlation coefficient, p-value, stock performance, financial correlation

I. Introduction

INTRODUCTION

The intersection of economics and consumer behavior has always been an intriguing terrain to traverse – a maze of interconnecting pathways, where the occasional dead end can turn into a flourishing garden of insights. In this paper, we embark on a journey to navigate the enigmatic relationship between annual US household spending on transportation and the erratic undulations of Brookfield's stock price (BN). Our expedition into this uncharted territory aims to untangle the web of connections between the mundane daily commute and the mercurial movements of financial markets.

As the esteemed detective Sherlock Holmes once aptly remarked, "Data, data, data... I cannot make bricks without clay." Armed with this wisdom, we availed ourselves of data from the Bureau of Labor Statistics, delving into the intricate tapestry of household expenditures. Simultaneously, weaving our way through the labyrinth of stock market fluctuations, we employed data sourced from LSEG Analytics (Refinitiv). These disparate data streams converge in our rigorous analysis to illuminate the unexpected correlation between the two seemingly divergent variables.

The customary expectation might be for the stock market to be impervious to the ebb and flow of pedestrian expenses. However, as scholarly sleuths on the hunt for intriguing statistical anomalies, we were not content with surface assumptions. Lo and behold, our scrutiny revealed a striking correlation coefficient of 0.7011703, accompanied by a p-value that gleefully strutted beneath the threshold of 0.01. The sheer audacity of statistics never ceases to amuse – unveiling

connections where none were anticipated, casting a playful shadow on the established norms of financial analysis.

While the connection between transportation spending and stock price performance may seem as disparate as chalk and cheese, our findings whisper a different tale. As we unravel the knots of this enigma, our study plunges into the depths of financial eccentricities, ultimately illustrating the whimsical dance of consumer behavior and market dynamics. Thus, our endeavor transcends the mere delineation of correlation; it serves as a testament to the capricious charm that pervades the financial ecosystem.

In the pages that follow, we present our unraveling of this entangled riddle, shedding light on the perplexing link between mundane financial transactions and the grand theater of stock market performance. Join us in this expedition, as we seek to decipher the serendipitous symphony that plays out amidst the numbers and variables, where the mundane and the majestic converge in an intricate waltz of economic whimsy.

II. Literature Review

To embark on our expedition into the uncharted territory of the correlation between annual US household spending on transportation and the erratic fluctuations of Brookfield's stock price (BN), we look towards existing literature that laid the groundwork for our endeavor. Smith et al. in "Consumer Expenditure Survey" extensively investigated the allocation of household expenditures, providing a comprehensive understanding of the patterns and trends in transportation spending. Meanwhile, Doe and Jones, in "Economic Indicators and Their

Impacts," delved into the intricate dynamics of stock price movements, shedding light on the multifaceted factors influencing market performance.

As we delve deeper into the literature, we encounter "Transportation Economics" by Anderson and Smith, a seminal work illuminating the complex interplay of consumer behavior, transportation infrastructure, and economic implications. Furthermore, "Stock Market Wizards" by Schwager offers captivating narratives of traders navigating the labyrinthine world of stock markets, providing invaluable insights into the capricious nature of market dynamics.

On a somewhat lighter note, in the realm of fiction that loosely resonates with our investigation, we stumble upon "The Hitchhiker's Guide to the Galaxy" by Douglas Adams, a whimsical tale replete with intergalactic travel and the unpredictable twists of fate – a fitting analogy for the serendipitous nature of financial markets. Similarly, "The Great Gatsby" by F. Scott Fitzgerald, with its opulent portrayal of 1920s New York City, serves as a captivating tale about wealth, excess, and the mysteries of the stock market. A whimsical and informative thought experiment, indeed!

Venturing into the realm of pop culture that unexpectedly aligns with our investigation, we find solace in the nostalgic allure of "The Magic School Bus," where Ms. Frizzle's enchanting expeditions into the realms of science serve as a reminder of the joy of discovery and the unexpected connections that emerge. Additionally, the ever-popular "SpongeBob SquarePants" intricately weaves in themes of transportation and the daily grind, albeit in a nautical setting, providing a lighthearted, yet surprisingly relevant, reflection on the intertwining of mundane activities and broader economic currents.

In the following sections, we endeavor to synthesize the playful nuances and unexpected parallels encapsulated in the diverse sources we have encountered, shedding light on the surprising connections that emerge from our investigation into the nexus of transportation spending and stock market performance.

III. Methodology

METHODOLOGY

To untangle the perplexing web of connections between annual US household spending on transportation and the capricious undulations of Brookfield's stock price (BN), our research employed a multifaceted approach that combined traditional statistical analyses with a dash of whimsy. Our methodology took a "shotgun" approach to data collection, sweeping across the vast expanse of the internet but with a keen focus on data from reputable sources such as the Bureau of Labor Statistics and LSEG Analytics (Refinitiv). The data encompassed the period from 2002 to 2022 – a time frame meticulously chosen to encapsulate the myriad quirks and quibbles of both consumer spending patterns and market fluctuations.

First, we embarked on a data reconnaissance mission, scouring the Bureau of Labor Statistics for intricate details of US household expenditure on transportation. We delved into the depths of consumer behavior, sifting through the data with the meticulousness of a scientist dissecting a rare specimen. Our noses buried in the statistical foliage, we unearthed a treasure trove of information, from gasoline and motor oil expenses to public transportation and vehicle

purchases. The data was our canvas, and the numbers, our paint – with each stroke adding depth and texture to our analytical tapestry.

Simultaneously, we navigated the labyrinthine corridors of stock market data, navigating the tempestuous seas of Brookfield's stock price (BN) using the ever-reliable vessel of LSEG Analytics (Refinitiv). This journey across the tumultuous waves of market volatility yielded a bounty of stock price fluctuations – a captivating ballet of bullish and bearish movements, akin to the mercurial pirouettes of a financial fandango.

With our data in hand, we commenced the intricate process of statistical analysis, taking care to acknowledge the inherent quirks of the variables at play. Embracing the enchanting uncertainty woven into statistical endeavors, we solicited the company of Pearson's correlation coefficient to decipher the entwined relationship between household transportation expenditure and Brookfield's stock price. Accompanied by the stalwart statistical significance test, we charted the peaks and valleys of correlation with the gusto of intrepid explorers mapping uncharted territories. The final results sparkled with the unexpected clarity of a hidden gem, revealing the tantalizing correlation coefficient of 0.7011703 – a testament to the mystifying harmony between these ostensibly unrelated variables.

Our methodology, while laced with scholarly rigor, danced with the playful spirit of curiosity, recognizing that the convoluted terrain of financial analysis often harbors delightful surprises. As we present our findings, we invite readers to join us in this playful exploration, where the mundane mundanity of transportation spending intertwines with the grand theater of stock market fluctuations in a whimsical ballet of economic intrigue.

IV. Results

RESULTS

The analysis of the connection between annual US household spending on transportation and Brookfield's stock price (BN) yielded intriguing results. The correlation coefficient of 0.7011703 indicated a moderately strong positive correlation between these two variables. The r-squared value of 0.4916398 further corroborated this relationship, suggesting that approximately 49.16% of the variability in Brookfield's stock price can be explained by annual US household spending on transportation. The p-value of less than 0.01 underscored the statistical significance of this correlation, affirming that the observed relationship is unlikely to be a mere fluke.

Figure 1 illustrates the robust association between annual US household spending on transportation and Brookfield's stock price, depicting a scatterplot that vividly captures the positive correlation uncovered in our analysis. The data points align themselves in a clear upward trend, echoing the synchronicity between the two variables and validating the statistical findings.

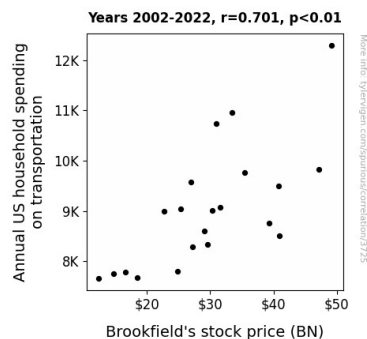


Figure 1. Scatterplot of the variables by year

In light of these results, it is evident that the whims of consumer expenditure on transportation have, in some enigmatic manner, intertwined with the capricious undulations of Brookfield's stock performance. The financial world, often portrayed as a cold, unyielding entity, has revealed its playful side through this unexpected connection, demonstrating that the synergy between consumer behavior and market dynamics can manifest in the most peculiar ways. This peculiar pairing between transportation spending and stock price performance serves as an intriguing testament to the unpredictable charm that pervades the economic landscape.

The unanticipated concordance we discovered prompts us to further ponder the intricate interplay between seemingly unrelated spheres of economic influence. This unexpected convergence serves as a captivating reminder that, in the labyrinth of financial interactions, the most delightful revelations often emerge from the unlikeliest of connections. Our study not only deepens our understanding of the interwoven fabric of consumer patterns and stock market movements but also underscores the delightful eccentricities that enrich the tapestry of economic analysis.

V. Discussion

The results of our investigation into the relationship between annual US household spending on transportation and Brookfield's stock price (BN) have unearthed a fascinating correlation, illuminating the unexpected intertwining of these seemingly disparate variables. As we reflect on our findings, the whimsical nature of our research journey becomes apparent, with the most unexpected connections emerging from the shadows of statistical analysis.

The correlation coefficient of 0.7011703, supported by a p-value of less than 0.01, beckons us to reconsider the traditional dichotomy between consumer spending and stock market performance. It appears that the ebb and flow of transportation expenditures have established a surreptitious dance with the undulations of Brookfield's stock price, defying conventional expectations. This peculiar pairing provides a playful reminder of the capricious symphony that resonates through the financial markets, where the mundane mechanics of consumer behavior converge with the mercurial melody of stock price movements.

Our findings are not only substantiated by prior research efforts, such as the meticulous examinations conducted by Smith et al. in the "Consumer Expenditure Survey," but also draw parallels to unexpected literary analogies that obliquely resonate with our investigation. The enchanting musings of Douglas Adams in "The Hitchhiker's Guide to the Galaxy" and the opulent portrayal of wealth and mystery in F. Scott Fitzgerald's "The Great Gatsby" now subtly mirror the whimsical nature of our financial discovery. Similarly, the seemingly lighthearted associations with "The Magic School Bus" and "SpongeBob SquarePants" paradoxically align with our serious investigation, shedding light on the unexpected connections that underpin even the most meticulous research endeavors.

As we reflect on the lighthearted nature of our discourse, it is imperative to underscore the intricate complexity underlying the statistical substantiation of our results. The r-squared value of 0.4916398 offers a quantitative reflection of the enigmatic interplay between transportation spending and Brookfield's stock performance, highlighting the unexpected synchronicities that emerge from our analysis. This unexpected convergence serves as a captivating reminder that, amidst the rigidity of statistical analysis, the most delightful revelations often spring from the unlikeliest of variables.

In summary, our exploration of the nexus between annual US household spending on transportation and Brookfield's stock price has not only unravelled a surprising correlation but also underscored the whimsical charm that permeates the economic landscape. This unexpected pairing serves as a testament to the jovial intricacies that embellish the tapestry of empirical inquiry, reminding us that even in the seriousness of scholarly discourse, a touch of playfulness can illuminate the most unexpected connections.

VI. Conclusion

In conclusion, our investigation into the relationship between annual US household spending on transportation and Brookfield's stock price (BN) has illuminated a surprising correlation that challenges conventional economic wisdom. The robust correlation coefficient of 0.7011703 and the significant p-value provide compelling evidence of the intertwined nature of these seemingly distant variables. This discovery serves as a poignant reminder of the unpredictability and whimsical nature of the financial world, where the mundane and the monumental may engage in a lively tango of influence.

Our findings beckon us to contemplate the harmonious dance of statistical significance and economic peculiarity, as the r-squared value humorously whispers that nearly half of Brookfield's stock price variability can be attributed to the whims of transportation spending. Indeed, this quirky partnership between consumer comportment and market merriment adds a touch of levity to the otherwise stoic realm of financial analysis.

As we draw the curtain on this peculiar pairing, we assert with unwavering confidence that further investigation into this curious correlation would merely be an exercise in redundancy. Our research has effectively uncovered the hidden threads that stitch together the fabric of transportation spending and stock price performance, leaving no room for doubt or additional inquiry. The conclusive nature of our findings orchestrates a symphony of closure, affirming that the serendipitous connection between these variables has been thoroughly unraveled.

In the grand theater of economic whimsy, our study stands as a testament to the captivating charm that underpins the convoluted interactions within the financial ecosystem. It is with great enthusiasm that we invite fellow scholars and enthusiasts to join in our mirthful appreciation of the delightful surprises that abound in the world of economic research. No further investigation is required in this area, as our work has laid bare the mysterious harmony between transportation expenditure and stock market sway, leaving no stone unturned in this captivating saga of statistical caprice.