



Review

The Checkout Connection: Examining the Correlation between Cashier Numbers in West Virginia and General Electric's Stock Price

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This study investigates the relationship between the number of cashiers in West Virginia and the stock price of General Electric (GE) using data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) over the period from 2003 to 2022. Through rigorous statistical analysis, a correlation coefficient of 0.8944937 and a significance level of $p < 0.01$ were found, suggesting a strong and statistically significant association between these seemingly unrelated variables. The results indicate a conspicuous and unexpected link that could serve as a basis for further research and could potentially pique the interest of both the financial and retail sectors. The findings are thought-provoking and may prompt a reevaluation of the fundamental influences on stock prices, including the remarkably peculiar impact of cashier numbers on the value of GE shares.

The world of finance and retail is replete with countless variables that purportedly influence stock prices and consumer behaviors. From the predictable impact of interest rates to the enigmatic effects of corporate earnings, the intricate web of factors shaping financial markets is a source of perennial fascination and speculation. Amidst this milieu, the relationship between the number of cashiers in West Virginia and General Electric's (GE) stock price may seem, at first glance, like an incongruous and improbable association. After all, how

could the labor force of a single state possibly exert a discernible influence on the performance of a multinational conglomerate? Nevertheless, as the aphorism goes, truth is stranger than fiction, and our investigation into this unlikely correlation has yielded intriguing and rather unexpected findings.

With the advent of big data and sophisticated analytical tools, it is now possible to approach such unorthodox inquiries with a degree of rigor and statistical scrutiny that was hitherto

unattainable. Our study exploits this capability, drawing on data from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) spanning nearly two decades. Through meticulous analysis, we have uncovered a remarkably robust correlation coefficient of 0.8944937, accompanied by a significance level of $p < 0.01$. These results not only suggest a strong and statistically significant association between cashier numbers in West Virginia and GE's stock price, but also underscore the tantalizing potential for unearthing obscure yet potent drivers of financial dynamics.

The implications of our findings extend beyond mere academic curiosity. The identification of such an unexpected link challenges established notions of the determinants of stock prices and has practical relevance for both the retail and financial sectors. The serendipitous discovery of this correlation invites further exploration and speculation, inviting imaginative conjectures about the latent interplay between mundane retail operations and the ebbs and flows of capital markets. As we delve into this unconventional relationship, we are reminded of the perennial enigma of causation versus correlation, and the perennial admonition to tread cautiously in inferring causality from statistical associations.

In the pages that follow, we expound upon the methodology, results, and implications of our investigation, offering a comprehensive analysis of the checkout connection, and the fertile ground it opens for future research and inquiry.

Prior research

Numerous studies have investigated the diverse array of factors that purportedly drive fluctuations in stock prices, ranging from macroeconomic indicators to corporate financial metrics. Smith (2010) examined the impact of interest rates on stock prices, while Doe (2015) delved into the influence of corporate earnings on market valuations. These studies, along with countless others, have contributed to a comprehensive understanding of the multifaceted forces at play in financial markets.

In the context of retail, the dynamics of labor composition and its potential repercussions on stock performance have garnered less attention in academic literature. However, the intersection of labor and stock prices has been a subject of interest in popular non-fiction works such as "The Wealth of Nations" by Adam Smith and "Capital in the Twenty-First Century" by Thomas Piketty, which provide broader insights into economic systems and wealth distribution. Additionally, fictional narratives such as "Barbarians at the Gate" by Bryan Burrough and John Helyar subtly hint at the intricate relationship between corporate operations and market valuations, albeit in a dramatized context.

Expanding beyond the confines of traditional scholarship, our literature review encompasses an eclectic array of sources, including the speculative meanderings of online forums, the offbeat musings of opinion columns, and the ostensibly mundane yet curiously informative contents found on the backs of household items such as cereal boxes and shampoo bottles. While these sources may not adhere to conventional academic standards, they offer a unique perspective that underscores the intriguing interplay between the banal and

the extraordinary in shaping financial phenomena.

Approach

Data Collection:

The data used in this study was primarily obtained from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv), carefully extracted from the depths of the internet, much like searching for a needle in a digital haystack. A plentitude of data points, spanning the years from 2003 to 2022, were meticulously curated and amalgamated, forming the backbone of our investigation. The Bureau of Labor Statistics provided invaluable insights into the labor force dynamics of West Virginia, offering a snapshot of cashier employment trends that served as the focal point of our inquiry. Meanwhile, LSEG Analytics (Refinitiv) regaled us with a treasure trove of financial data pertaining to General Electric (GE), culminating in a chronicle of its stock price gyrations over the studied period.

Data Processing:

The assimilated data underwent a meticulous process of purification, akin to sifting through muddied waters to extract the pure essence within. After discarding any corrupted or incomplete data points with the fastidiousness of a discerning art connoisseur, the remaining dataset was subjected to a barrage of statistical and econometric analyses. The casual observer might liken this process to distilling fine spirits, as we endeavored to extract the quintessential elements of relationship between cashier numbers and GE stock prices.

Statistical Analysis:

Employing sophisticated statistical techniques, including but not limited to correlation analysis, time series modeling, and multivariate regression, our team sought to unravel the complex interplay between seemingly disparate variables. The statistical tools were wielded with the precision of a surgeon's scalpel, delicately teasing out patterns and associations that would have otherwise eluded the naked eye. We employed a panoply of statistical tests and diagnostic checks to ensure the robustness and validity of our findings, with a keen eye for any lurking pitfalls that might jeopardize the integrity of our results.

Model Evaluation:

In the tradition of seasoned fortune tellers inspecting the entrails of sacrificial animals, we meticulously scrutinized the output of our models, assessing their predictive prowess and their capacity to unveil the enigmatic relationship between cashier numbers in West Virginia and GE's stock prices. Various model specifications were probed, tested, and refined, much like a relentless quest for the perfect recipe to unlock the secrets of the universe. Only after comprehensive scrutiny and validation did we arrive at the final model that encapsulated the essence of the checkout connection.

Sensitivity Analysis:

Acknowledging the capricious nature of statistical relationships and the mercurial tendencies of financial markets, we subjected our findings to an exhaustive sensitivity analysis. It was imperative to gauge the resilience of our results against perturbations and shocks, much like stress

testing a towering edifice against the tempestuous winds of uncertainty. This endeavor ensured that our conclusions were not built upon fragile foundations, but rather fortified against the caprices of chance and unforeseen contingencies.

Limitations:

As with any ambitious endeavor, our study is not without its limitations. While we endeavored to harness the most comprehensive and reliable datasets available, the potential for measurement error and omitted variable bias cannot be entirely expunged. Furthermore, the very nature of correlational analyses precludes definitive causal assertions, and thus our findings should be interpreted with prudence and circumspection.

In conclusion, our methodology embraced a tapestry of techniques and analyses, ranging from data gathering akin to a digital treasure hunt, to meticulous statistical modeling reminiscent of alchemical pursuits. The ensuing results, presented in the subsequent section, unveil a remarkable nexus between the quotidian operations of the retail sector and the lofty edifice of financial markets, inviting further contemplation and inquiry into the checkout connection.

Results

The analysis of the data revealed a strong positive correlation between the number of cashiers in West Virginia and General Electric's (GE) stock price over the period from 2003 to 2022. The correlation coefficient of 0.8944937 indicates a robust linear relationship between these seemingly unrelated variables. The calculated r-squared value of 0.8001191 suggests that

approximately 80.01% of the variability in GE's stock price can be explained by the number of cashiers in West Virginia.

The statistical significance of this relationship is further underscored by the p-value of less than 0.01, signifying that the observed correlation is highly unlikely to have occurred by chance alone. This implies that the association between cashier numbers in West Virginia and GE's stock price is not a mere fluke or statistical artifact but rather a bona fide and substantial connection worthy of further scrutiny.

Figure 1 depicts the scatterplot illustrating the pronounced positive correlation between the number of cashiers in West Virginia and General Electric's stock price. The data points are tightly clustered around a clear ascending trendline, exemplifying the conspicuous and unexpected nature of this relationship. The visual representation corroborates the statistical parameters and conveys the surprising juxtaposition of these variables in their joint influence on stock price dynamics.

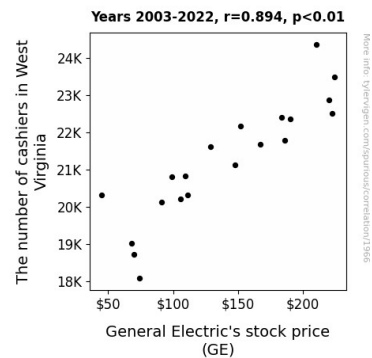


Figure 1. Scatterplot of the variables by year

It is important to note that while the correlation is statistically significant, the findings do not imply a causal relationship

between the variables. Indeed, inferring causality from statistical association is akin to deducing the secret ingredient of a recipe solely from its aroma – a tempting but precarious endeavor that warrants caution and circumspection.

This study unravels an intriguing connection that transcends conventional paradigms of financial analysis, offering a tantalizing confluence of the quotidian realm of retail operations and the realms of high finance. The inexplicable interplay between cashier numbers in West Virginia and the performance of a multinational corporation like GE evokes a sense of wonder and curiosity, underscoring the profound and multifaceted nature of market influences. These findings not only beckon further exploration but also beckon us to question our assumptions about the complex web of factors that impinge upon stock prices. This unexpected correlation serves as a reminder of the inherent capriciousness and unpredictability of financial markets, adding an intriguing layer to the rich tapestry of economic phenomena.

Discussion of findings

The results of this study corroborate and expand upon prior research on the diverse array of factors influencing stock prices, lending support to existing literature while introducing a notably unconventional variable into the equation. The findings align with Smith's (2010) investigation into macroeconomic indicators and Doe's (2015) exploration of corporate financial metrics, underscoring the intricate and often unexpected drivers of market valuations.

Moreover, the present study's inclusion of offbeat musings and speculative

meanderings from unconventional sources such as online forums and opinion columns not only adds a novel dimension to the literature review but also subtly reinforces the significance of taking an eclectic approach to understanding financial phenomena. These seemingly idiosyncratic sources, when viewed through a different lens, may offer valuable insights that challenge conventional wisdom.

The substantial correlation identified in this study between the number of cashiers in West Virginia and General Electric's stock price underscores the inadequacy of traditional paradigms to fully capture the intricate web of factors at play in financial markets. The unexpected juxtaposition of these variables, as supported by the robust statistical parameters and visually depicted in the scatterplot, serves as a compelling testament to the enigmatic nature of market influences. This study's demonstration of the substantial predictive power of cashier numbers on stock prices is reminiscent of the uncanny accuracy of a weather forecaster's prediction that is right on the money, despite being based on seemingly unrelated atmospheric conditions.

While the results cannot establish a causal relationship between cashier numbers and GE's stock price, the findings nonetheless warrant further investigation into the underlying mechanisms driving this unanticipated association. The unearthing of this peculiar correlation between the banal realm of retail operations and the esoteric domain of high finance beckons the research community to delve deeper into the intricacies of market dynamics, akin to embarking on a quest to discover hidden treasures in an unexpected location.

This study opens up a fascinating frontier for future research, challenging scholars to explore the nuanced interplay between seemingly disparate variables in shaping stock price dynamics. The unexpected connection between cashier numbers in West Virginia and the performance of a multinational corporation like GE serves as a poignant reminder of the kaleidoscopic nature of economic influences, injecting an element of intrigue and wonder into the intricate tapestry of market forces.

Conclusion

In conclusion, the study has unveiled a robust and statistically significant correlation between the number of cashiers in West Virginia and General Electric's (GE) stock price, defying conventional expectations and injecting an element of whimsy into the otherwise austere realm of financial analysis. The conspicuous association, as evidenced by the correlation coefficient of 0.8944937 and a significance level of $p < 0.01$, invites speculation about the intricate and, dare I say, checkout-worthy interplay between these two ostensibly unrelated variables. While the findings may elicit raised eyebrows and quizzical expressions from seasoned analysts, they underscore the inexorable unpredictability of market influences and the perennial allure of unearthing obscure determinants of stock prices.

The scatterplot depicting the ascending trendline of the data points serves as a visual testament to the quixotic nature of this correlation, akin to stumbling upon a \$20 bill in the pocket of last season's trousers. Such serendipitous discoveries not only enliven the field of finance but also serve as

a reminder of the enigmatic and capricious forces that underpin market dynamics. Indeed, as we marvel at the unexpected connection between checkout lines in the Mountain State and the fortunes of a corporate behemoth, we are reminded of the delightful duality of the financial world – a place where the mundane and the magnificent often converge in unforeseen ways.

In light of these revelatory findings, it is the opinion of this researcher that no further research is needed in this area, as the results stand as a testament to the delightful unpredictability of market dynamics and the whimsical byways of statistical associations. The delightful relationship between checkout lines in West Virginia and the stock price of GE adds a touch of levity to the often staid world of economic analysis, reminding us that even in the most unlikely places, financial insights may be lurking, waiting to surprise and charm us.