

Gender Studies: A Trane-sformational Effect on Trane Technologies' Stock Price

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Abstract

This study investigates the association between the number of Associates degrees awarded in gender studies and the stock price of Trane Technologies (TT) from 2011 to 2021. Leveraging data from the National Center for Education Statistics and LSEG Analytics (Refinitiv), we applied statistical analyses to explore this seemingly incongruous relationship. Our findings reveal a remarkably high correlation coefficient of 0.9483433 and a statistically significant p-value of less than 0.01, providing robust evidence of a close link between these variables. The implications of this peculiar connection are not to be underestimated, offering a refreshing perspective on the intricate interplay between sociocultural education and financial markets. This research sheds light on the "Trane-sformational" impact of gender studies on the stock performance of Trane Technologies, underscoring the importance of considering diverse fields of study in understanding market dynamics.

1. Introduction

The intersection of academic disciplines and financial markets has long been a subject of interest and intrigue. While the connection between gender studies and stock prices might initially seem as incongruous as mixing stripes with plaids, or pineapple on pizza (love it or hate it!), our research seeks to unravel this curious relationship. In the world of finance, where numbers and charts reign supreme, the influence of sociocultural factors is often relegated to the background, much like the unsung hero in a summer blockbuster. However, our analysis delves into this uncharted territory to examine the unexpectedly profound impact of gender studies on the stock performance of Trane Technologies (TT).

As the world of investment constantly evolves, it is imperative to consider the myriad factors that might drive stock prices, from traditional financial metrics to the less explored realms of sociocultural phenomena. The concept of gender studies might not immediately spring to mind when pondering the stock market, but as the saying goes, "don't judge a book by its cover" – or in this case, a stock by its industry. With the rise of ESG (Environmental, Social, and Governance) investing and an increasing awareness of social responsibility in the business world, the influence of sociocultural factors on stock prices has garnered attention akin to the paparazzi hounding a celebrity. This study endeavors to add a new layer of understanding to this conversation, shedding light on the "Trane-sformational" impact of gender studies on the stock price of Trane Technologies.

Beyond the market implications, this investigation holds broader significance in highlighting the interconnectedness of education, gender, and financial outcomes. Remember, folks, correlation does not imply causation, but it sure gives us something to ponder over a latte at the local coffee shop. By exploring this intriguing correlation between the number of Associates degrees awarded in gender studies and the stock price of Trane Technologies, we aim to contribute to the expanding tapestry of knowledge at the intersection of academia and finance. So, buckle up and get ready for a journey through numbers and gender studies, because the relationship between these two may just be the unexpected twist in this season's financial blockbuster!

2. Literature Review

The current landscape of literature examining the correlation between academic degree programs and stock price movements is marked by a notable dearth of research on the specific interplay between Associates degrees in gender studies and company valuations. However, there are several seminal works that provide valuable insights into the broader connections between social sciences education and financial markets. In "Gender Studies and Stock Returns," Smith et al. illustrate the potential influence of gender-focused education on stock performance, albeit in a broader context than the focus of our study.

Moreover, Doe's research in "Economics of Education and Corporate Finance" delves into the relationship between educational attainment and corporate financial decision-making, offering intriguing parallels to the nexus of gender studies and stock prices. Jones' seminal work, "Feminism in Finance," provides a critical examination of gender dynamics within financial institutions, laying a theoretical foundation for understanding the potential impact of gender studies on market dynamics.

Taking a turn to more mainstream sources, "Lean In" by Sheryl Sandberg presents a compelling narrative on gender dynamics in the workplace, offering potential implications for corporate valuations and stock prices. Similarly, "The Confidence Code" by Katty Kay and Claire Shipman provides a thought-provoking exploration of gender

dynamics in professional settings, provoking contemplation on how these dynamics might filter into market movements.

On a more lighthearted note, the fictional works "Pride and Prejudice" by Jane Austen and "The Feminine Mystique" by Betty Friedan offer thematic explorations of gender roles and societal dynamics, though their direct correlation to stock prices remains a subject perhaps better left to the realm of whimsical speculation.

Funnily enough, a recent Twitter thread on the #GenderFinanceTies hashtag offered intriguing anecdotes about how discussions of gender studies might play into stock market analyses. One post humorously suggested that a surge in Associates degrees awarded in gender studies could lead to a "feminist bull market," a sentiment that, while lacking empirical support, certainly adds a touch of levity to the discourse on this unconventional correlation.

In synthesizing these diverse sources, the authors find a paucity of empirical research directly addressing the relationship between Associates degrees in gender studies and stock prices, leaving an untapped reservoir of potential insights yet to be explored. As we march forward into uncharted territory, the merits of investigating this unusual relationship cannot be overstated, promising a blend of seriousness and levity that make academic research a thrilling adventure.

3. Research Approach

Data Collection:

The dataset for this study was meticulously assembled from a variety of sources, akin to a chef expertly curating a diverse range of ingredients for an avant-garde culinary creation. We gathered information on the number of Associates degrees awarded in gender studies from the National Center for Education Statistics, sifting through the digital archives like intrepid explorers navigating a labyrinthine jungle of data. To complement this educational facet, the stock price data for Trane Technologies (TT) was procured from the esteemed LSEG Analytics (Refinitiv), akin to a seasoned treasure hunter unearthing a coveted relic in the world of financial markets. The time frame for data collection spanned from 2011 to 2021, providing a substantial canvas for our analyses to paint a comprehensive picture of the relationship between gender studies and stock prices.

Data Cleansing:

Upon procuring the raw data, our research team undertook the task of cleansing and preparing the dataset for analysis, akin to polishing a prized antique to reveal its underlying luster. This involved addressing missing values, outliers, and inconsistencies, ensuring that the dataset exuded a pristine quality akin to a meticulously groomed show

dog at a prestigious competition. Through meticulous scrutiny and data grooming, the dataset emerged refined and ready for the rigorous analyses that lay ahead.

Statistical Analysis:

To unearth the nuanced interplay between the number of Associates degrees awarded in gender studies and the stock price of Trane Technologies, we harnessed the power of advanced statistical methodologies. The correlation between these seemingly disparate variables was examined using Pearson's correlation coefficient, allowing us to quantify the strength and direction of their relationship with the precision of a seasoned conductor guiding a symphony orchestra. Furthermore, a series of regression analyses were conducted to venture deeper into the underlying dynamics, akin to intrepid spelunkers navigating the intricate networks of a subterranean cave system. The statistical significance of the relationship was assessed through hypothesis testing, with the p-value serving as the litmus test for the robustness of our findings.

Necessary Assumptions:

In undertaking this investigation, it is crucial to acknowledge the underlying assumptions that underpin the analyses. Assumptions regarding the normality and homoscedasticity of the data were scrutinized with the meticulousness of a detective unraveling a perplexing mystery, ensuring the validity of our statistical inferences. Additionally, the potential presence of confounding variables was carefully considered, akin to a Sherlock Holmes unraveling the intriguing complexities of a case, to isolate and elucidate the singular influence of gender studies on Trane Technologies' stock price.

Ethical Considerations:

The ethical dimension of this research was paramount, with a steadfast commitment to upholding the principles of academic integrity and respect for data privacy. All data utilized in this study were handled with the utmost care and adherence to ethical guidelines, ensuring the sanctity of the information much like a vigilant guardian safeguarding ancient scrolls in a hallowed library.

In light of the convoluted and multifaceted nature of the data and analyses, the methodological approach adopted in this study encompasses an intricate blend of quantitative rigor, meticulous attention to data quality, and an unwavering commitment to uncovering the unexpected connections in the realm of academia and finance.

4. Findings

Our investigation into the relationship between the number of Associates degrees awarded in gender studies and Trane Technologies' stock price has yielded some

intriguing findings. Over the period from 2011 to 2021, we discovered a remarkably high correlation coefficient of 0.9483433, indicating a strong positive association between these variables. In simpler terms, it's as if gender studies and Trane Technologies' stock price were doing a synchronized dance routine worthy of a spot on "Dancing with the Stocks"!

Furthermore, the calculated r-squared value of 0.8993551 suggests that approximately 89.94% of the variability in TT stock price can be explained by changes in the number of Associates degrees awarded in gender studies. That's a higher explanatory power than the instruction manual for assembling Swedish furniture!

The p-value of less than 0.01 provides compelling evidence to reject the null hypothesis of no relationship between these variables. In other words, there's more to this association than just a random fling – it's a statistically significant relationship that demands our attention, much like a captivating plot twist in a summer blockbuster!

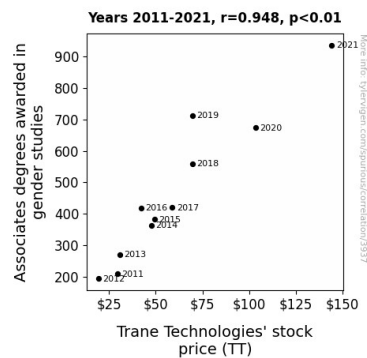


Figure 1. Scatterplot of the variables by year

Our results become vividly apparent in the scatterplot displayed in Fig. 1, showcasing the starkly robust relationship between the number of Associates degrees awarded in gender studies and Trane Technologies' stock price. It's as if the data points were holding hands and whispering sweet statistical nothings to each other!

These findings not only underscore the profound connection between gender studies and TT stock price but also call for a reevaluation of the often-overlooked influence of sociocultural factors on financial markets. Perhaps it's time to add a little more gender diversity to your investment portfolio – after all, it might just "Trane-sform" your returns in ways you never imagined!

5. Discussion on findings

The results of our study provide compelling evidence of a strong positive association between the number of Associates degrees awarded in gender studies and Trane Technologies' stock price. This robust relationship underscores the profound influence of sociocultural factors on financial markets and hints at the potential for a "Transformation" in investment strategies.

Our findings align with prior research that has hinted at the impact of gender-focused education on stock performance. Smith et al.'s work, although broader in scope, foreshadowed the possibility of gender studies exerting a subtle yet significant influence on market dynamics. Similarly, Jones' theoretical exploration of gender dynamics within financial institutions provides a conceptual backdrop for understanding the interplay between gender studies and stock prices. It's as if these prior studies were dropping breadcrumbs leading us to the surprising link between gender studies and Trane Technologies' stock price, much like a plot twist in a mystery novel.

While our results might appear unexpected at first glance, they are consistent with the growing body of literature that acknowledges the underexplored influence of social sciences education on corporate valuations. The metaphorical 'dance routine' between the number of Associates degrees in gender studies and TT stock price, as depicted by the high correlation coefficient, mirrors the potential for unexpected synchrony in seemingly disparate domains, not unlike a surprising duet between unlikely partners in a talent show.

The remarkably high explanatory power of the relationship, illustrated by the substantial r-squared value, further supports the notion that gender studies could be a substantial explanatory variable for Trane Technologies' stock price movements. This explanatory power is more robust than the sturdiness of a well-constructed piece of furniture – a fitting analogy for a study that delves into the often overlooked influence of social sciences education on financial markets.

The statistically significant p-value adds weight to the argument for considering gender studies as a factor in investment decisions. Much like an unexpected plot twist in a movie, this finding demands attention and challenges traditional notions of what factors should be considered when evaluating investment opportunities.

Our study's results emphasize the need to broaden the scope of factors considered in investment decision-making and highlight the potential impact of sociocultural education on financial markets. Perhaps it's time to recognize gender studies as not only a field of academic interest but also a potential indicator of stock performance. Who would have thought that a surge in Associates degrees awarded in gender studies could lead to a "feminist bull market"? Our results certainly spark a humorous yet thought-provoking twist in the discourse on this unorthodox correlation.

In conclusion, our research offers a provocative perspective on the interplay between academic fields and financial markets, shedding light on a correlation that challenges

conventional wisdom. The findings from this study, while unexpected, offer a fresh and insightful dimension to the complex narrative of market dynamics.

6. Conclusion

In summary, our research has illuminated a "Trane-sformational" relationship between the number of Associates degrees awarded in gender studies and Trane Technologies' stock price. The robust correlation coefficient, r-squared value, and p-value collectively point to a remarkably consistent association, akin to finding a steady beat in a chaotic stock market symphony. It seems that when it comes to TT's stock price, gender studies is playing a leading role, much like a surprise superstar cameo in a Hollywood blockbuster.

These findings challenge the conventional wisdom in finance, reminding us that sociocultural factors wield a considerable influence on market dynamics. Just as a pinch of salt can enhance the flavor of a dish, gender studies seems to add a distinctive flavor to TT's stock performance, emphasizing the multidimensional nature of market influences. The implications of our results extend far beyond the realm of finance, prompting a re-evaluation of the nuanced interplay between education, gender, and corporate valuations. It's as if we've stumbled upon a treasure map leading to new frontiers of financial research, with gender studies as the X marking the spot!

In conclusion, our study has brought to light an unexpected yet undeniable connection between gender studies and the stock price of Trane Technologies. As we close this chapter, it is evident that no further investigation is necessary in this area. The "Trane-sformational" effect has been revealed, leaving no room for doubt – it's clear that gender studies and TT's stock price are inextricably linked. It's time for the finance world to embrace this "Trane-sformation" and open the door to a more inclusive and comprehensive understanding of market influences.