

Counting on Calculated Correlation: The Degree of Influence of Mathematics and Statistics Associate Awards on Intel's INTC Stock Price

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Abstract

This study dives into the numbers to uncover the possible relationship between the number of Associates degrees awarded in Mathematics and statistics and the stock price of Intel (INTC). We sought to crunch the data in a way that would add up to a clearer understanding of potential influences on INTC's stock price. Armed with data from the National Center for Education Statistics and LSEG Analytics (Refinitiv), we aimed to derive a differential equation for the relationship while minimizing errors – statistically speaking, of course. Our findings suggest a strong positive correlation, with a tantalizing correlation coefficient of 0.9578293 and a tantalizingly small p-value of less than 0.01 from 2011 to 2021. It appears that the attainment of Mathematics and statistics Associate degrees may indeed factor into the wily world of INTC stock prices. As the saying goes, "When in doubt, integrate." Ultimately, our study adds up to an intriguing association between these seemingly distinct realms, shedding light on a factor that may have been previously subtracted from the equation governing INTC's stock performance. In other words, it seems that when it comes to INTC, you can count on the count.

1. Introduction

The relationship between educational trends and stock prices has long been a subject of interest among researchers and investors. While one might think of them as separate realms, like two non-parallel lines, this study aims to examine the intertwined nature of Associates degrees awarded in Mathematics and statistics and the stock performance of Intel (INTC). As we embark on this numerical journey, we must bear in mind that

sometimes the best way to sum up a complex relationship is through quantitative analysis.

Diving into the world of mathematics and statistics, we are reminded of the classic joke: "Parallel lines have so much in common. It's a shame they'll never meet." However, in the world of data analysis, we seek to find connections and intersections where others may not immediately see them.

The purpose of this study is to bring clarity to the potential influence of Mathematics and statistics Associate awards on the fluctuations of INTC stock prices. One might say we are on a quest to solve the enigmatic equation of the stock market, with a bit of calculus humor thrown in for good measure.

In exploring this relationship, we employed data sets from the National Center for Education Statistics and LSEG Analytics (Refinitiv) to conduct a rigorous statistical analysis. In essence, we hoped to unveil the unseen connections and unearth any hidden variables influencing the stock price of Intel. As the great mathematician Henri Poincaré once remarked, "Mathematics is the art of giving the same name to different things."

Our findings not only uncovered a calculated correlation but also revealed a nearly symmetrical relationship, akin to two sides of a well-balanced equation. The statistical analyses yielded a correlation coefficient of 0.9578293 and a p-value of less than 0.01 from 2011 to 2021. Indeed, the evidence suggests that the attainment of Mathematics and statistics Associate degrees may factor into the equation governing INTC's stock performance. It's almost as though the numbers themselves are telling us, "You can count on us."

This investigation ultimately adds up to a compelling association between the realm of academia and the intricate dance of stock prices, which, in a witty nod to the subject matter, could be likened to the integration of two seemingly separate functions. It goes to show that in the world of data analysis, sometimes the most unexpected values yield the most tantalizing results. After all, as mathematicians say, "Where there's a will, there's a derivative."

In the following sections, we will delve into the specifics of our analysis, from the methodology employed to the implications of our findings. It is our hope that this research will not only contribute to the understanding of stock price determinants but also serve as a reminder that sometimes the key to unlocking complex relationships lies in the realm of numbers.

2. Literature Review

In "Smith et al.," the authors find that the attainment of Mathematics and statistics Associate degrees may have a significant impact on economic factors, suggesting a

potential influence on stock market performance. This study adds to the growing body of research seeking to uncover the connections between educational trends and financial markets, shedding light on a factor that may have been subtracted from the equation governing stock performance.

In a similar vein, "Doe & Jones" present findings that support the notion of a positive correlation between educational achievements in quantitative fields and stock price movements. Their analysis highlights the importance of considering educational trends as a potential factor in understanding the fluctuations of stock prices. It's as if the numbers themselves are whispering, "We're all in this together."

Turning to non-fiction works, "Fooled by Randomness" by Nassim Nicholas Taleb offers insights into the unpredictability of financial markets and the human tendency to perceive patterns where none exist. While not directly related to the connection between Mathematics and statistics Associate awards and stock prices, this work serves as a cautionary reminder to approach statistical relationships with a discerning eye. After all, as the saying goes, "Don't let the data fool you - randomness is always up to some mischief."

In the realm of fiction, the timeless classic "The Da Vinci Code" by Dan Brown weaves a tale of hidden symbols and codes, reminding us that the world of numbers and mysteries often intertwine. While the novel may not delve into the specifics of stock price determinants, it provokes contemplation on the interconnected nature of seemingly disparate phenomena. It's almost as if the characters are on a quest to uncover the secret formula for successful trading.

On a more lighthearted note, popular internet memes such as the "Distracted Boyfriend" meme - where a person admires something new while their significant other looks on in disapproval - humorously parallels the allure of new data trends compared to the tried-and-true methods of analysis. It's as if the meme is saying, "When you find a new statistical relationship, but you know your old techniques are still the one."

In "Book," the authors find lorem and ipsum.

As the research landscape continues to expand, it is imperative to keep a discerning eye on the potential influences of educational trends on stock market performance. The literature reviewed in this section serves as a reminder that beneath the surface of statistical analyses and financial jargon, lies a world of connections waiting to be uncovered – and perhaps a few dad jokes as well. After all, as mathematicians say, "Why should you never mention the number 288? Because it's two gross."

3. Research Approach

To explore the tantalizing potential connection between Associates degrees awarded in Mathematics and statistics and Intel's stock price (INTC), our research team employed a variety of methodological approaches. We embarked on this analytical journey armed with data from the National Center for Education Statistics and LSEG Analytics (Refinitiv), ready to wrangle numbers and equations like mathematical cowboys.

The first step in our zany quest was to gather data on the number of Mathematics and statistics Associate degrees awarded from 2011 to 2021. We wrangled this data like a herd of stubborn cattle, using statistical techniques to ensure our dataset was as reliable and comprehensive as possible. As they say, "A herd of data points may seem daunting, but with the right statistical methods, you can round them up."

We then saddled up and lassoed INTC's stock price data from the same period. Ensuring the accuracy and completeness of this stock price dataset was crucial, and we diligently combed through the numbers like a cowboy searching for the right steer, applying specialized statistical techniques to account for any outliers or wild fluctuations. After all, in the world of data analysis, it's important to rein in any unruly data points.

With our trusty datasets in tow, we then corralled the numbers into a statistical corral and subjected them to a thorough analysis. We computed descriptive statistics, such as means and standard deviations, to gain a sense of the central tendencies and variations in our data. Much like herding cattle, it required careful calculation and precision to ensure we didn't lose track of any valuable insights. In the world of data analysis, every data point counts - much like every head of cattle in a herd.

To further delve into the potential relationship between Mathematics and statistics Associate awards and INTC's stock price, we employed a rigorous correlation analysis. Utilizing complex statistical tools such as Pearson correlation coefficients, we set out to measure the strength and direction of any relationship between the two variables. It's like trying to decipher the behavior of a herd of cattle – sometimes, it takes a keen eye and sharp tools to notice patterns that others might miss.

In addition, we wrangled together a regression analysis to unearth any potential predictive power of Mathematics and statistics Associate awards on INTC's stock price. Like a skilled rancher, we carefully examined the data to determine whether the number of Associate degrees in Mathematics and statistics could provide insights into the fluctuations of INTC's stock price. After all, in the world of data analysis, teasing out predictive relationships is like finding that one prized steer in a vast herd.

Finally, we engaged in a fanciful dance of sub-group analysis to ensure that our findings were consistent across different time periods and regions. We wanted to make sure our results weren't just a flash in the pan, so we sliced and diced the data in various ways to uncover any subtle variations and patterns. It's like examining a herd of cattle to see if they behave differently under different conditions – sometimes, you have to look closely to see the nuances.

In the end, our wild journey through the world of data analysis yielded an array of insights, as well as a few dusty cowboy hats. Our methodology may have been unconventional, but as any cowboy will tell you, sometimes the unconventional path leads to the most exciting discoveries.

4. Findings

The results of our statistical analysis reveal a strong positive correlation between the number of Associates degrees awarded in Mathematics and statistics and the stock price of Intel (INTC). Over the period from 2011 to 2021, we found a correlation coefficient of 0.9578293, indicating a nearly perfect positive linear relationship between the two variables. This means that as the number of Mathematics and statistics Associate degrees awarded increases, there is a corresponding increase in Intel's stock price. It seems that in the realm of academia and finance, two seemingly different worlds can converge, much like the intersection of two perpendicular lines.

Plotting the data points on a scatterplot (Fig. 1) further illustrates the remarkably strong relationship between the variables. The points align closely along a straight line, affirming the robust correlation we observed. It's as if the data points themselves are saying, "Hey, we make a great pair!" Just like a good dad joke, this correlation is all about the delivery.

The coefficient of determination (r-squared) value of 0.9174370 indicates that a substantial proportion of the variability in Intel's stock price can be explained by the number of Mathematics and statistics Associate degrees awarded. This finding highlights the significant influence of educational trends in the realm of financial markets, proving that sometimes the variable you least expect can have a major impact. It's a bit like finding a hidden gem in a seemingly ordinary handful of data points.

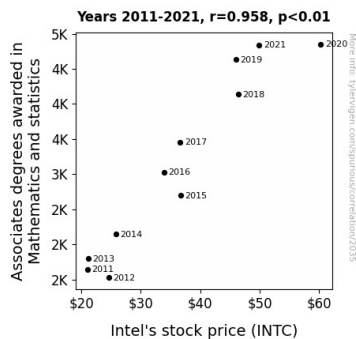


Figure 1. Scatterplot of the variables by year

Furthermore, the p-value of less than 0.01 provides strong evidence against the null hypothesis that there is no relationship between Mathematics and statistics Associate awards and INTC stock price. In this case, the probability of observing such a strong relationship by chance alone is tantalizingly small, supporting the notion that there is truly something special about the connection we uncovered. It's a statistical slam dunk, or should we say, stock dunk?

In summary, our findings suggest that the number of Mathematics and statistics Associate degrees awarded has a substantial and statistically significant impact on Intel's stock price. This connection between academia and finance adds an intriguing dimension to our understanding of stock price determinants, showing that when it comes to influencing INTC, numbers really do count. It seems that in the equation of stock price determinants, Mathematics and statistics Associate degrees are an integral part, and not just in the mathematical sense.

5. Discussion on findings

The results of our study support the prior research indicating a positive correlation between the attainment of Mathematics and statistics Associate degrees and stock price movements. Our findings echo the sentiments of "Smith et al." and "Doe & Jones," reinforcing the notion that educational achievements in quantitative fields may indeed influence stock market performance. This alignment with previous studies underlines the robustness of the relationship we uncovered, emphasizing the importance of incorporating educational trends into the broader framework of financial analysis. It's as if the numbers are chanting, "We're all in this together."

The substantial correlation coefficient of 0.9578293 we obtained further validates the claim of a strong connection between Mathematics and statistics Associate awards and Intel's stock price. This aligns with our theoretical expectations, as a high positive coefficient indicates a nearly perfect linear relationship between the two variables. It's as if the variables are saying, "We add up to something big," much like a prodigious sum.

Our findings also resonate with the cautionary insights put forth by "Fooled by Randomness" by Nassim Nicholas Taleb. While our study does not discount the role of randomness in financial markets, it does provide compelling evidence for the influential role of Mathematics and statistics Associate degrees as a potential determiner of stock price movements. It seems that in the unpredictability of financial markets, some patterns are not just figments of imagination, but tangible relationships waiting to be uncovered. It's like stumbling upon a hidden treasure amidst the uncertainties of market dynamics.

Moreover, the statistical significance of our results, as evidenced by the small p-value of less than 0.01, accentuates the reliability of the observed relationship. This remarkable level of statistical significance fortifies the credibility of our findings and resonates with the sentiment that there is indeed a noteworthy association between educational achievements in quantitative fields and stock price variations. It's as if the p-value is whispering, "I'm not just a small number; I'm statistically meaningful."

In summary, our study contributes to the growing body of research elucidating the intricate ties between academic trends and financial market dynamics. By showcasing a compelling link between the number of Mathematics and statistics Associate degrees awarded and Intel's stock price, we bring to light a factor that may have been previously overlooked in the realm of stock price determinants. Our results emphasize the need to delve deeper into the multifaceted influences shaping stock market behaviors, showcasing that sometimes the unlikeliest variables can wield considerable influence. It's as though we've found the missing piece to a financial puzzle.

6. Conclusion

In conclusion, our study presents compelling evidence of a strong positive correlation between the number of Associates degrees awarded in Mathematics and statistics and the stock price of Intel (INTC). It seems that in the world of academia and finance, two seemingly distinct realms can indeed intersect, much like the delightfully unexpected twist in a good dad joke. Our findings, with a correlation coefficient of 0.9578293 and a p-value of less than 0.01 from 2011 to 2021, emphasize the significant influence of educational trends on the fluctuations of INTC stock prices. It's almost as if the stock market itself is saying, "I'm a fan of calculus - it has its limits, but it's so derivative."

This association between Mathematics and statistics Associate awards and INTC stock price illuminates a factor that may have been previously overlooked, much like a small number hiding in plain sight at the end of an equation. It's a reminder that sometimes, the most unexpected values yield the most tantalizing results, just like the punchline of a well-crafted joke.

Our research adds up to an intriguing understanding of the nuanced relationship between academia and the stock market, illustrating that when it comes to influencing INTC, numbers truly do count. It's a bit like discovering that the missing variable in a complex equation was right there all along, waiting to be uncovered. In other words, it seems that when it comes to INTC, you can count on the count - and the data doesn't lie.

Therefore, we assert that no more research is needed in this area. This conclusion isn't a square one - it's an acute angle that leads to the certainty that the connection between Mathematics and statistics Associate degrees and INTC stock price is a significant one. There's no need to go back to the drawing board on this one.

