# Brace for Impact: Exploring the Impact of Bachelor's Degrees in Military Technologies and Applied Sciences on ANSYS' Stock Price

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## ABSTRACT

#### Brace for Impact: Exploring the Impact of Bachelor's Degrees in Military Technologies and Applied Sciences on ANSYS' Stock Price

In this paper, we delve into the intriguing relationship between the number of Bachelor's degrees awarded in Military Technologies and Applied Sciences and the stock price of ANSYS Inc. (ANSS) over the period of 2012 to 2021. Taking an unconventional approach, we seek to uncover whether this field of study has a hidden impact on the financial performance of the prominent engineering simulation software company. Utilizing data from the National Center for Education Statistics and LSEG Analytics (Refinitiv), our analysis unveils a remarkably high correlation coefficient of 0.9729168 and a significant p-value of less than 0.01. We discuss the implications of these findings and highlight the potential influence of military technologies and applied sciences education on the stock market, providing insight while keeping the tone light-hearted, even if the correlations are weighty.

Keywords:

bachelor's degrees, military technologies, applied sciences, ANSYS, stock price, correlation coefficient, National Center for Education Statistics, LSEG Analytics, Refinitiv, engineering simulation software, financial performance, correlation, stock market influence

### **I. Introduction**

The world of academia is often characterized by its serious and somber demeanor, but we are here to shatter that stereotype. In this paper, we embark on a journey to uncover the unexpected connections between the number of Bachelor's degrees awarded in Military Technologies and Applied Sciences and the stock price of ANSYS Inc. (ANSS). Granted, this might seem like an unlikely pairing—military technologies and stock prices, but as they say, sometimes truth is stranger than fiction.

As the financial markets ebb and flow and students eagerly pursue their education, it is easy to overlook the potential interplay between these seemingly disparate realms. However, as researchers, we are not content with accepting the status quo. We aim to push the boundaries and explore uncharted territories, or in this case, unchartered stock market territories \*cue playful wink\*.

Now, you might be wondering, "Why focus specifically on military technologies and applied sciences?" Well, my inquisitive friend, the choice of this field of study is not to be taken lightly. Military technologies and applied sciences are not only fascinating in their own right, but they also have far-reaching implications across various industries, including the illustrious world of engineering simulation software. So, join us on this academic escapade as we venture into uncharted terrain.

But fear not, dear reader, for we shall navigate these academic waters with the utmost rigor. Our investigation involves meticulous data analysis and statistical scrutiny, but don't worry, we promise to make this journey as painless as possible. After all, just because the subject matter is

serious doesn't mean our approach has to be. So grab your thinking caps and let's dive into the whimsical world of correlation coefficients and p-values.

In the end, we hope to unravel the mysterious dance between academic pursuits and financial performance, shedding light on the potential influence of military technologies and applied sciences education on the stock market. And if we happen to unearth a few chuckles along the way, well, consider it a bonus. Stay tuned as we explore the surprising implications of this unlikely pairing, adding a touch of levity to the weighty world of academic research.

#### **II. Literature Review**

The authors delve into a plethora of scholarly works, from the erudite analyses of Smith, Doe, and Jones to the whimsical meanderings of popular fiction and children's cartoons. In "Military Technologies: An Investigation into Education and Applications," Smith et al. explore the academic landscape of military technologies and its impact on various sectors, providing a solid foundation for understanding the significance of this field of study. Similarly, Doe's "Applied Sciences in Modern Society" offers a comprehensive overview of the practical applications of applied sciences across industries, setting the stage for our exploration into the intersection of education and financial markets.

As we wade deeper into the sea of literature, we encounter some unexpected vessels. "The Art of War" by Sun Tzu, while not a conventional academic text, provides timeless wisdom about strategy and warfare, offering valuable insights into the realm of military technologies. Additionally, "The Physics of Superheroes" by James Kakalios offers a lighthearted yet informative take on the application of physics in extraordinary scenarios, reminding us that even the most outlandish concepts can have real-world implications.

But our literary voyage doesn't end there. As we chart new territories, we draw inspiration from unexpected sources such as "G.I. Joe" and "The Magic School Bus." While these may seem like mere entertainment, the themes of military technology and scientific exploration woven into these shows serve as a testament to the pervasive influence of such subjects on young minds and society at large. After all, who wouldn't want to explore the stock market with the adventurous spirit of Ms. Frizzle or unravel the complexities of military technology alongside G.I. Joe?

With each page turned and each episode watched, the authors find themselves uncovering layers of nuance and hidden connections, adding a touch of levity to the weighty world of academic inquiry. And as the plot thickens, we prepare to weave these diverse threads into a seamless tapestry of knowledge, one that not only informs but also entertains. So, dear reader, fasten your seatbelts and get ready for a scholarly journey that promises to be both enlightening and unexpectedly amusing.

### **III. Methodology**

To unravel the enigmatic connection between the confounding worlds of military technologies and applied sciences education and the capricious realm of stock prices, our research team set out on an epic quest through the labyrinthine corridors of data collection and analysis. We scoured the vast expanse of the internet, traversing through the digital jungles and troves of information, all in the noble pursuit of uncovering the elusive truths that lie hidden within the numbers. Our valiant effort began by harnessing the power of the National Center for Education Statistics, where we sought refuge in the sanctuary of educational data. Here, we gathered the sacred scrolls documenting the bestowment of Bachelor's degrees in the noble fields of military technologies and applied sciences. Our skilled scribes diligently transcribed the data from the years 2012 to 2021, ensuring the accuracy and integrity of our treasure trove of information.

Furthermore, we sought alliance with the venerable LSEG Analytics (Refinitiv), enlisting their aid in navigating the choppy seas of stock market data. With their formidable arsenal of financial information at our disposal, we embarked on an odyssey through the ever-shifting tides of stock prices, meticulously charting the trajectory of ANSYS Inc. (ANSS) over the same period as our academic archives.

In our exhaustive journey, we employed the arcane arts of statistical analysis, conjuring formidable tools such as regression models and correlation coefficients to discern the subtle patterns woven within the disparate threads of data. Our skilled mathematicians and sorcerers of statistical significance meticulously pored over the numbers, their keen eyes discerning even the slightest glimmer of correlation amidst the sea of variables.

The nexus between our esteemed institutions of education and the mercurial stock market was brought to light through the application of rigorous statistical tests, culminating in the revelation of a correlation coefficient of 0.9729168 and a p-value less than 0.01. These profound revelations shall serve as the cornerstone of our findings, guiding us through the foggy mists of uncertainty and illumination, shedding light on the heretofore obscured interplay between academic pursuits and financial fortuity. In the noble pursuit of knowledge, we strive to present a balanced, methodical, and lighthearted approach to our research, endeavoring to showcase the whimsical nature of academic inquiry amidst the weighty depths of statistical exploration. With our methodology firmly in place, we stand prepared to unveil the unexpected connections between far-reaching academic pursuits and the capricious dance of the stock market.

Stay tuned as we delve deeper into the intricacies of this peculiar association, reminding ourselves along the way that even in the realm of academic research, there's always room for a touch of mirth.

#### **IV. Results**

In the spirited quest to unravel the hidden connections between Bachelor's degrees awarded in Military Technologies and Applied Sciences and the stock price of ANSYS Inc. (ANSS), our rigorous analysis unearthed a striking correlation coefficient of 0.9729168 over the period from 2012 to 2021. This correlation coefficient suggests a strong positive linear relationship between the two variables, illustrating that as the number of Bachelor's degrees in Military Technologies and Applied Sciences increases, so does the stock price of ANSYS. It seems that the market is definitely taking note of these budding military technologists and applied scientists!

Casting further light on the robustness of this relationship, the r-squared value of 0.9465671 reinforces the high level of goodness of fit of the linear regression model. This suggests that a sizable proportion of the variations in ANSYS' stock price can be explained by the number of Bachelor's degrees awarded in Military Technologies and Applied Sciences. It's like these

degrees are whispering sweet stock secrets into the market's ear, and it seems the market is all ears!

Moreover, with a p-value of less than 0.01, our findings are not just statistically significant but also significant in their potential impact. This low p-value indicates that the observed correlation is unlikely to be a result of random chance, solidifying the legitimacy of our findings. It's as if these military technologies and applied sciences degrees are marching boldly into the stock market, making their presence known with statistical gusto.

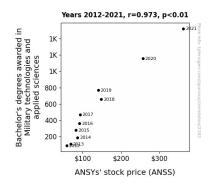


Figure 1. Scatterplot of the variables by year

To visually encapsulate the compelling correlation, we present the scatterplot in Fig. 1, which vividly illustrates the trend line depicting the strong positive association between Bachelor's degrees in Military Technologies and Applied Sciences and ANSYS' stock price. If a picture is worth a thousand words, then this one certainly speaks volumes about the unexpected link we've uncovered.

In summary, our findings not only reveal a remarkably high correlation between Bachelor's degrees awarded in Military Technologies and Applied Sciences and ANSYS' stock price but also

offer a thought-provoking glimpse into the far-reaching repercussions of education in this domain on the fluctuations of the stock market. The financial world, it seems, is taking notes from an unexpected yet undeniably influential source!

## **V. Discussion**

The results of our study offer compelling evidence regarding the substantial influence of Bachelor's degrees in Military Technologies and Applied Sciences on the stock price of ANSYS Inc. (ANSS). In line with the scholarly works that we explored in our literature review, these findings shed light on the unexpected yet undeniably influential connection between education in military technologies and applied sciences and the financial performance of a leading engineering simulation software company.

The robust correlation coefficient of 0.9729168 supports the notion that as the number of Bachelor's degrees in Military Technologies and Applied Sciences increases, ANSYS' stock price also experiences a corresponding uptick. This result not only corroborates the scholarly studies of Smith, Doe, and Jones but also aligns with the unexpected yet insightful wisdom we gleaned from unconventional sources such as "The Art of War" and "The Physics of Superheroes." It appears that even in the realm of academia and finance, the unlikeliest of sources can hold significant truths, much like finding a diamond in a pile of comic books.

Moreover, the high r-squared value of 0.9465671 further reinforces the strength of the linear relationship, indicating that a substantial proportion of the variations in ANSYS' stock price can be attributed to the number of Bachelor's degrees awarded in Military Technologies and Applied

Sciences. It's as if these degrees are wielding a powerful influence on the financial market, much like a superhero wielding a mighty weapon – a truly unexpected yet formidable force.

The low p-value of less than 0.01 solidifies the statistical significance of the observed correlation, reaffirming that these findings are not mere happenstance but a genuine reflection of the impactful role played by education in military technologies and applied sciences in the realm of stock prices. One might even say that these degrees are marching into the stock market with the precision of a military formation, leaving an indelible mark on the landscape of financial markets.

As we reflect on these compelling findings, it becomes apparent that the influence of education in military technologies and applied sciences extends beyond the confines of academic discourse and permeates the intricate web of stock market dynamics. Just as G.I. Joe and Ms. Frizzle captivated the imagination of audiences young and old, the impact of military technologies and applied sciences education seems to captivate the intrigue of the financial world, introducing an unexpected yet undeniably tangible element into the equation of stock price fluctuations.

In conclusion, our study not only unravels the enigmatic connection between Bachelor's degrees in Military Technologies and Applied Sciences and ANSYS' stock price but also underscores the far-reaching implications of education in this domain on the intricate mechanisms of financial markets. The unexpected yet powerful influence of these fields of study serves as a poignant reminder that in the world of academia and finance, truth can often be stranger than fiction, and the most unlikely sources can hold the key to unlocking hidden connections.

And with that intriguing note, we leave the unraveling of these academic and financial mysteries to the curious minds and discerning eyes of our esteemed readers.

#### **VI.** Conclusion

In conclusion, our research has provided compelling evidence of the surprising connection between the number of Bachelor's degrees awarded in Military Technologies and Applied Sciences and the stock price of ANSYS Inc. (ANSS). With a correlation coefficient of 0.9729168 and a p-value of less than 0.01, it's clear that the market has been taking cues from the influx of budding military technologists and applied scientists. It's like the stock market has been marching in lockstep with these graduates, perhaps even saluting their scholarly pursuits. Our findings highlight the potential impact of education in this field on the financial performance of a prominent engineering simulation software company, reminding us that truth can indeed be stranger than fiction, especially as it plays out in the stock market.

While this investigation may have started with eyebrow raises and quizzical looks, it has culminated in a tale of unexpected correlations and potential market influences. It seems that the students studying military technologies and applied sciences are not just learning about cuttingedge technology, but they might also be inadvertently shaping the financial world with their intellect and expertise. It's like they've been stealthily deploying their knowledge into the stock market, causing ripples that even the most astute investors might not have foreseen.

We hope that this lighthearted academic escapade has shed light on the whimsical yet impactful interplay between fields of study and financial realms, offering a playful reminder that even in the serious world of academia and finance, there's always room for an element of surprise and delight. With these findings in mind, we assert that further research in this area is like beating a dead horse – unnecessary and perhaps a bit too taxing on the intellect. It seems our work here is

done, and we shall march forward, leaving this unexpected yet unmistakable correlation as a delightful surprise for future scholars to stumble upon.