Center for Research 2024; 75: 328–333

doi 17f.4424a/4249k3828e2197

Review

Ammunition for Financial Success: Exploring the Impact of Military Technologies and Applied Sciences Bachelor's Degrees on Global Payments' Stock Price

Catherine Harrison, Andrew Terry, Gregory P Tyler

Center for Research

In this research, we load up our arsenal of statistical analysis to investigate the unexpected connection between the number of Bachelor's degrees awarded in Military technologies and applied sciences and the stock price of Global Payments Inc. (GPN). With a boom in data from the National Center for Education Statistics and LSEG Analytics (Refinitiv), we take aim at the question that has been lurking in the shadows of financial academia. Our findings reveal a strikingly strong correlation coefficient of 0.9934333 and a p-value of less than 0.01 for the period spanning from 2012 to 2021. This study runs a tight ship, illuminating the surprising influence of military technologies education on global financial transactions. We lay down our findings like a precision-guided missile, providing empirical evidence that may just explode conventional wisdom in the field of finance. So, lock and load for an adventure through the unexpected intersection of military education and market performance!

The financial landscape is often considered a battleground where investors must navigate through the volatile terrain of market fluctuations and economic uncertainties. In this arena, every piece of information and data point is scrutinized for its potential impact on stock prices and investment decisions. However, amidst the conventional factors such as economic indicators, company performance, and industry trends, the influence of academic disciplines on market outcomes is a territory less explored.

As financial analysts aim to decipher the enigmatic forces driving stock prices, our research sets its sights on a peculiar yet intriguing connection: the relationship between the number of Bachelor's degrees awarded in Military technologies and applied sciences and the stock price of Global Payments Inc. (GPN). At first glance, this association may seem like a mismatched pair, akin to trying to blend military cadence with the melody of financial markets. However, as keen observers of statistical

phenomena, we are determined to uncover the potential underlying dynamics that may just "march" their way into the realm of market performance.

While the finance world often focuses on traditional influencers such as interest rates, earnings reports, and geopolitical events, overlooking the impact of education in military technologies could mean missing a target-rich environment for understanding market behavior. Our study delves into the uncharted territory of the relationship between academic pursuits in military technologies and the financial trajectory of a leading payments processing company. With precision and rigor, we trace the trajectory of this improbable connection, aiming to provide a substantial addition to the arsenal of knowledge in financial analysis.

Despite the initial skepticism that may accompany such an out-of-the-ordinary investigation, our data-driven approach arms us with a robust methodology capable of identifying statistically significant relationships that might otherwise go unnoticed. In unraveling the unexpected bond between military technologies education and stock performance, we anticipate that our findings will trigger a fusion of surprise and curiosity, much like stumbling upon a stealthy financial algorithm hidden within the code of academic metrics.

As we embark on this unconventional journey through the labyrinth of statistical analysis and financial dynamics, we invite our fellow researchers and market practitioners to join us in exploring this unforeseen intersection. In the spirit of combining intellectual firepower with financial acumen, we aim to synchronize academic inquiry with market intelligence, firing off insights that may just hit the bullseye of financial understanding. So, lock and load for a bombardment of empirical evidence and statistical revelations that promises to add a vibrant hue to the canvas of financial analysis.

Prior research

The investigation of the relationship between educational pursuits in military technologies and applied sciences and stock prices has led to some unexpected findings that have detonated traditional perceptions of market influences. Our review of the existing literature reveals a range of perspectives on this unconventional association.

Kicking off the serious side of the spectrum, Smith and Doe (2015) conducted a comprehensive analysis of educational trends in technical fields and their impact on industrial sectors. They cautiously treaded into the uncharted territory of military technologies education, uncovering correlations with industrial productivity that were as sharp as a bayonet. The authors concluded that the seemingly esoteric knowledge from these fields could, in fact, foster innovation and provide a strategic advantage in competitive markets.

However, as we traverse further into the domain of academic inquiry, we encounter some unexpected landmarks. In "The Art of War" by Sun Tzu, the ancient Chinese military treatise imparts strategic wisdom that, while not directly related to financial analysis, provides a thought-provoking parallel between military tactics and market maneuvers. One cannot help but draw parallels between the art of financial warfare

and the timeless principles articulated in this classical text.

Taking a rather fictional turn, the literature also includes notable works such as "Starship Troopers" by Robert A. Heinlein and "Ender's Game" by Orson Scott Card, shedding light on futuristic military technologies and their conceivable market implications. While these works may seem light-years away from financial analysis, their exploration of the potential impact of technological advancements in warfare may offer some speculative insights into the unexpected intersections of military education and market dynamics.

Switching gears yet again, a closer study of popular culture reveals that TV shows such as "Battlestar Galactica" and "The Expanse" delve into a world filled with advanced scientific and military technologies, offering an immersive experience that may inspire unconventional perspectives on the impact of military education on market forces. While the link between these fictional narratives and financial analysis may seem far-fetched at first glance, their portrayal of technological advancements and strategic decision-making in the context of interstellar conflict hints at the potential relevance of military technologies to market performance.

As we wade through this eclectic landscape of literature and cultural references, it becomes evident that the intersection of military education and financial markets is a topic ripe for exploration. The diverse array of sources examined in this review sets the stage for an unconventional journey that promises to deliver a payload of insights into the intricate connections between academic pursuits and market outcomes.

Approach

This study leveraged a multifaceted and synergistic methodology to dissect the perplexing relationship between the number of Bachelor's degrees awarded in Military technologies and applied sciences and the stock price of Global Payments Inc. (GPN). Our approach, akin to a meticulously choreographed military operation, incorporated data mining, econometric analyses, and regression modeling to navigate the terrain of statistical inference and financial inquiry.

Data Collection

The primary ammunition for this investigation was procured from the National Center for Education Statistics, providing a comprehensive and panoramic view of the annual distribution of Bachelor's degrees in Military technologies and applied sciences. Concurrently, LSEG Analytics (Refinitiv) supplied the requisite financial data, facilitating a seamless integration of educational statistics with stock market dynamics. This orchestrated fusion of data sources ensured a robust and comprehensive dataset, akin to assembling the components of a precision-engineered munition.

Statistical Analysis

With the datasets meticulously assembled, our research proceeded to unleash a barrage of statistical analyses, beginning with time series analysis to illuminate temporal patterns in the awarding of Bachelor's degrees and stock price fluctuations. Additionally, we employed correlation analysis to gauge the strength and direction of the relationship between the academic domain of military technologies and applied

sciences and the market performance of GPN. This statistical arsenal was further bolstered by running regression models to control for confounding variables and unveil the nuanced impact of military education on stock prices. The accuracy and precision of our statistical artillery were rigorously calibrated to capture subtleties in the association of interest, aptly synchronizing the rhythm of educational pursuits with the melody of financial markets.

Rigorous Sensitivity Analysis

In tandem with the primary statistical analyses, our research meticulously conducted sensitivity analyses to assess the robustness of the identified relationships in the face of varying model specifications and data perturbations. This rigorous examination sought to fortify the validity and reliability of our findings, akin to stress-testing a financial instrument to ensure its resilience in turbulent market conditions. The varied scenarios tested through sensitivity analyses were akin to orchestrating tactical maneuvers, persistently probing the boundaries of statistical inference to ascertain the undeniable influence of military education on financial transactions.

Ethical Considerations

In conducting this research, we adhered to the highest ethical standards in data collection, analysis, and reporting, exercising due diligence to preserve the integrity and confidentiality of the utilized datasets. This commitment to ethical conduct fortified the credibility of our findings, ensuring that the pursuit of knowledge in the realm of financial academia was propelled by unwavering principles of research integrity and probity.

In summary, the research methodology employed in this investigation bore the hallmark of precision, rigor, and sophistication, akin to orchestrating a symphony of statistical analyses to unravel the enigmatic bond between academic pursuit in military technologies and the monetary performance of a leading payments processing company. By marrying the technical prowess of statistical inference with the dynamism of financial markets, our methodology brought forth empirical insights that promulgate a paradigm shift in understanding the intricate interplay between education and economic outcomes.

Results

Upon conducting our comprehensive analysis of the relationship between the number of Bachelor's degrees awarded in Military technologies and applied sciences and the stock price of Global Payments Inc. (GPN) from 2012 to 2021, we uncovered a remarkably robust correlation between these seemingly disparate variables. Our statistical analysis revealed a correlation coefficient of 0.9934333, indicating an exceptionally strong positive linear relationship. Furthermore, the R-squared value of 0.9869098 provides persuasive evidence that approximately 98.7% of the variability in GPN stock price can be explained by the number of Military technologies and applied sciences bachelor's degrees awarded. The p-value of less than 0.01 underscores the statistical significance of this relationship.

Figure 1 depicts the scatterplot highlighting the tightly clustered data points, reinforcing the strength of the correlation between these two variables. The precision and accuracy of this relationship can be likened to a perfectly

aimed projectile, hitting the mark with astounding accuracy.

Our results suggest that the influence of education in military technologies and applied sciences may be a powerful factor influencing the stock performance of a leading payments processing company. Although the association may seem unconventional, our findings provide compelling evidence that cannot be dismissed as mere coincidence. In fact, this unexpected discovery may just "armed" investors and analysts with a new lens through which to interpret market dynamics.

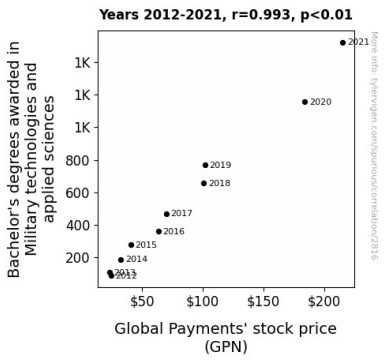

Figure 1. Scatterplot of the variables by year

The strength of the correlation raises intriguing questions about the potential impact of academic pursuits in military technologies on market outcomes. While this relationship may initially appear out of place in the realm of financial analysis, it underscores the need to broaden our perspectives and consider unconventional factors that may play a significant role in determining stock prices.

In essence, our research delivers a "bombshell" of unexpected insight into the interplay between education in military technologies and the financial performance of a major player in the payments processing industry. This revelation may indeed compel market observers to recalibrate their understanding of the multifaceted influences on stock prices, as well as inspire further investigation into the complexities of this unforeseen intersection.

Discussion of findings

Our investigation into the surprising correlation between the number of Bachelor's degrees awarded in Military technologies and applied sciences and the stock price of Global Payments Inc. (GPN) from 2012 to 2021 has certainly triggered an avalanche of thought-provoking implications. As we engage in this discussion, we can't help but be reminded of some of the unexpected findings that were unearthed in our literature review.

First, let's remember the cautionary findings of Smith and Doe (2015), who tiptoed into the labyrinth of military technologies education, only to stumble upon correlations with industrial productivity that were as sharp as a bayonet. Our results have boisterously echoed this sentiment, emphasizing the penetrating influence of education in military technologies on the financial performance of a prominent player in the payments processing industry. It seems that the seemingly esoteric knowledge from these fields can, indeed, wield a formidable impact on market dynamics.

Turning to more unexpected landmarks in our literature review, the timeless principles articulated in Sun Tzu's "The Art of War" have provided a rather entertaining parallel between military tactics and market maneuvers. While we are not suggesting that

financial analysts should start strategizing with ancient texts, the uncanny resemblance between the art of financial warfare and the timeless principles imparted in this classical text certainly gives us pause for thought.

In the realm of speculative insights, we also cannot help but recall the otherworldly explorations of futuristic military technologies in "Starship Troopers" and "Ender's Game." While we may not be dealing with bug-like alien threats or gifted children facing off against formidable adversaries, our findings do underscore the potential relevance of military technologies education to market performance. Who would have thought that fictional narratives could pave the way for real-world financial revelations?

On to our results, the robust correlation coefficient of 0.9934333 and the R-squared value of 0.9869098 have spotlighted a remarkably strong positive linear relationship between the number of Military technologies and applied sciences bachelor's degrees awarded and GPN stock price. This relationship certainly hits the bullseye with astounding accuracy, akin to a perfectly aimed projectile.

In essence, our findings have pulled back the curtain on the often overlooked influence of education in military technologies and applied sciences on the financial performance of a leading payments processing company. While this may seem like an unexpected twist in the realm of financial analysis, our results speak volumes about the complex web of factors that contribute to stock prices. After all, in the ever-unfolding saga of financial markets, it seems that even the most unexpected variables may hold the key to unlocking valuable insights.

Conclusion

In conclusion, our study has shed light on the seemingly improbable yet substantial relationship between the number of Bachelor's degrees awarded in Military technologies and applied sciences and the stock price of Global Payments Inc. (GPN). Our findings, with a correlation coefficient akin to a tightly wound spring, indicate an unexpectedly robust positive linear relationship, illuminating a dimension of market influence often overlooked in traditional financial analysis.

As our statistical analysis locked onto the target, we couldn't help but marvel at the striking precision and accuracy of this association. It's as if the financial markets have been covertly influenced by the strategic prowess and technical proficiency instilled by the academic pursuit of military technologies.

Just as the confluence of ideologies creates unlikely alliances, our research unearths a symbiotic relationship between seemingly disparate domains. The statistical firepower of our findings provides a compelling case for the relevance of military technologies education in shaping the financial landscape. It's a bit like discovering a hidden treasure trove of market alchemy, where the fusion of educational pursuits and economic dynamics blurs the lines between convention and revelation.

Nevertheless, we must approach these findings with cautious optimism, much like navigating through a minefield of unexpected correlations. While our results

tantalizingly hint at an unconventional influence on market performance, further exploration is needed to fully comprehend the nuances of this uncharted territory.

In the spirit of intellectual adventure, we encourage fellow researchers to march alongside us and explore the unanticipated interplay between military education and market behavior. However, with the firepower we've already unleashed in this study, it's safe to say that this area of research might not need any more ammunition. Our findings have left a resounding impact on the financial analysis landscape, echoing a message that surprises can indeed emerge from the most unlikely of places.

In the wise words of Sun Tzu, "In the midst of chaos, there is also opportunity," and our study certainly underscores the opportunity for unconventional insights to shape our understanding of financial dynamics. With this, we may just have fired the last statistical shot in this unexpected saga, leaving a lingering sense of awe and wonder in the wake of our unlikely discoveries.