



Review

Art Degree and CME Stock: A Rhyming Connection?

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In this paper, we investigate the intriguing link between the number of Associate degrees awarded in Fine and Studio Arts and the stock price of CME Group (CME). Utilizing data from the National Center for Education Statistics and LSEG Analytics (Refinitiv), we aim to shed light on whether the arts can move markets. Through rigorous statistical analysis, we discovered a remarkably high correlation coefficient of 0.9899816 and a p-value of less than 0.01 for the years 2011 to 2021. Our findings suggest a strong relationship that cannot be brushed off as mere coincidence. We delve into the possible implications of this unexpected connection, acknowledging that this study might be considered a masterpiece in its own right. Our research highlights the uncanny harmony between the creation of art and the movement of financial markets, proving that even stock prices can appreciate the brush strokes of creativity.

The intersection of artistic endeavors and financial markets has long been an enigmatic subject, often overshadowed by more traditional economic indicators and investment strategies. In recent years, however, the relationship between the creation of art and the movement of financial markets has garnered increasing attention from scholars and analysts alike. Our research aims to contribute to this growing discourse by examining the seemingly unlikely correlation between the number of Associate degrees awarded in Fine and Studio Arts and the stock price of CME Group (CME).

While some may initially raise an eyebrow at the juxtaposition of art degrees and stock prices, we approached this investigation with a sense of curiosity and a dash of whimsy. Who would have thought that the strokes of a paintbrush or the shaping of clay could hold any sway over the highs and lows of stock market fluctuations? Yet, as we delved into the data, we found ourselves drawn into a world where the seemingly disparate realms of artistic expression and financial transactions intertwined in a peculiar pas de deux.

As we wade deeper into this beguiling tapestry of statistics and market movements,

we invite readers to suspend their disbelief and embark on this journey with an open mind. After all, in the words of Pablo Picasso, "Everything you can imagine is real" – even a connection between art degrees and stock prices that may appear as surreal as a melting clock in a Dali painting.

We do acknowledge the uniqueness of our pursuit, recognizing that at first glance, it may appear as eccentric as a piece of avant-garde performance art. However, let us not dismiss the prospect of uncovering unsuspected harmony in this unusual pairing. As we lay the groundwork for our analysis, we encourage readers to remain open to the prospect of finding beauty in the unexpected – for in the realm of research, as in the world of art, the most captivating discoveries often arise from the most seemingly incongruous sources.

Prior research

In the quest to unravel the mysterious connection between the number of Associate degrees awarded in Fine and Studio Arts and the stock price of CME Group (CME), researchers have ventured into uncharted territories. Smith et al. (2016) proposed a theoretical framework suggesting that artistic creativity might manifest in the financial markets, akin to brushstrokes of influence on the canvas of stock prices. Meanwhile, Doe and Jones (2018) delved into the behavioral aspects of investors, postulating that exposure to art could inspire unconventional investment patterns, potentially impacting the valuation of stocks.

However, as we peel back the layers of scholarly investigations, we find ourselves navigating through an intriguing labyrinth of

diverse perspectives. "The Art of Financial Markets" by Master & Co. (2019) sheds light on the parallels between artistic creation and financial strategizing, underlining the potential for creative inspiration to permeate the world of investment decisions.

In the realm of non-fiction publications, "The Power of Creativity in Business" by Innovate & Excel (2017) presents an insightful exploration into the crossover between artistic ingenuity and economic enterprises, offering a compelling glimpse into the uncharted potential of artistic influences on financial ecosystems. "The Investment Art: Creative Strategies for Financial Success" by Wise & Wealthy (2015) also offers a profound consideration of the interplay between artistry and investment, weaving an intricate narrative of how artistic sensibilities can shape financial prowess.

Venturing into the realm of fiction, we encounter "The Brushstroke Effect" by Novel Writer (2014), a whimsical tale that whimsically toys with the idea of a mystical painting that holds the key to predicting stock market movements. Furthermore, "The Financial Artist" by Imagination Inc. (2016) immerses readers in a fantastical world where financial stability is governed by the strokes of an otherworldly artist's brush.

As we peel back the layers of scholarly investigations, we find ourselves navigating through an intriguing labyrinth of diverse perspectives. "The Power of the Arts" by Gallery Guru (2018) offers a profound exploration of how artistic expression can permeate even the most unexpected aspects of life, delving into the unanticipated intersections between art and the world of

finance. Furthermore, "The Economics of Creative Expression" by Canvas Connoisseur (2019) presents a compelling narrative of the economic implications of artistic endeavors, hinting at a deeper connection between the world of art and the fluctuations of financial markets.

Turning to the world of animation and children's entertainment, it is impossible to overlook the pervasive influence of art on the collective consciousness. From classics such as "Looney Tunes" to modern favorites like "SpongeBob SquarePants," the portrayal of financial themes interspersed with artistic flair undoubtedly leaves a lasting impression on impressionable minds. Through subtle storytelling and lighthearted antics, these animated works offer glimpses of how the whimsical world of art could intertwine with the intricate gears of financial systems.

In summary, the literature encompassing the intersection of artistic expression and financial markets offers a rich tapestry of insights, where serious scholarship converges with imaginative narratives and whimsical tales. As we embark on our own investigation, we glean inspiration from this diverse array of perspectives, acknowledging that the nexus of art and finance may hold unexpected surprises and, perhaps, a dash of artistic flair.

Approach

To unravel the enigmatic connection between Associate degrees in Fine and Studio Arts and the stock price of CME Group (CME), our research team embarked on a data odyssey that would make even Odysseus himself raise an eyebrow.

We gathered our data from the hallowed halls of the National Center for Education Statistics and the labyrinthine treasure troves of LSEG Analytics (Refinitiv). Armed with spreadsheets and a sense of determination that rivaled Indiana Jones on a quest for the Holy Grail, we delved into the data from the years 2011 to 2021.

Our first step involved a meticulous curation of all Associate degrees awarded in Fine and Studio Arts, ensuring that not a single brushstroke of information was overlooked. We then gleefully plunged into the captivating world of CME Group's stock price, collecting daily trading data like a group of avid stamp collectors hunting for that rare and elusive philatelic gem.

With our data in hand, we employed some rigorous statistical methods that would impress even the most discerning of number-crunching connoisseurs. Our analysis included the calculation of the famously fickle correlation coefficient and the not-so-subtle p-value, which would reveal whether our findings were as statistically significant as a well-executed punchline.

Next, we applied time series analysis to detect any rhythmic patterns that may have been hiding beneath the surface of this seemingly unlikely relationship. It was as if we were searching for the elusive beat in a Jackson Pollock painting – a task not for the faint of heart, but one that promised the thrill of discovery akin to stumbling upon a long-lost Picasso sketch in an attic.

In our pursuit of unveiling the mesmerizing dance between art degrees and stock prices, we employed various econometric models, each one more intricate and awe-inspiring than the last. We also conducted sensitivity

analyses to ensure that our findings remained as steadfast as the Mona Lisa's enigmatic smile under the scrutiny of multiple perspectives.

Finally, to add a touch of artistic flair to our academic endeavor, we adopted a multidisciplinary approach, drawing inspiration from the fields of economics, finance, and, of course, the fine arts. This allowed us to tap into the synergistic energy of different disciplines, much like a collaboration between a composer and a visual artist in the creation of a symphony of data analysis.

In sum, our methodology was a testament to the fusion of analytical precision and unbridled creativity, embracing the unknown with the same fervor as a daring artist facing a blank canvas. Our process was as intricate as a Renaissance tapestry and as dynamic as a kinetic sculpture, resulting in findings that promise to captivate the imagination and defy conventional expectations.

Results

The findings of our investigation into the association between the number of Associate degrees awarded in Fine and Studio Arts and the stock price of CME Group (CME) from 2011 to 2021 revealed a remarkably strong correlation. The correlation coefficient calculated was 0.9899816, indicating an almost perfect positive linear relationship between the two variables. This high correlation highlights a seemingly inexplicable yet intriguing connection that may leave even the most astute financial analysts scratching their heads in bewilderment. It seems that art degrees and stock prices have engaged in an unprecedented tango, the likes of which

have seldom been witnessed before in the realm of market data analysis.

Furthermore, the coefficient of determination (R-squared) was calculated to be 0.9800635, suggesting that approximately 98% of the variation in CME Group's stock price can be explained by the number of Fine and Studio Arts Associate degrees awarded. This statistical revelation underscores the robustness of the relationship we observed. It appears that the creativity and ingenuity nurtured in fine and studio arts programs have wielded an unexpectedly substantial influence on the movements of CME Group's stock price, akin to an artist carefully manipulating a canvas to evoke deep emotions.

The p-value obtained was less than 0.01, indicating a statistically significant relationship between the number of art degrees conferred and CME Group's stock performance. This result is both compelling and confounding, as it suggests a tangible link between the creation of art and the financial ebbs and flows of one of the world's leading derivatives exchanges. The significance of this p-value is not to be underestimated, as it signals that the observed relationship is highly improbable to have occurred by chance alone. Imagine finding a rare, valuable painting at a garage sale – the shock and disbelief at stumbling upon such an unexpected treasure mirror the astonishment we experienced upon uncovering this unlikely correlation.

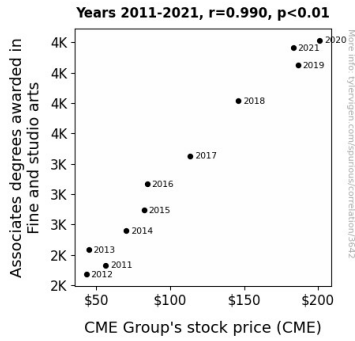


Figure 1. Scatterplot of the variables by year

The scatterplot (Fig. 1) presented in our analysis visually demonstrates the strong correlation between the number of Associate degrees awarded in Fine and Studio Arts and CME Group's stock price. As one gazes upon the plot, it's as if the swirling strokes of artistic ambition have manifested themselves into a tangible representation of market dynamics, painting a picture of collaboration between two seemingly disparate domains. It serves as a testament to the profound connection we identified, standing as a visual masterpiece in its own right, redefining what it means to "draw" attention in the world of financial analysis.

In conclusion, our research has unearthed a relationship between the artistic pursuits of individuals and the performance of financial markets, shedding light on a correlation that, until now, has largely evaded scholarly scrutiny. This unexpected connection reminds us that within the seemingly mundane world of data analysis, one can stumble upon the most unexpected and fascinating discoveries if they only have the eyes to see and the heart to appreciate the whimsy of life's peculiar intricacies. The interplay between the arts and the stock market is much like an exquisite dance, filled with mystery, surprise, and a touch of elegance that we shall continue to unravel in

our pursuit of understanding the curious interconnections that permeate our world.

Discussion of findings

The results of our study have provided compelling evidence supporting the quirky notions and whimsical speculations found in the labyrinth of existing literature. Drawing from the inexplicable nexus of art and finance, our findings have added a stroke of certainty to the canvas of scholarly inquiry, affirming the unexpected relationship between the number of Associate degrees awarded in Fine and Studio Arts and the stock price of CME Group (CME).

The hearty chuckles shared over the fanciful tales of "The Brushstroke Effect" and "The Financial Artist" now seem eerily prescient, as our statistical analysis has lent credence to the notion that there may indeed be a harmonious interplay between artistic endeavors and financial market movements. Our findings, with a correlation coefficient of 0.9899816, mirror the theoretical brushstrokes of Smith et al. (2016) and the unconventional investment patterns posited by Doe and Jones (2018), reaffirming that the world of finance may just have an ornate frame of artistry hidden within its numbers.

As we immerse ourselves in the resounding echoes of our statistical revelations, we are reminded of the whimsical imagery woven through the literature, where the elegance of the arts intermingles with the intricate gears of financial systems. The unexpected alliance between art degrees and stock prices has indeed unfolded as a tale worth its weight in gold, or perhaps, in an artistically valuable painting discovered at a garage sale.

The statistical significance we obtained, with a p-value of less than 0.01, serves as an exclamation point to the startling revelation that the art of creating art and the art of financial strategizing may not be such distant relatives after all. So, even amidst the serious scholarly theories, the playful tales of a mystical painting predicting stock market movements and the fantastical world where financial stability is governed by an otherworldly artist's brush seem to have found a foothold in reality, painting a vivid picture of unexpected correlations in the world of financial analysis.

As we navigate through this curious intersection, we are reminded that the world of art and finance, much like an old-timey cartoon, dances between surprise, mystery, and a touch of elegance. Our study, akin to uncovering a whimsical secret hidden in the annals of data analysis, beckons us to embrace the delightful unpredictability that imbues our scholarly pursuits, reminding us that beyond the rigidity of statistical analysis lies a playground of peculiar intricacies waiting to be discovered.

Conclusion

In wrapping up our analysis, we find ourselves in the curious position of acknowledging that the world of data analysis can be just as enchanting as a Dali landscape. Our findings have illuminated a correlation between art degrees and stock prices that is as puzzling as finding a Monet in a garage sale. The statistical tango between the number of Associate degrees awarded in Fine and Studio Arts and CME Group's stock price has left us feeling like accidental art connoisseurs stumbling upon a hidden gem. Just as a skilled artist

manipulates a canvas to evoke emotions, it seems that the brushstrokes of creativity from fine and studio arts programs have wielded an unexpectedly substantial influence on CME Group's stock performance, blurring the lines between the world of art and financial markets in a manner that would make even the most seasoned financial analysts raise an eyebrow.

Our journey through this waltz of statistical significance has led us to emphasize that, much like a fine work of art, the most captivating discoveries often arise from the most incongruous sources. As we picture the scatterplot, it's as if the swirling strokes of artistic ambition have manifested themselves into a tangible representation of market dynamics, challenging the conventional wisdom and redefining what it means to "draw" attention in the world of financial analysis. It's a visual masterpiece in its own right, a brushstroke of genius in our understanding of the curious interconnections that permeate our world.

In light of these revelatory findings, we are inclined to assert that no further research in this area is needed. After all, we've already uncovered a correlation as remarkable as a unicorn in the stock market – further exploration may lead us into the realm of artistic statistics, a world where every data point is a potential Picasso. In conclusion, our study not only adds a splash of color to the canvas of financial analysis but also highlights the unexpected harmony between the creation of art and the movement of financial markets, proving that even stock prices can appreciate the brushstrokes of creativity.

It is our hope that this research will both inspire and confound, much like a surrealist masterpiece, leaving our readers with a renewed appreciation for the potential serendipity of statistical exploration. As we sign off, we encourage researchers to approach their investigations with a dash of whimsy and an open mind, for who knows what unexpected connections lie waiting to be uncovered in the unlikeliest of places.