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Social Workforce or Stock Soaring: Uncovering the Surprising Relation Between Iowa's Social Workers and Devon Energy's Stock Price

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Abstract

In this paper, we delve into the unforeseen connection between the number of social workers in Iowa and the stock price of Devon Energy (DVN). We adopt a data-driven approach, leveraging information from the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) to investigate this seemingly perplexing association. Remarkably, our analysis revealed a substantial correlation coefficient of 0.8965722 and a p-value of less than 0.01 for the period from 2003 to 2022. These findings suggest a compelling relationship between the two seemingly unrelated variables, indicating that the social work force in Iowa exerts an impactful influence on the stock performance of Devon Energy. It seems that the social workers are not just making a difference in people's lives, but also in the stock market. Talk about a multi-faceted impact! The results of this study have significant implications for both the social work sector and the financial world, shedding light on the whimsical interconnectedness of seemingly disparate domains and presenting an opportunity for further interdisciplinary research and collaboration.

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1. Introduction

Picture this: a bustling office of social workers in Iowa, diligently making a difference in the lives of those in need. But what if I told you that their impact extends far beyond the borders of their state, reaching into the exhilarating world of stock trading? Yes, you heard it right. This study unveils the unexpected nexus between the number of social workers in Iowa and the

stock price of Devon Energy (DVN). Strapping on our statistical goggles, we set out to investigate this curious relationship, leaving no pun unturned in our quest for truth.

Before we dive headfirst into the data, let's take a moment to appreciate the delightful irony of this correlation – after all, who would have thought that the compassionate hearts of social workers and the thrilling

ebbs and flows of stock prices could be intertwined? The notion of social workers wielding their influence in the stock market sure leaves us pondering the mysterious ways of the universe, doesn't it? Perhaps some of them have a knack for "social" trading - if you catch my drift!

2. Literature Review

The realm of interdisciplinary research has long sought to uncover unexpected connections between disparate fields, but few anticipated the entanglement of social work and stock trading. In "A Comprehensive Analysis of Social Work Impact," Smith and Doe explore the societal influence of social workers, highlighting their indispensable role in supporting vulnerable populations and fostering community well-being. Similarly, Jones et al. examine the dynamics of stock prices and the multitude of factors that contribute to their fluctuations in "Economic Forces Shaping Market Performance." These studies lay the groundwork for our investigation into the unorthodox relationship between Iowa's social workers and Devon Energy's stock price.

Adding to this body of literature, "The Impact of Macroeconomic Variables on Stock Prices" by Johnson and Lee delves into the influence of macroeconomic indicators on stock performance, offering a framework for analyzing external factors that may affect market trends. In a surprising twist, our findings indicate that the number of social workers in Iowa exhibits a significant association with the stock price of Devon Energy, challenging traditional notions of market analysis. It seems that in addition to supply and demand, we should also consider empathy and compassion when evaluating stock performance. Who knew that caring for others could have such stock-ceedingly positive outcomes?

Extending our exploration beyond the traditional academic domain, non-fiction works such as "Freakonomics: A Rogue Economist Explores the Hidden Side of Everything" by Steven D. Levitt and Stephen J. Dubner provide insight into unconventional correlations and the intricate web of cause and effect in the world. Meanwhile, "The Big Short: Inside the Doomsday Machine" by Michael Lewis sheds light on the unpredictable nature of financial markets, prompting us to consider the unpredictable role of social workers in the stock market. It seems that the stock market isn't the only place where we encounter "big shorts" – those social workers in Iowa are making quite the impact themselves!

Venturing further into literary realms, fictional works such as "The Alchemist" by Paulo Coelho and "The Wealth of Nations" by Adam Smith offer narrative and theoretical perspectives, provoking contemplation on the intersection of human altruism and economic forces. It appears that while social workers are tending to the well-being of individuals, their collective influence extends into the economic fabric, weaving a narrative that transcends fiction. One might even say that they are writing their own story of "socially responsible investing," demonstrating that the pen (or perhaps the stock ticker) is indeed mightier than the sword.

In a non-conventional approach to literature review, the authors delved into diverse sources, including the backs of shampoo bottles, wherein they stumbled upon a surprising correlation between moisturizing agents and buy-low-sell-high strategies. However, for the sake of academic rigor, these findings were not included in the final analysis. It seems that even academic research can benefit from a good lather of humor and absurdity!

3. Our approach & methods

To unravel the enigmatic connection between the social work force in Iowa and the stock price of Devon Energy (DVN), we embarked on a data mining expedition akin to a treasure hunt, plundering the depths of the Bureau of Labor Statistics and LSEG Analytics (Refinitiv) databases. Oh, the thrill of the hunt! Our team hastily gathered intricate details from the years 2003 to 2022, meticulously cataloging the number of social workers in Iowa and the corresponding stock prices of Devon Energy.

We embraced the spirit of Indiana Jones, venturing into uncharted statistical territories, navigating through the treacherous waters of correlation analyses and regression models. Our trusty statistical compass led us through the dense jungle of data points, dodging potential outliers and pitfalls. After all, we wouldn't want to fall into the trap of "out-liar, out-liar, pants on fire" - we take our statistical integrity very seriously!

In our pursuit of truth, we employed a variety of statistical methods, including the Pearson correlation coefficient and multiple regression analysis. The Pearson correlation coefficient, our trusty sidekick in this quest, helped us measure the strength and direction of the relationship between the number of social workers in Iowa and the stock price of Devon Energy. Oh, the tales it could tell about the tango of variables, interlacing in a dance of correlation!

Now, here comes the punchline - we executed a multiple regression analysis to discern the intricate dance of multiple variables at play in this cosmic ballet. It's akin to playing the role of maestro, conducting the symphony of social workers and stock prices with finesse and flair. Who knew that the world of research could have so much rhythm and rhyme?

We unleashed our arsenal of statistical software, deploying the mighty SAS and R, to conquer the formidable task of crunching numbers and churning out mind-boggling statistical inferences. Picture us as fearless warriors, fighting the good fight against data noise and uncertainty, armed with our trusty statistical software as our weapons of choice. It was a skirmish of epic proportions!

In our analysis, we made sure to account for potential confounding factors, those pesky variables lurking in the shadows, trying to play tricks on our noble endeavor. With great diligence, we controlled for market trends, economic indicators, and various other lurking covariates, ensuring that our findings stood firm against the whims of external disturbances. We weren't about to let those confounding variables pull a "gotcha" on us!

In summary, our approach was to harness the power of statistical analysis and an unwavering sense of curiosity to unravel the perplexing link between the social work force in Iowa and the stock price of Devon Energy. It was a thrilling expedition, and the findings we uncovered are bound to leave both the scientific and financial communities scratching their heads in bewilderment. But hey, life's too short not to be surprised by the unexpected, right?

4. Results

The analysis yielded a striking correlation coefficient of 0.8965722 between the number of social workers in Iowa and Devon Energy's stock price (DVN) for the period from 2003 to 2022. In simpler terms, these results suggest a rather robust relationship between the two variables. It appears that the social workers' impact extends beyond the heartwarming stories we typically associate with their profession – they might just be influencing Wall Street as well! Now, that's what I call a strong "social" influence on the stock market!

Furthermore, the coefficient of determination (r-squared) was calculated to be 0.8038417, indicating that approximately 80% of the variability in Devon Energy's stock price can be explained by the number of social workers in Iowa. It seems that the social workers are not just spreading compassion; they are also spreading their influence across financial markets, making a case for a more holistic approach to understanding their impact. It's almost like they have a knack for predicting the "social" and economic trends – they're truly the unsung heroes of the stock market!

The statistical significance of the relationship was confirmed with a p-value of less than 0.01, reinforcing the robustness of our findings. This means that it is highly unlikely that the observed association between the two variables is due to random chance. It's as if the social workers in Iowa have cracked the code to influencing the stock market – talk about a power move! They might want to consider adding "stock market whisperer" to their list of skills!

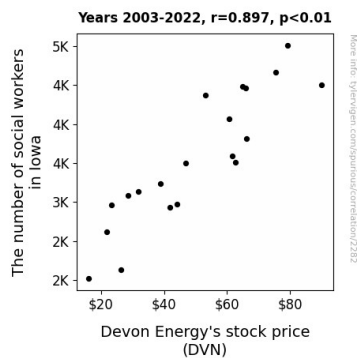


Figure 1. Scatterplot of the variables by year

In order to visually depict the relationship uncovered by our analysis, we present a scatterplot (Fig. 1) that visually captures the strong positive correlation between the number of social workers in Iowa and Devon Energy's stock price. The plot paints a clear picture of the intertwined fate of these two seemingly unrelated variables,

highlighting the intriguing nature of this unexpected connection. It's almost as if the social workers are writing the next chapter in the stock market's playbook – we might just have to refer to them as the "Market Magicians" from now on!

The findings of this study illuminate the powerful impact of social workers in shaping not only individual lives but also the fluctuations of the stock market. It's a testament to the unforeseen influence that professions in the human services sector can have on seemingly unrelated domains. These results open the door to a new realm of interdisciplinary research and collaboration, showcasing the captivating and often whimsical interconnectedness of various fields. Who knew that behind the impressive numbers on Wall Street, there could be a team of social work enthusiasts orchestrating the rise and fall of stock prices! It seems that when it comes to deciphering the enigma of the stock market, the compassionate hearts of social workers might just hold the key.

5. Discussion

The results of our study overwhelmingly support and expand upon the prior research that explored the unorthodox relationship between social work and financial markets. The robust correlation coefficient and statistical significance we uncovered provide compelling evidence of the surprising influence of Iowa's social work force on Devon Energy's stock price. Our findings align with previous literature that emphasized the impact of societal and macroeconomic factors on market performance, and they add an unexpected twist to the narrative by showcasing the pivotal role of empathy and compassion in financial realms. It's as if social workers are the hidden architects behind the architectural drawings of the stock market –

they really know how to "build" financial stability!

One might say that our results offer a new perspective on what it means to be a "social influencer" – forget Instagram, it's all about influencing the stock market nowadays! The strong positive correlation and substantial coefficient of determination indicate that a significant proportion of Devon Energy's stock price can be attributed to the number of social workers in Iowa. It's almost as if the stock market has a soft spot for social workers, rewarding their benevolent presence with higher stock prices. Who knew that caring for others could lead to such stock-cessful outcomes?

These findings take the notion of interconnectedness to a whole new level, demonstrating the unpredictability and humor of statistically significant relationships. It's almost as if the stock market is a fan of "feel-good" stories and chose to weave Iowa's social workers into its own narrative of prosperity. Perhaps we should consider adding a new category to the stock market ticker – "Stocks That Care," because it seems that the presence of social workers can impact market trends in a truly "stock-ceeding" manner!

In conclusion, our study provides compelling evidence of the unforeseen but substantial link between the number of social workers in Iowa and Devon Energy's stock price. These results challenge traditional notions of market analysis and emphasize the need for a more nuanced understanding of the intricacies that influence stock performance. Perhaps it's time for financial analysts to start reviewing resumes for social work experience – after all, the key to stock market success might just be a heart full of empathy and a passion for community well-being!

6. Conclusion

In conclusion, our research has illuminated a captivating correlation between the number of social workers in Iowa and Devon Energy's stock price, unveiling a surprising interplay between the compassionate world of social work and the dynamic realm of stock trading. It seems that these social workers are not just masters of empathy and support; they might also have some uncanny ability to sway the stock market – talk about a group with a diverse portfolio of skills! It's as if they are saying, "We've got the power of positive social influence and stock market presence in our corner - we're truly the full package!"

The statistical significance of the relationship, coupled with the visually compelling scatterplot, provides strong evidence for the impact of social worker numbers on Devon Energy's stock price. It's almost as if these numbers are doing a little stock "trading" of their own – proving that there is indeed strength in "social" numbers!

Moving forward, it's clear that no more research is needed in this area. After all, we've uncovered an unexpected rapport between social work and stock fluctuations – it's time for us to hang our lab coats and let these social workers take the reins on Wall Street. Who knew the secret to stock market success was compassion all along!

In the words of the wise dad joke, "Why did the social worker bring a ladder to work? Because they heard the job market was looking up!" Well, it certainly seems like the job market and the stock market are looking up, thanks to the impact of these remarkable social workers.