Navigating the Suez: The Actuary Search for Cana-logical Signs

Caroline Henderson, Andrew Tucker, Gemma P Tyler The Journal of Maritime Mathematics and Nautical Economics The Institute for Maritime Risk Assessment and Geospatial Analysis Chapel Hill, North Carolina

Abstract

In this paper, we set sail on a peculiar voyage to uncover the mysterious link between the number of actuaries in Georgia and Google searches for the infamous Suez Canal. Utilizing Bureau of Labor Statistics data and Google Trends analytics, our research team embarked on a quest to navigate the uncharted waters of this peculiar connection. To our surprise, we discovered a strong correlation coefficient of 0.8874707 and a significance level of p < 0.01 for the period spanning 2004 to 2022. This study sheds light on the unexpected currents that tie the world of actuarial science to the ebb and flow of global web searches. As we chart a course through the sea of data, we uncover the buoys of statistical significance and the undercurrents of trending queries, leading us to wonder just how deep the waters of causation truly run. Join us as we delve into this curious confluence of numbers and explore the depths of the Suez-actuarial relationship.

1. Introduction

As the old saying goes, "There are lies, damn lies, and statistics." But what if those statistics lead us to unexpected and amusing discoveries? In this paper, we embark on a journey that is part treasure hunt, part detective story, and all statistical adventure. Our quest? To unravel the enigmatic connection between the number of actuaries in Georgia and the Google searches for the fabled Suez Canal. Could it be that the actuarial profession holds the key to unlocking the mysteries of global internet intrigue? Join us as we navigate this tangled web of data and embark on a journey that promises to be both informative and unusually whimsical.

The Suez Canal, a vital artery of global trade, evokes images of massive ships navigating the narrow waterway, connecting the Mediterranean Sea to the Red Sea and beyond.

Meanwhile, the bustling city of Atlanta, Georgia, is home to a growing community of actuaries, those intrepid number-crunchers who navigate the treacherous seas of risk and probability with the poise of seasoned sailors. What could possibly link these seemingly disparate entities? As we steer our course through the waves of data, we will unveil the unexpected correlations that bob to the surface, making waves in the world of statistical analysis.

As our ship sets sail on this unusual voyage of discovery, we invite you to hoist the mast of curiosity and join us in navigating the Suez: The Actuary Search for Cana-logical Signs. But be warned, this journey is not for the faint of heart – we cannot guarantee smooth sailing, but we can promise an intriguing, and at times amusing, exploration of the curious currents that connect the world of actuarial science with the digital tides of internet search queries. So batten down the hatches and prepare to be entertained and enlightened as we uncover the unexpected alliances lurking beneath the surface of data-driven analysis.

2. Literature Review

The curious confluence of the number of actuaries in Georgia and Google searches for the Suez Canal has sparked scholarly intrigue and puzzled pundits in the realm of statistical analysis. Smith et al. (2018) provided initial insights into the burgeoning field of Suez-actuarial symbiosis, highlighting the intersections of maritime economics and the risk-pricing expertise of actuaries. Meanwhile, Doe (2020) delved into the depths of internet search patterns, uncovering the enigmatic surge in Suez-related queries when juxtaposed with the geographical distribution of actuaries. Jones (2016), in a pioneering work, demonstrated the nuanced correlation between professional demographic trends and historical seafaring narratives, invoking the spirit of adventure in the often-dry landscape of actuarial literature.

Turning the helm to non-fiction publications, "The Suez Canal: A Vital Waterway" offers a comprehensive account of the canal's historical and geopolitical significance, providing a backdrop to contextualize the unexpected linkage with actuarial activities. In a similar vein, "Probability: A Primer for the Perplexed" introduces the reader to the esoteric world of probability and risk assessment, setting the stage for a whimsical exploration of actuarial curiosities.

However, as we navigate deeper into the murky waters of our search for scholarly insights, we encounter a peculiar crosswind of fictitious works that, while not directly related, add a buoyant and irreverent spirit to our quest. "The Suez Secret: An Actuarial Adventure" spins a tale of intrepid number-crunchers braving the enigmatic waters of the Suez, perhaps unwittingly foreshadowing our own exploration. Meanwhile, "The

Probability Paradox: A Mathematical Mystery" seduces readers with the promise of unraveling perplexing probabilities, echoing the intrigue of our own puzzling correlation.

In an unexpected turn, our research team cast their net wider, venturing beyond traditional academic sources to scour the unlikeliest of repositories for insights – the humble CVS receipts. Much to our surprise, amidst the mundane listings of overpriced candy and inexplicable coupons, we stumbled upon a fabled parchment that bore cryptic inkblots hinting at a mysterious connection between Georgia's actuarial community and the ever-fascinating Suez Canal. While we cannot vouch for the scientific rigor of this unconventional source, its unexpected contribution to our inquiry cannot be dismissed outright.

As we prepare to unpack the findings of our own research, we urge readers to fasten their seatbelts and brace for a rollercoaster ride of statistics, whimsy, and unforeseen revelations. Set sail with us as we navigate the choppy waters of causation, and remember, while correlation does not imply causation, it certainly does make for an intriguing and occasionally uproarious journey.

3. Research Approach

To unveil the intricate link between the number of actuaries in Georgia and Google searches for the illustrious Suez Canal, our research team embarked on a methodological quest that would make even the hardiest statistician raise an eyebrow or two. We scoured the digital landscape, navigating through a thicket of data sources and analytical tools to chart our course through the stormy seas of correlation analysis.

First, we cast our nets into the vast ocean of Bureau of Labor Statistics data, capturing the annual count of actuaries in the state of Georgia from 2004 to 2022. Armed with this treasure trove of employment figures, we next turned our eyes to the turbulent waves of Google Trends, scavenging for the peaks and troughs of global interest in the Suez Canal over the same period.

With the wind in our sails and data in hand, we steered our course toward the shores of statistical analysis. Employing the almighty powers of Pearson's correlation coefficient, we set about unraveling the tangled knot of numerical confluence between our two unlikely companions – the number of actuaries and the search queries for the Suez Canal. But, dear reader, we did not stop there. No, we ventured beyond the familiar shores of correlation to seek the elusive shores of statistical significance, heeding the call of the p-value and its signal of meaningful connections amidst the sea of data.

As we sailed through the choppy waters of methodology, we were at times beset by the squalls of uncertainty, questioning whether our chosen path would lead us to the fabled shores of scientific discovery, or if we had merely embarked on a fool's errand. But with

the unwavering compass of scientific rigor guiding our course, we steered our research vessel toward the shores of correlation and significance, daring to ask, "Can the ebb and flow of actuarial numbers truly influence the tidal waves of Google searches for a distant canal?"

In the end, dear reader, our odyssey through the methodological seas has yielded a bounty of statistical insights that may just leave you shipwrecked with wonder. So hoist the flag of curiosity high and join us as we splice the mainbrace of data analysis and set a course to navigate the Suez-actuary conundrum. Smooth sailing? Perhaps not, but the thrill of discovery and the promise of unexpected connections await those who dare to embark on this statistical voyage.

4. Findings

The investigation into the relationship between the number of actuaries in Georgia and Google searches for the Suez Canal yielded intriguing findings. Our analysis revealed a remarkably strong correlation coefficient of 0.8874707, indicating a robust positive relationship between these two seemingly disparate variables. The coefficient of determination (r-squared) of 0.7876042 suggests that approximately 78.76% of the variation in Suez Canal searches can be explained by the number of actuaries in Georgia. Furthermore, the p-value of less than 0.01 indicates that the observed correlation is statistically significant.

The relationship between these variables is visually depicted in Fig. 1, which presents a scatterplot illustrating the pronounced positive correlation between the number of actuaries in Georgia and Google searches for the Suez Canal. The data points form a tight cluster, affirming the strength of the association.

The unexpected connection uncovered in this study raises fascinating questions about the underlying mechanisms driving these trends. While we had initially set sail to uncover the mysteries of actuarial science and internet intrigue, the navigation of this particular statistical channel has led us to ponder the deeper currents at play. It seems that beneath the surface of numbers and web searches lies a mysterious confluence, perhaps hinting at deeper causative forces or merely reflecting the quirks of human curiosity.



Figure 1. Scatterplot of the variables by year

Despite the whimsical nature of our initial quest, the robustness of the correlation coefficient and its statistical significance demand serious reflection. This unexpected discovery sheds light on the curious interplay between the world of actuarial science and the digital tides of internet search queries, inviting further exploration into the depths of this peculiar relationship.

5. Discussion on findings

The results of our investigation have set a course for some rather intriguing discussions, much like a playful game of "actuary of the Suez." The strong positive correlation we uncovered between the number of actuaries in Georgia and Google searches for the Suez Canal echoes the findings hinted at in the literature. It's as if we were navigating the uncertain waters of academic inquiry only to find a marvelously buoyant confirmation of prior research, and yes, the seas are indeed a bit punny.

Our findings stand as a testament to the whimsical winds that seemingly blow through the world of statistical analysis. The correlation coefficient of 0.8874707 offers a robust affirmation of the uncanny connection between these seemingly distinct variables, akin to the harmonious convergence of winds and currents charting a common course in the ocean of data.

The results not only support the existing literature's undertakings, but they also give rise to further questions. Much like discovering a hidden treasure map in a dusty, tome-filled library, our findings reveal a mysterious pathway that propels us further into the uncharted realms of actuarial and digital interactions.

It's rather delightfully surprising, is it not, how this seemingly tangential correlation has emerged as a significant beacon in our scholarly exploration? It is almost as if the very waves of data themselves were nudging us towards this peculiar discovery, as if to say, "Set your course toward the confluence of numbers and queries, for there lies a tale yet untold."

As we embark on the next leg of our academic odyssey, it becomes increasingly clear that our research has opened a veritable Pandora's box of curiosity. By charting this unexpected correlation, we begin to ponder the causative undercurrents at play in the sea of statistics. The enigmatic forces driving this curious connection remain just as elusive as the fabled Kraken dwelling in the depths of yore.

In conclusion, this peculiar confluence of numbers and queries stands as a testament to the endearing whimsy that often underlies the most steadfast of scholarly pursuits. Our findings not only enrich the academic discourse but also invite fellow researchers to join us in navigating the moments of wonder and mystery that lay hidden in the treasured depths of data. So, fellow scholars, secure your life vests and batten down the hatches; for the search for Cana-logical signs is far from over.

6. Conclusion

In conclusion, our peculiar voyage through the uncharted waters of actuarial science and Google search activity has illuminated a curious confluence of numbers. The robust correlation coefficient of 0.8874707 and the statistically significant p-value continue to baffle and intrigue our research team. It seems that, much like the meandering route of a cargo ship through the Suez Canal, the path of statistical discovery can lead us to unexpected and amusing destinations.

The strong connection between the number of actuaries in Georgia and searches for the Suez Canal suggests a tangential relationship that continues to defy conventional wisdom. It appears that the currents of causation between these seemingly disparate realms run deeper than anticipated, leading us to wonder about the unseen forces at play.

As we navigate this statistical channel, we are reminded of the old saying, "It's all fun and games until someone loses an 'r'." However, in this case, we seem to have gained an 'r' of tremendous significance. We must also acknowledge that this unexpected correlation has the potential to add a new dimension to our understanding of the interplay between professions and global internet intrigue.

Our findings not only highlight the unexpected ties between actuarial science and maritime fascination but also underscore the whimsical nature of statistical exploration. In the grand scheme of academic pursuits, this peculiar connection reminds us that sometimes the most surprising discoveries come when we venture into uncharted waters.

In light of these findings, we confidently assert that no further research is needed in this area. This unusual alliance between the world of actuaries and the digital tides of internet

queries is a fascinating intellectual oddity, worthy of recognition and a moment of whimsical reflection.