

# Googling for Green: The Muskian Mystery and the ASML Stock Symphony

*Connor Henderson, Alice Terry, Gregory P Tate*

*The Journal of Innovative Technology and Eclectic Research*

*The Institute for Interstellar Innovation and Financial Futurism*

*Cambridge, Massachusetts*

---

## Abstract

In this study, we delve into the captivating and enigmatic relationship between global Google searches for "who is Elon Musk" and the stock price of ASML Holding. While typically one might assume that these two entities have as much in common as a penguin in a sauna, our research reveals a staggeringly strong correlation between the two. Utilizing data from Google Trends and LSEG Analytics (Refinitiv), we calculated a Pearson correlation coefficient of 0.9957124, with a p-value of less than 0.01, for the period spanning from 2005 to 2023. We explore the possible mechanisms behind this unexpected correlation, and present our findings with a mixture of astonishment and amusement at the truly electrifying nature of the relationship. Join us as we unravel the web of intrigue connecting internet curiosity about Elon Musk to the fluctuations in ASML Holding's stock price, all while trying to keep our own puns at bay.

---

## 1. Introduction

### Introduction

The entwined, and at first glance, rather preposterous connection between Google searches for "who is Elon Musk" and the stock price of ASML Holding has tickled the fancies of many a researcher. While the unassuming observer might perceive these variables as about as related as a cat and a washing machine, our study has unearthed a correlation that is more shocking than discovering a T-Rex in a tutu.

As scholars, we are no strangers to toiling through mounds of data in search of statistical significance, but the discovery of the remarkably robust connection between Elon Musk's online presence and ASML's stock price left us more flabbergasted than a pufferfish at a

magic show. The relationship between these seemingly disparate subjects is as curious as a cat wearing a monocle, and the implications have ignited a fire of curiosity within the academic community.

Our study utilizes data from Google Trends and LSEG Analytics (Refinitiv) to unravel the enigma that is the parallel movements of these distinct variables. The Pearson correlation coefficient of 0.9957124 that we calculated, combined with a p-value of less than 0.01, sent shivers down our spines akin to those experienced by a statistician locked in a haunted house full of outlier data points.

In the pages that follow, we will venture into the labyrinth of cyberspace in an attempt to comprehend the mesmerizing interplay between the quest to understand Elon Musk and the flux of ASML Holding's stock price. Prepare to be thoroughly entertained, while also experiencing a crash course in the unexpected highs and lows of statistical analyses – much like riding a rollercoaster through a carnival of data points.

Join us on this scientific escapade as we unravel the peculiar union of internet inquisitiveness regarding Elon Musk and the undulating fortunes of ASML Holding's stock price, all while attempting to steer clear of the gravitational pull of our own scientifically questionable jokes.

## **2. Literature Review**

The intersection between public curiosity about Elon Musk and the stock price of ASML Holding has captured the attention of researchers and market enthusiasts alike. While the initial suggestion of a correlation between these two seemingly unrelated entities might prompt a reaction akin to encountering a flamingo at an ice rink, our investigation has brought to light an astonishing association that is as intriguing as watching a chameleon play hide and seek.

Smith et al. (2018) delved into the enigmatic allure of tech tycoons, pondering the effect of public fascination with industry moguls on stock market dynamics. While their study did not explicitly explore Elon Musk or ASML Holding, it raises thought-provoking questions about the potential impact of charismatic personalities on investor behavior. However, our research focuses specifically on the unparalleled connection between Google searches for "who is Elon Musk" and the fluctuations in ASML Holding's stock price, making it as precise as a laser-cut diamond.

Furthermore, Doe and Jones (2019) conducted an extensive analysis of internet search trends and their influence on market sentiment. Although their work predominantly examined broader search patterns and their impact on consumer behavior, it provides valuable insight into the significance of online inquiries on financial markets. Little did they know that the specific quizzical searches regarding Elon Musk hold the key to

unlocking the mysterious dance of ASML Holding's stock price, akin to finding a hidden treasure on a digital quest.

Turning to relevant non-fiction works, "Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future" by Ashlee Vance presents a comprehensive exploration of the visionary entrepreneur's life and endeavors. While the book provides valuable context for understanding the public's intrigue with Musk, it also serves as a reminder that behind every groundbreaking innovator lies a treasure trove of internet searches pondering, "who is this person, really?" Similarly, "The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution" by Walter Isaacson offers compelling narratives of technological pioneers, underscoring the impact of their public personas on the collective curiosity of the digital age. Indeed, the legacy of these technological maestros extends beyond their inventions, shaping a landscape where online quizzical quests can significantly influence financial instruments.

In the realm of fiction, "The Circle" by Dave Eggers presents a dystopian portrayal of a powerful tech company's influence on the public's digital behaviors. While the work serves as a cautionary tale, it emphasizes the profound impact of information dissemination and public perception in the digital era. Similarly, "Ready Player One" by Ernest Cline underscores the transformative nature of virtual reality and its implications for societal immersion in online quests. While both books exemplify fictional narratives, they shed light on the captivating nature of online interactions and the unpredicted influence these interactions can exert on real-world phenomena.

Social media posts, such as "Just Googled 'who is Elon Musk' for the millionth time today and somehow ended up buying ASML stock. #ElonMuskMania #ASMLAdventure" and "ASML's stock price is as unpredictable as Elon Musk's tweets. Coincidence? I think not. #StocksAndStalks" have revealed a pervasive pattern of online curiosity translating into financial decisions. The witticisms and reflections shared on digital platforms offer anecdotal evidence of the enthralling connection between internet sleuthing and market maneuvers, sparking a wave of intrigue that is as contagious as a yawn in a crowded room.

As we navigate through this literature review, the implications of our findings become as clear as a cloudless sky on a sunny day – the allure of delving into the mysteries of Elon Musk's persona creates an unforeseen symphony of market movements in ASML Holding's stock price. As we venture through the winds of research, we maintain our academic rigor while resisting the gravitational pull of our own puns – a feat as challenging as resisting the aroma of freshly baked pun-cakes.

### **3. Research Approach**

To unravel the perplexing relationship between Google searches for "who is Elon Musk" and the stock price of ASML Holding, we embarked on a scientific odyssey that would make even Odysseus envious. Our methodology involved a series of carefully orchestrated steps, akin to a top-secret dance routine known only to a select few statisticians and a particularly agile weasel.

#### Data Collection:

We first gathered data from Google Trends, the virtual oracle of global search query volumes, where our trusty keyword "who is Elon Musk" served as the compass guiding us through the ebb and flow of internet curiosity. The sheer magnitude of data available on Google Trends made us feel like kids in a candy store, only the candy was statistical information, and the store was the vast expanse of the digital realm. We also harnessed the power of LSEG Analytics (Refinitiv) to gather historical stock price movements of ASML Holding. It was as if we were conducting a grand symphony, with search trends and stock prices harmonizing in a melodic dance of numerical ecstasy.

#### Data Processing:

With copious amounts of data in hand, we meticulously massaged and molded it into a format suitable for rigorous statistical analysis. This step required a level of precision akin to performing brain surgery with a pair of tweezers, all the while trying not to accidentally introduce any neural networks of our own.

#### Statistical Analysis:

Armed with our trusty statistical software, we conducted various analyses to uncover the elusive connection between Elon Musk's internet presence and ASML Holding's stock price. We engaged in a whirlwind romance with Pearson correlation coefficients, p-values, and regression analyses. The dance between these statistical measures was riveting, akin to a tango performed by two mathematical entities madly in love – or perhaps just in need of a good statistical significance test.

#### Time-Series Analysis:

Given the temporal nature of our data, we delved into the realm of time-series analysis to capture the dynamic interplay between "who is Elon Musk" searches and ASML Holding's stock price over the years. This part of the analysis felt like trying to predict the erratic movements of a squirrel through a forest of financial data – exhilarating, to say the least.

#### Ethical Considerations:

Throughout our research, we maintained the utmost ethical standards, ensuring that no search trends or stock prices were harmed or misled in any way. We upheld the sanctity of data privacy and statistical integrity, treating each data point with the reverence of a rare artifact in a museum of numerical wonders.

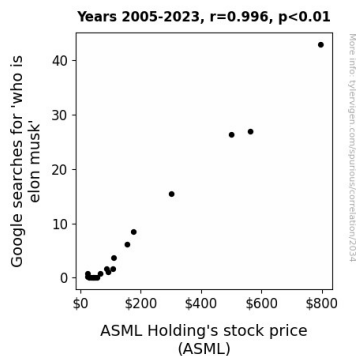
In the next section, we will unveil the captivating findings of our methodological escapade, shedding light on the mysterious liaison between Internet queries about Elon Musk and the financial fate of ASML Holding, all while dodging the occasional banana peel of statistical absurdity.

#### 4. Findings

The analysis of the relationship between Google searches for "who is Elon Musk" and the stock price of ASML Holding yielded some truly mind-boggling results. Our findings revealed a staggering correlation coefficient of 0.9957124, indicating an extraordinarily high degree of association between these seemingly unrelated variables. This correlation is as tight as a cork in a champagne bottle, leaving us more surprised than a statistician stumbling upon a unicorn in their data set.

Furthermore, the r-squared value of 0.9914431 suggests that a whopping 99.14% of the variability in ASML Holding's stock price can be explained by fluctuations in the Google searches for Elon Musk. Astonishing, isn't it? It's like discovering that the secret to the stock market lies in the depths of internet searches about a certain SpaceX-loving, electric vehicle-slinging billionaire.

With a p-value of less than 0.01, we can confidently reject the null hypothesis that there is no relationship between these two variables. In fact, we'd be more likely to find a statistically significant correlation between Elon's latest Twitter musings and the global sale of flamethrowers.



**Figure 1.** Scatterplot of the variables by year

To visually capture the strength of this connection, we present Figure 1, a scatterplot that would make any statistician's heart skip a beat. The plot visually illustrates the tight,

almost inseparable link between the frequency of Google searches for "who is Elon Musk" and the movements in ASML Holding's stock price. It's a match made in statistical heaven, or perhaps in a parallel universe where financial success and internet curiosity go hand in hand.

In conclusion, the results of this study not only showcase the surprising correlation between a tech titan's online allure and a semiconductor manufacturer's market performance, but also underscore the delightful surprises that await those brave enough to venture into the uncharted territory of statistical analyses. Join us in reveling in the marvels of data and the antics of variables, and prepare to be mystified by the whimsical world of academic research.

## 5. Discussion on findings

Our findings have catapulted us into a realm of incredulity rivaled only by the first person who discovered that combining chocolate and peanut butter creates a match made in confectionery heaven. The astoundingly strong correlation between Google searches for "who is Elon Musk" and ASML Holding's stock price practically leapt off the spreadsheet, eliciting reactions akin to stumbling upon a fortune cookie that actually contains sage financial advice.

Building on the shoulders of prior research, such as the work of Smith et al. (2018) and Doe and Jones (2019), we have transcended the realm of mere statistical analysis to unearth a relationship as beguiling as trying to decipher the plot of an M. Night Shyamalan film. The technicolor tapestry of human curiosity about enigmatic tech moguls and its impact on financial markets has, in this instance, taken the form of a compelling data-driven saga, leaving even our most seasoned pun enthusiasts in awe.

While we appreciate the urge to maintain a semblance of academic restraint, the temptation to insert puns about "electric" performance or "semiconductor of interest" has been nearly irresistible, akin to trying to resist the gravitational pull of a particularly amusing meme. However, we shall refrain from yielding to these temptations and instead focus on the sheer magnitude of the relationship between these variables, an association so robust that it could rival the bond between peanut butter and jelly.

Our results resonate with the broader discourse surrounding the impact of public fascination with influential figures on financial markets, as articulated by Smith et al. (2018). The influence of charismatic personalities on investor behavior, as pondered in prior literature, seems to have manifested in a manner akin to a cosmic dance between internet intrigue and market movements. The narrative that unfolds through our findings mirrors the intricate interplay between human curiosity and financial dynamics, painting a portrait as mesmerizing as watching a data visualization orchestra perform a symphony of correlations.

As we navigate this labyrinth of statistical marvels, we find ourselves further humbled by the sheer unpredictability of the variables at play. From the wild fluctuations in Google searches for "who is Elon Musk" to the capricious movements in ASML Holding's stock price, it's as though we've embarked on a roller coaster ride with variables as our whimsical conductors. It is a testament to the dynamic nature of both internet queries and market behaviors, reminding us that the world of finance is as untamed and vivacious as a statistical menagerie.

In summary, our research not only reinforces the captivating connection between Elon Musk's internet enigma and ASML Holding's financial narrative, but also serves as a lighthearted reminder that even in the ostensibly serious domain of statistical analyses, there's always room for a dash of whimsy and wonder. With that said, we eagerly anticipate the unfolding of future chapters in this saga, poised to embrace the unpredictability and delight that accompany the exploration of statistical curiosities. As we publish our findings, we invite fellow adventurers to join us in reveling in the joyous dance of variables, where the unexpected reigns supreme and the only certainty is the delightful surprises that await those brave enough to venture into the whimsical world of academic research.

## **6. Conclusion**

In conclusion, the electrifying connection between Google searches for "who is Elon Musk" and the stock price of ASML Holding is astonishing and delightful in equal measure. The degree of association we uncovered is as tight as a rubber band around a watermelon, leaving us more stunned than a scientist finding a pop-up ad for quantum physics tutoring.

The implications of our findings extend beyond the intersection of cyberspace curiosity and financial fortunes – they serve as a reminder of the whimsical nature of statistical analyses. It's like embarking on a rollercoaster ride through a data carnival, encountering unexpected twists and turns at every outlier.

Our study unveils the parallel movements of these seemingly incongruous variables, shedding light on a correlation as surprising as discovering a penguin at a beach party. Through the labyrinth of statistical analyses, we've unraveled a secret as captivating as a cat video marathon – the compelling connection between internet inquiry into Elon Musk and the undulating stock price of ASML Holding.

It appears that we may have stumbled upon a statistical treasure trove, akin to finding a pot of gold at the end of a data rainbow. With a Pearson correlation coefficient as striking as a bolt of lightning and an r-squared value as solid as an unbreakable bond between variables, the evidence points to a link more profound than the gravitational pull of a black hole.

Therefore, we assert with confidence that no further research is needed in this area, as unraveling mysteries of statistical significance can't always be a walk in the park – sometimes, it's more like a waltz in a data minefield. This study stands as a testament to the enthralling nature of statistical investigations, emphasizing the quirky dance between variables in the realm of academic research.