## Libertarian Votes and Air Bag Woes: A Political Puncture or Statistical Silliness?

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## ABSTRACT

# Libertarian Votes and Air Bag Woes: A Political Puncture or Statistical Silliness?

This study delves into the quirky relationship between Libertarian votes for Senators in Colorado and the occurrence of automotive recalls for issues with air bags. By scrutinizing data from the MIT Election Data and Science Lab, Harvard Dataverse, and the US DOT, our research team uncovered a correlation coefficient of 0.9916051 and p < 0.01 for the years 1990 to 2020. We explore this unexpected connection through a blend of political analysis and statistical whimsy. The findings, while surprising, may leave some pondering whether it's a case of statistical serendipity or a political puncture.

Keywords:

Libertarian votes, Senators, Colorado, automotive recalls, air bags, correlation coefficient, political analysis, statistical analysis, MIT Election Data and Science Lab, Harvard Dataverse, US DOT, statistical serendipity, political puncture

#### **I. Introduction**

Automotive recalls and political voting patterns may seem like an unlikely duo, akin to a mismatched pair of socks or a sweet dessert followed by a spicy entree. However, our research aims to uncover the peculiar relationship between Libertarian votes for Senators in Colorado and the occurrence of automotive recalls for issues with air bags. Can political choices truly influence the reliability of our vehicles, or is this connection merely a statistical fluke? Buckle up as we embark on a journey through the intersection of politics and automotive safety, where the road may be bumpy but the insights are undeniably intriguing.

The notion of air bags, those silent guardians of vehicular safety, encountering woes might jar our sensibilities like a sudden pothole in an otherwise smooth commute. Yet, our investigation is not merely an exercise in statistical whimsy; rather, it seeks to shed light on a correlation whose significance extends beyond the realm of numbers and charts. As we navigate through the labyrinth of data, we remain ever-mindful of the unexpected twists and turns that statistical analyses can yield, akin to navigating a roundabout in a foreign land – perplexing yet filled with intriguing possibilities.

This research tackles a conundrum that may puzzle even the most astute observers, akin to deciphering a cryptic crossword clue with no clear solution in sight. The tie between political preferences and automotive recalls may seem as incongruous as pairing a red wine with fish, but our findings urge us to consider the possibility that beneath this apparent incongruity lies a tale of hidden correlations and unsuspected intricacies.

The aim here is not to merely tickle the fancy of data enthusiasts with statistical oddities but to unravel a puzzle that may have wider implications. Through scrutiny of data sources ranging from the MIT Election Data and Science Lab to the US DOT, and the Harvard Dataverse, we endeavor to provide a nuanced understanding of this unlikely linkage. So, grab hold of the proverbial steering wheel of inquiry as we embark on a journey through the twists and turns of political voting patterns and automotive safety, where the unexpected findings are as intriguing as stumbling upon a secret shortcut during rush-hour traffic.

### **II. Literature Review**

In "Smith and Doe's Exploration of Political Influence on Automotive Safety," the authors find that Libertarian votes for Senators in Colorado have an unexpected association with the frequency of automotive recalls for air bag issues. This curious correlation has sparked both skepticism and curiosity within the research community, raising questions about the potential impact of political ideologies on the mechanical reliability of vehicles.

Jones et al., in their work "Political Puzzles: Unraveling the Mysteries of Voting Patterns and Vehicle Defects," delve into the curious connection between libertarianism and automotive recalls, offering insightful analysis peppered with statistical whimsy. Their findings prompt us to consider whether there may be a deeper, unexpected relationship at play, beyond the surface level of political preference and automotive safety.

Turning our attention to the wider literary landscape, books such as "Free Markets and Faulty Airbags: An Unlikely Relationship" by Lorem Ipsum and "The Libertarian Paradox: Political Principles and Puzzling Recalls" by Dolor Sit Amet, provide thought-provoking perspectives on the intersection of political ideologies and automotive engineering. These works delve into the intricacies of libertarian voting behavior while weaving in the unforeseen consequences for vehicular safety, offering both enlightenment and entertainment to readers.

On the fictional front, titles such as "The Air Bag Affair" by Agatha Christie and "Libertarian Votes and Vehicular Volatility" by Sir Arthur Conan Doyle (if they were alive and decided to tackle this unlikely topic) may not offer empirical evidence, but their nuanced exploration of political intrigue and unexpected twists could certainly inspire fresh avenues of inquiry.

In a twist that may surprise some, TV shows such as "The Politician Mechanic" and "Recall Wars: Automotive Edition" offer a whimsical yet informative glimpse into the offbeat world of political voting patterns and automotive recalls. While these programs may blur the line between reality and escapism, their portrayal of the intersection between politics and engineering quirks presents a lighthearted take on this captivating subject matter.

As we immerse ourselves in the literature and media landscape surrounding this peculiar phenomenon, it becomes apparent that the unexpected connection between libertarian votes and air bag recalls is not just a statistical blip but a rich tapestry of political punctures and automotive whimsy waiting to be unravelled.

#### **III. Methodology**

Our methodology for uncovering the peculiar relationship between Libertarian votes for Senators in Colorado and automotive recalls for issues with air bags involved a concoction of statistical rigor and a touch of whimsy. We procured data from various sources, primarily the MIT Election Data and Science Lab, Harvard Dataverse, and the US Department of Transportation. The years under scrutiny spanned the period from 1990 to 2020, allowing us to capture the evolution of political choices and automotive safety issues over three decades.

First, we traversed the vast expanse of electoral data, akin to a political archeologist unearthing buried voting preferences. With the precision of a surgeon wielding a scalpel, we extracted Libertarian votes for Senators in Colorado, dissecting the nuances of electoral choices that may often perplex even the most seasoned political pundits. Our efforts to procure this data involved navigating through the labyrinthine corridors of information repositories, bypassing the detours of irrelevant data and skirting the speed bumps of data inconsistency.

Simultaneously, our foray into the domain of automotive recalls for issues with air bags mirrored a detective's quest for elusive clues. We meticulously combed through data from the US DOT, keeping our analytic magnifying glass at the ready to detect any statistical fingerprints that could lead us to a potential correlation. The process of sifting through automotive recall information was akin to navigating a maze of vehicle safety records, dodging the occasional statistical deadend while remaining vigilant for the slightest indication of a consequential connection.

Once the data on Libertarian votes and automotive recalls were captured, we proceeded to perform a sophisticated dance of statistical analysis. Employing techniques that would make even the most seasoned data scientist pause with admiration, we computed correlation coefficients, confidence intervals, and p-values. The statistical toolbox at our disposal resembled a treasure trove of analytical instruments, and we wielded these tools with the finesse of a virtuoso maestro conducting a symphony of data. Furthermore, we conducted robustness checks and sensitivity analyses to ensure that the observed relationship between Libertarian votes and automotive recalls did not buckle under the weight of alternative statistical models or data permutations. This process involved scrutinizing our findings from diverse angles, akin to turning a multifaceted gemstone under different sources of light to reveal its true brilliance.

In addition, we adopted a cautious approach toward the interpretation of our findings, acknowledging the possibility of lurking confounders and spurious correlations. Our pursuit of scientific integrity compelled us to exercise prudence akin to a wary driver navigating treacherous road conditions, ensuring that our conclusions remained grounded in empirical evidence rather than succumbing to the allure of statistical mirages.

In summary, our methodology was a fusion of meticulous data retrieval, intricate statistical analyses, and a touch of audacious curiosity. Our journey through the intersection of political voting patterns and automotive safety was riddled with unexpected twists and turns, yet our methodological approach remained steadfast in its pursuit of unraveling the enigmatic relationship between Libertarian votes and air bag recalls.

### **IV. Results**

The investigation into the curious connection between Libertarian votes for Senators in Colorado and the frequency of automotive recalls for air bag issues unveiled a correlation coefficient of 0.9916051 and an r-squared value of 0.9832806. In statistical terms, these values indicate an exceptionally strong association between the two variables during the period spanning from 1990 to 2020. The p-value, strikingly less than 0.01, further underscores the robustness of this relationship, prompting both raised eyebrows and peals of laughter from the statistical sleuths among us.

Notoriously known for their strong convictions and principles, it seems Libertarians may also have an unexpected influence on the reliability of our trusty steeds' air bags. This finding may leave one contemplating the subtle influence of political choices on not just public policy but also on the mechanical intricacies of our four-wheeled companions.

The scatterplot (Fig. 1) paints a vivid picture of this surprising relationship, akin to observing a rare astronomical conjunction or witnessing the unlikeliest of duets harmonizing on stage. The data points converge in a manner that can only be described as nothing short of a statistical waltz, leading one to appreciate the whimsical nature of correlation analysis and the unexpected connections it can reveal.



Figure 1. Scatterplot of the variables by year

In conclusion, this exploration into the seemingly disparate worlds of political voting patterns and automotive safety has unveiled a correlation that challenges conventional expectations. Whether this is a case of statistical serendipity or a substantive link deserving further examination, one thing remains certain: the interplay between vehicle safety and political proclivities is not as straightforward as changing lanes on a highway. It presents an enigma due for unraveling, leaving us to ponder if this is a statistical curiosity or a hidden consequence of political decision-making.

#### V. Discussion

The results of our study provide empirical support for the quirky and unexpected relationship between Libertarian votes for Senators in Colorado and the occurrence of automotive recalls for air bag issues, as previously hinted at in the literature. The robust correlation coefficient of 0.9916051 and a p-value less than 0.01 confirm and extend the findings of prior research, robustifying the hypothesis that political leanings may indeed intertwine with vehicular safety in a manner more whimsical than one might initially suspect.

The literature review deftly brought our attention to the uncharted territory that marries political influences and vehicular malfunctions. While it may sound like the stuff of fiction, the pervasive theme of political punctures and automotive whimsy resonates more strongly than expected. As highlighted by Jones et al., the unexpected association is not merely a symbolic statistical blip, but a revealing insight into the interplay of individual ideologies and mechanical reliability.

The strength of the correlation, depicted with the elegance of a statistical waltz in our scatterplot, further emphasizes the compelling nature of this relationship. It's akin to finding humor in an unexpected situation – disarming yet thought-provoking. The robustness of the association,

encapsulated by the high r-squared value, adds depth to our understanding and quells any lingering doubts about the sincerity of this statistical oddity.

Were Agatha Christie or Sir Arthur Conan Doyle alive to witness this statistical sleuthing, they might have found fodder for a literary masterpiece. The intertwining of political intrigue and vehicular whimsy would undoubtedly spark their sleuthing instincts. It is a testament to the unpredictability and richness of statistical analyses that such unlikely connections can be unearthed.

As we consider the implications of our findings, it becomes apparent that the intersection of political choices and vehicular reliability is a puzzle worth solving. The enigma of whether this relationship constitutes a statistical serendipity or a substantive link is a tantalizing knot that demands unraveling. Perhaps, in the world of statistical whimsy, the unexpected is precisely where the laughter of truth resides. The future, shrouded in statistical uncertainty, promises both further exploration and a dash of whimsy.

#### **VI.** Conclusion

In closing, our inquiry into the peculiar nexus of Libertarian votes for Senators in Colorado and the occurrence of automotive recalls for air bag issues has revealed a correlation that is as captivating as stumbling upon a unicorn in rush-hour traffic. The robust correlation coefficient of 0.9916051 and the remarkably low p-value leave us pondering whether political choices wield an unforeseen influence not just on public policies but also on the mechanical reliability of our beloved automobiles.

The scatterplot (Fig. 1) showcasing this bizarre relationship invites contemplation, akin to viewing an abstract painting that defies conventional interpretation. It's a reminder that statistical analysis, much like deciphering a cryptic crossword clue, can lead us down unexpected paths, occasionally landing us in a place where the air is filled with statistical serendipity.

However, while the allure of this linkage may be as enchanting as a scenic drive along the coast, we must exercise caution not to embark on flights of statistical fancy. Further research is essential to unveil the underlying mechanisms driving this correlation. Nonetheless, for now, we assert that no more research is needed in this area, trusting that our findings will serve as a roadmap for future explorations at the curious intersection of political voting patterns and automotive safety.