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# Air Bags and Ballots: A Study of Libertarian Votes in Alaska and Automotive Recalls

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#### **KEYWORDS**

air bags, automotive recalls, Libertarian votes, Alaska, correlation, political preferences, consumer behavior, product safety, politics, voting behavior, US Department of Transportation, MIT Election Data and Science Lab, Harvard Dataverse

#### Abstract

This research paper investigates the fascinating correlation between votes for the Libertarian presidential candidate in Alaska and automotive recalls for issues with air bags. Utilizing data from the MIT Election Data and Science Lab, Harvard Dataverse, and the US Department of Transportation, we uncovered a substantial correlation coefficient of 0.9719805 and p < 0.01 for the period from 1990 to 2020. It's as if the air bags were trying to inflate the candidate's vote count! Our findings raise intriguing questions about the potential influence of political preferences on consumer behavior and highlight the need for further investigation into the interplay of politics and product safety. Additionally, we cannot air our findings without acknowledging the impact of this research on the automotive and political spheres.

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#### 1. Introduction

The intersection of politics and consumer behavior has long been a topic of interest for researchers seeking to understand the complex dynamics that shape decisionmaking processes. In this study, we delve into the unexpected relationship between votes cast for the Libertarian presidential candidate in Alaska and automotive recalls pertaining to air bag malfunctions. It's almost as if the air bags were deflating the hopes of the candidate's success!

The state of Alaska offers a unique setting for our investigation, given its distinctive political landscape and the singular underlying factors that may drive voter preferences. As the last frontier, it seems only fitting that this state would play a role in uncovering such an intriguing connection. One might say it's the "Alaska-tomy" of political and automotive correlations.

The study is primarily motivated by the lack of prior research on this specific linkage, as well as the potential implications for public safety, consumer behavior, and electoral forecasting. By conducting a thorough analysis of data spanning from 1990 to 2020, we aim to shed light on this unusual correspondence and its wider implications. We decided to dive into this study headfirst, just like air bags in a collision.

Our research not only aims to contribute to the academic literature on political behavior and consumer choices but also seeks to provide valuable insights for policymakers, automotive manufacturers, and potential future presidential candidates. After all, it's crucial to have an "airtight" understanding of the factors that influence voting patterns and product safety risks.

In the following sections, we will present the methodology employed for data collection and analysis, followed by a comprehensive exploration of our findings. Hopefully, our research doesn't "deflate" your expectations!

# 2. Literature Review

Previous studies by Smith (2010), Doe (2015), and Jones (2018) have extensively explored the link between political preferences and consumer behaviors. However, none have dared to venture into the peculiar realm of the relationship between votes for the Libertarian candidate Alaska and presidential in automotive recalls for airbag issues. It's as if these researchers were afraid of "crashing" into uncharted territory.

In "Cars and Votes: Understanding the Unlikely Correlation," the authors find that there is a statistically significant correlation between the number of votes for the Libertarian candidate in Alaska and the frequency of automotive recalls related to airbag malfunctions, suggesting a surprising connection between political leanings and vehicular safety concerns. It's almost as if the candidates are "inflating" their support through automotive recalls.

In their book "Engines and Elections: Exploring Unconventional Relationships," Smith and Johnson (2017) reveal that the correlation coefficient between Libertarian airbag-related votes in Alaska and automotive recalls is higher than previously anticipated, hinting at a potential influence political ideologies of on airbag performance. One could say it's an "airraising" revelation!

If we take a fictional approach to related literature, we might draw inspiration from books such as "The Art of Political Airbag Deployment," "Libertarianism on the Road: A Tale of Recalls and Rebels," and "Inflated Ideals: The Ballot Bag Conundrum." These fictitious works offer a whimsical twist to the serious subject matter at hand, much like a well-timed dad joke at a scholarly conference.

Drawing from less conventional sources, one cannot overlook the contributions of popular board games to the discourse. Games like "Crash Landing: The Political Edition" and "Recall Risk: Election Day" may not provide empirical evidence, but their imaginative scenarios may tickle the fancy of researchers delving into the intersection of politics and automotive safety. After all, who doesn't appreciate a "board" approach to scholarly pursuits?

# 3. Our approach & methods

#### Data Collection:

The data for this study was collected from a variety of sources, including the MIT Election Data and Science Lab, Harvard Dataverse, and the US Department of Transportation. It was as if we were on a

treasure hunt for the ultimate dataset! The election data provided information on votes for the Libertarian presidential candidate in Alaska, while the Department of Transportation offered records of automotive recalls related to air bag issues. It was a process akin to sifting through political and automotive "haystacks" to find the elusive needles of correlation.

#### Data Filtering and Preparation:

underwent Upon retrieval, the data meticulous cleaning and transformation procedures to ensure its suitability for analysis. We filtered out any spurious entries and anomalies, separating the proverbial "chaff" from the "wheat" of relevant information. The datasets were then merged, creating a comprehensive repository of information that allowed for subsequent quantitative analysis. It was an amalgamation process that rivaled the fusion of political ideologies in a high-stakes debate.

## Correlation Analysis:

To explore the potential relationship between Libertarian votes in Alaska and automotive recalls for air bag issues, we employed advanced statistical techniques. The correlation coefficient was calculated to determine the strength and direction of the association between these variables. The results yielded a coefficient of 0.9719805 and p < 0.01, indicating a remarkably robust correlation. It was almost as if the air bags were aiming for a political "recount"!

#### Time-Series Analysis:

Additionally, a time-series analysis was conducted to examine the temporal patterns of Libertarian votes and automotive recalls over the period from 1990 to 2020. This analysis allowed for the identification of potential trends and fluctuations in the data, shedding light on the evolving dynamics between political elections and automotive safety issues. It was like tracing the rise and fall of political fortunes and air bag deployments over the decades.

## Sensitivity Analysis:

Furthermore, a sensitivity analysis was performed to assess the stability of the correlation under various conditions and assumptions. This rigorous evaluation provided insights into the robustness of the observed relationship, considering different scenarios and statistical parameters. It was a process akin to stress-testing the correlation, ensuring its resilience in the face of methodological challenges. One might say we put the correlation through its "air bag crash test"!

In conclusion, the methodology employed in this study facilitated a comprehensive and rigorous investigation of the relationship between Libertarian votes in Alaska and automotive recalls for air bag issues. The next section will delve into the compelling findings that emerged from this captivating analysis. We hope these findings don't "pop" the bubble of anticipation!

# 4. Results

The findings of our empirical analysis revealed a remarkably strong positive correlation between votes for the Libertarian presidential candidate in Alaska and automotive recalls related to air bag issues. The correlation coefficient of 0.9719805 and an r-squared value of 0.9447462 indicated a robust relationship between these seemingly disparate variables. It's as if the political winds were blowing the air bags in a particular direction!

To illustrate this striking correlation, we present in Figure 1 a scatterplot displaying the clear association between the number of votes for the Libertarian candidate and the frequency of automotive recalls for air bag malfunctions. The data points closely align to form a pattern that would make any statistician's heart beat faster. The figure speaks for itself, much like a well-timed dad joke at a family gathering.

The high correlation coefficient and rsquared value suggest that a substantial proportion of the variability in automotive recalls for air bag issues can be explained by the number of votes garnered by the Libertarian presidential candidate in Alaska. It's as if the candidate's popularity is inflating the number of automotive issues reported!



Figure 1. Scatterplot of the variables by year

Moreover, the p-value of less than 0.01 provides strong evidence against the null hypothesis, further supporting the assertion that the observed correlation is unlikely to have occurred by chance. One might say this result is quite an "air-tight" case against randomness.

In summary, our analysis unearths a compelling linkage between political votes and automotive safety concerns, presenting a conundrum worthy of further investigation and mirth-worthy puns.

# 5. Discussion

The results of our study reveal a robust and statistically significant correlation between votes for the Libertarian presidential candidate in Alaska and automotive recalls related to air bag issues. Our findings not only support the prior research conducted by Smith, Doe, and Jones, but they also expand upon it by demonstrating a strikingly high correlation coefficient and r-squared value. It is as if the air bags were seeking the support of political votes before deciding to "pop" into action.

The high correlation coefficient of 0.9719805 indicates a strong positive relationship between these two seemingly disparate variables. This finding validates the work of previous researchers, who dared to explore the unconventional territory of the interplay between political leanings and automotive safety concerns. It's almost as if there's an "inflated" influence of political ideologies on airbag performance, as suggested by Smith and Johnson (2017).

The p-value of less than 0.01 provides compelling evidence against the null hypothesis, further cementing the validity of our results. One could say that this result is airtight, much like a well-constructed airbag casing.

Our findings not only confirm the existence of a notable correlation but also emphasize the need for further investigation into the mechanisms underlying this intriguing relationship. It's as if this research has opened the "airbag" of curiosity, prompting an expansion of the scholarly discourse into the uncharted intersection of politics and automotive safety.

In conclusion, our study contributes to the field by uncovering a novel and substantial linkage between political votes and automotive safety concerns. The "inflated" influence of political preferences on airbag performance, as evidenced by our results, calls for continued scrutiny and analysis. After all, nothing should be left "uninflated" when it comes to studying such unexpected correlations.

# 6. Conclusion

In conclusion, our study unearths a compelling correlation between votes for the Libertarian presidential candidate in Alaska and automotive recalls related to air bag malfunctions. The robust relationship revealed in our analysis raises more questions than answers, leaving researchers and observers "air-bag-ging" for more insights. Our findings suggest the need for further investigation into the interplay of political drivers and product safety risks, as well as the potential influence of political preferences on consumer behavior. It's as if the political landscape is "air-bag-ious" in its effects on automotive safety concerns!

On a lighter note, it appears that the political winds blowing in Alaska may have unforeseen ramifications for automotive manufacturers. One might say that the "ballots" in Alaska have a direct impact on the "recalls" in automotive.

While the reasons behind this correlation remain uncertain, the "air" of mystery surrounding these findings is enough to provoke a "rattling" sense of curiosity. Perhaps this association is simply an "airefutable" coincidence, or maybe there are underlying forces at play that warrant additional scrutiny. It's clear that we've "bagged" an intriguing discovery, but the "de-vice" behind this phenomenon remains to be fully understood.

Overall, our study sparks a humorous yet enlightening journey into the unexpected connections between political behavior and consumer trends. It's as if the "politics" of air bags is more complex than meets the eye. Our research serves as a "bag-of-tricks" that challenges conventional wisdom and prompts a reevaluation of the factors influencing voting patterns and product safety risks.

In light of these findings, we assert that no further research is needed in this area. It's time for us to "deflate" the potential for additional studies and let this one "inflate" its significance on its own.