

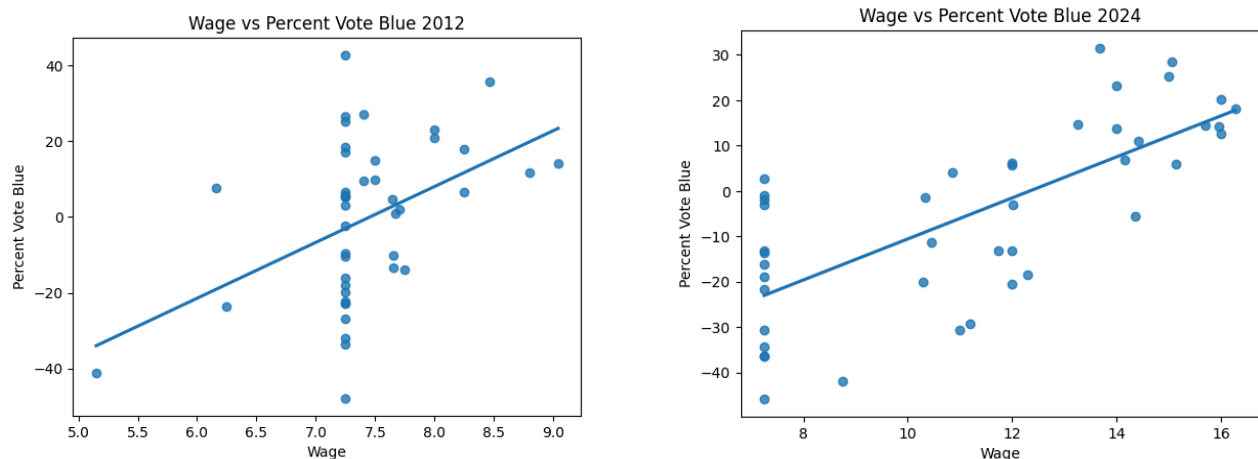
## Introduction

We all know that minimum wage in most states can be...opinionated. Some say it is too low while others say they can live comfortably. Either way there seems to be a relationship between minimum wage and election results in the United States. Given the data in the 2012 and 2024 election data there has been a deep relationship when it comes to minimum wage. We used the years 2012 and 2024 because these two years were very influential and just overall big elections and it seemed better to see the relationship between the two variables.

- a. Is state minimum wage linked to presidential results?

## Data Methods

For our sources we used the New York Times and CNN for the election results and the Federal Reserve Bank of St. Louis for minimum wage for both years 2012 and 2024. We went through each state and subtracted the two parties to get the difference to support our argument.

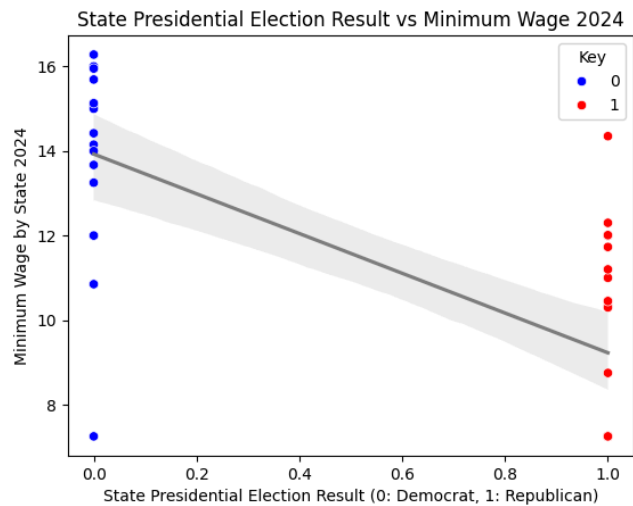
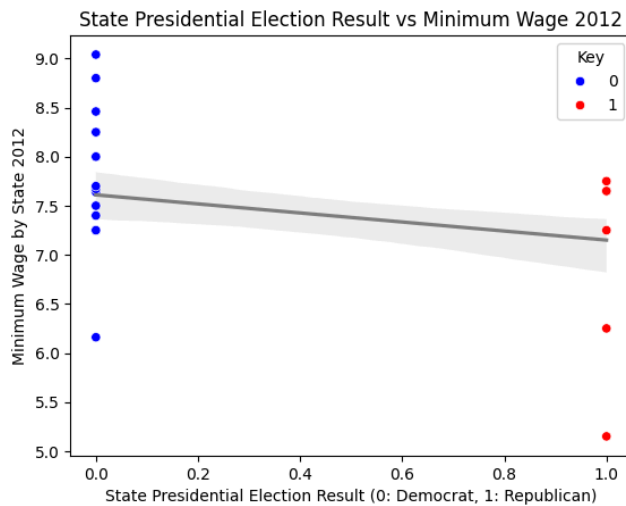


The scatterplot shows that the correlation between minimum wage and voting for the democratic increased from the 2012 election to the 2024 election. R- value for 2012 is .442 which shows a moderate positive linear relationship. And then R- value for 2024 is .724 which shows a strong positive linear relationship.

## Statistical Methods

This graph shows a binary regression plot.

$$\text{Minimum\_Wage} = B_0 + B_1(\text{republican}) + \epsilon$$



## Results

We found that on average states that have higher minimum wage vote blue and states with lower minimum wages voted red in both the 2012 and 2024 elections. Although the 2024 election shows a more drastic difference with red states on average minimum wage being -4.7004 whereas in 2012 on average red states minimum wage was -.4608.

## Conclusion

This data is important because it shows the relationships between voter's wants from the president they are voting for. The Democratic party is consistently pushing for higher minimum wage so states that have Democratic legislation have higher minimum wage than those who don't. Republican states may want to rethink their voting because electing federal democratic officials will push for high minimum wages and overall increased economic well-being for all states.

## Sources

[NYTimes](#)

[CNN](#)

[St. Louis](#)