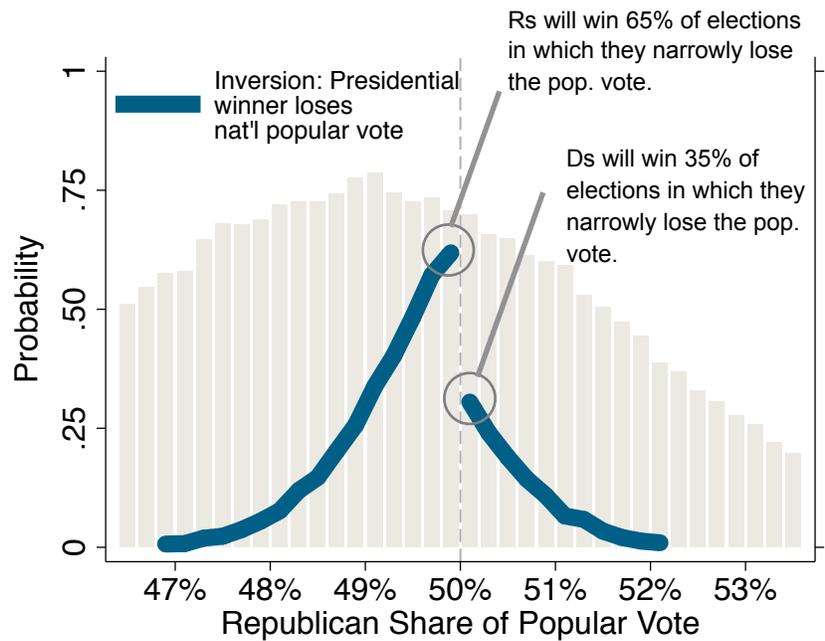


Probability of an electoral inversion, computed from 1988-2016 election results.

Republicans would win most elections in which they lose the popular vote by 500,000 or fewer votes.



In 45% of Presidential races decided by less than one percent of the vote, the popular vote winner will lose.

New evidence from UT-Austin economists shows that the Electoral College is much more likely than previously understood to elect the Presidential candidate who loses the national popular vote.

In the 48 Presidential elections since the 'Corrupt Bargain' of 1824, there have been four times when the President did not win the popular vote: 1876, 1888, 2000, and 2016. Such electoral "inversions" are clearly controversial. What was unclear until now was how often we should expect such outcomes. Was it statistically probable or was it a fluke that the Electoral College would have yielded four inversions in the past two centuries?

New research from the UTECS team provides the first answer to this question. Statistical simulations of the possibilities for Presidential elections show that inversions are very likely and always have been. This is especially true in elections decided by a

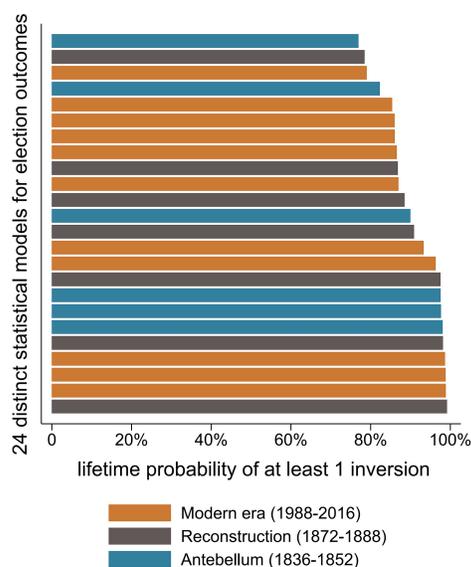
**32%** Probability of inversion in a race decided by less than 2% (2.6 million votes)

**45%** Probability of inversion in a race decided by less than 1% (1.3 million votes)

**1 in 8** Fraction of elections since 1828 with a popular vote margin within 1%

**90%** Probability of experiencing at least one inversion over a voting lifetime

**77%** Probability that if an inversion occurs, it will be a Democrat popular vote majority and a Republican Electoral College win



The research uses hundreds of distinct statistical models, computed using data from three historical periods. All models agree that inversions are likely.

few percentage points (which today equals a few million votes). The 2000 & 2016 inversions were not the results of extraordinary political circumstances or unique candidates. Instead, these were relatively likely outcomes. The only reason the US hasn't experienced more inversions is that "sample" is small—just 25 Presidential elections per century, and even fewer close elections.

## Electoral College inversions have been very likely since the 1800s.

Innovative data journalists and election forecasters have recently applied increasingly sophisticated statistical tools to analyze politics. These predict or explain the results of particular contests, such as Trump/Clinton 2016. But they do not answer the deepest questions about the Electoral College: how likely are inversions as an enduring feature of American political life, independent of two particular candidates or parties?

The UTECS team studied three eras of US politics from the 19<sup>th</sup>, 20<sup>th</sup>, and 21<sup>st</sup> centuries: from contests between Whigs and Democrats before the Civil War to today's Republicans and Democrats. The research used hundreds of distinct statistical models to understand the extent to which modeling assumptions affected the results. The high rate of electoral inversions in close elections holds in all time periods, and under any plausible model of how elections unfold. The clear finding is that inversions have been likely through all of US history. Inversions are an enduringly fundamental feature of the Electoral College.

## Almost all voters will eventually experience an inversion.

Over a voting lifetime, many Americans vote in 60 years' worth of elections. How likely is it that at least one of these will be an inversion? If elections continue to be close as they have been in the last 30 years, the lifetime probability of voting in an inversion is at least 80%. Voting in an election where the winner loses the popular vote is a fact of political life for American voters.