PRESS RELEASE
NBER Research Paper

The popular vote winner will lose 45% of Presidential elections decided by one percentage point (1.3 million votes) or less.

32%	Probability of inversion in a race in 2020 or beyond decided by less than 2% (≈2.6 million votes in 2016)
45%	Probability of inversion in a race in 2020 or beyond decided by less than 1% (≈1.3 million votes in 2016)
1 in 8	Fraction of elections since 1828 with a popular vote margin within 1%
90%	Probability of a voter experiencing at least one inversion over a voting lifetime
77%	Probability that if an inversion occurs, it will be a Democratic popular vote majority and a Republican Electoral College win
1836	First year in UTECS data
2016	Last year in UTECS data
2.5 million	Simulated Presidential elections generated by UTECS computations

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The University of Texas Electoral College Study (UTECS), led by two UT-Austin economists, provides the first-ever quantification of the probability, across US history, of an "inversion" — when the popular vote winner loses the election.

The study shows that inversions are **likely in any close election**, and have been throughout US history.

In 48 Presidential elections since the early 1800s, there have been four inversion elections: 1876, 1888, 2000, and 2016. "What was unclear until now was whether inversions are likely," Professor Dean Spears explained. "Was 2016 a statistical fluke, or was it probable that the Electoral College would have yielded four inversions over the past two centuries?" New statistical research provides the first answer to this question, with detailed simulations of the statistical possibilities for Presidential elections. Inversions are very likely, especially in elections where one or two percentage points of the popular vote separates candidates.

2016 was not exceptional statistically: an inversion was likely because the national popular vote was close.

The study finds that even in a pre-Civil War election, a national popular vote as close as 2016's would have had a chance of inversion just as large as in the 2016 election — despite the fact that there would have been fewer states and different political parties. If 2020 is a close election, then there is significant chance of an inversion, even if the popular vote winner receives millions more votes. Professor Geruso noted, "What is surprising is that this has little to do with the particular candidates, issues, or likely swing states in 2020. It is a fundamental feature of the EC, and has been true across US history." If in the future more elections are close, then it is very likely that there will be more inversions.

More details, including **two-page briefs** and a white paper with full statistical methods, are at utecs.org.