Replication Code for Massive Election Fraud?: A Compendium of Statistically Fallacies in Claims about the 2020 Presidential Election

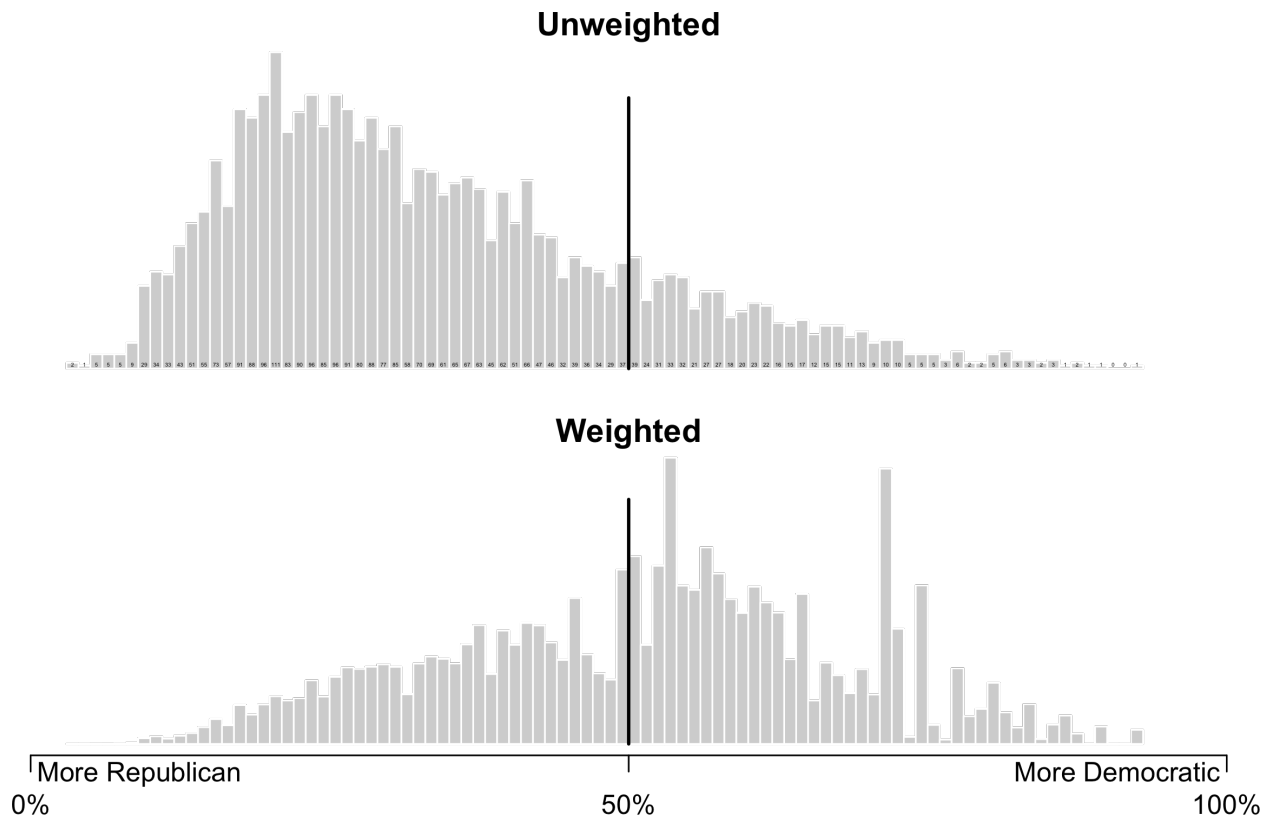Jonathan Cervas   Bernard Grofman

2023-11-24

```r
# Merging 2016 and 2020 county-level data
a <- dplyr::full_join(pres.county.2016, pres.cnty.2020, by="fips")
counties.16.20 <- a[complete.cases(a),]  # Filtering out incomplete cases, notably issues with Alaska d

# Plotting vote shares for 2016 vs 2020
plot(
  two_party(counties.16.20$dem2016, counties.16.20$gop2016),
  two_party(counties.16.20$dem2020, counties.16.20$gop2020),
  xlab="Clinton 2016 County Vote Share",
  ylab="Biden 2020 County Vote Share",
  col="#33333333")
abline(0, 1)

# Linear model summary for 2016 vs 2020 vote shares
summary(lm(two_party(counties.16.20$dem2020, counties.16.20$gop2020) ~ two_party(counties.16.20$dem2016
```

```r
# Plotting raw vote advantages for 2016 vs 2020
plot(
  counties.16.20$dem2016 - counties.16.20$gop2016,
  counties.16.20$dem2020 - counties.16.20$gop2020,
  xlab="Clinton Advantage 2016 County Vote",
  ylab="Biden Advantage 2020 County Vote",
  col="#33333333")
abline(0, 1)
```

Figure 3 - Histogram of the 2020 Presidential Election Results, by County

Unweighted

Weighted

More Republican   50%   More Democratic

0%   50%   100%

```
## Warning in rgdal::writeOGR(counties.shp, dir.gis, "us2020", driver = "ESRI
## Shapefile", : Field names abbreviated for ESRI Shapefile driver

## Registered S3 method overwritten by 'geojsonlint':
##   method         from
##   print.location dplyr
```

Table 3

```r
# Exit poll data for 2016
exit.2016
```

```
##                 White Black Hispanic Asian Other
## proportion_vote  0.70  0.12     0.11  0.04  0.03
## Democratic       0.37  0.89     0.66  0.65  0.56
## Republican       0.57  0.08     0.28  0.27  0.36
```

```r
# Exit poll data for 2020
exit.2020
```

```
##                 White Black Hispanic Asian Other
## proportion_vote  0.67  0.13     0.13  0.04  0.04
## Democratic       0.41  0.87     0.65  0.61  0.55
## Republican       0.58  0.12     0.32  0.34  0.41
```

Table 4 - Change in Non-Hispanic White Votes between 2016 and 2020

```
# Table 4 - Change in Non-Hispanic White Votes between 2016 and 2020
tab4
```

```
##                               2016       2020 Difference
## Trump                     54531026   61565755    7034729
## Clinton/Biden            35397332   43520620    8123287
## Other                      5740108    1061479   -4678629
## Non-Hispanic White Votes  95668466  106147853   10479387
## Minority Votes            41000771   52281778   11281007
## All Votes                136669237  158429631   21760394
```

Create Maps

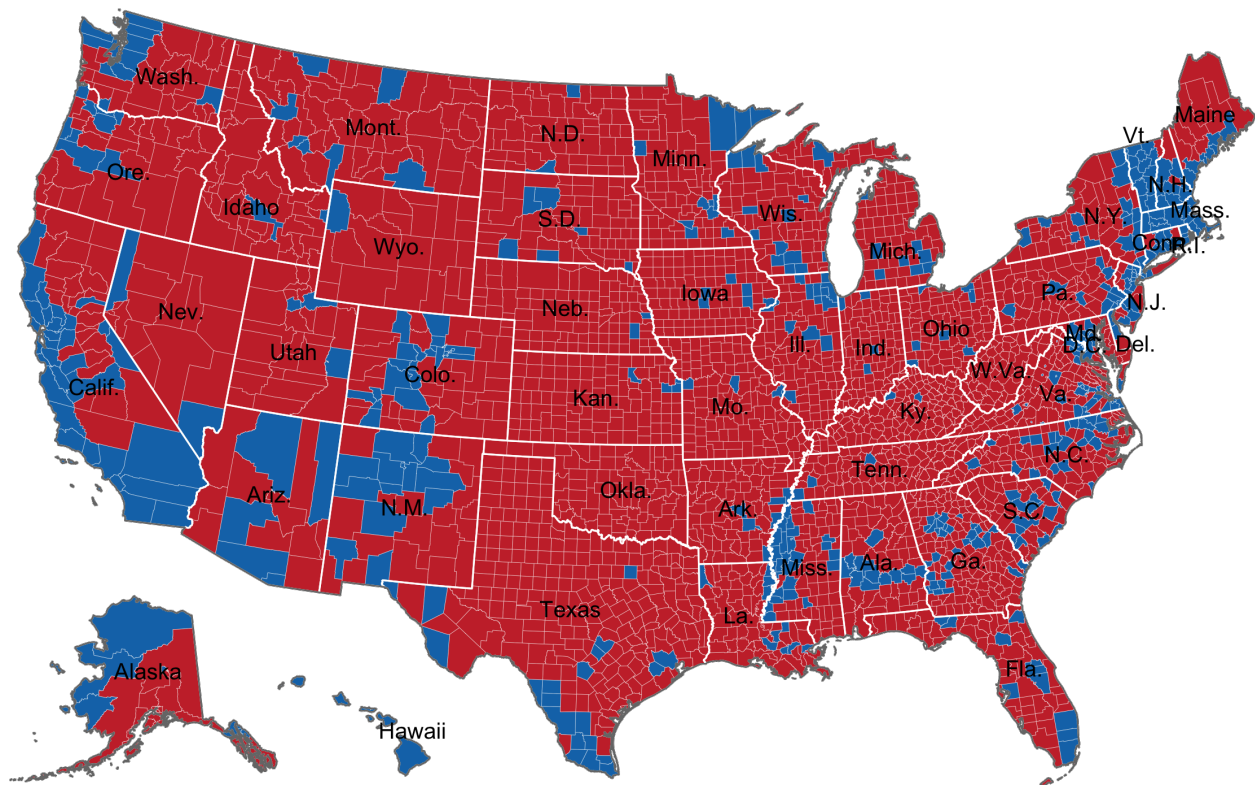## Figure 4 - Choropleth Plot, 2020 Presidential Election by county

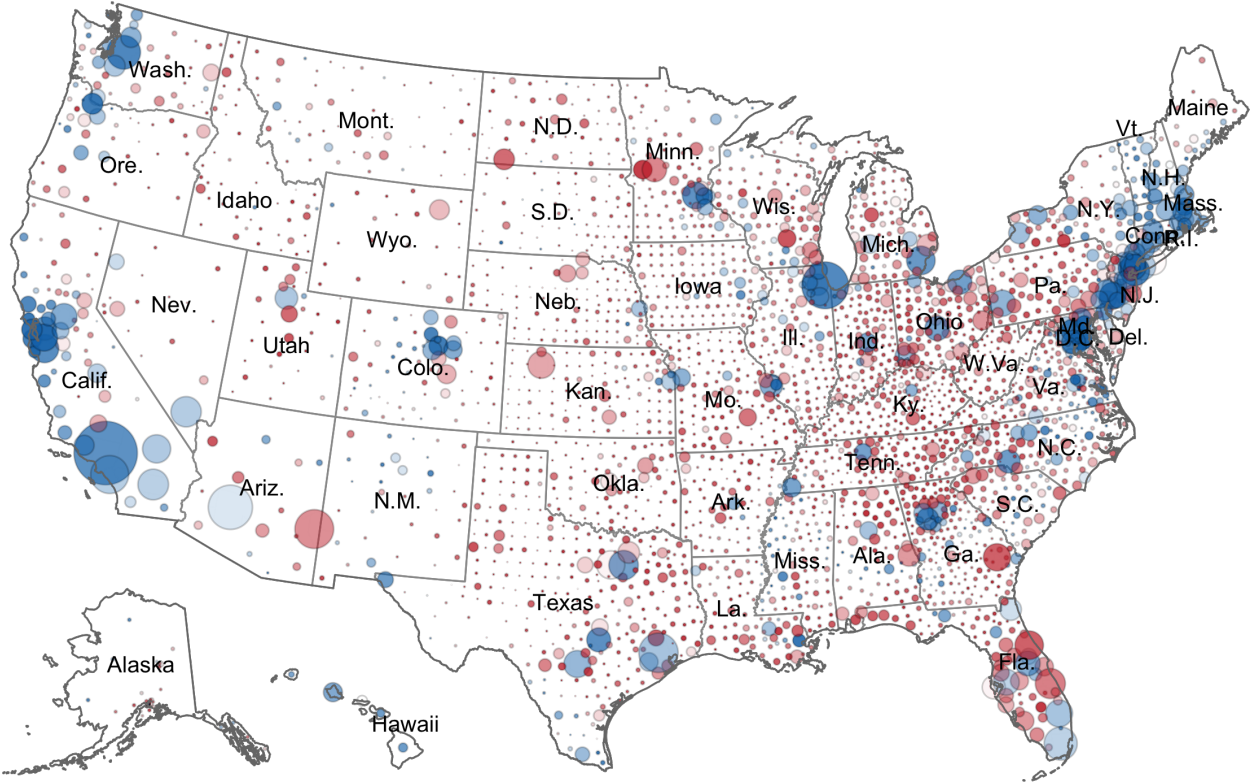**Figure 5 − Bubble Plot, 2020 Presidential Election by county**
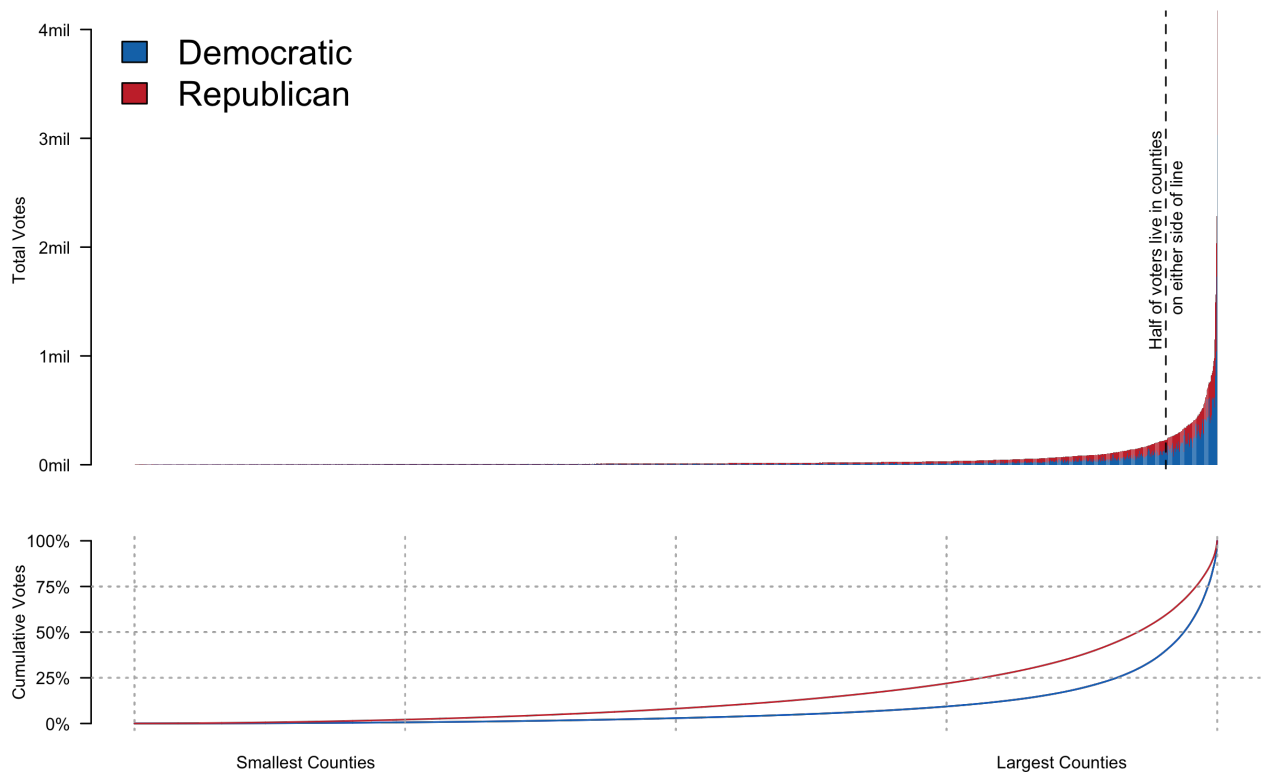
Figure 2 – Votes in each County

Figure 6 – Kent County, Michigan 2020 election data plotted as Ayyadurai shows it.

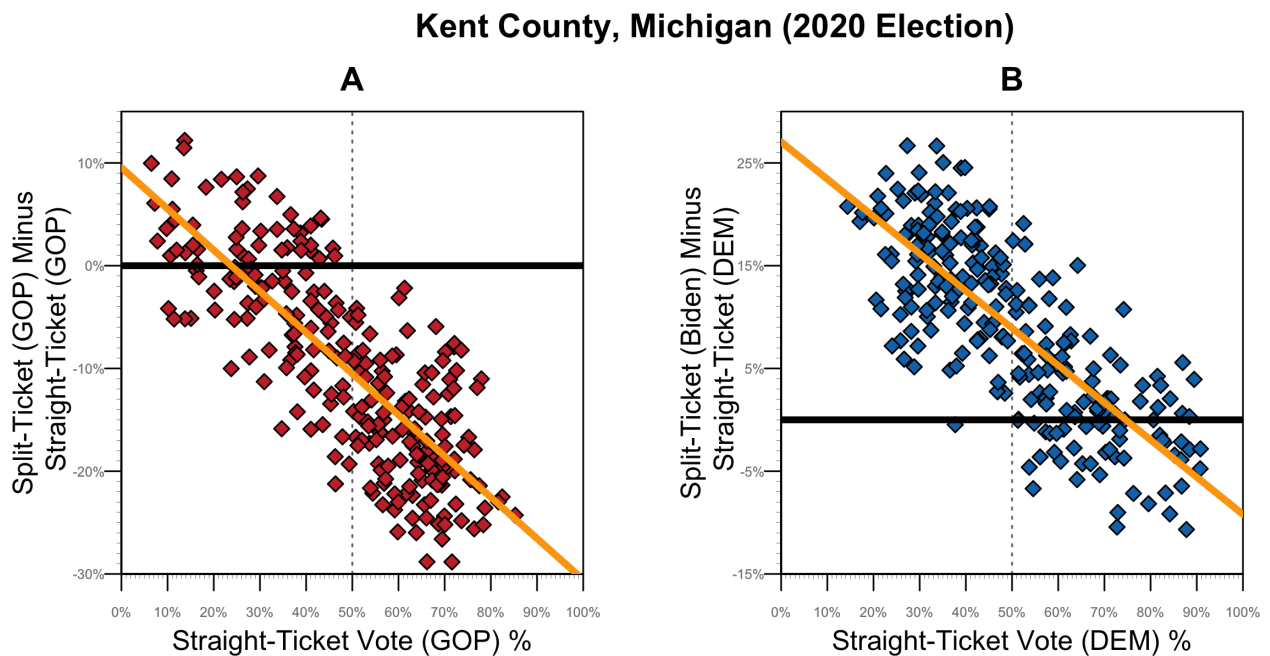Kent County, Michigan (2020 Election)

Figure 7 – Kent County, Michigan Precinct comparison between Trump Straight-ticket and Trump Split-Ticket Support

Kent County, Michigan (2020 Election)