

# NEW PERSPECTIVES ON THE LAW & ECONOMICS OF ELECTIONS

*ASSA EARLY CAREER RESEARCH AWARD: PANEL B*

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S E  
UNSW B S



# E I E F A K

- Gerrymandering
- Political geography and “compactness”
- Incumbent reelection rate
- Future directions

**GE A DE I G**



I A A EG F  
GE A DE E

- What is the optimal strategy?
- What are the implications for representation of different groups (party, race, gender,...)?
- How can or do regulations/constraints interact?
- You cannot regulate what you don't understand

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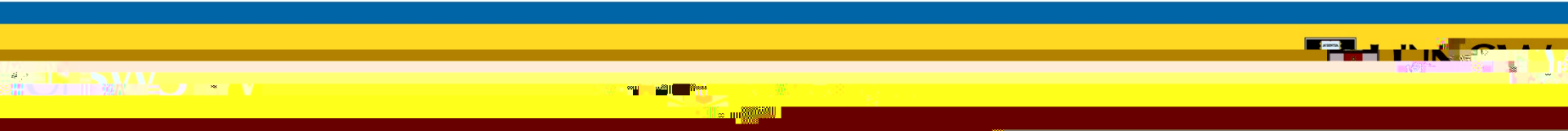
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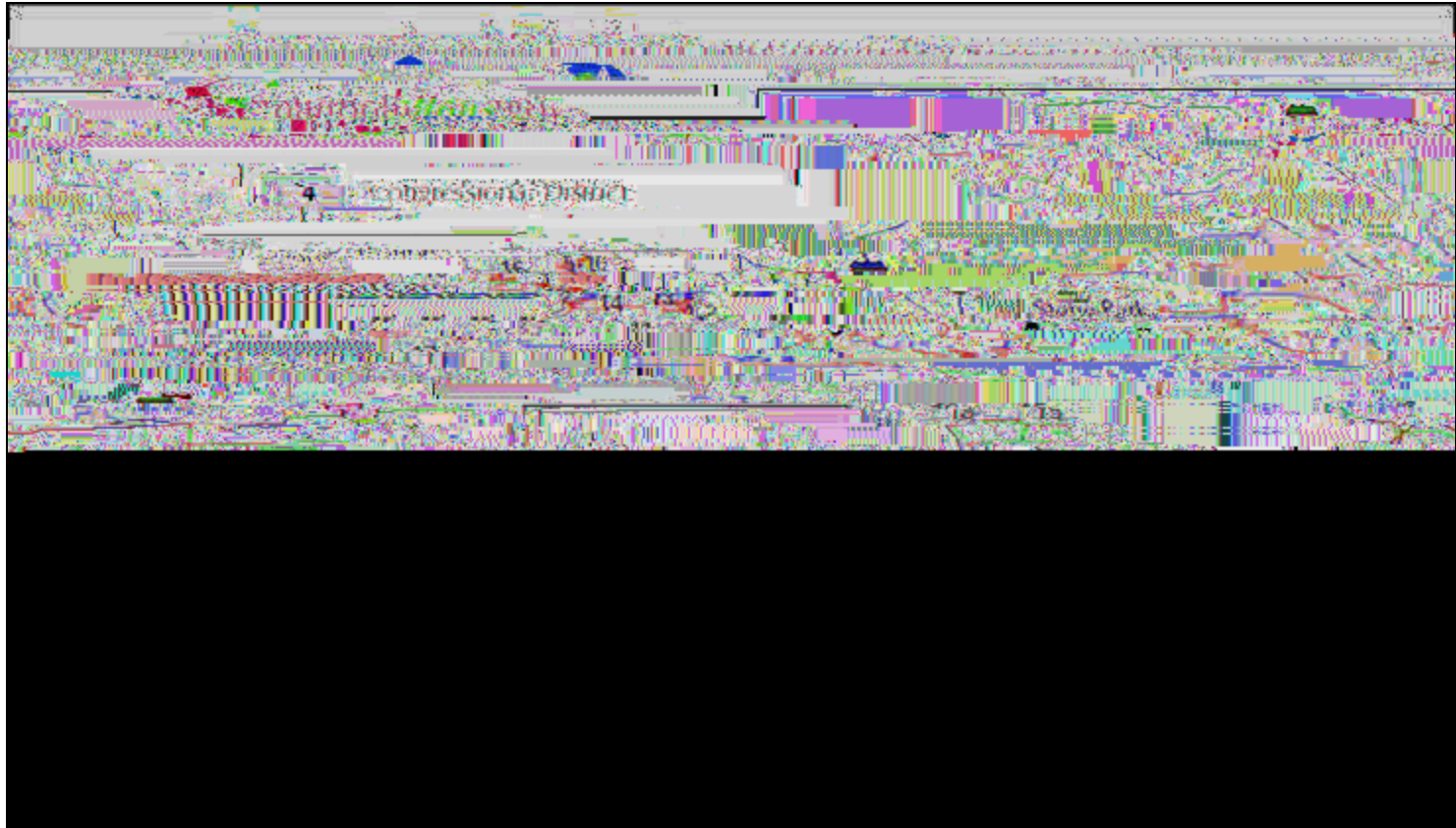




# A CHI G ICE I I I

- Voters in the tails of the distribution v likely to vote one way or the other
- Best way to use your strongest supporters is to neutralize your strongest opponents
- Use them as the pivotal voter in some district, not right/left of the median in many districts

# DEI AC A HA E ?





**C AC E**



# F E I I G E A E

- Area of circumscribing figures (rectangle, circle, hexagon, )
- Perimeter length
- Ratio of perimeter length to area of circumscribing figure--call this \*
- One minus square root of (\*)
- One divided by square root of (\*)
- 100 times (\*)
- Ratio of district population to area of convex hull of a district
- Ratio of reflexive to non-reflexive interior angles in a district
- Median price of petrol divided by age of oldest citizen in a district...

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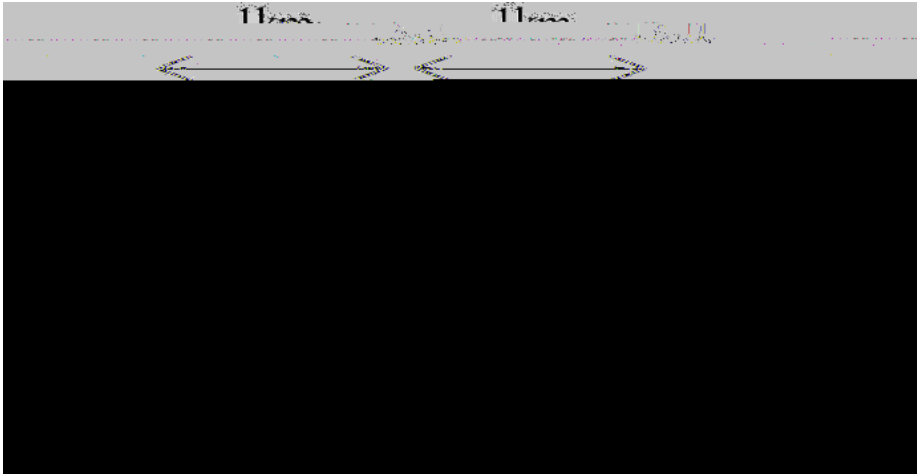
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$$N_{ea} = 24$$

$$M_a = 1, 2, 5, 3, 5, 6$$

$$D_e a = 16$$

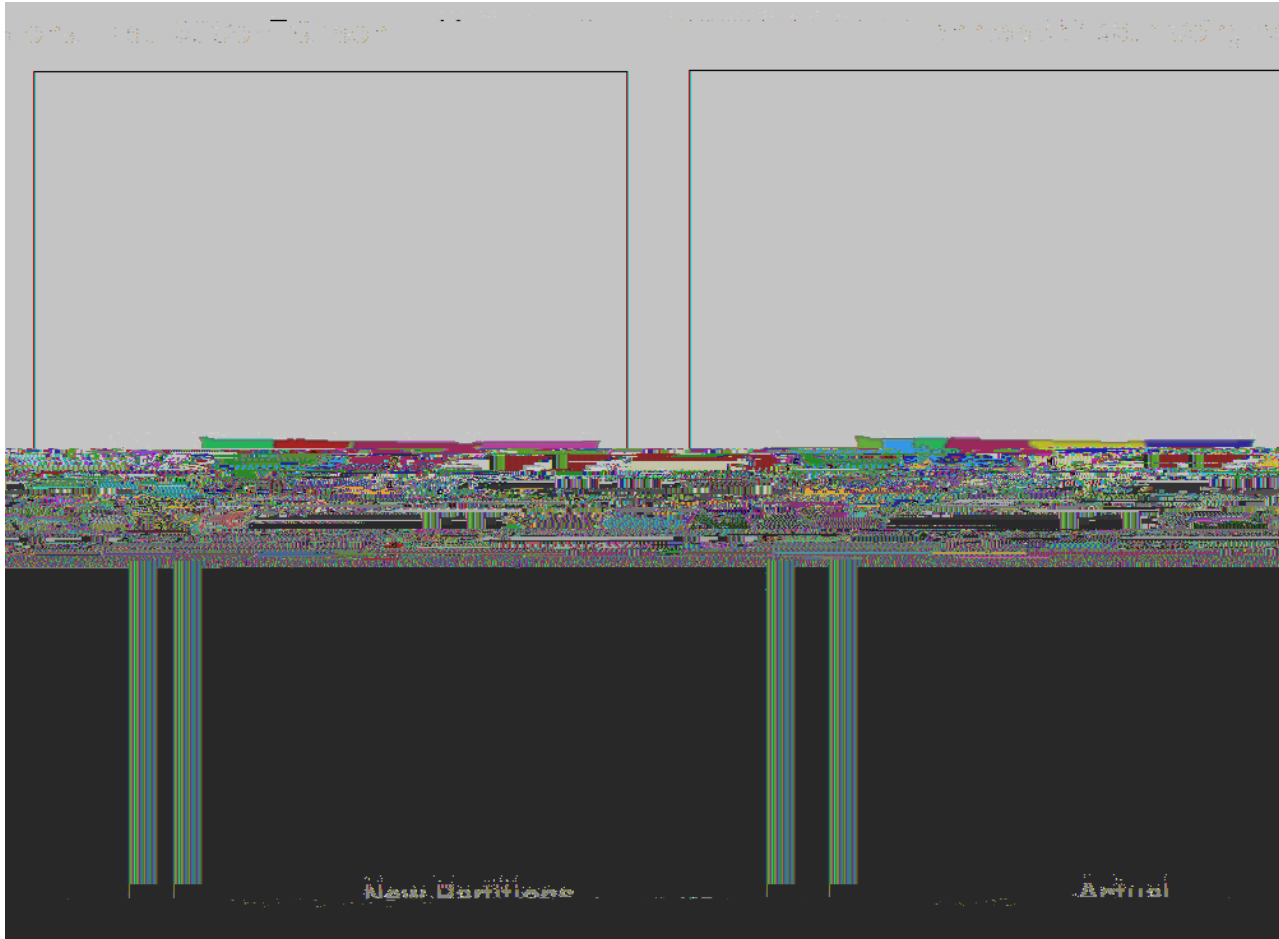
$$RPI = 24/16 = 3/2$$

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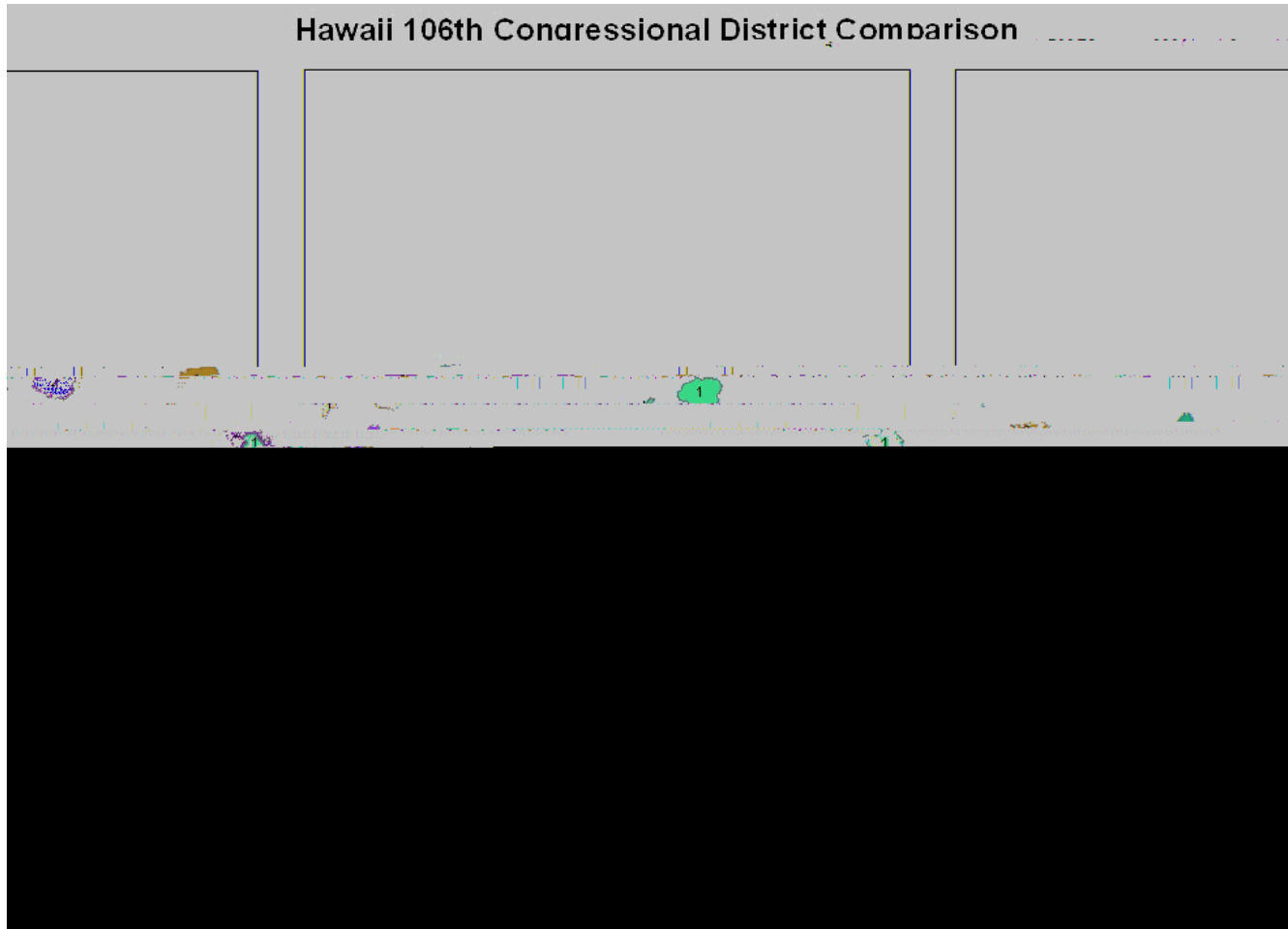
- Minimum partition problem is NP-Hard
- CA:  $n=53$ , census tracts=6,800
- Number of possible districting plans  
CA= $78.4 \times 10^{59,351}$
- Even in a small state number of plans great than number of atoms in the visible universe



# COMPAC DI IC



# COMPACT DI IC

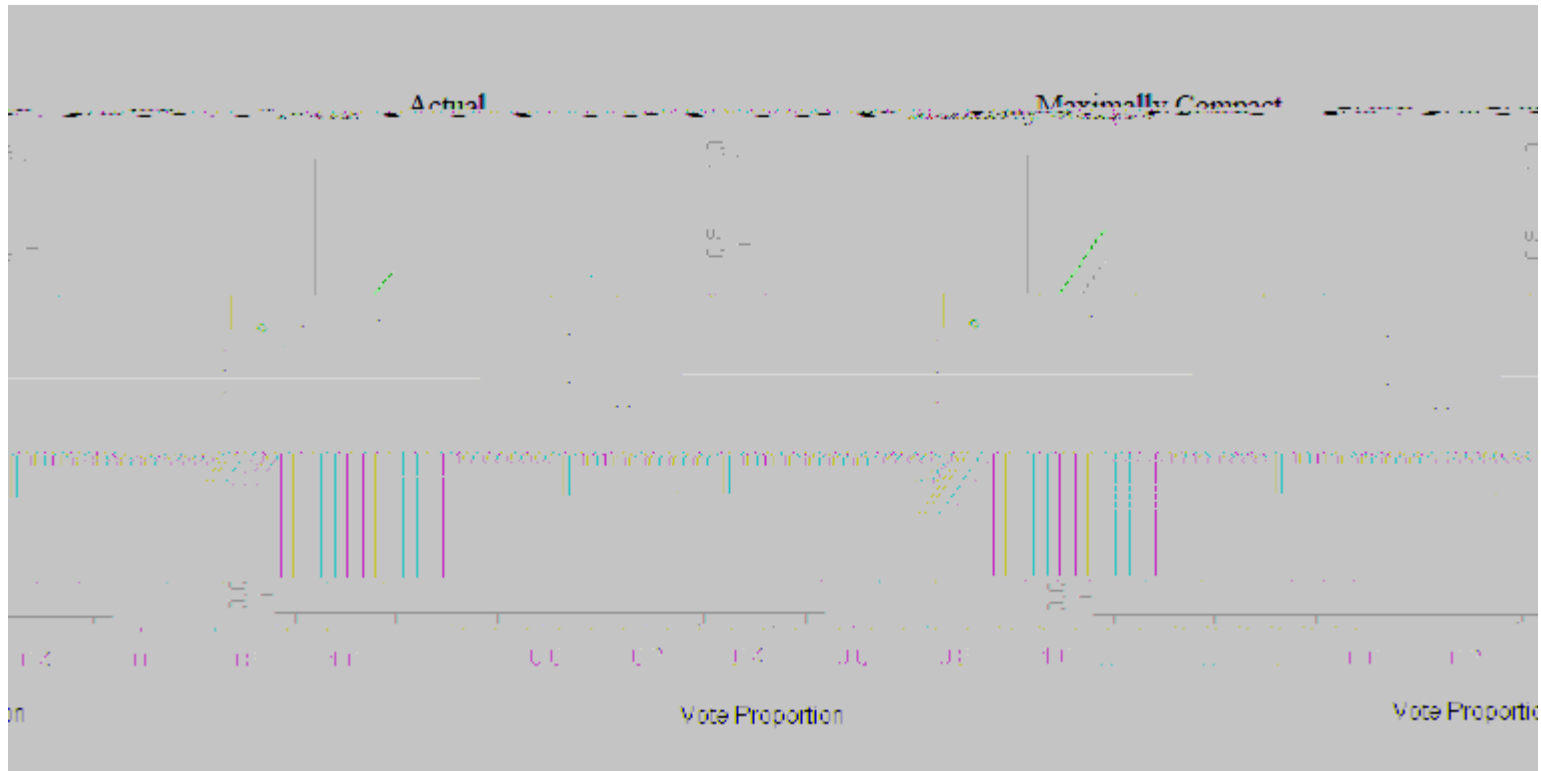


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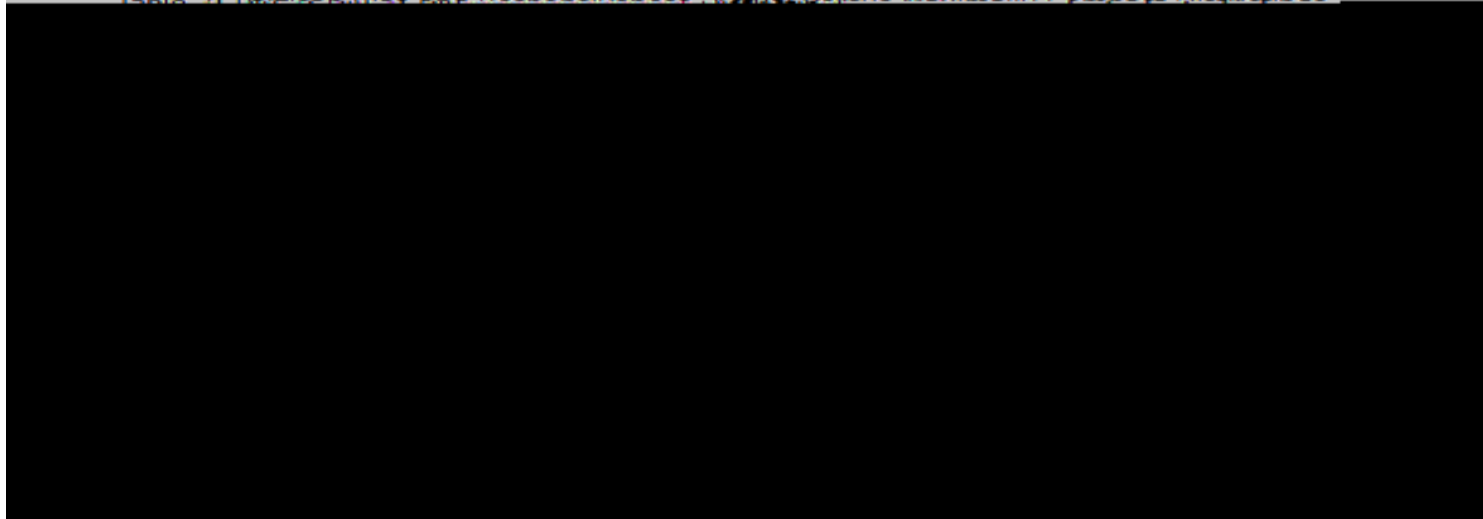


# CA E EC I C E FAC A



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Table 2: Deviance, Bias, and Dispersion: Actual versus Maximally Compact Distributions



**I C BE EE EC I**



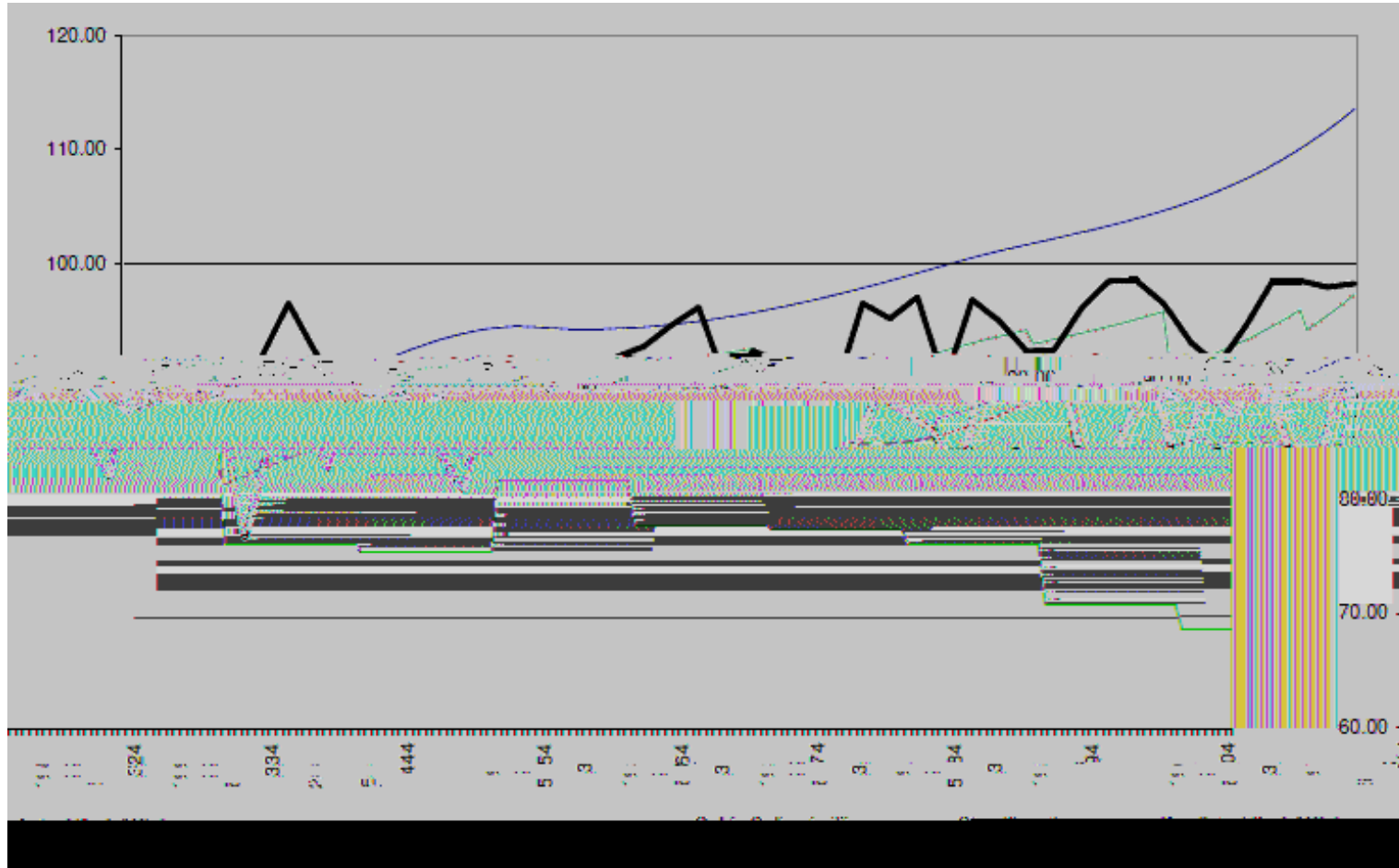
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# IF HA HE HA ?

- Polarization? (McCarty-Poole-Rosenthal say no)
- Political geography? (Glaeser)
- Money in politics?
- Media?
- Two-sided matching?

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