How American Politics Ensures Electoral Accountability in Congress[1]

Gary King[2]

Institute for Quantitative Social Science
Harvard University

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[1] Joint with Danny Ebanks & Jonathan N. Katz (thanks to Aleksandra Conevska)
[2] GaryKing.org

The Plan

Model Validation: Out-of-sample tests

Prob(Incumbent Defeat): High, No Change

Intermediate Variables: Massive Change

How No Change Leads to Massive Change

Evaluating the Health of American Legislative Democracy

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  - Different combos of {Polarization, Partisanship, IncAd, Marginals, Gerrymandering bias} $\rightsquigarrow$ the same Prob(Defeat)

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  - Interpret: to understand the big picture

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$$v_{it} \sim \mathcal{N}(\mu_{it}, \sigma^2) \qquad \text{Regression}$$
$$\mu_{it} = X_{it}\beta_t$$

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$$v_{it} \sim \mathcal{N}(\mu_{it}, \sigma^2) \qquad \text{Gelman-King's JudgeIt}$$
$$\mu_{it} = X_{it}\beta_t + \gamma_i$$

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- Computation: extensive but easy; ElectIt Software

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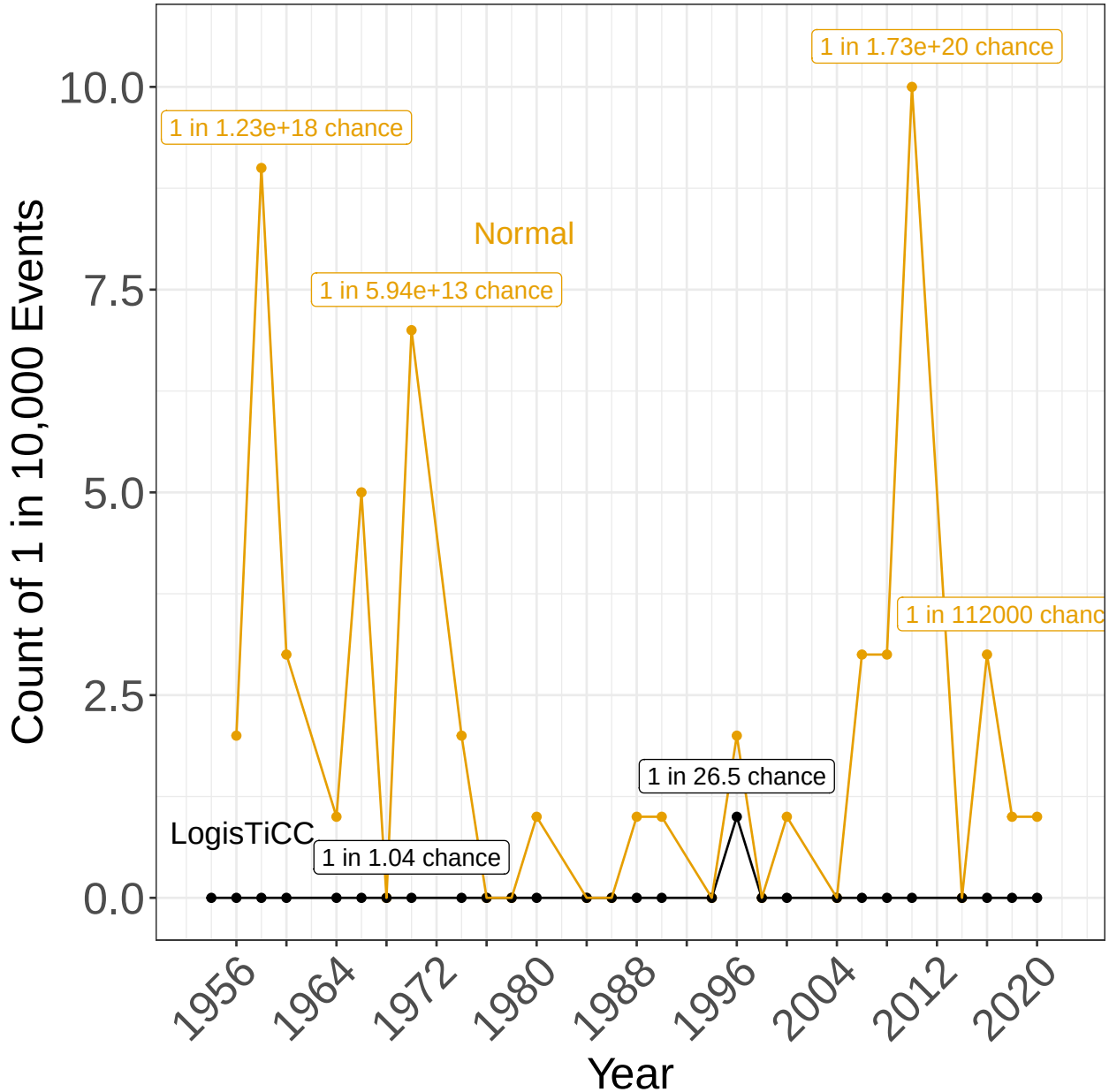

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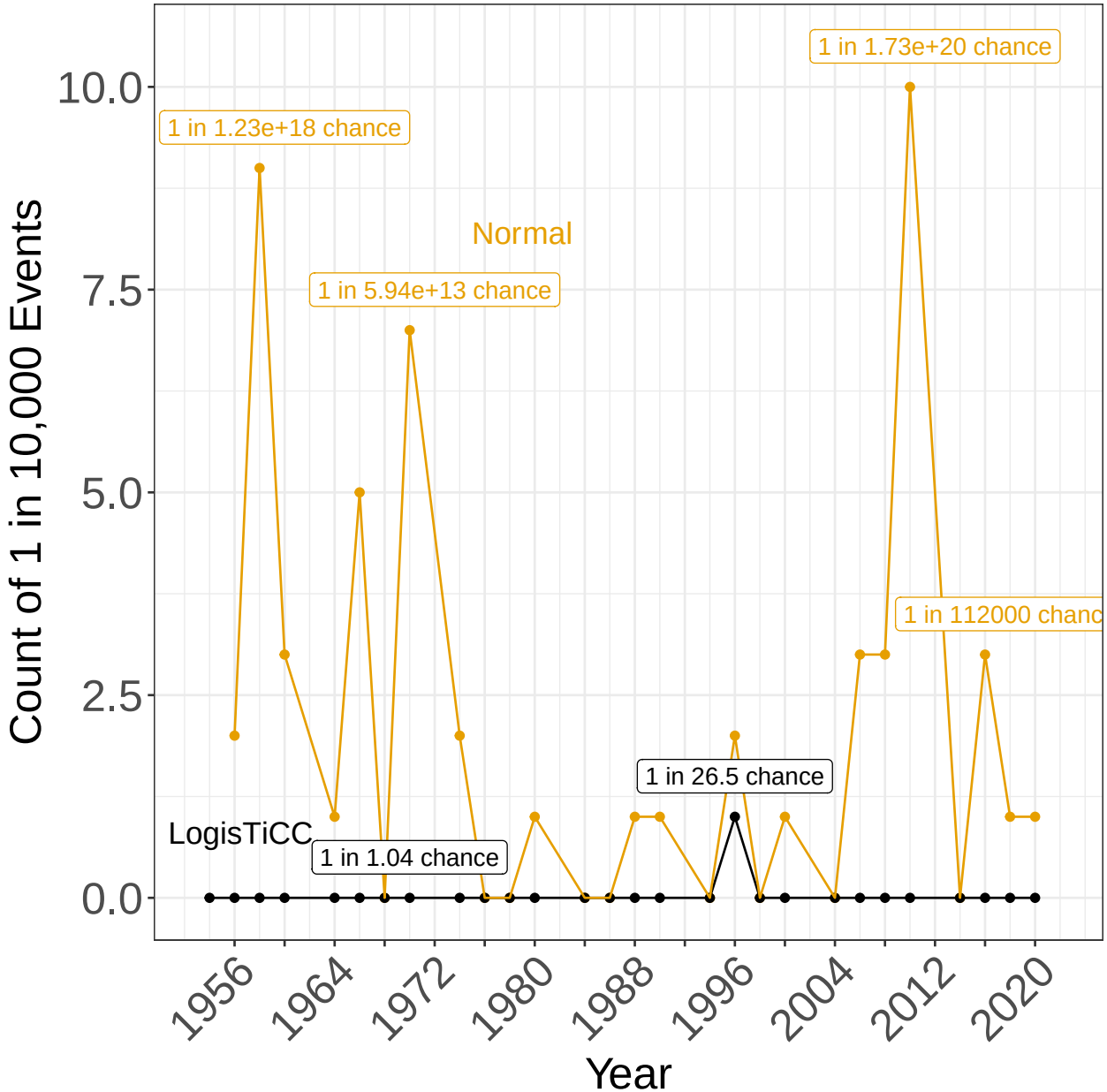
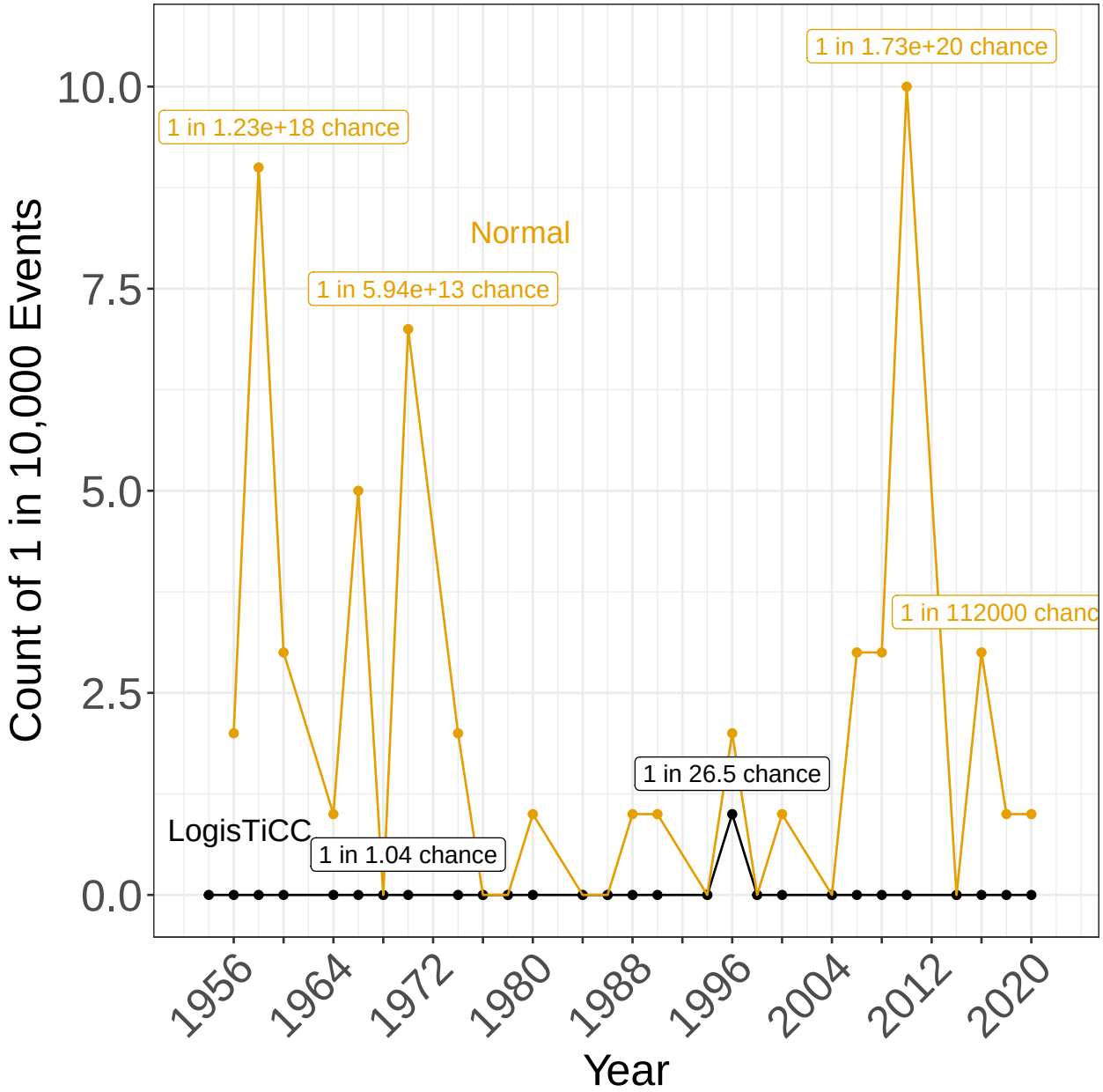


1-in-10K Events:

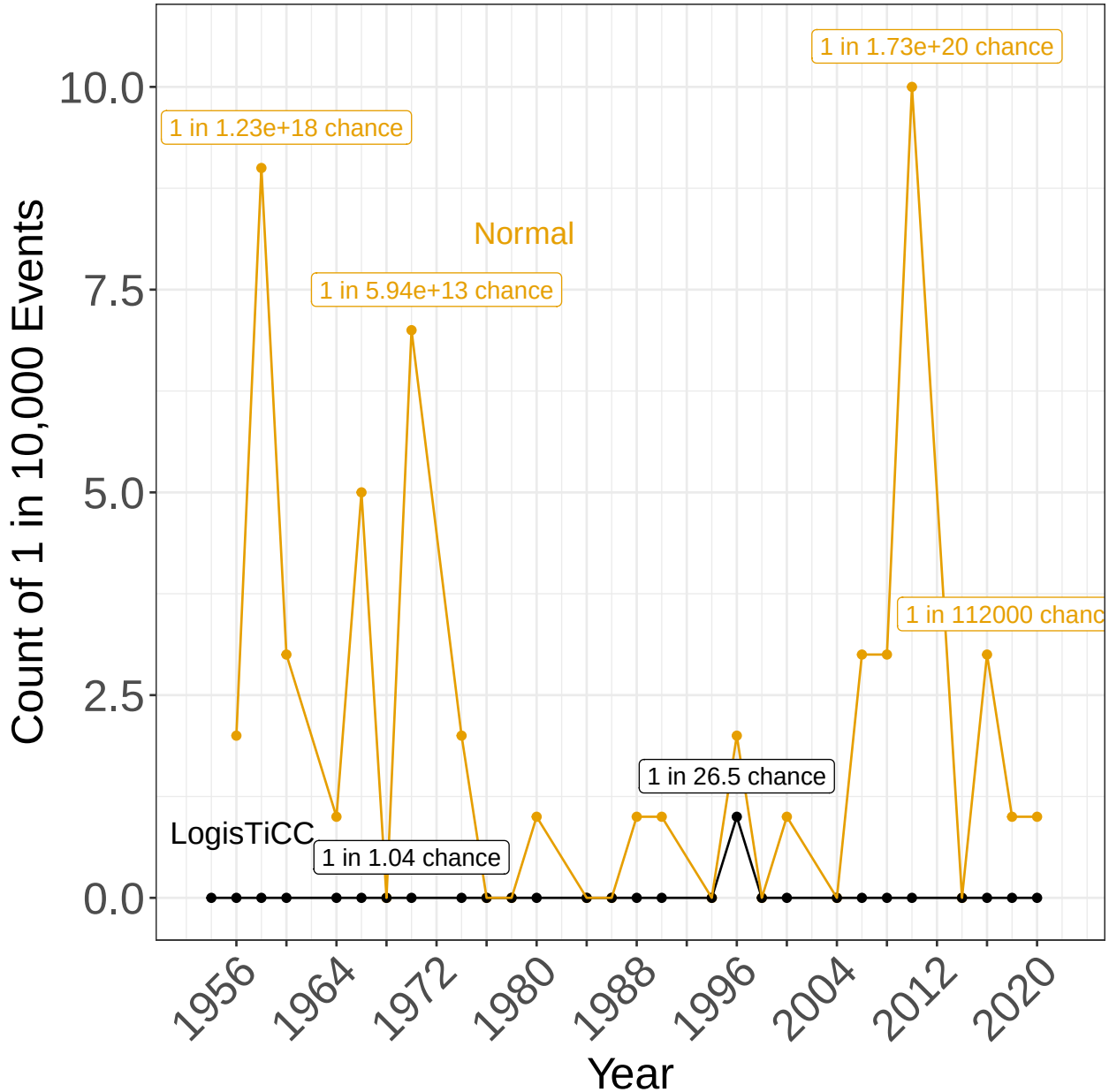
“Moral Certitude”: Elections outside 99.99% CI



1-in-10K Events:

LogisTiCC:
1 in 10K

“Moral Certitude”: Elections outside 99.99% CI



1-in-10K Events:

LogisTiCC:
1 in 10K

Normal:
All the time!

Competitiveness Calibration

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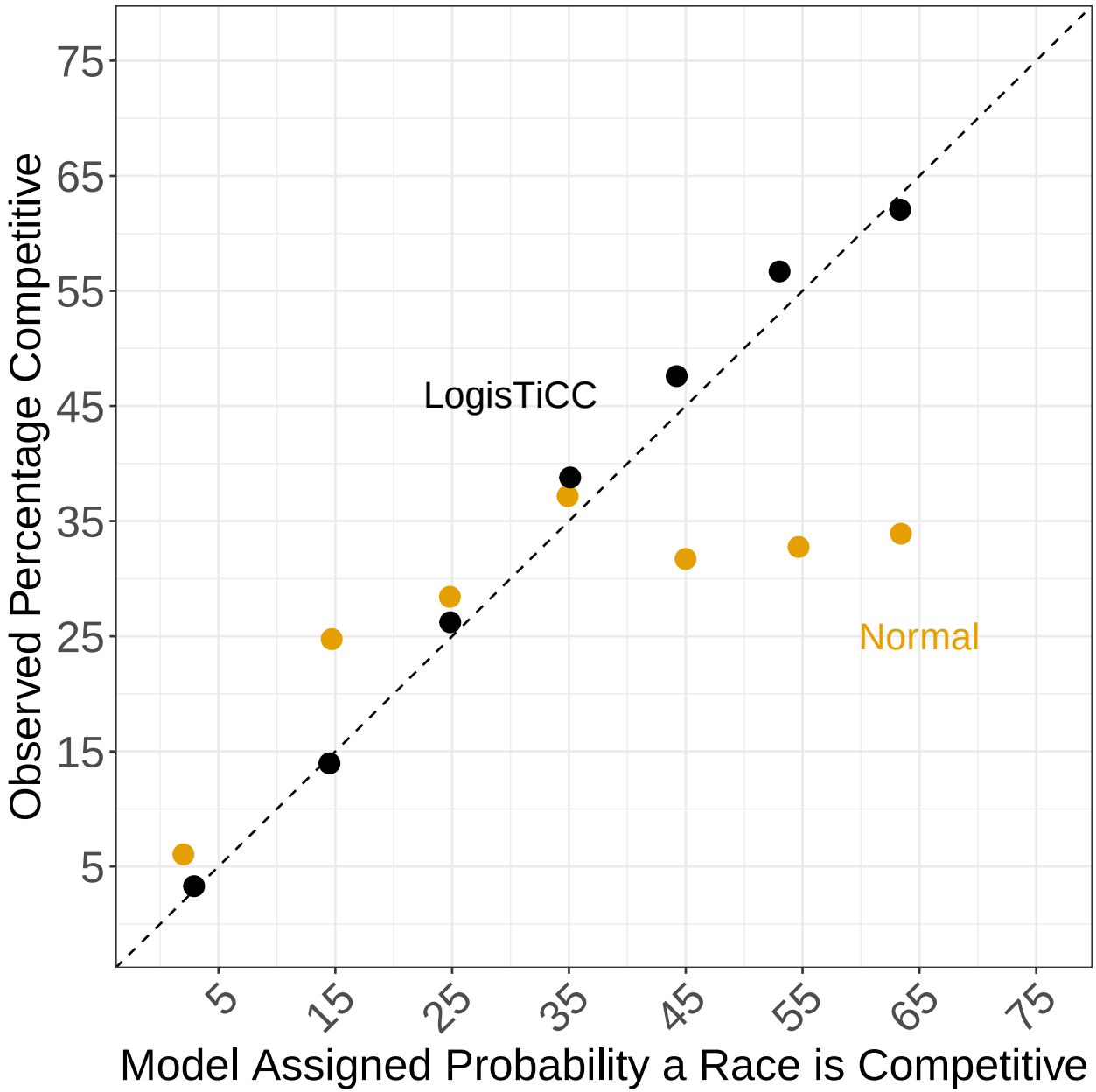

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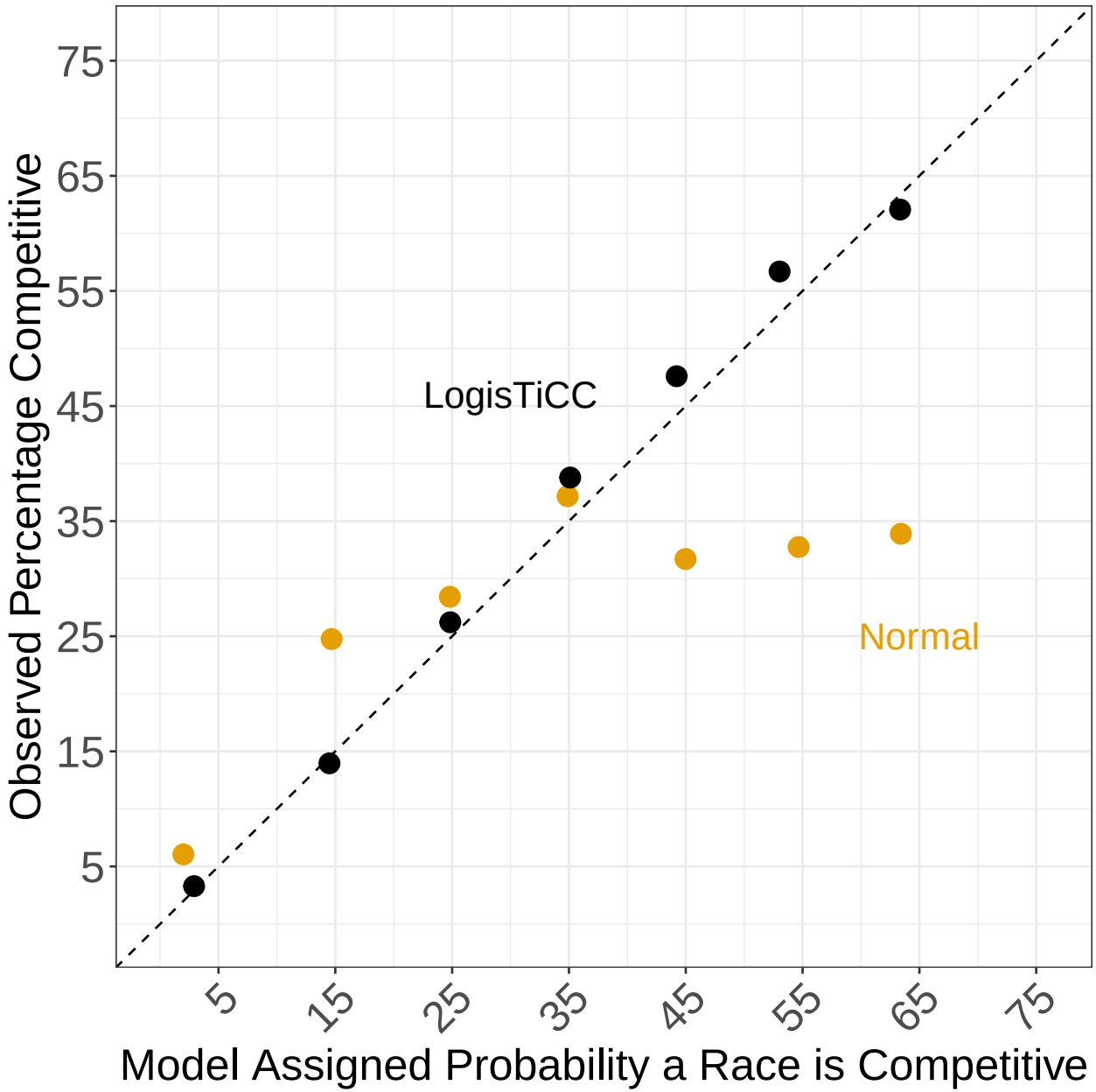

LogisTiCC: Near perfect

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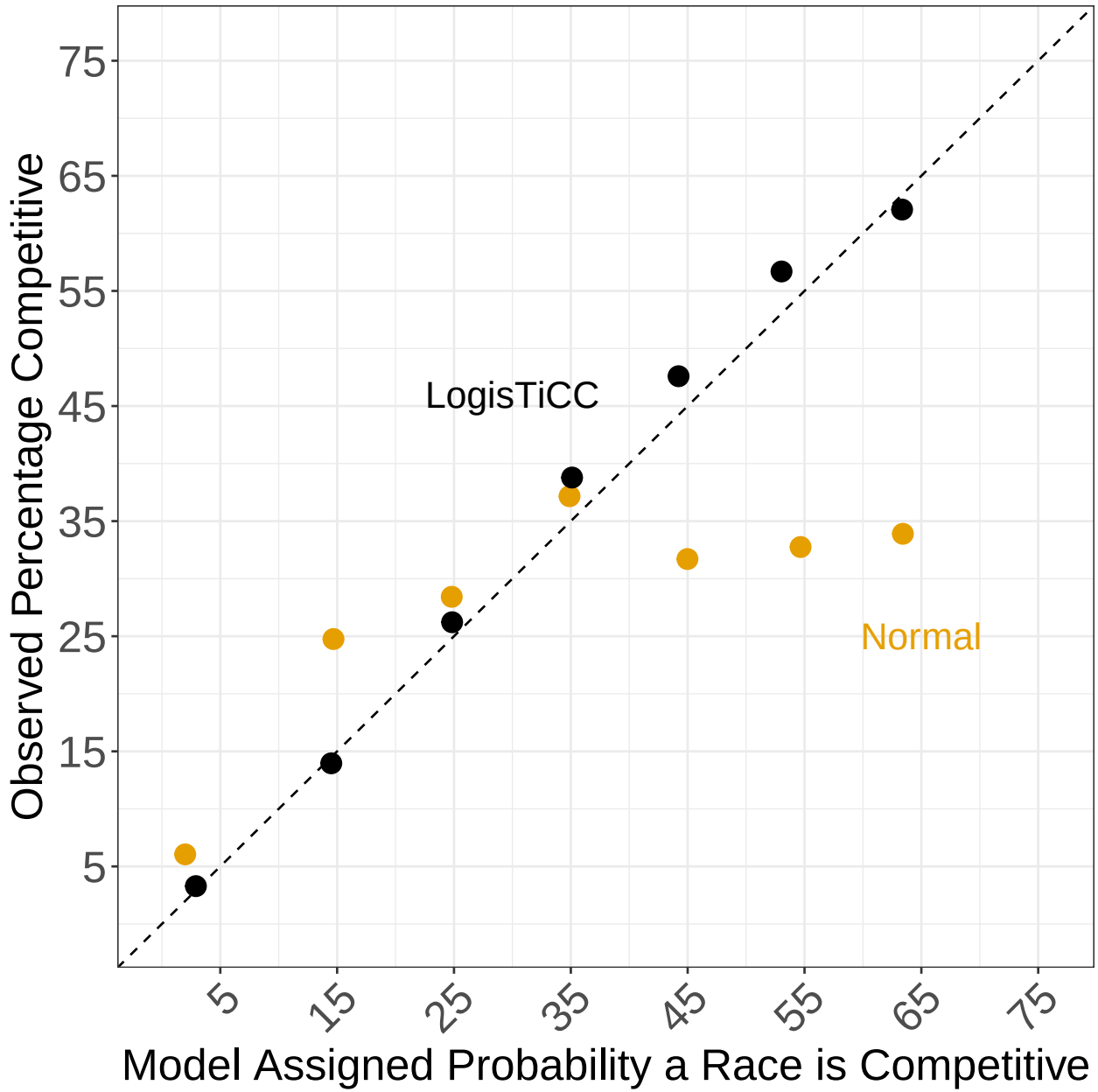

LogisTiCC: Near perfect

Normal: Fails for the most important elections

95% CI Coverage:

95% CI Coverage: Median House Seat Expected Vote

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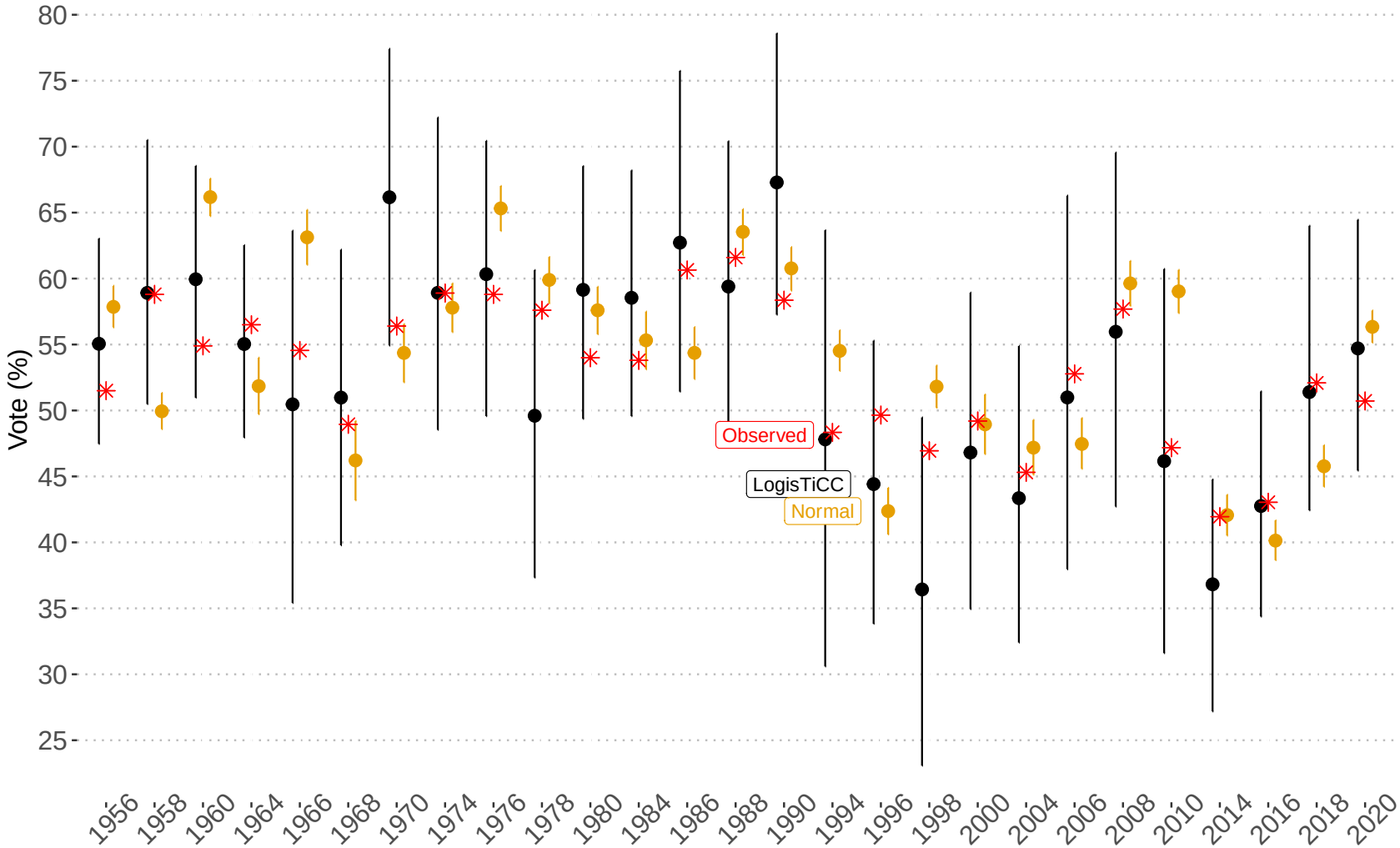

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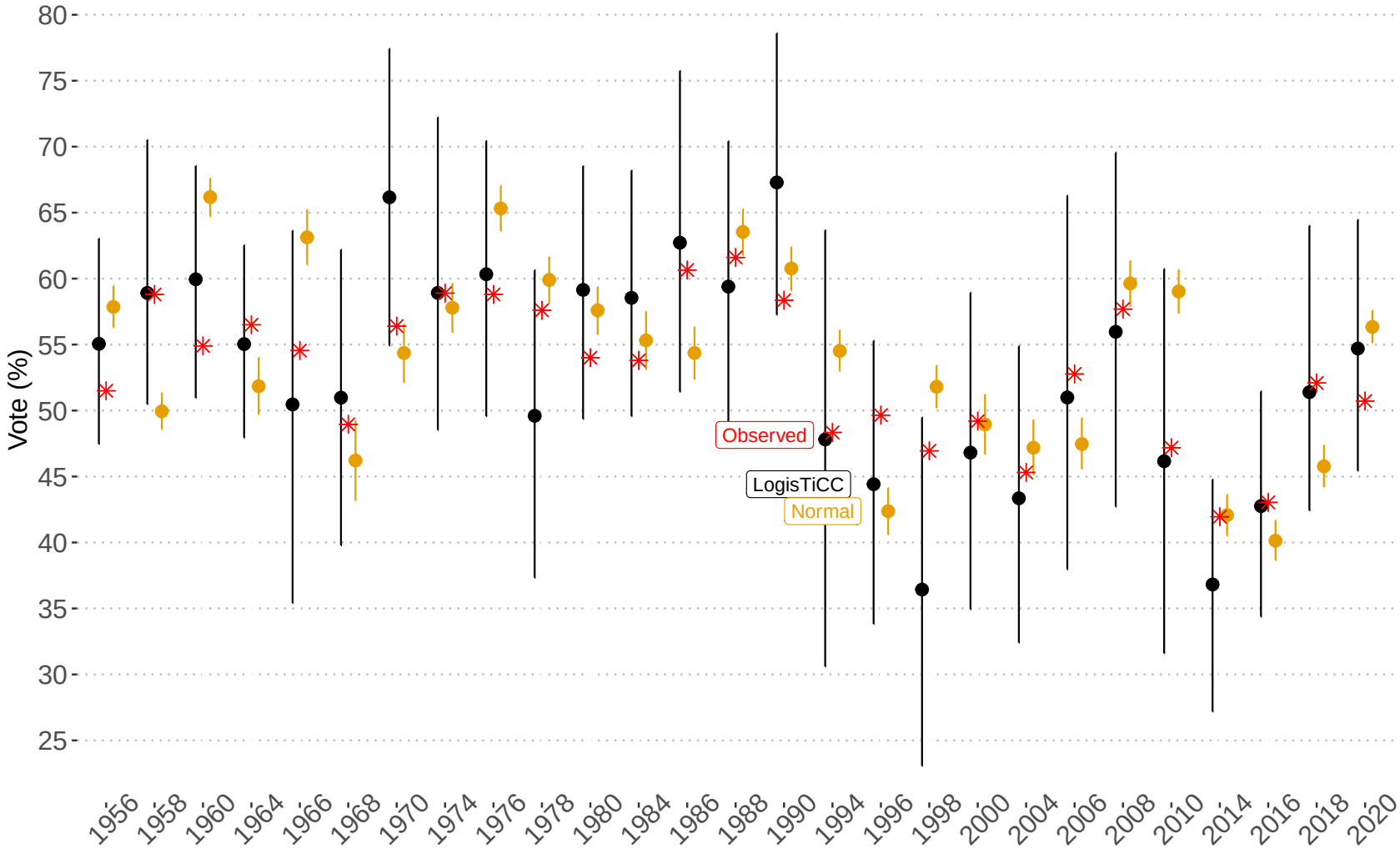

95% CI captures

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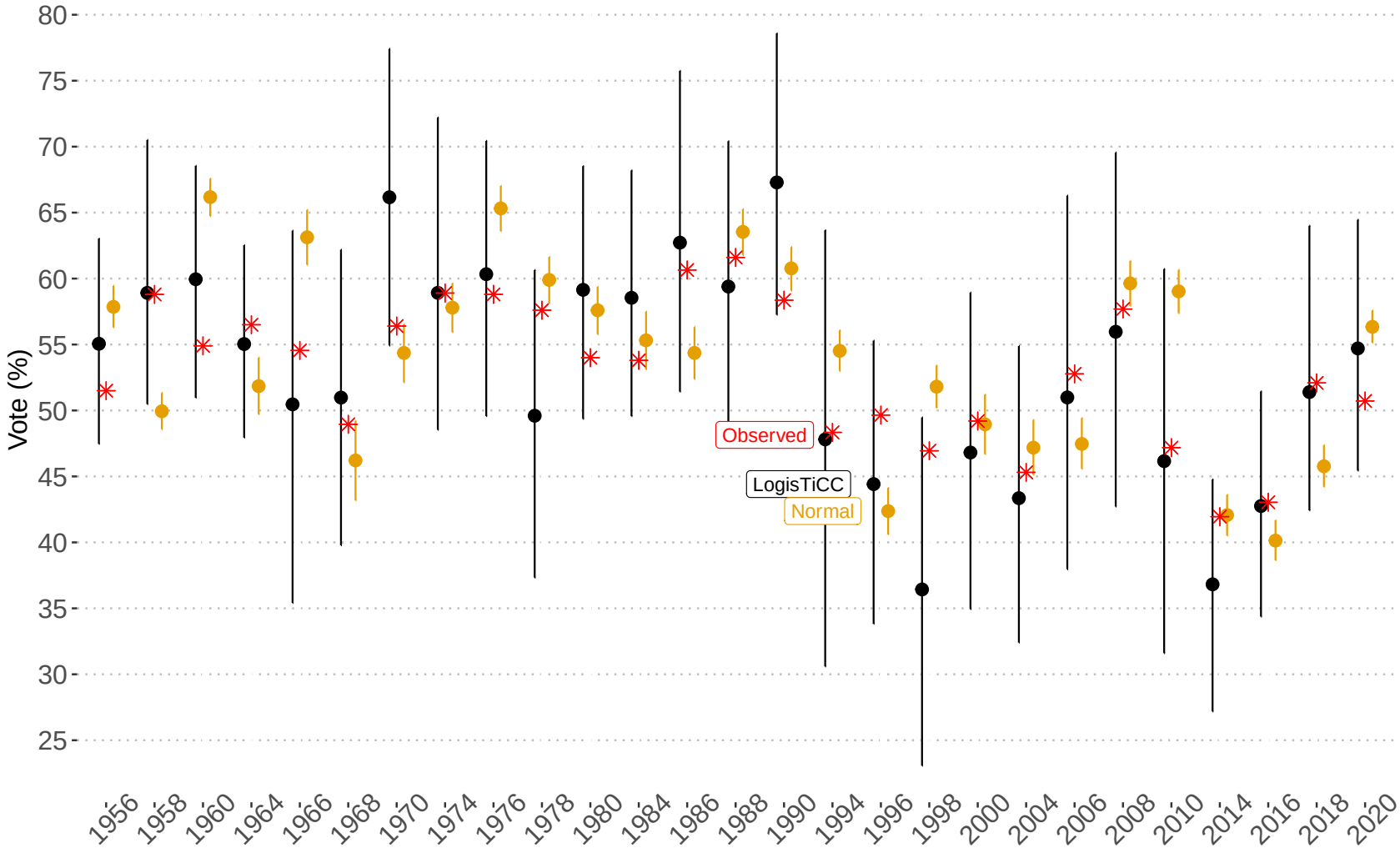

95% CI captures (Theory: 26/27):

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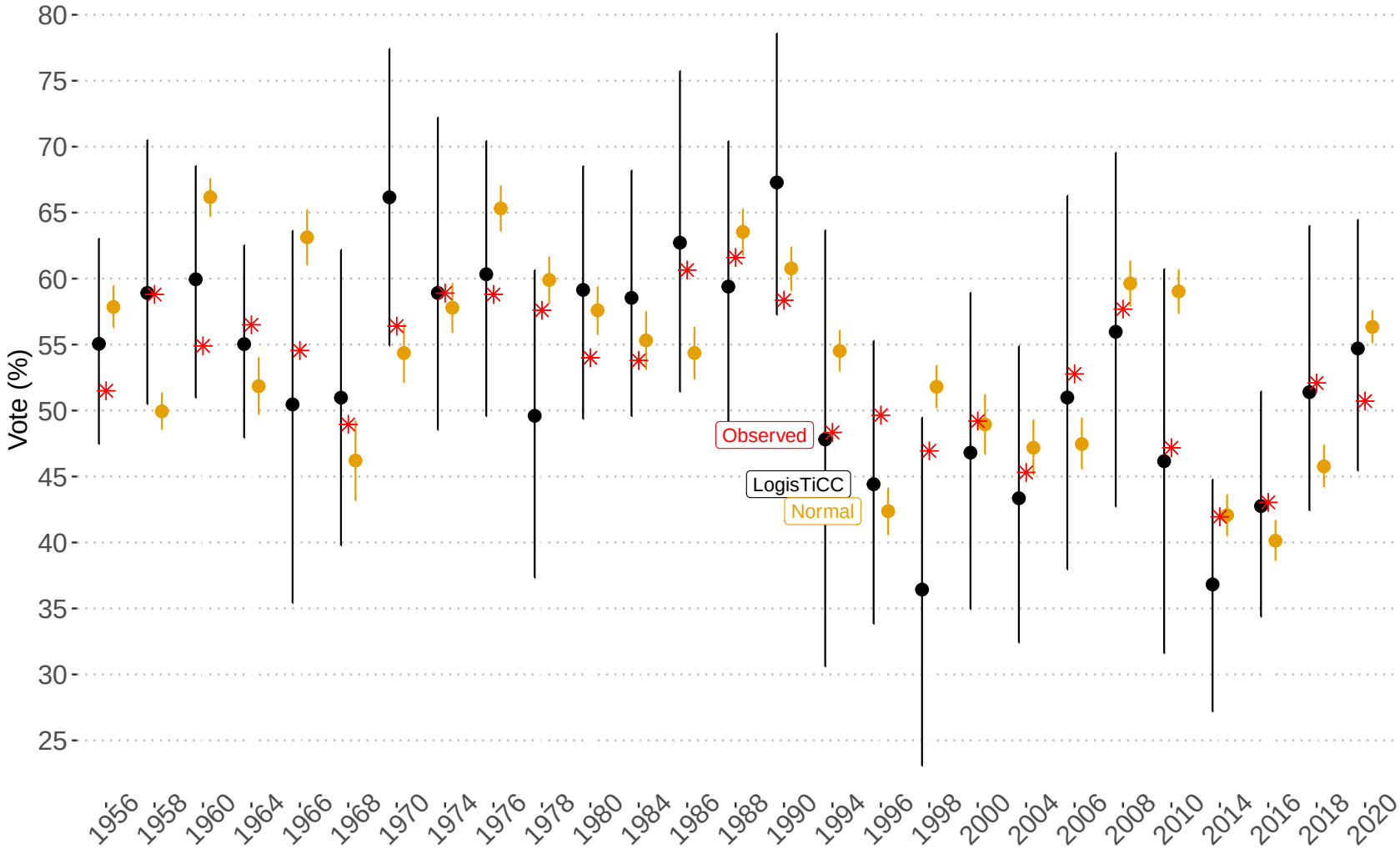
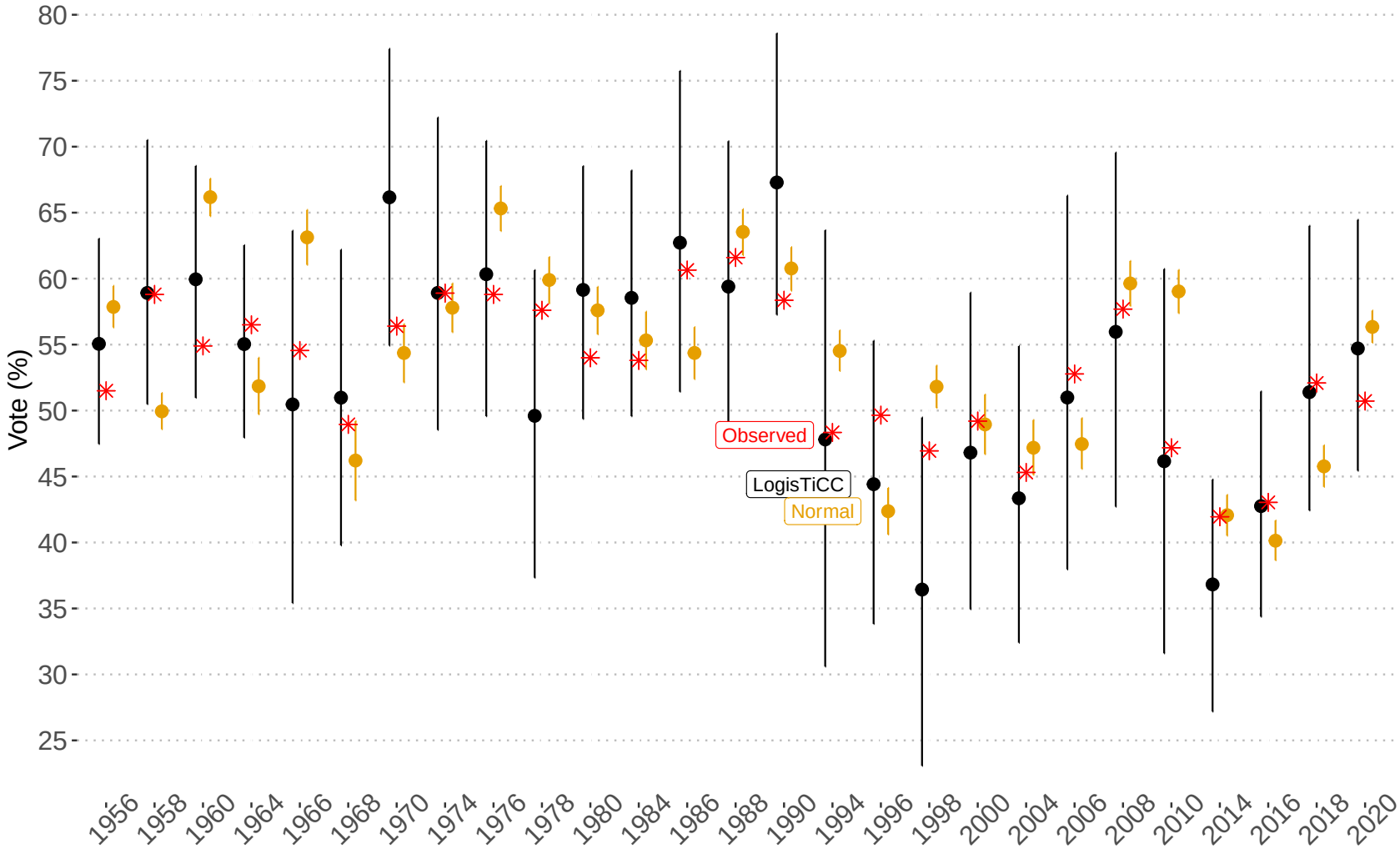


95% CI captures (Theory: 26/27): Normal 7/27,

95% CI Coverage: Median House Seat Expected Vote



95% CI captures (Theory: 26/27): Normal 7/27, LogisTiCC 27/27

95% CI Coverage:

95% CI Coverage: District Vote

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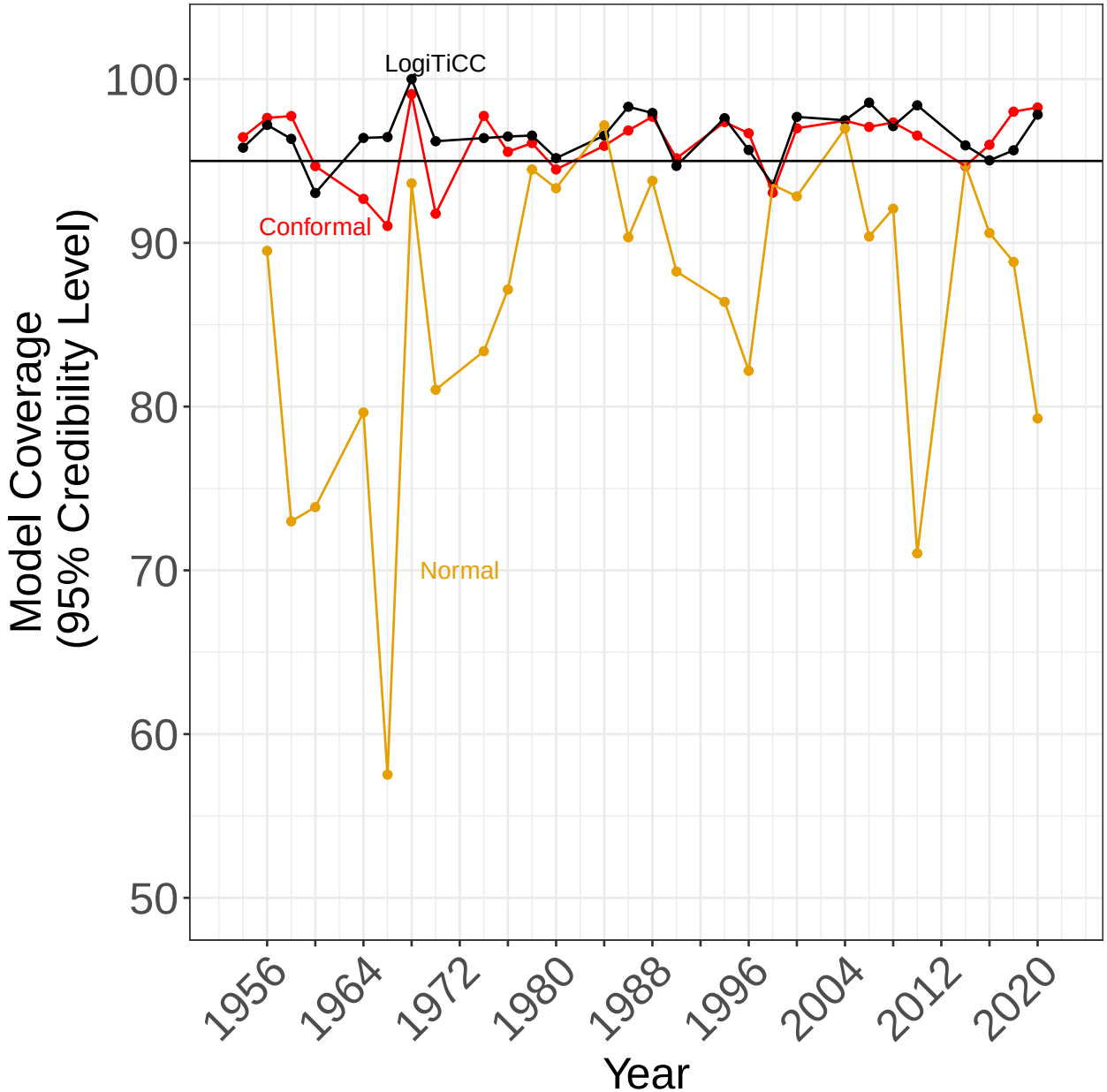
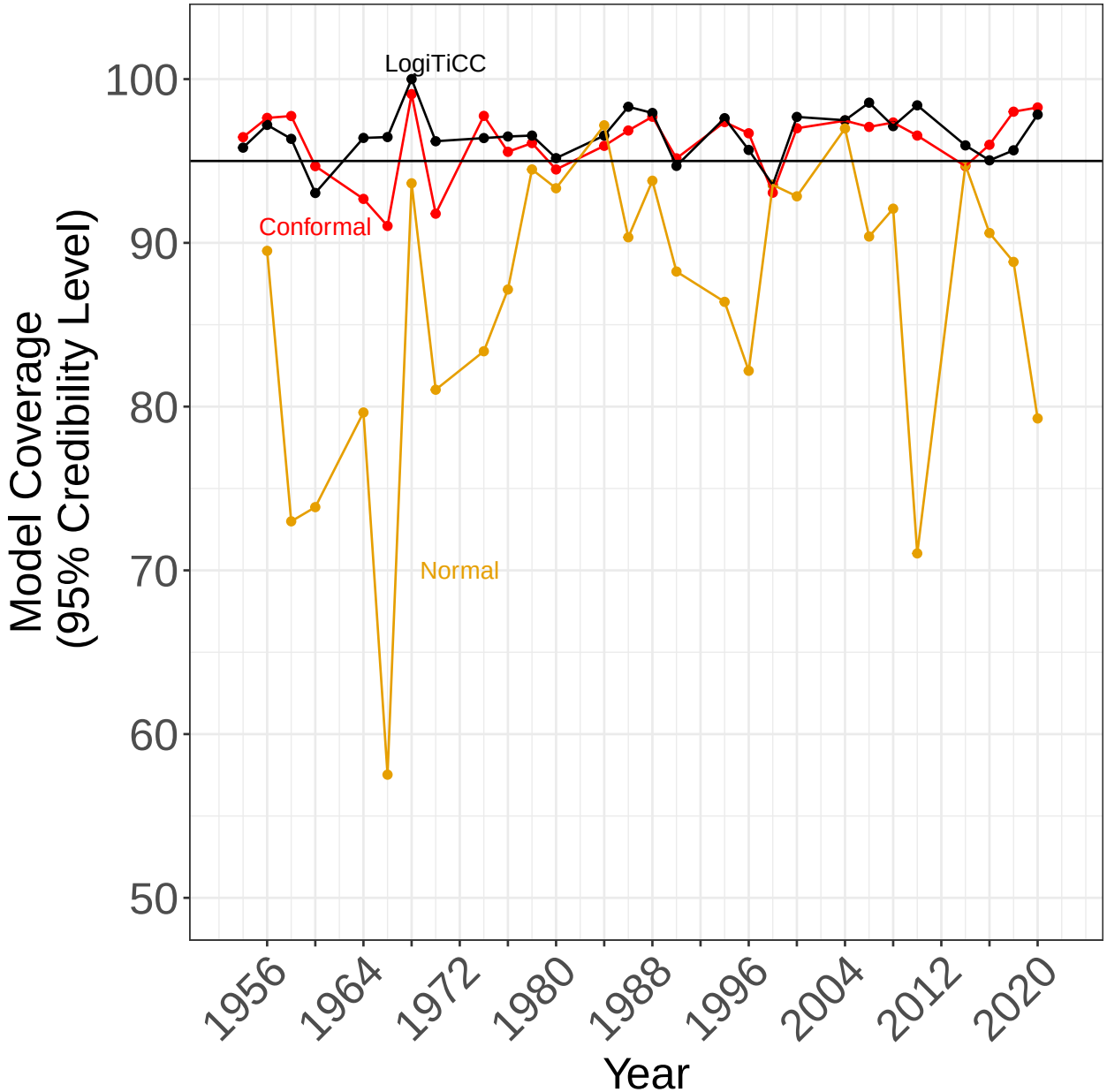
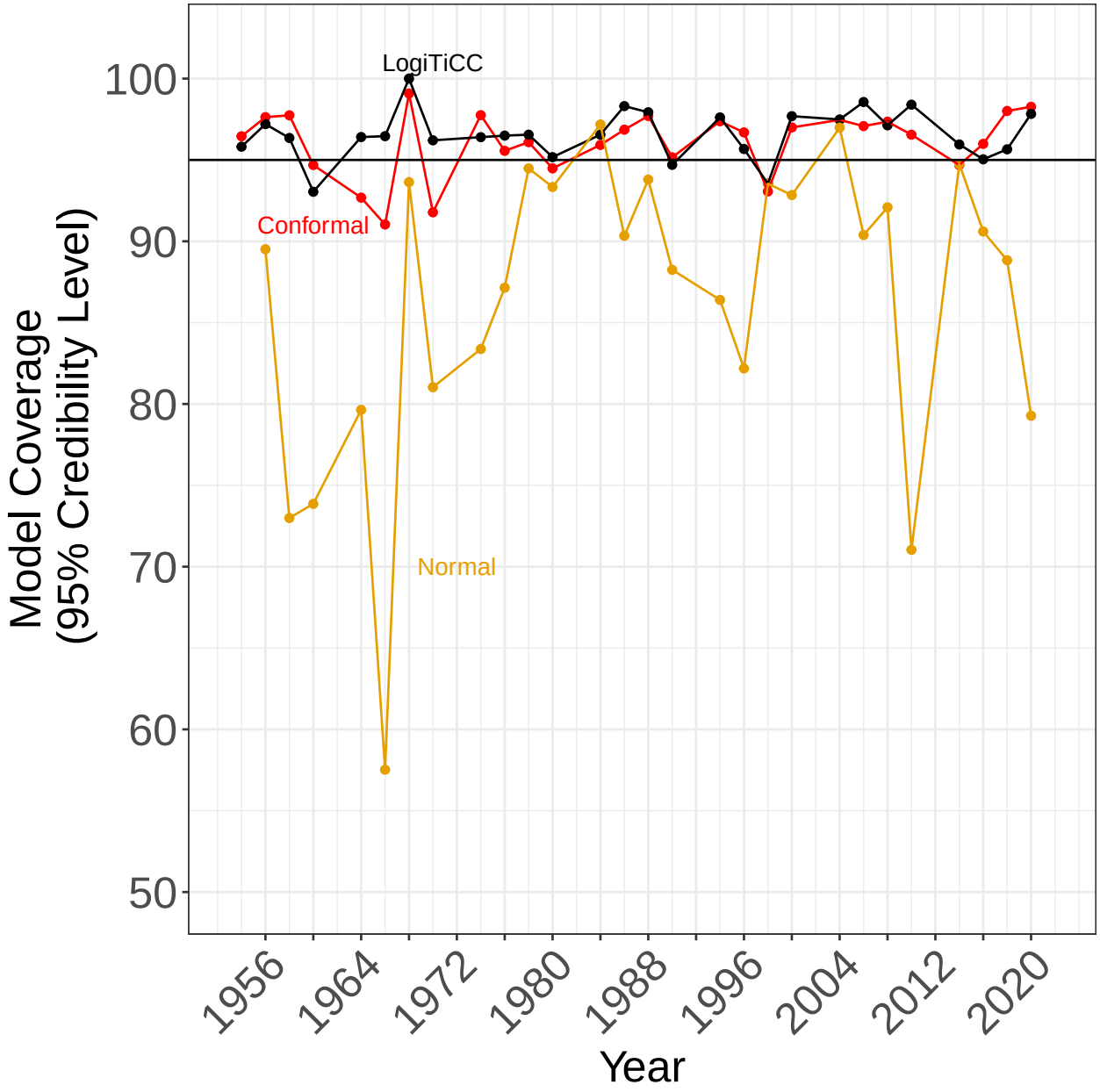


95% CI Coverage: District Vote



LogisTiCC:
~ correct

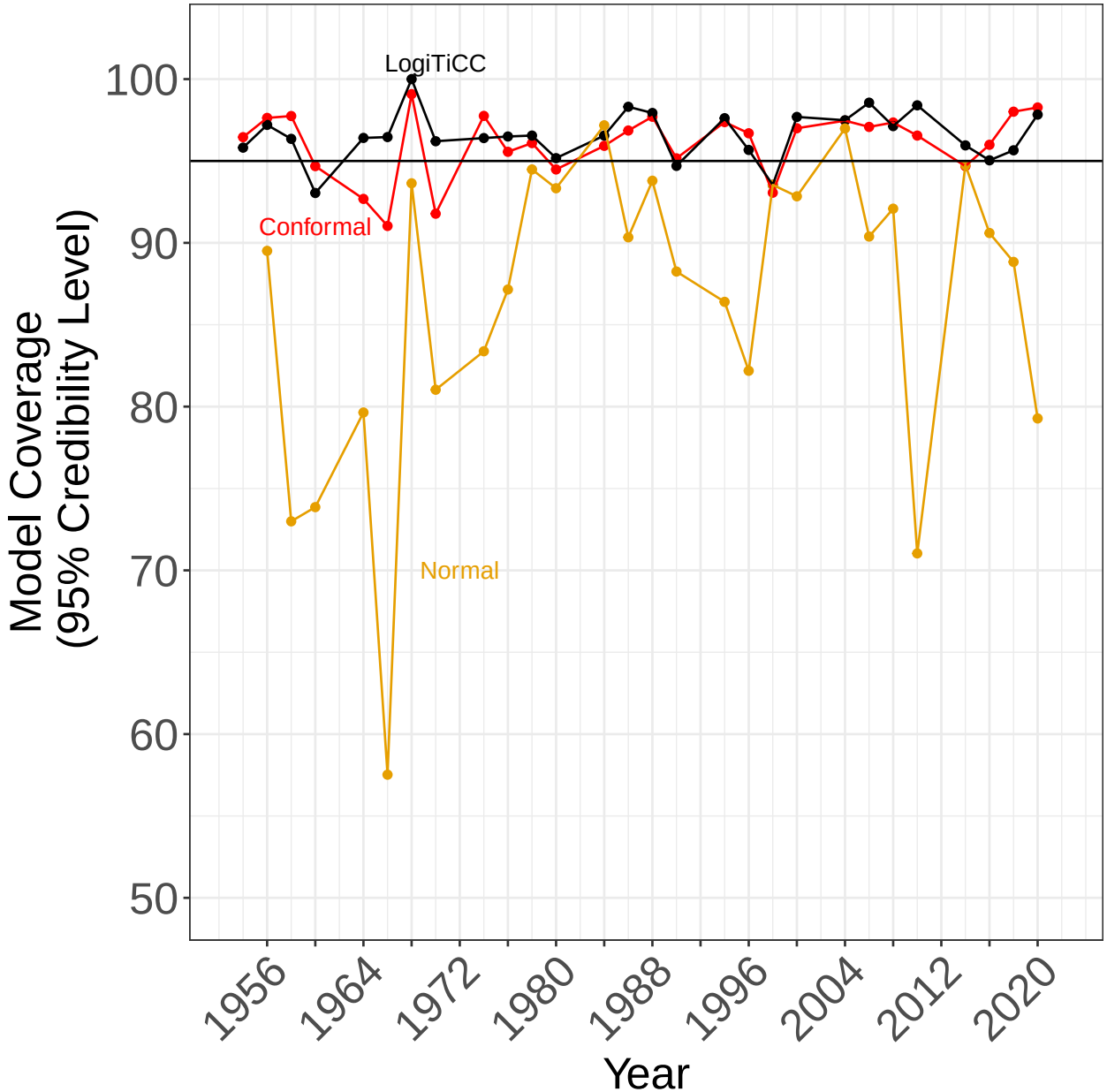
95% CI Coverage: District Vote



LogisTiCC:
~ correct

Normal: Way over confident

95% CI Coverage: District Vote



LogisTiCC:
~ correct

Normal: Way over confident

Nonparametric:
~ correct

The Plan

Model Validation: Out-of-sample tests

Prob(Incumbent Defeat): High, No Change

Intermediate Variables: Massive Change

How No Change Leads to Massive Change

Prob(Defeat): High Mean, No (systematic) Change

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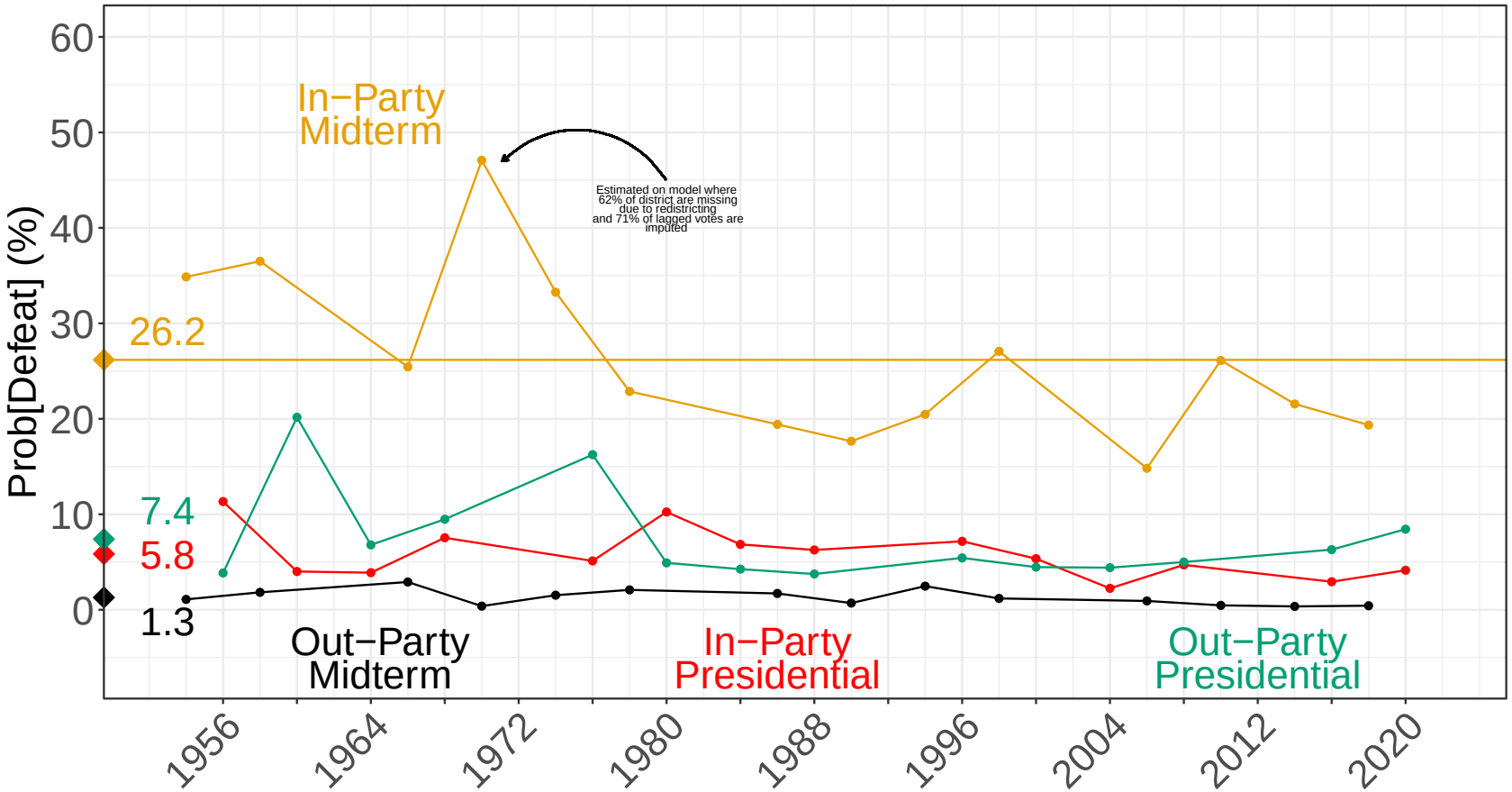

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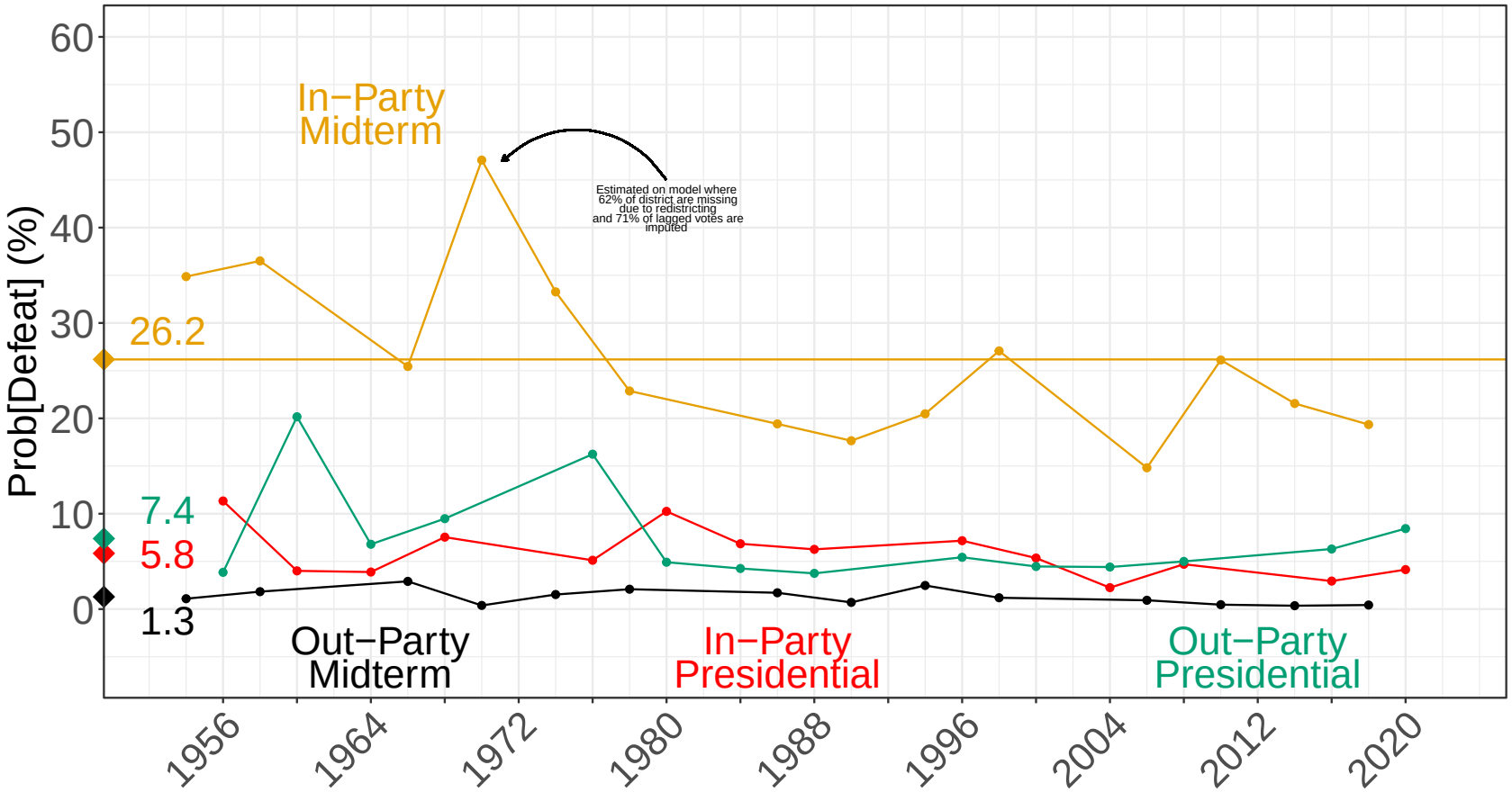

Mean high: 1.3–26.2%; overall: 11%

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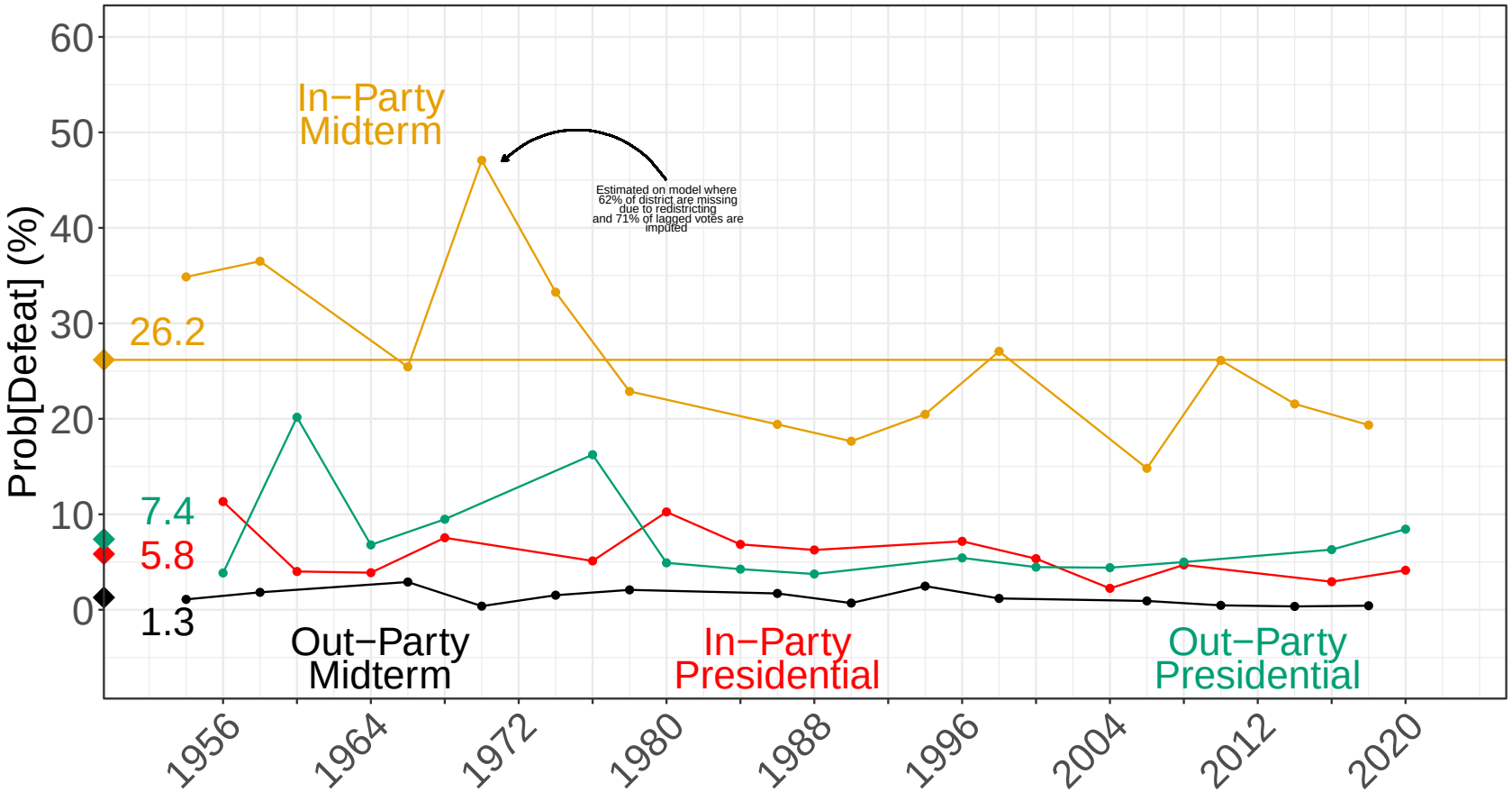

Mean high: 1.3–26.2%; overall: 11%

No Trend: Approximately constant over time

Prob(Defeat): High Variation, No (systematic) Change

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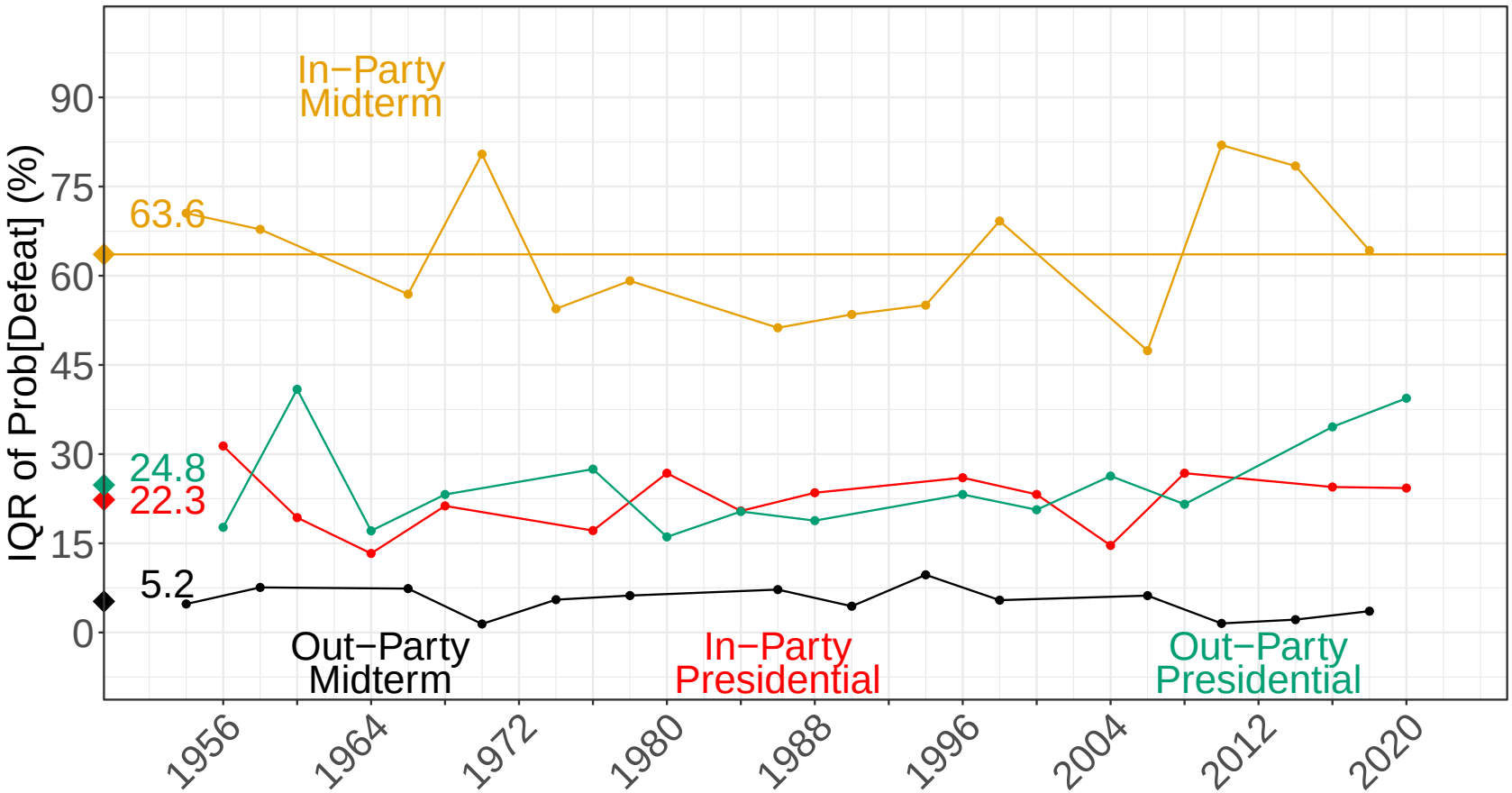

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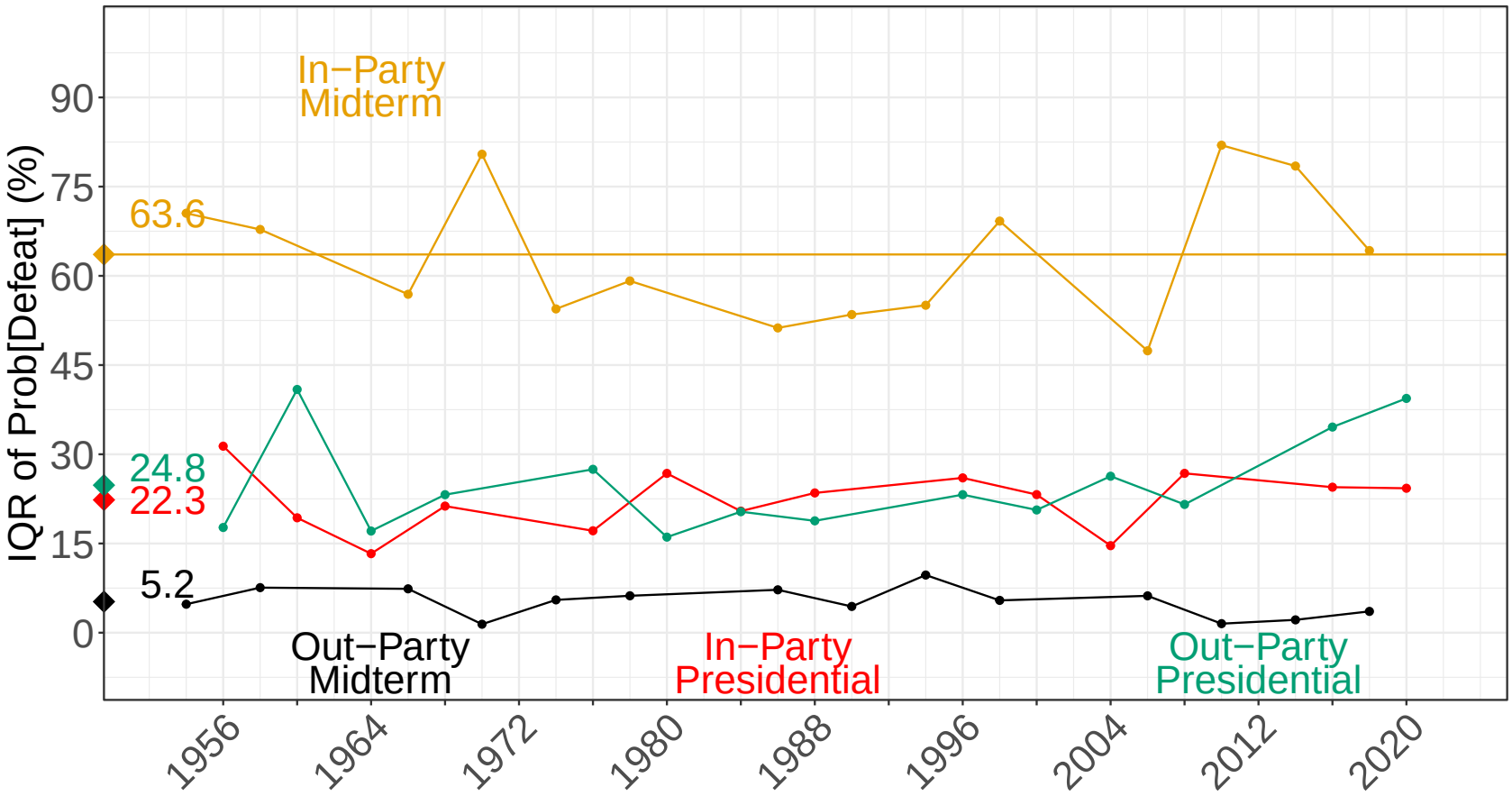

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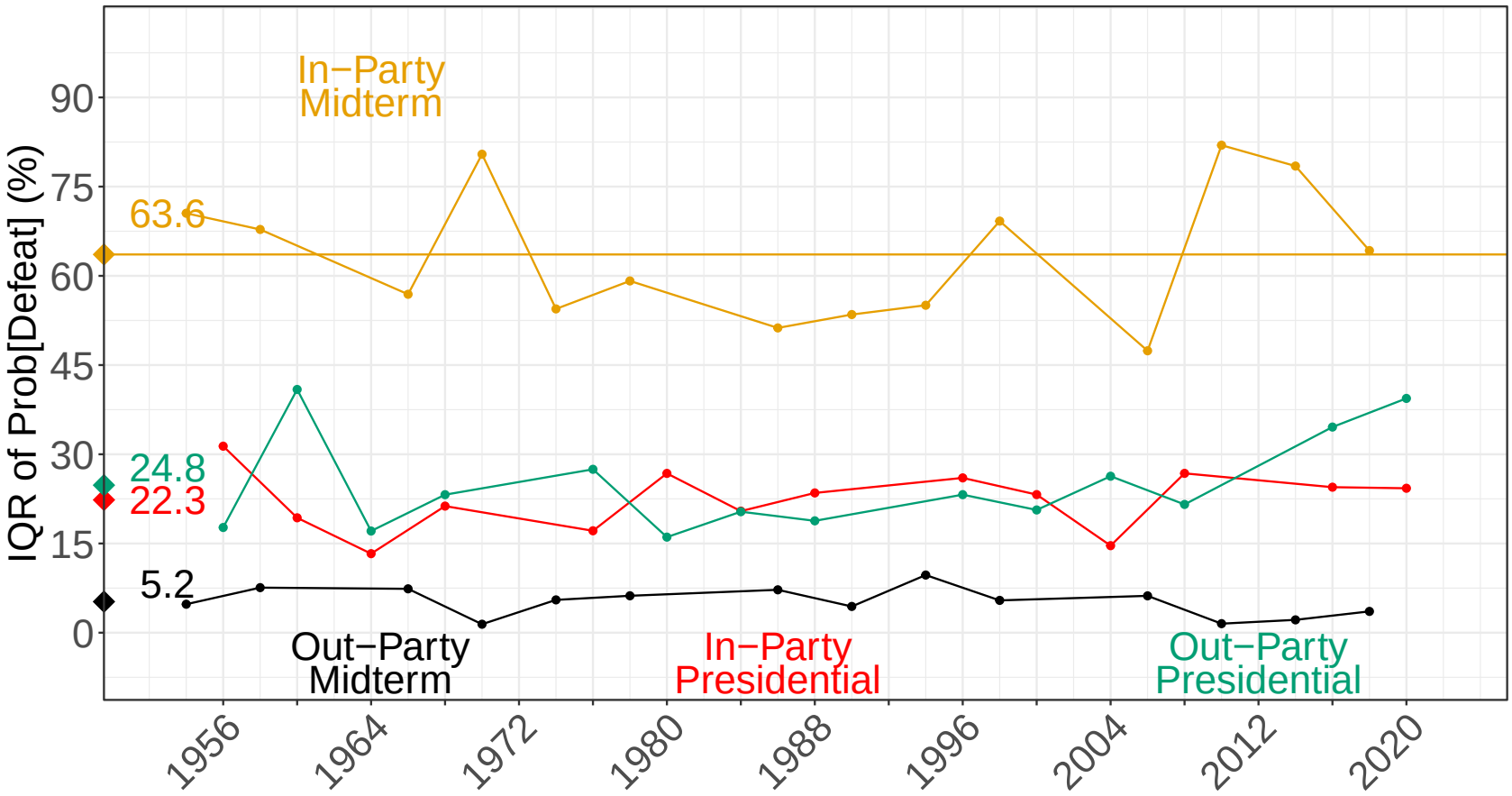

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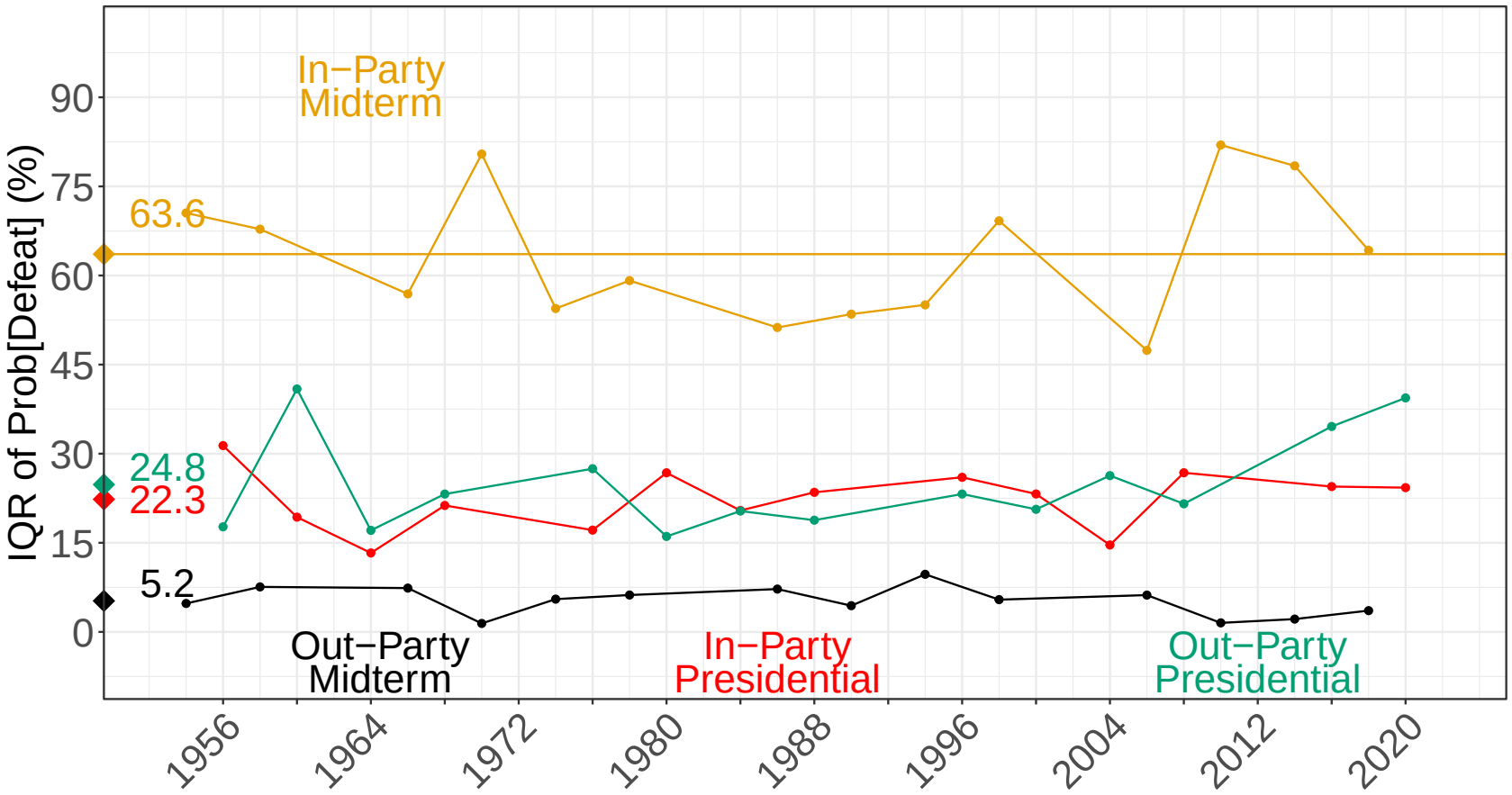

Mean high: 1.3–26.2%; overall: 11%

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Individual job security? Random terror!

The Plan

Model Validation: Out-of-sample tests

Prob(Incumbent Defeat): High, No Change

Intermediate Variables: Massive Change

How No Change Leads to Massive Change

Massive Political Change [With Prob(Defeat) constant?]

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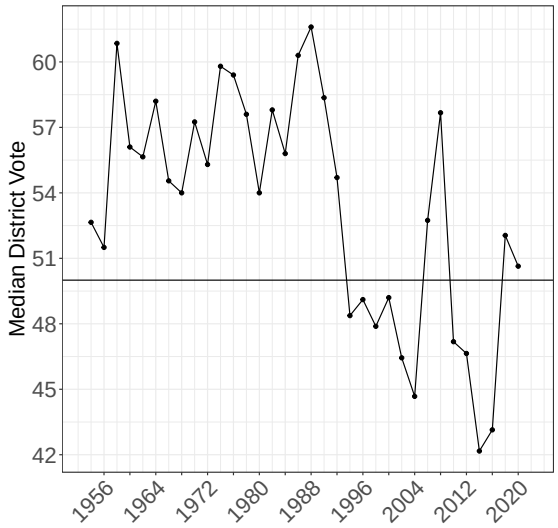
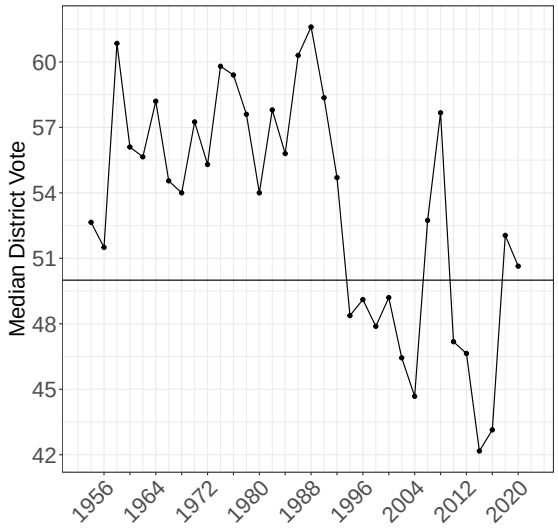


Median District Vote

Massive Political Change [With Prob(Defeat) constant?]



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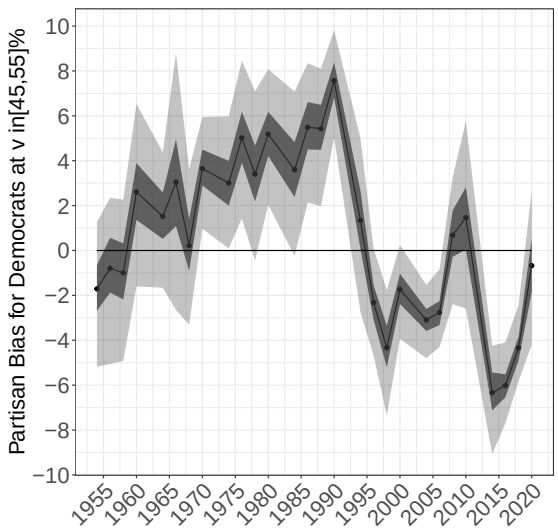
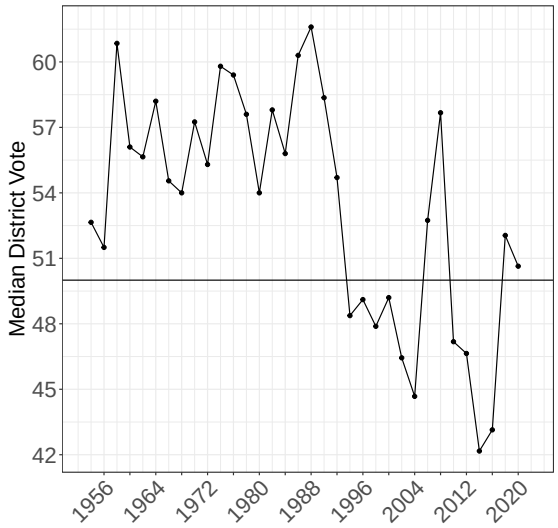


Partisan Bias

Massive Political Change [With Prob(Defeat) constant?]



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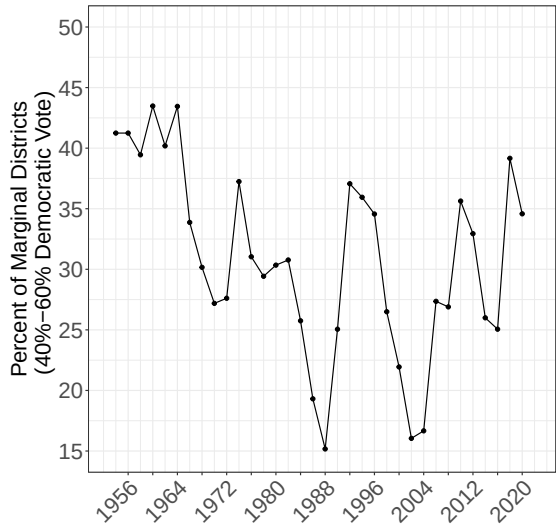
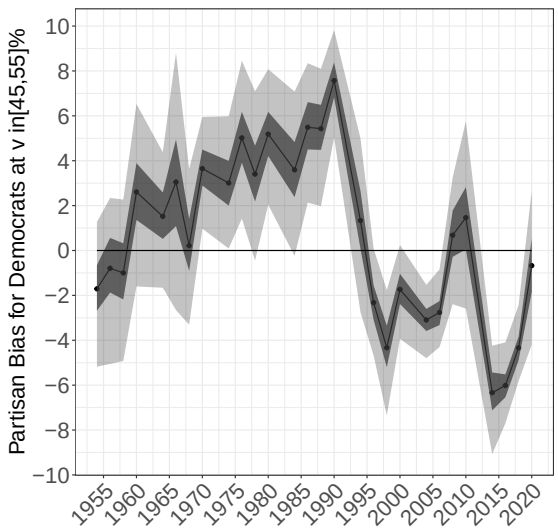


Electoral Marginals



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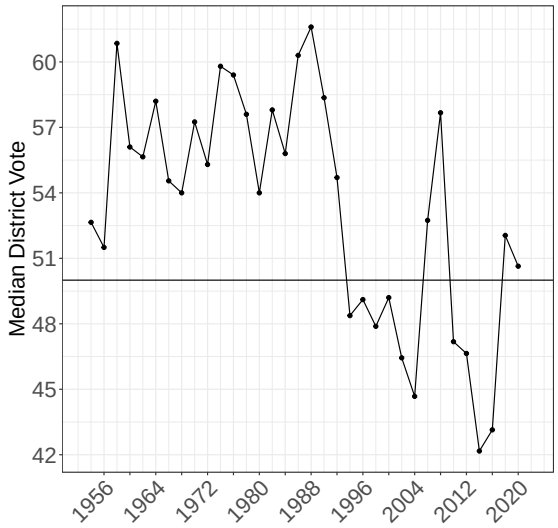
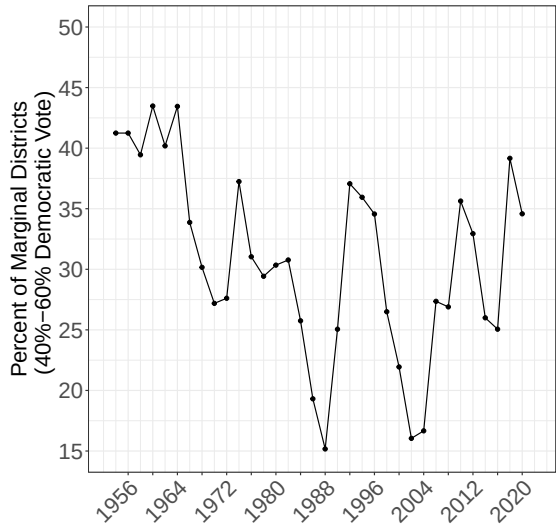


Median District Vote



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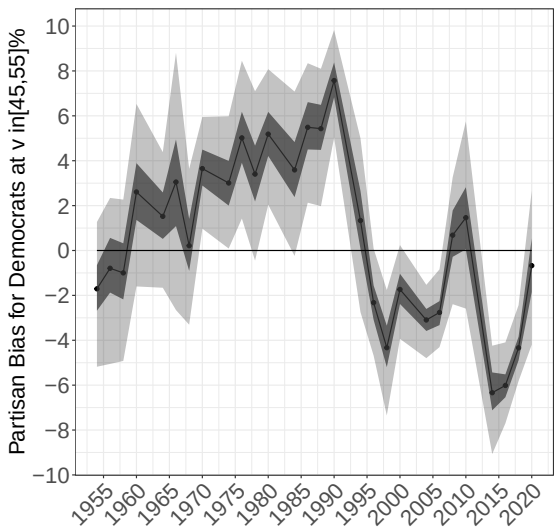
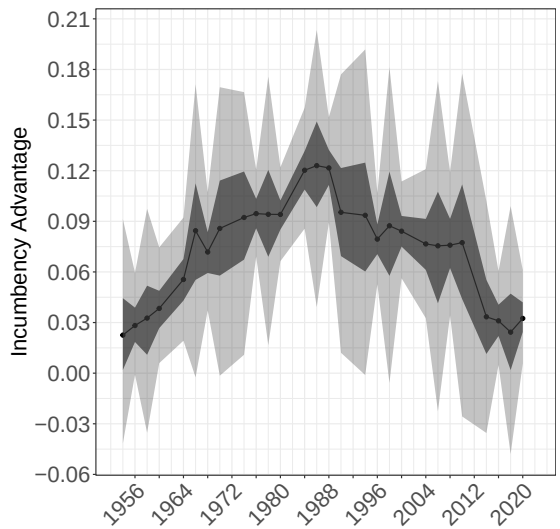
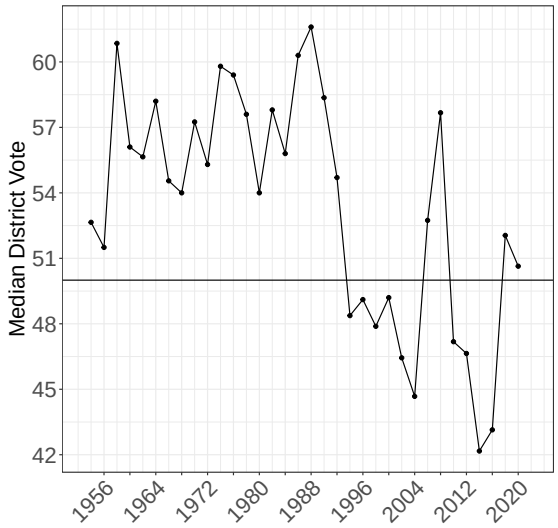


Partisan Bias

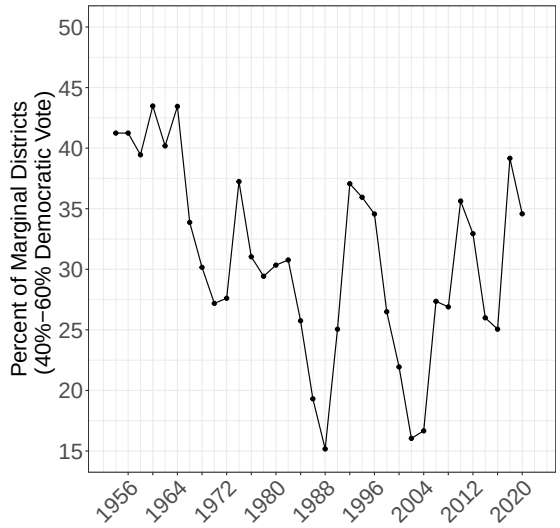


Incumbency Advantage

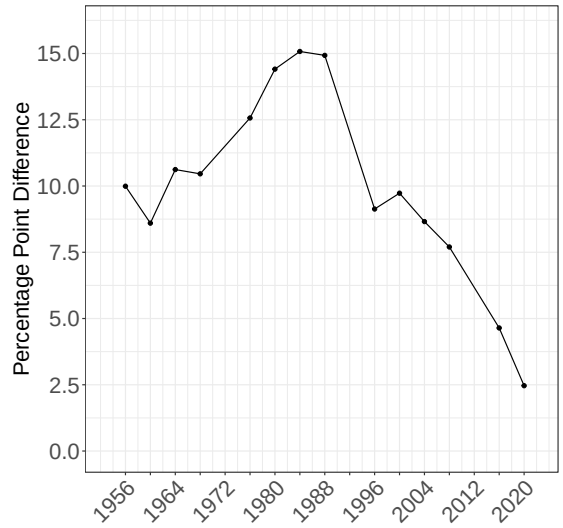
Massive Political Change [With Prob(Defeat) constant?]



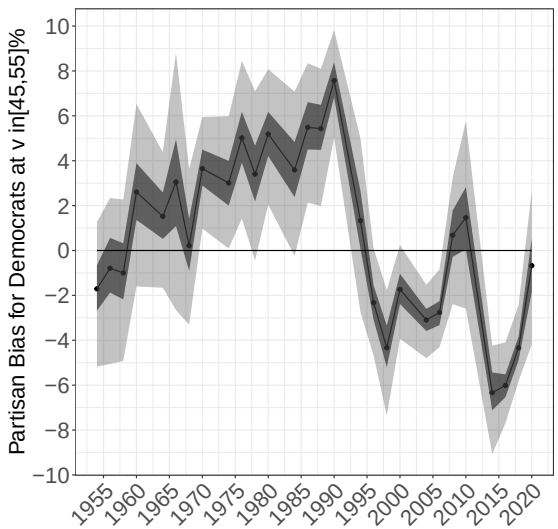
Median District Vote



Electoral Marginals



Split Ticket Voting



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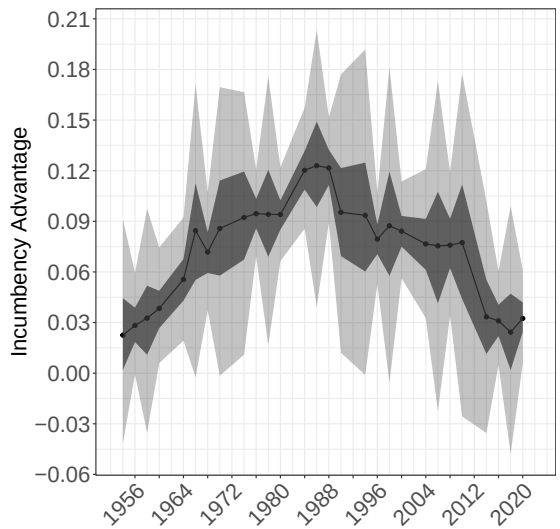

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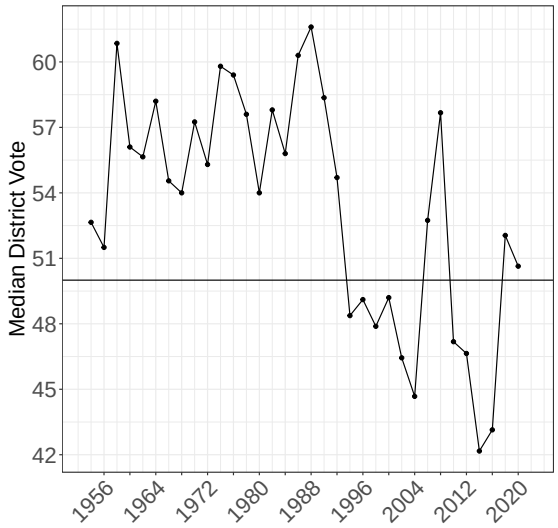
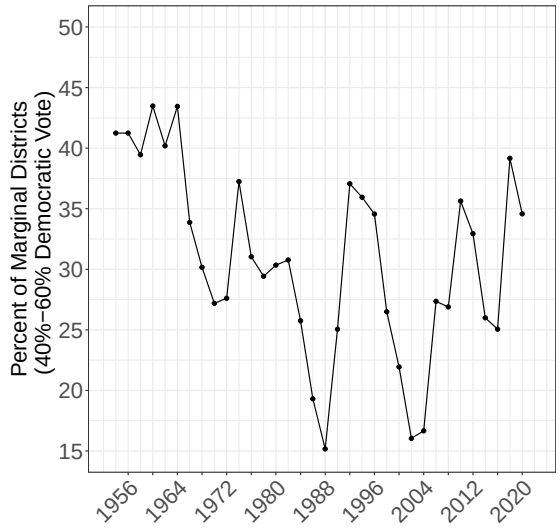
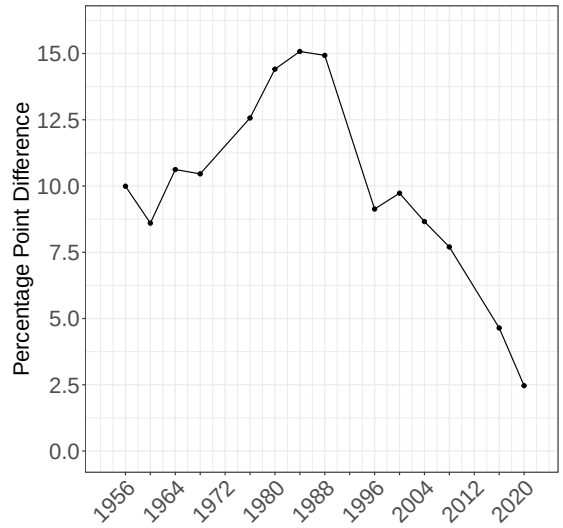


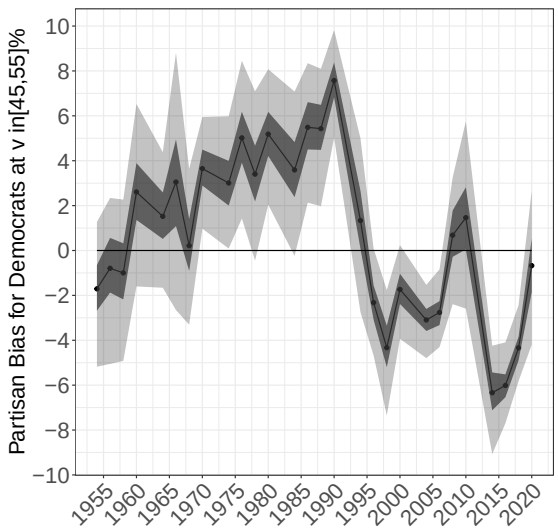
Median District Vote



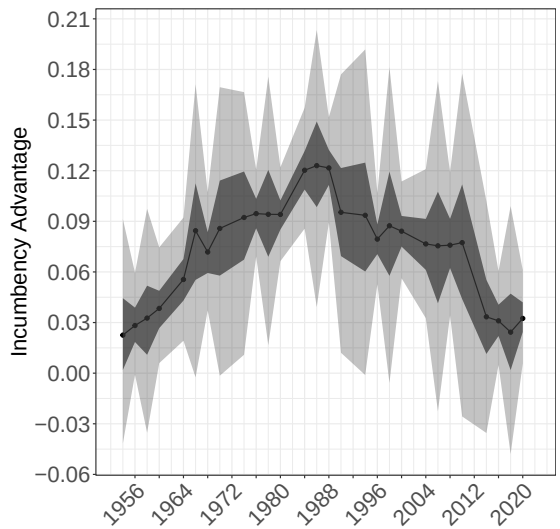
Electoral Marginals



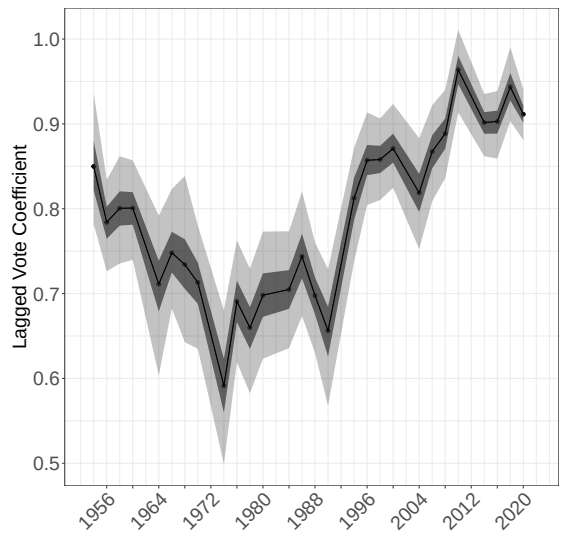
Split Ticket Voting



Partisan Bias



Incumbency Advantage



Lagged Vote

The Plan

Model Validation: Out-of-sample tests

Prob(Incumbent Defeat): High, No Change

Intermediate Variables: Massive Change

How No Change Leads to Massive Change

More than Central Tendency: Variation Matters

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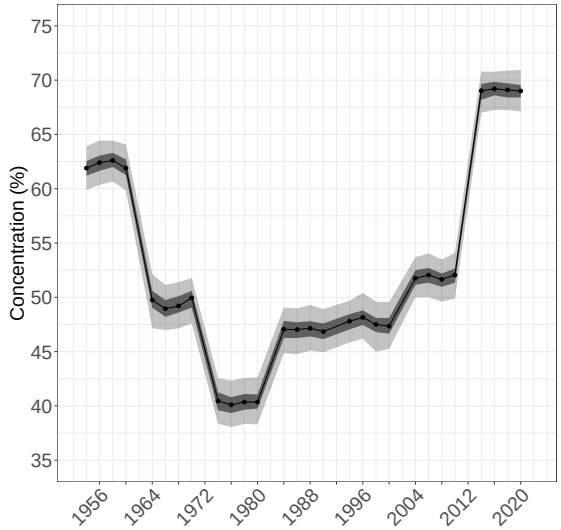
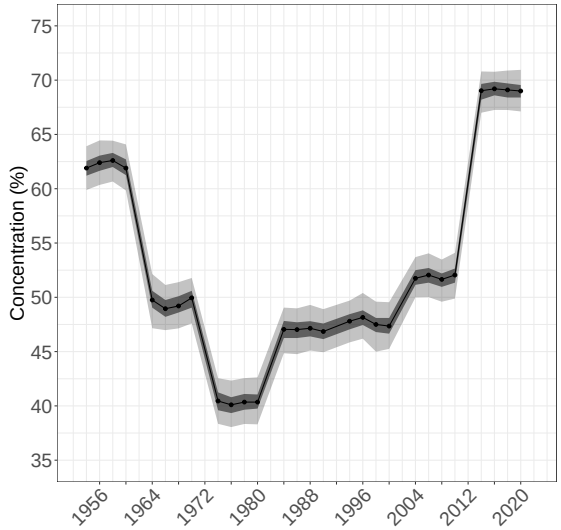


Concentration:

$$\int_{45}^{55} p(v|E[v] = 50)dv$$

More than Central Tendency: Variation Matters



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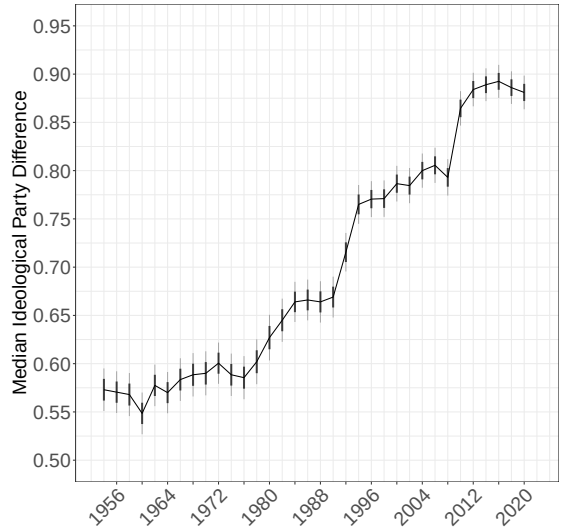
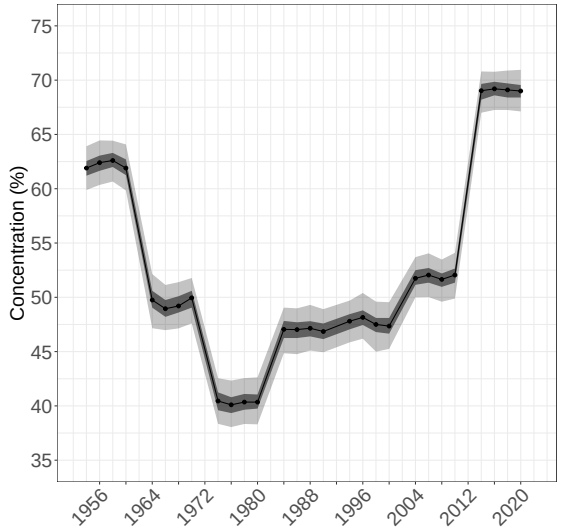


Ideological Polarization
(DW-NOMINATE)

More than Central Tendency: Variation Matters



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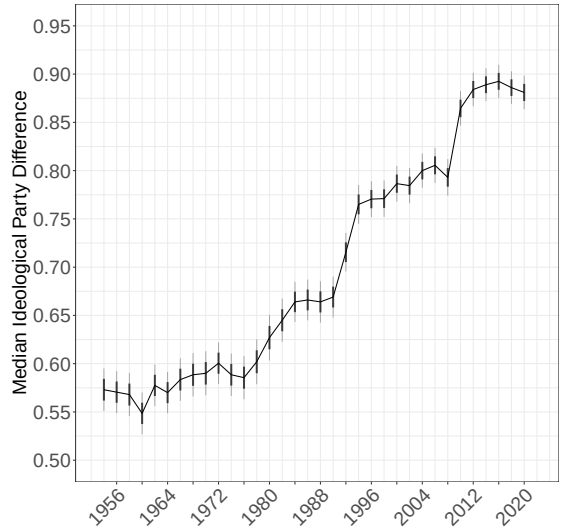
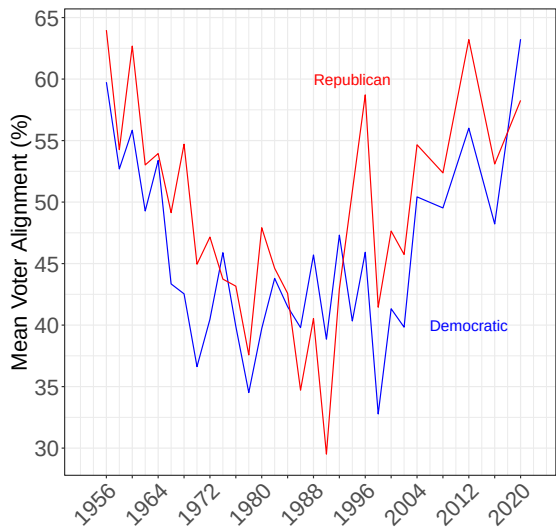
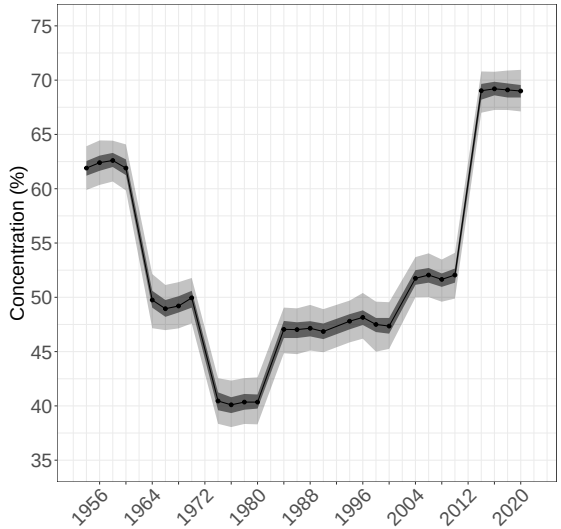


Ideological Polarization
(DW-NOMINATE)



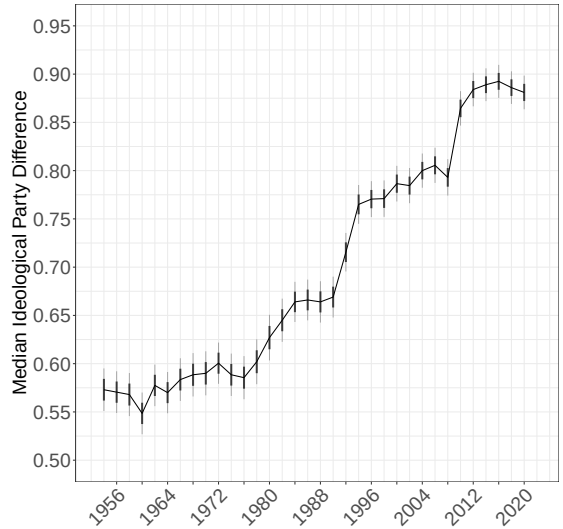
Party ID-Vote Agreement (ANES)

More than Central Tendency: Variation Matters

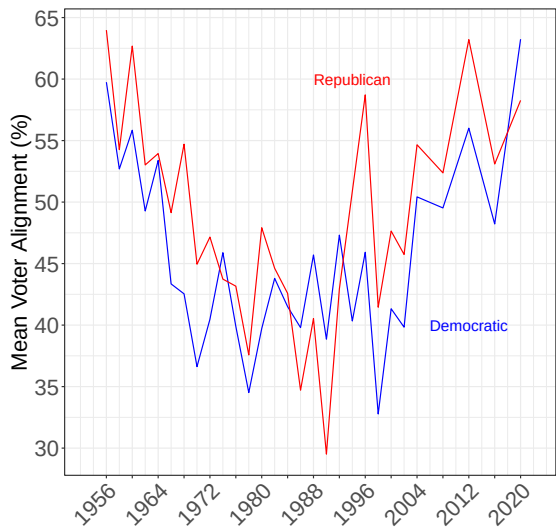


Concentration:

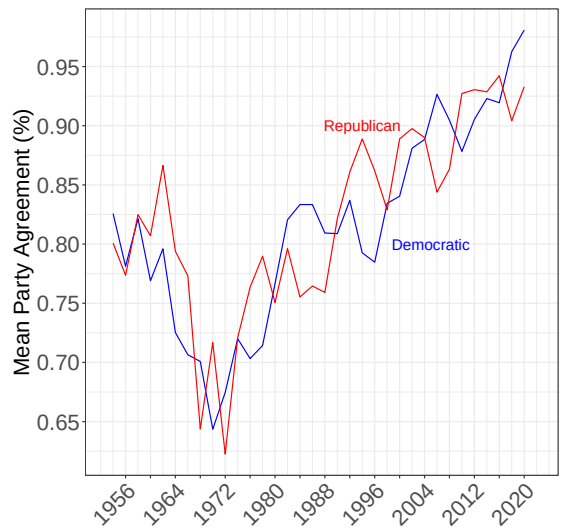
$$\int_{45}^{55} p(v|E[v] = 50)dv$$



Ideological Polarization (DW-NOMINATE)



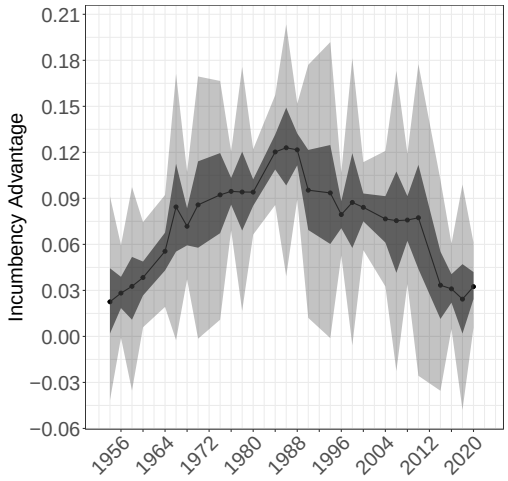
Party ID-Vote Agreement (ANES)



Legislator-Leader Party Agreement (Roll calls)

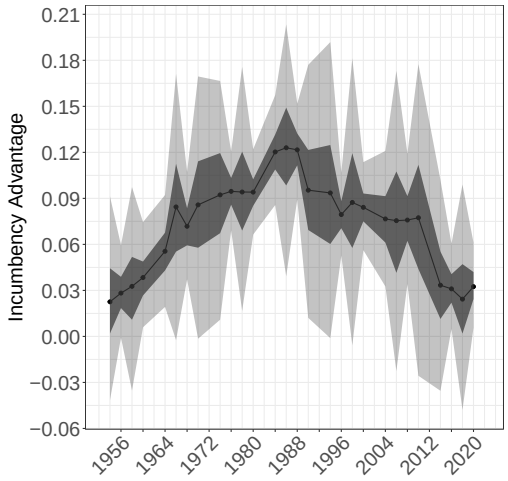
“Adding” it up

“Adding” it up



Incumbency Advantage

“Adding” it up



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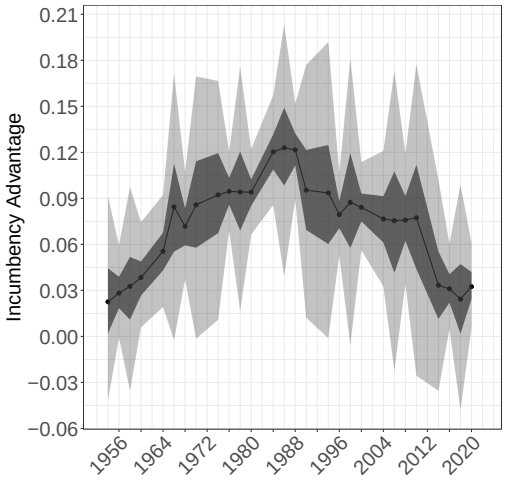
Incumbency Advantage

“Adding” it up



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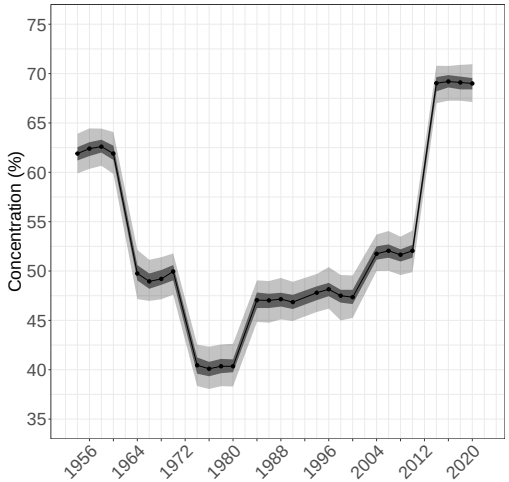
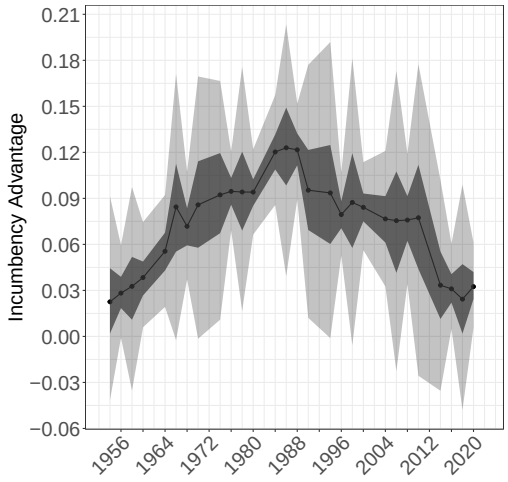


Incumbency Advantage

Concentration:

$$\int_{45}^{55} p(v|E[v] = 50)dv$$

“Adding” it up



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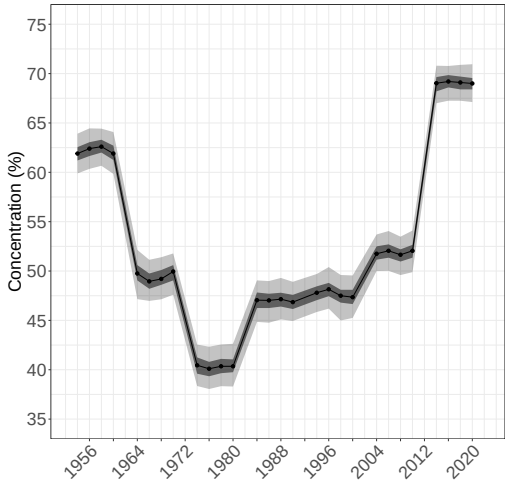

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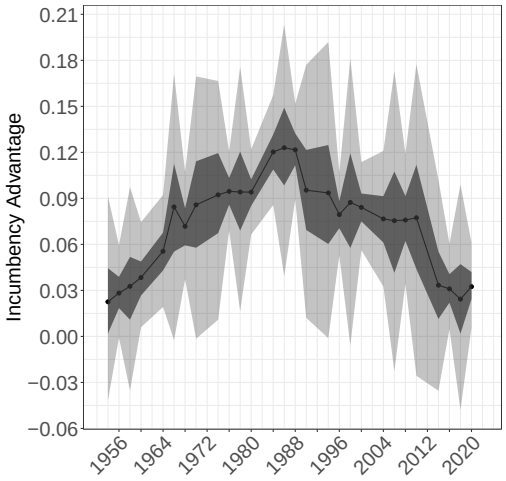

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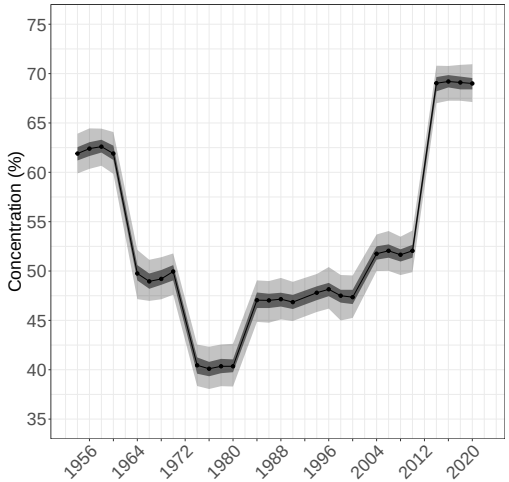

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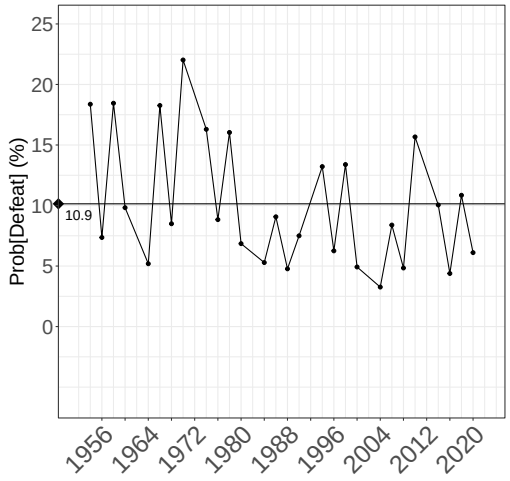


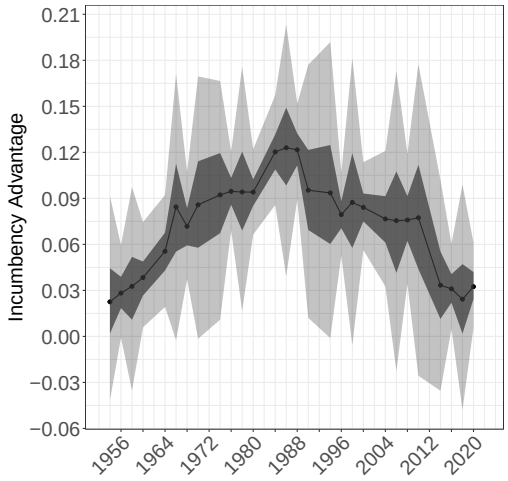
Incumbency Advantage

Concentration:

$$\int_{45}^{55} p(v|E[v] = 50)dv$$

Mean Prob(Defeat)

“Adding” it up



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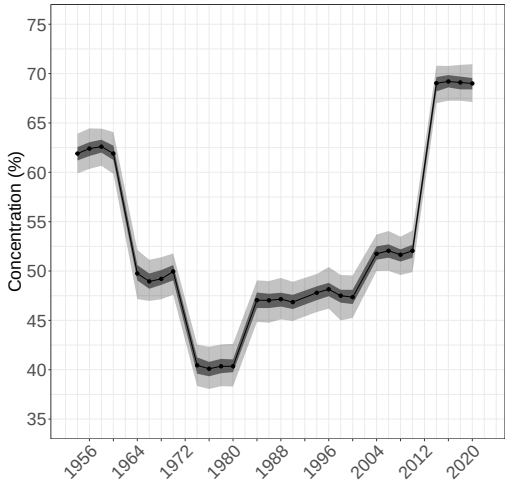

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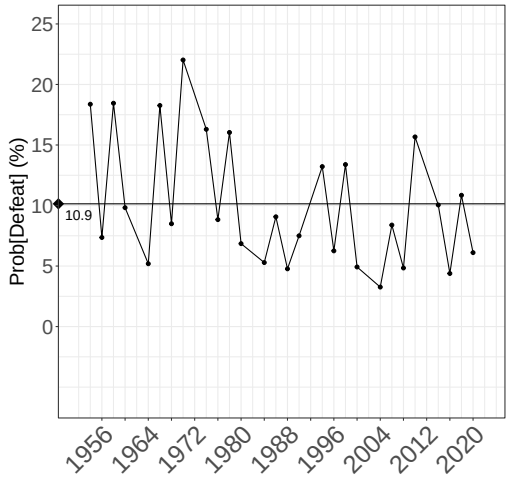

Incumbency Advantage

Concentration:

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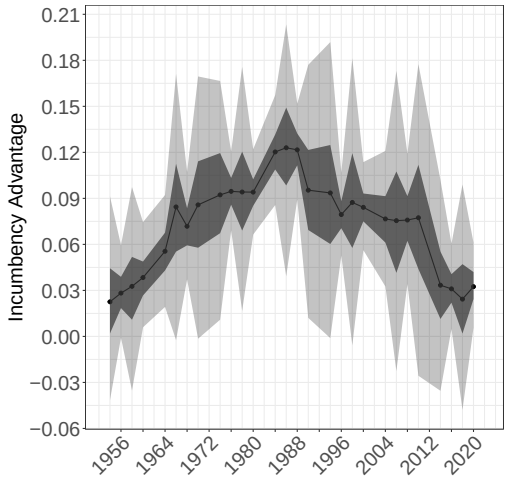
Mean Prob(Defeat)

We find

“Adding” it up



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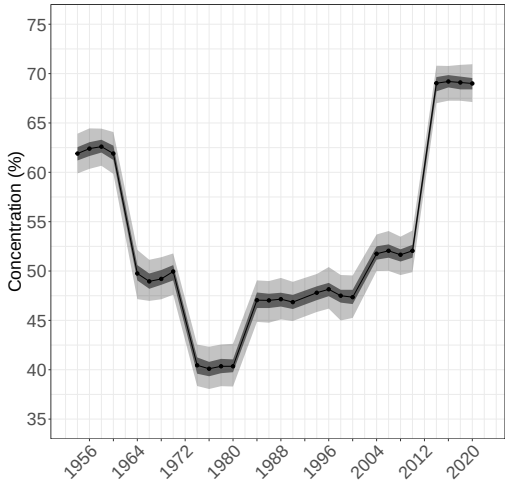

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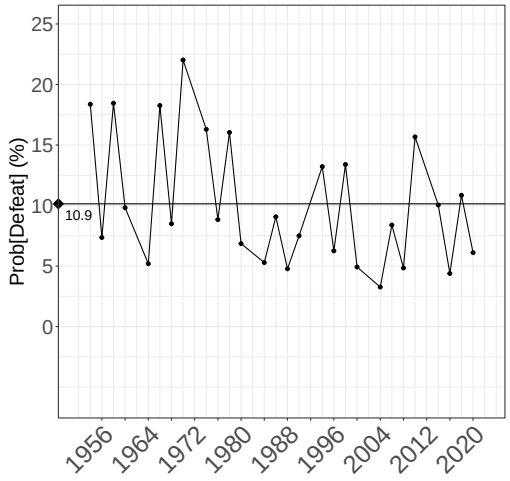


Incumbency Advantage

Concentration:

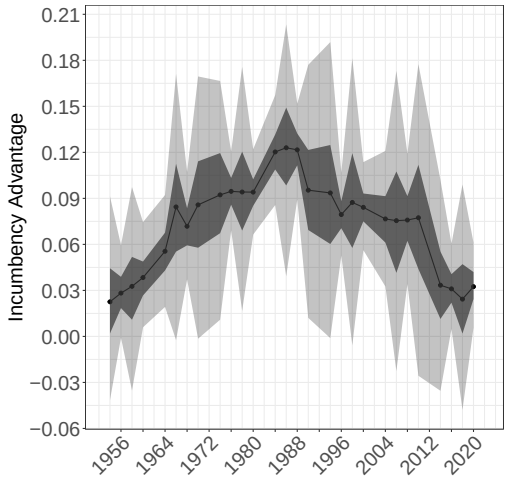
$$\int_{45}^{55} p(v|E[v] = 50)dv$$

Mean Prob(Defeat)

We find

- Prob(defeat) high, constant over > 2/3rds century

“Adding” it up



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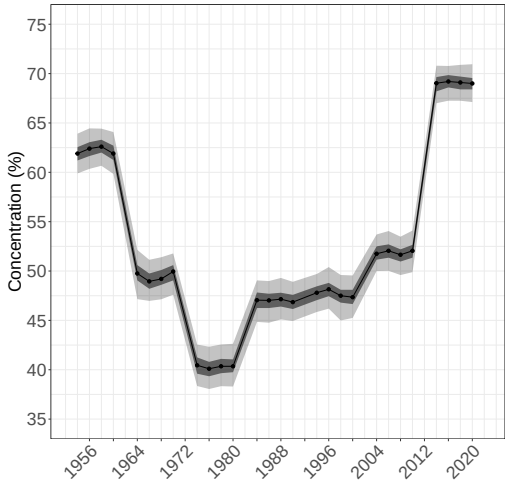

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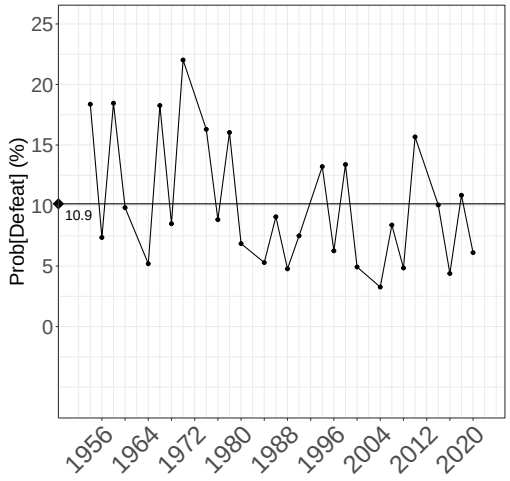


Incumbency Advantage

Concentration:

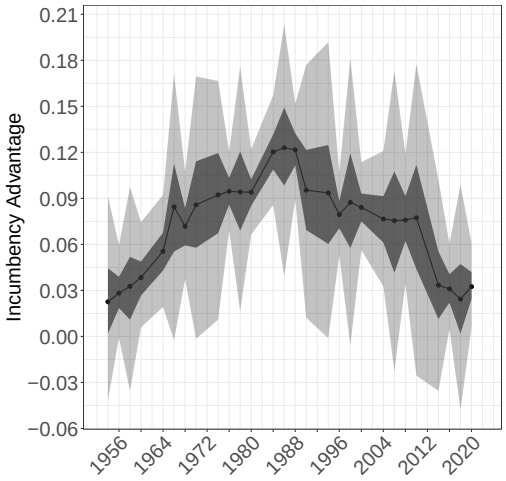
$$\int_{45}^{55} p(v|E[v] = 50)dv$$

Mean Prob(Defeat)

We find

- Prob(defeat) high, constant over > 2/3rds century
- Different combos of {Polarization, Partisanship, IncAd, Marginals, Gerrymandering bias} ⇝ the same Prob(Defeat)

“Adding” it up



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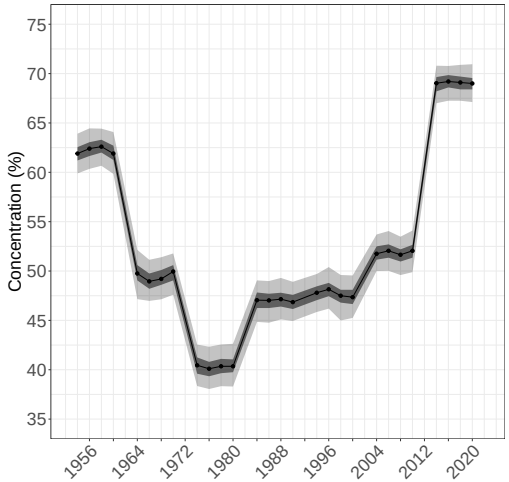

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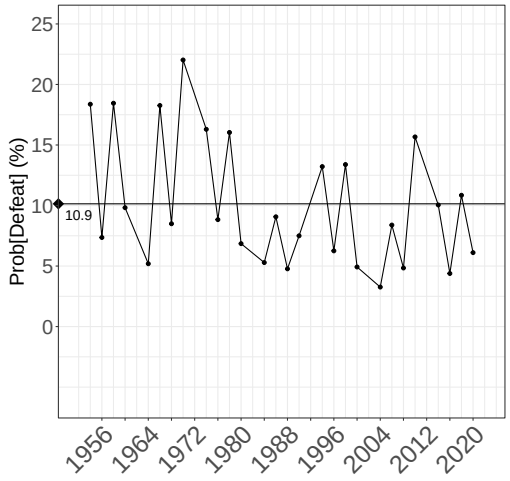

Incumbency Advantage

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Mean Prob(Defeat)

We find

- Prob(defeat) high, constant over > 2/3rds century
- Different combos of {Polarization, Partisanship, IncAd, Marginals, Gerrymandering bias} $\rightsquigarrow$ the same Prob(Defeat)
- (This part of) American democracy actually seems to work

Papers, slides, software, data

GaryKing.org