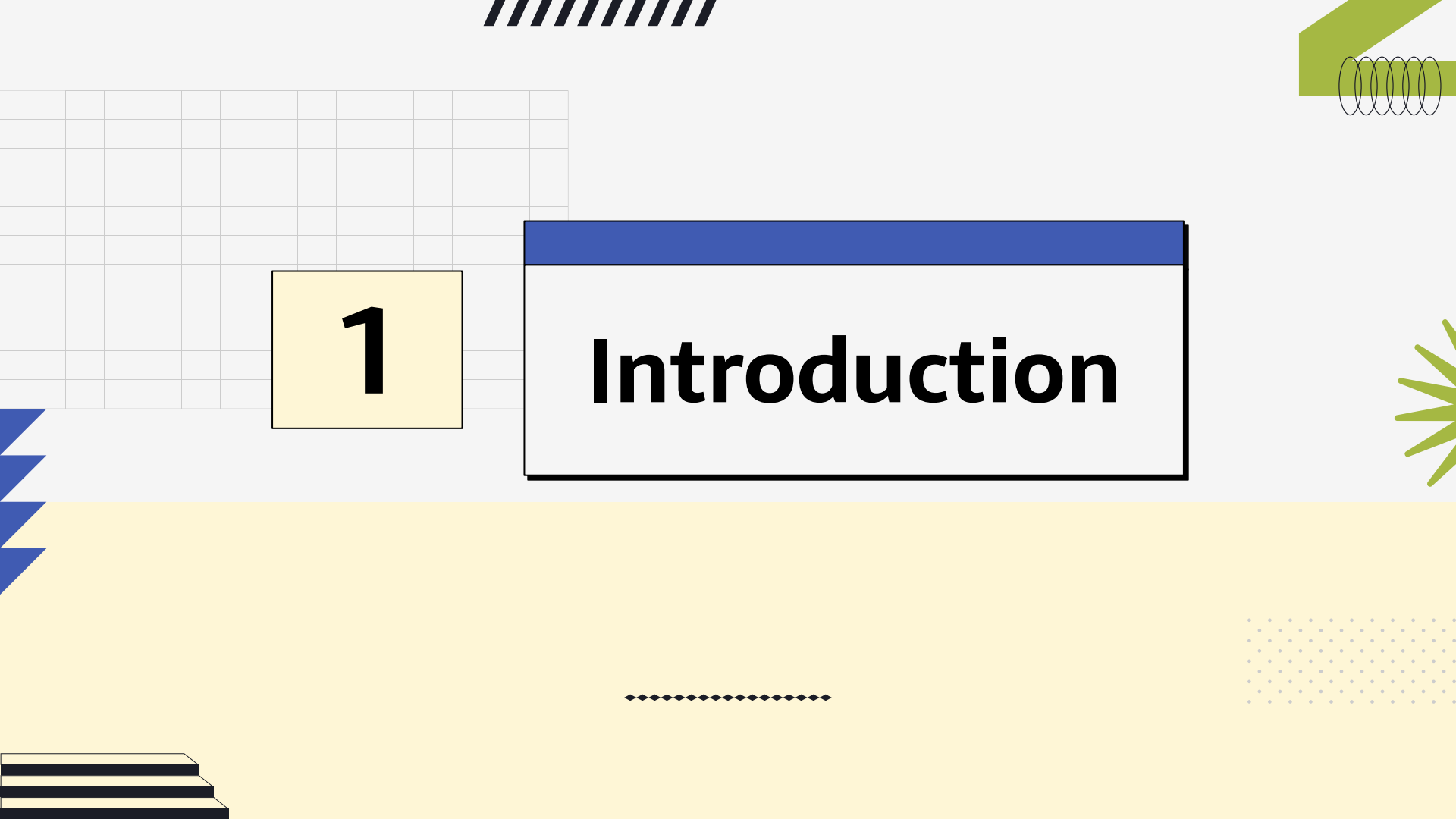# Working Class Wins:
What contributes to the success of working class individuals in high-level government elections?

Project Avocado: Maia Kotelanski, Cai Liu, Helen Pertsemlidis, Alina Yin

1

Introduction
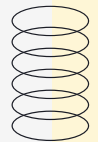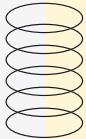
White-Collar Government

Millionaires make up 3% of the United States population but represent a majority of officials in the House of Representatives, Senate, and Supreme Court.[1]

Why?

cost of campaigns, time-commitment, political parties favoring white collar candidates

What factors contribute to Working-Class Candidates' success in high-level elections?

[1]Burden, B. C. (2007). The Personal Roots of Representation. Princeton: Princeton University Press.

Our Dataset: Candidates

★ US House of Representatives Primaries
★ 2008-2016
★ 7869 Total Candidates
★ 24 Variables
  ○ Variety of factors related to election results:
    ■ Vote share
    ■ Fundraising
    ■ Incumbency status,
    ■ Education level
    ■ Ideology

EDA highlights

Does the quality of candidates influence the vote share?
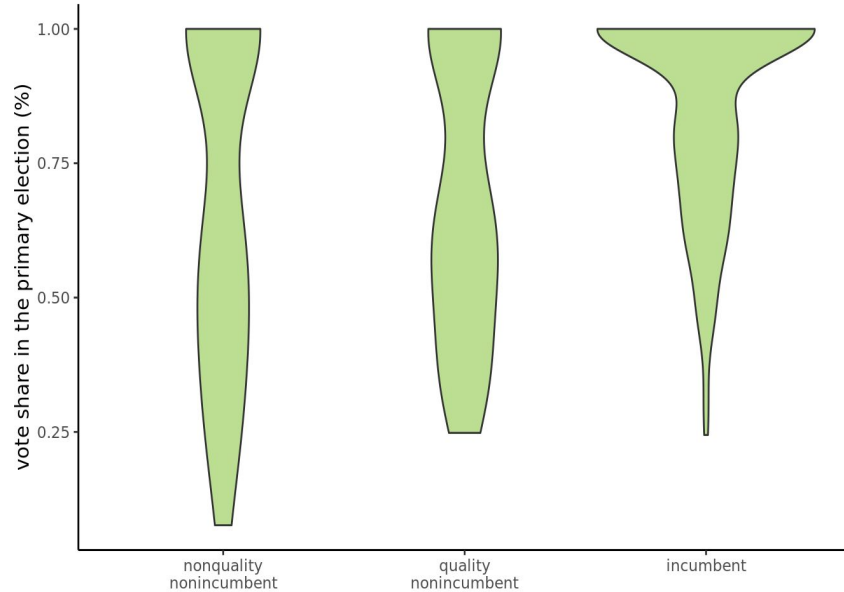
Is there a correlation between income and campaign spending?
for congressional districts where working-class candidates won
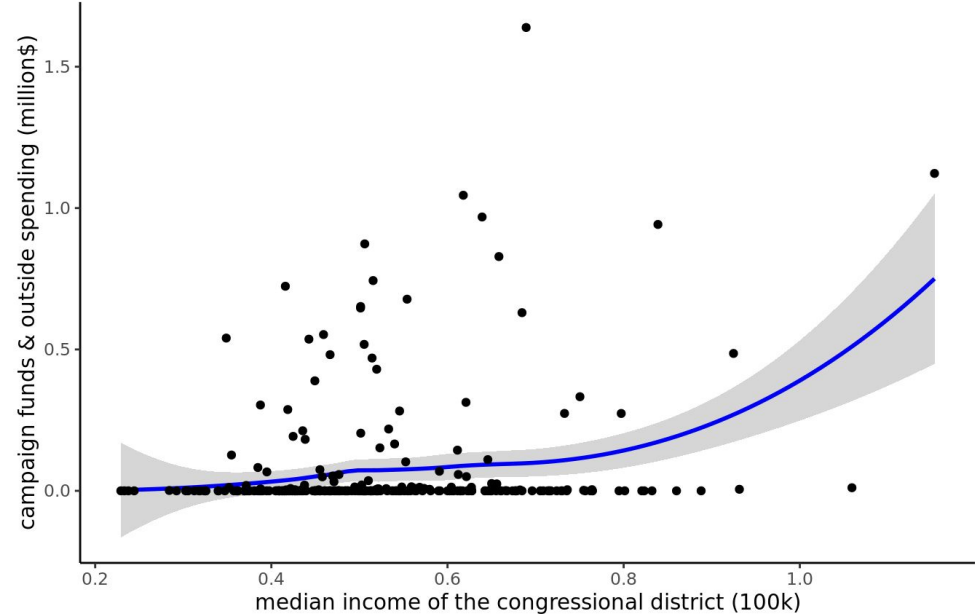
Our Approach

★ Research Question: What factors contribute to votes in working class representatives' favor?
★ Hypothesis: biggest predictors are
  ○ total_primary (total dollars contributed toward a candidate's campaign funds and outside spending in dollars)
  ○ quality_candidate (incumbent/quality status of the candidate)
  ○ qualnumber (number of quality opponents)

2

Data Analysis & Inference

Independent variables:

factors related to the candidate's vote share

(selected 14 total)

Examples: the state the candidate is from, count of opponents, candidate party

Dependent Variable:

candidate's vote share in the primary election

(**candpct**)

1 Filter the dataset to working class workers

2 Perform forward and backward model selection with stepAIC
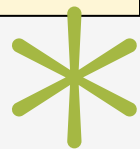   - ★ select the model with the lowest AIC
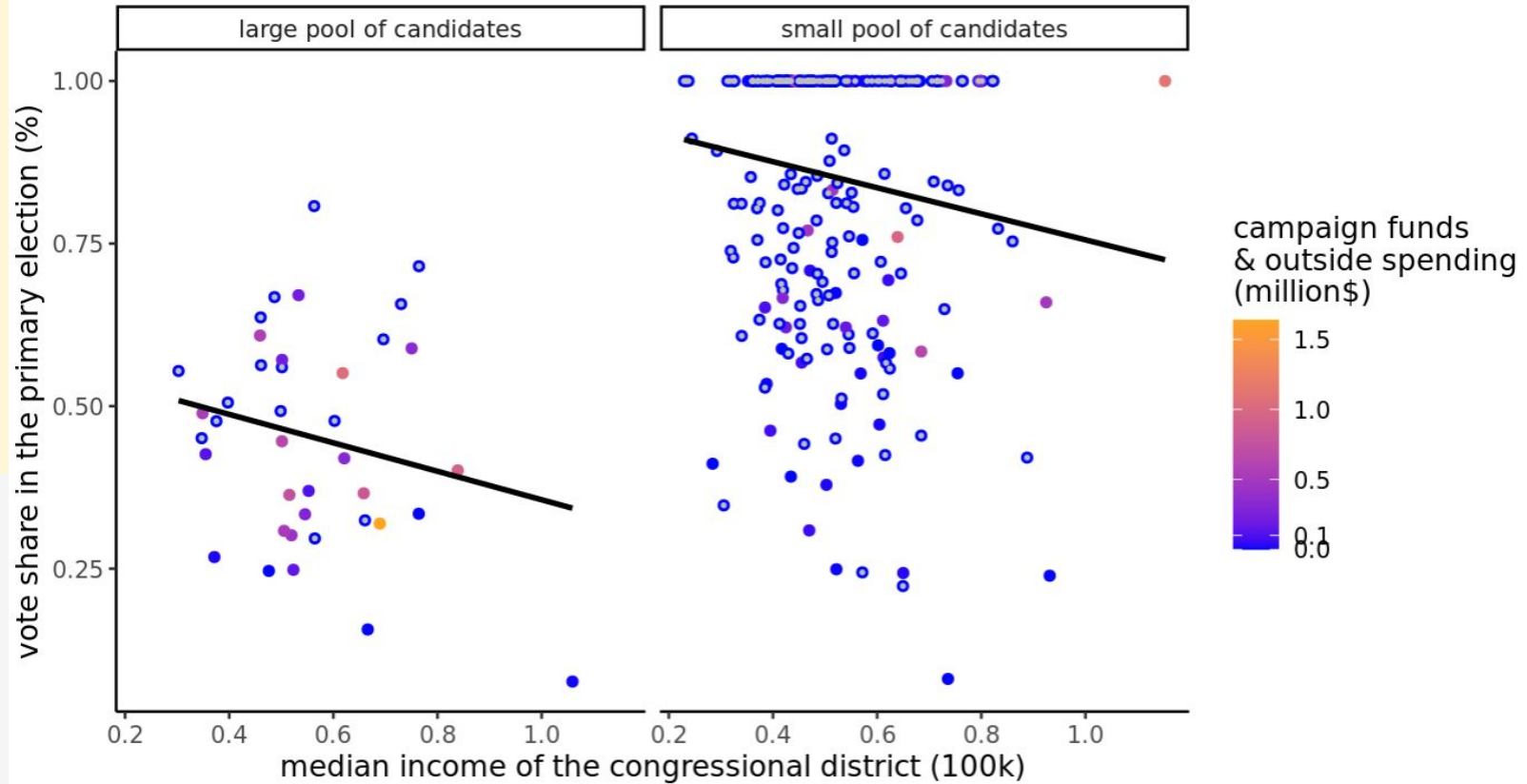   - ★ conclude prominent factors

3 Run an interactive model with the factors selected to see if it works better

4 Visualize the relationship between the response variable and the top three explanatory variables

Primary predictors to working-class candiates vote share
among candidates that won the primary elections

Most Prominent factors

- Candnumber
- Dist_income
- Total_primary

Primary predictors to working-class candiates vote share among candidates that won the primary elections

Interpretations:
- **The money contributed toward a candidate's campaign funds** positively influences a candidate's success (as hypothesized).
- **The median income of the congressional district** negatively influences a candidate's success (did not expect in the hypothesis).
- **The number of opponents** rather than the quality of them has a significant negative correlation with success (different from the hypothesis).
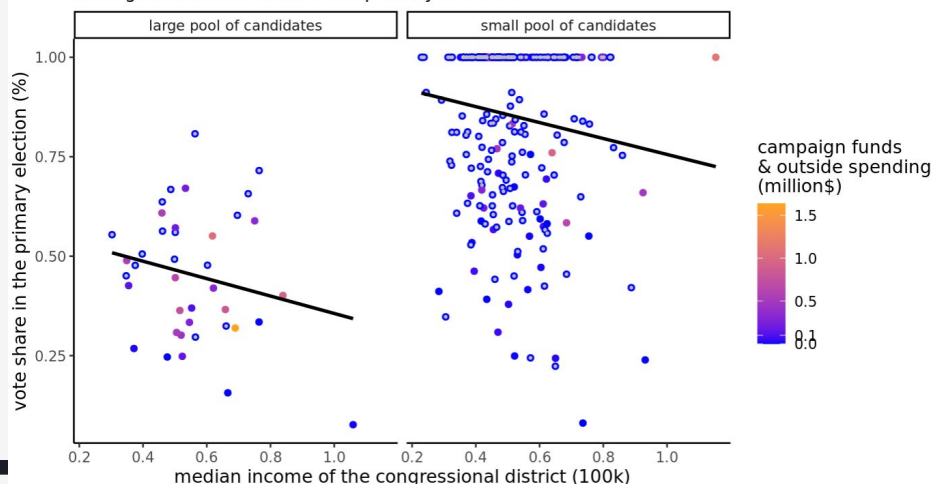
3

Discussions

Implications

Future working class candidates and their teams should consider:
- Putting more emphasis on generating donations from donors for campaign funds.
- Note and apply targeted measures based on the median income of the congressional district and the number of opponents.

Limitations

- Correlations vs. causations
- Limitations in applications since some factors can not be changed
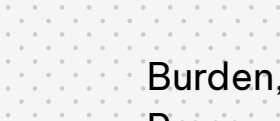- Could consider some influential factors that are less prominent
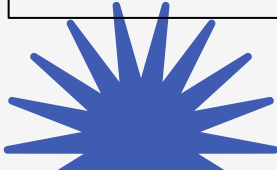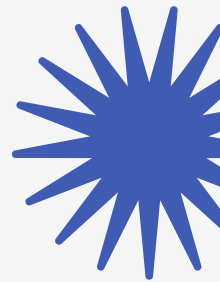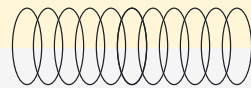
Thanks!

References

Burden, B. C. (2007). The Personal Roots of Representation. Princeton: Princeton University Press.