# Corruption information and vote share: A meta-analysis and lessons for survey experiments

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Introduction

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- Recent explosion of experimental research on this subject.
- What have we learned from this research? Is evidence actually mixed?

### Methods

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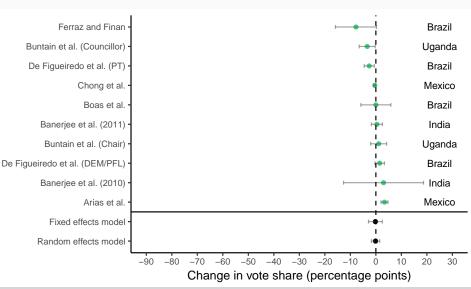
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- Treatment: corruption information provision.
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- Includes both published articles and working papers.

### **Results: Field Experiments**



Introduction N

Methods

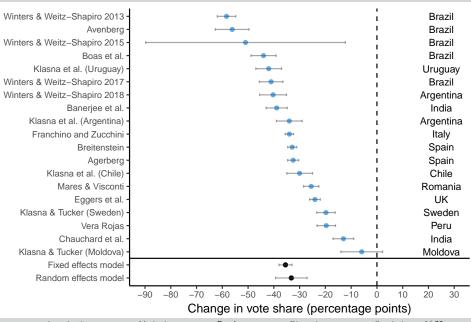
Results

Discussion

Conclusion

3/28

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Introduction

Methods

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  - 68% of the total heterogeneity across studies can be accounted for by including a dummy variable for type of experiment.
    - Mixed effects meta-analysis with moderator.
    - Point estimate of this dummy variable (0 = field, 1 = survey) is equal to -0.33 (significant at 1% level), the same as the overall estimate across all studies

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- Publication bias and/or p-hacking
- Social desirability bias
- Survey context does not mirror real-world settings:
  - Non-compliance
  - Differences in outcome choices
  - Costliness/decision complexity

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Introduction Methods Discussion Conclusion 7/28

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- Five of eight papers published. Three unpublished papers all have null findings. Figure
- Not enough data for formal tests.

Introduction Methods Discussion Conclusion 7/28

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- No costs to selecting the socially desirable option in hypothetical vignette.
- Voting against corruption in the abstract may therefore reflect the respondents' actual preferences.
- In actual election voters may discount information, or have strong material/ideological incentives to stick with candidate.

#### Differences in experimental context: non compliance

Treatments are weak and easily missed in field experiments.

- In survey experiments ITT = ATE = CACE (LATE)
- Field experiments measure ITT as they do not know the non compliance rate. Non compliance necessarily reduces the ITT.
  - $ITT = CACE \times \pi_C$

#### Differences in experimental context: outcome choice

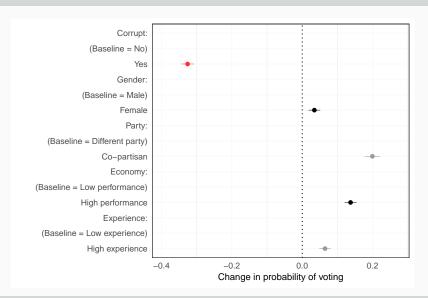
Choice set offered to voters is not necessarily identical across experiments. Example:

- Field: Candidate A is revealed to be corrupt to voters in a treatment group, but not to voters in control.
  - Treated voter can cast a ballot for corrupt candidate A, or candidate B, who may be clean or corrupt.
  - Control voter can cast a ballot for candidate A or candidate B, and has no corruption information.
- Survey: Corrupt actions of politician A are revealed or not.
  - Treated voter can vote for corrupt candidate A or not, but no challenger exists.
  - Control voter can vote for clean candidate A or not, but no challenger exists.

Conjoint experiments: Randomizing more candidate characteristics may capture variety of moderating factors and reduce social desirability bias.

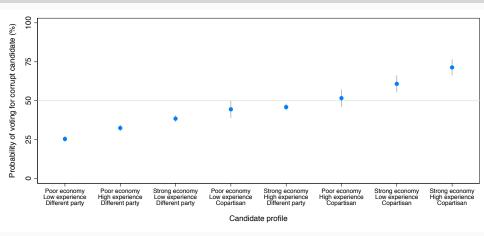
Conjoint experiments: Randomizing more candidate characteristics may capture variety of moderating factors and reduce social desirability bias.

 But, traditional method of analysis (comparing magnitudes of individual average marginal component effects) may be misleading.



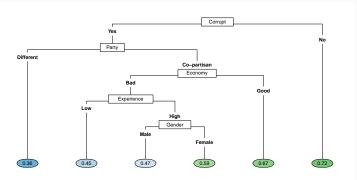
Proposal: When researchers have strong theories about the conditions that shape voter decision-making, a more appropriate method may be to calculate average marginal effects in order to present predicted probabilities of voting for a candidate under these conditions.

• E.g. Compare the probability of voting for a realistic candidate with outlier characteristics such as corruption to the probability of voting for a realistic candidate without this characteristic. Example 1 Example 2 Example 3



**Figure 2:** Breitenstein (2019) conjoint: can the right candidate overcome corruption?

Proposal: When we do not have strong theories about the conditions that shape voter decision-making, we can use regression trees to illuminate them.



**Figure 3:** Breitenstein (2019) conjoint decision tree: predicted probabilities of voting for candidate

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  - Survey context failing to mirror real-world settings:
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- Researchers should exercise caution when interpreting actions taken in hypothetical vignettes as indicative of real world behavior such as voting.

Supplemental material

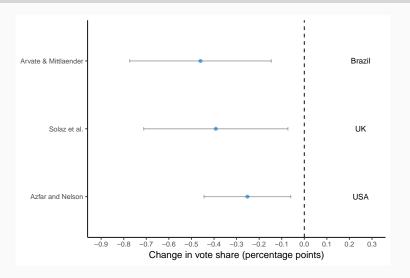
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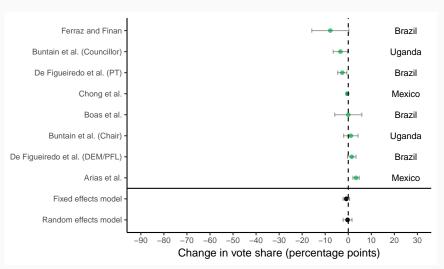
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- Point estimates, standard errors and/or confidence intervals are not always explicitly reported (4 cases). In these cases standard errors are estimated by digitally measuring coefficient plots.
- Two field experiments include general anti-corruption treatments not specific to candidates. Robustness check excludes these studies.

### Lab experiments Back



**Figure 4:** Lab experiments: Average treatment effect of corruption information on vote share

#### Robustness checks



**Figure 5:** Field experiments: Average treatment effect of corruption information on incumbent vote share (excluding Banerjee et al. (2010) and Banerjee et al. (2011))

Table 1: Regression tests for funnel plot asymmetry

Studies included	p value
All	0.0004
All with moderator	0.765
Field	0.840
Survey	0.630

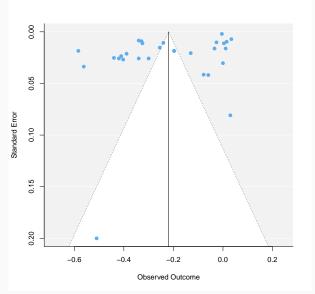


Figure 6: Funnel plot: All experiments

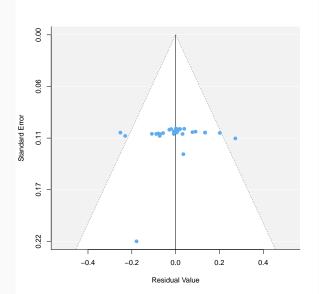


Figure 7: Funnel plot: All experiments with field experiment moderator

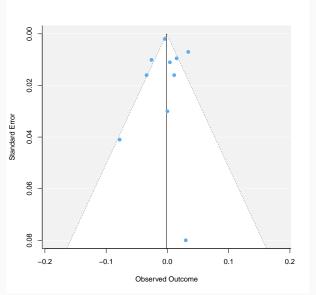


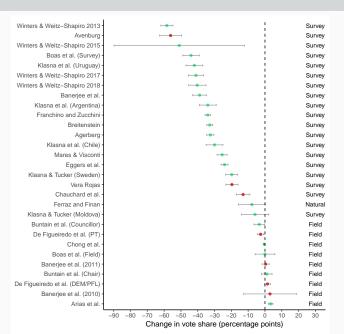
Figure 8: Funnel plot: Field experiments

# Does p-value predict publication status? Back

Table 2: Do p-values predict publication status?

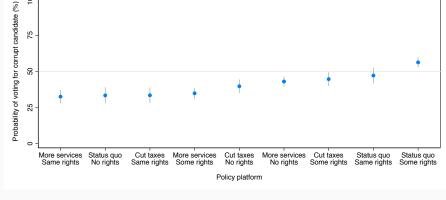
	Dependent variable: Published		
	OLS	Logit	
Reference: P less than 0.01	0.84***	1.67***	
	(0.10)	(0.63)	
P less than 0.05	-0.18	-0.98	
	(0.27)	(1.38)	
P less than 0.1	0.16	14.89	
	(0.44)	(2,399.54)	
P greater than 0.1	-0.34	-1.67	
	(0.20)	(1.03)	
Observations	29	29	
Note:	*p<0.1; **p<0.05; ***p<0.01		

#### All experiments by publication status Back



### Additional conjoint replications: Franchino and Zucchini (2015)

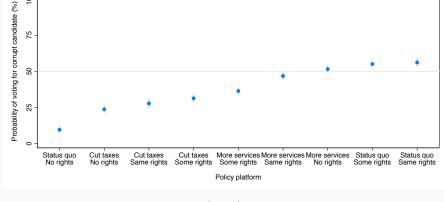




**Figure 10:** Franchino and Zucchini (2015) conjoint: can policy positions overcome corruption (conservative respondents)?

# Additional conjoint replications: Franchino and Zucchini (2015)





**Figure 11:** Franchino and Zucchini (2015) conjoint: can policy positions overcome corruption (liberal respondents)?

### References

- Banerjee, A., Green, D., Green, J., & Pande, R. (2010). Can voters be primed to choose better legislators? experimental evidence from rural india. In *Presented and the political economics seminar, stanford university.*
- Banerjee, A., Kumar, S., Pande, R., & Su, F. (2011). Do informed voters make better choices? experimental evidence from urban india. *Unpublished manuscript*.
- Breitenstein, S. (2019). Choosing the crook: A conjoint experiment on voting for corrupt politicians. Research & Politics, 6(1), 2053168019832230.
- De Vries, C. E., & Solaz, H. (2017). The electoral consequences of corruption. *Annual Review of Political Science*, *20*, 391–408.
- Franchino, F., & Zucchini, F. (2015). Voting in a multi-dimensional space: a conjoint analysis employing valence and ideology attributes of candidates. *Political Science Research and Methods*, 3(2), 221–241.