

# **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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# Meta-Analysis

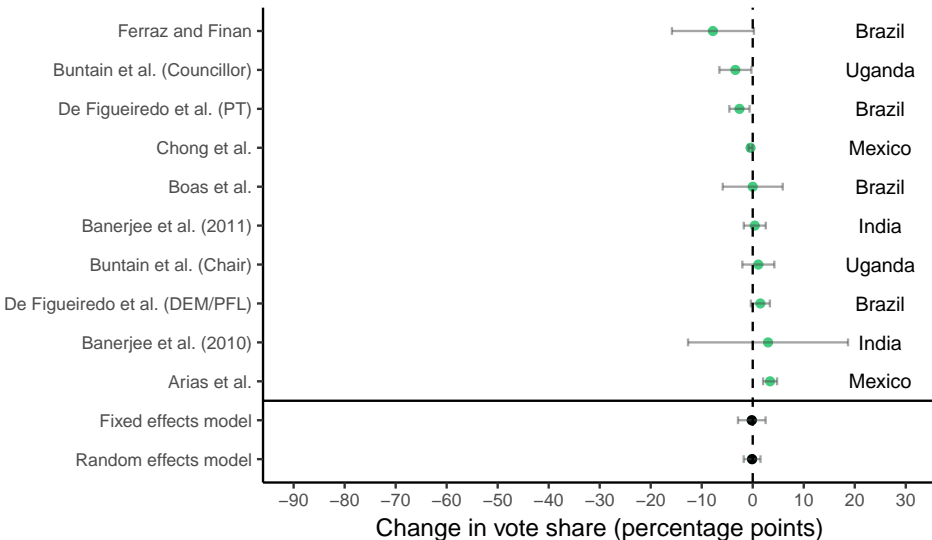
Meta-analysis of all **experimental** studies conducted to date.

- **Treatment**: corruption information provision.
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- Random assignment of corruption information → measurement of voting outcomes.
- As treatments are not always assigned identically, I take steps to standardize where possible. [Details](#)
- Includes both **published articles and working papers**.

# Results

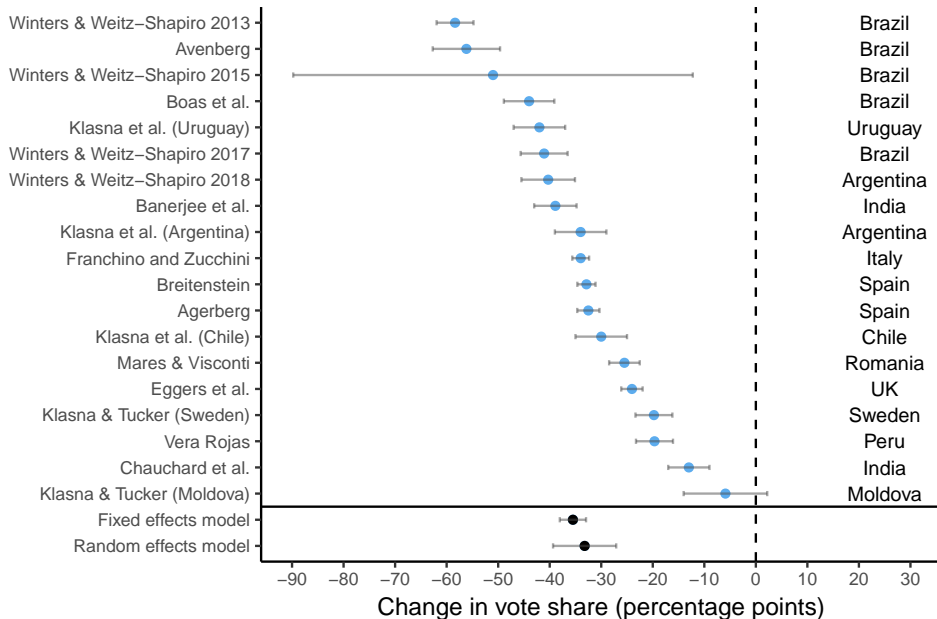
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# Results: Field Experiments





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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 (with no moderator).

Results

## Discussion

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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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- P-curve - virtually all results significant at 1% level (not clustered around 0.05 or 0.01).
- Tests for funnel plot asymmetry. [Figures](#)
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- Five of eight papers published. Three unpublished papers all have null findings. [Figure](#)
- Not enough data for formal tests.

# Social desirability bias



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- 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 experiment: Candidate A is randomly revealed to be corrupt, and voters can cast vote for corrupt candidate A, or candidate B, who may be clean or corrupt.
- Survey experiment: Candidate A is randomly revealed to be corrupt, and voters can cast vote for corrupt candidate A, or counterfactual Candidate A who *is not* corrupt.

## Differences in experimental context: complexity, costliness and conjoint experiments

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

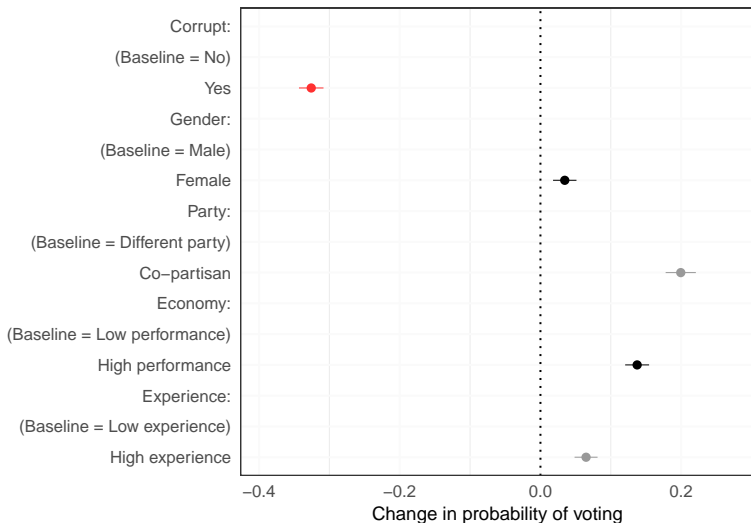
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**Conjoint experiments:** Randomizing more candidate characteristics may capture variety of moderating factors and reduce social desirability bias.

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



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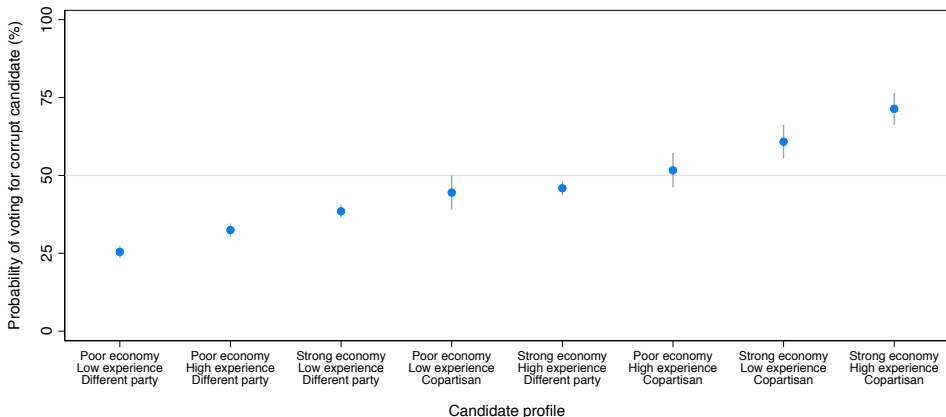


## Differences in experimental context: complexity, costliness and conjoint experiments

**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

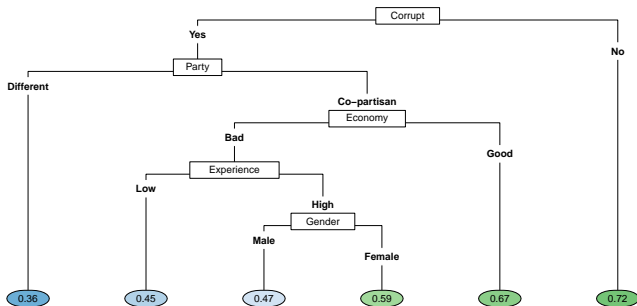
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**Figure 2:** Breitenstein (2019) conjoint: can the right candidate overcome corruption?

# Differences in experimental context: complexity, costliness and conjoint experiments

**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

## Conclusion

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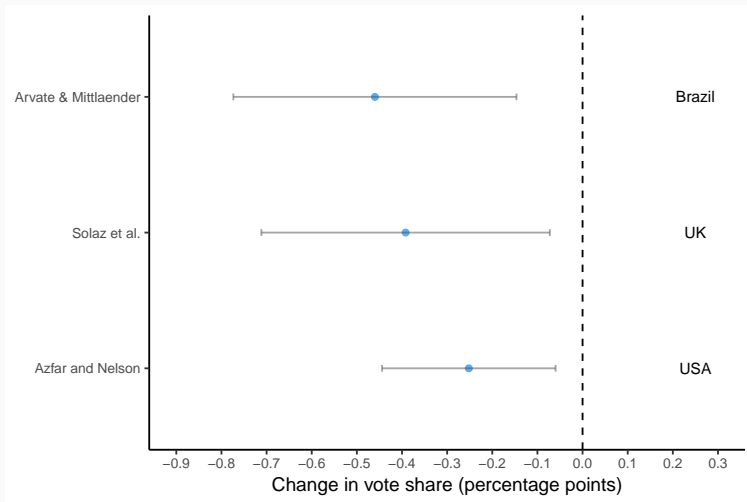
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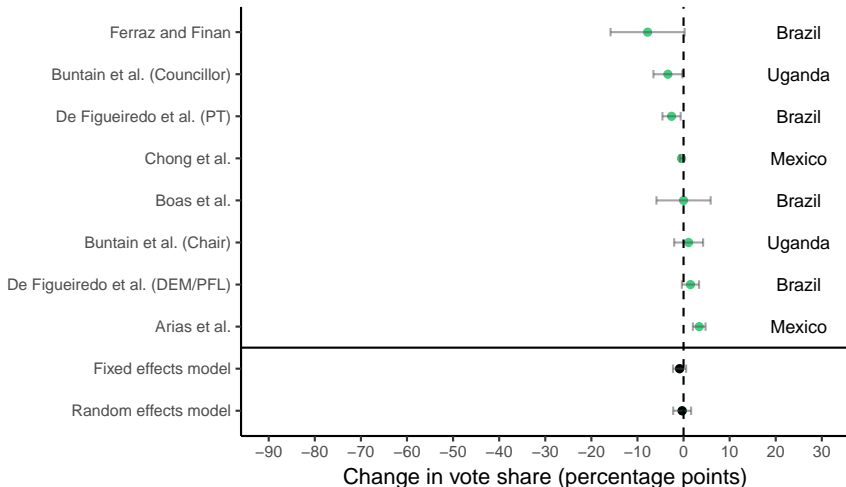
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- Point estimates, standard errors and/or confidence intervals are not always explicitly reported (4 cases). In these cases standard errors are estimated by digitally measuring coefficient plots.
- Two field experiments include general anti-corruption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



**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))

# Mixed effects meta-analysis with survey experiment moderator

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**Table 1:** Mixed effects meta-analysis with survey experiment moderator

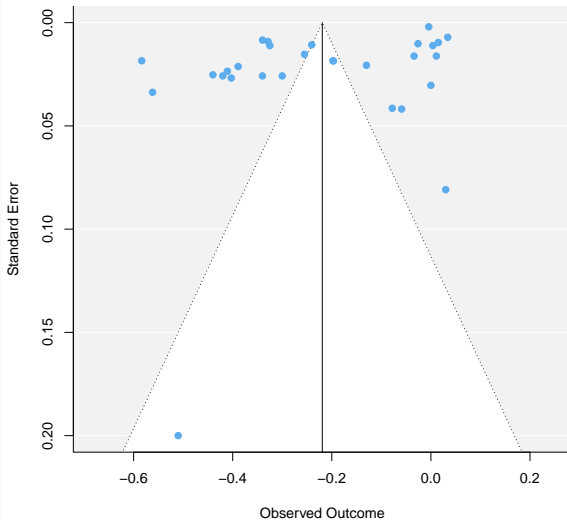
Value	Estimate
Constant	-0.005 (0.035)
Survey experiment moderator	-0.326 (0.043)

*Note:* Standard errors in parenthesis.

**Table 2:** Regression tests for funnel plot asymmetry

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

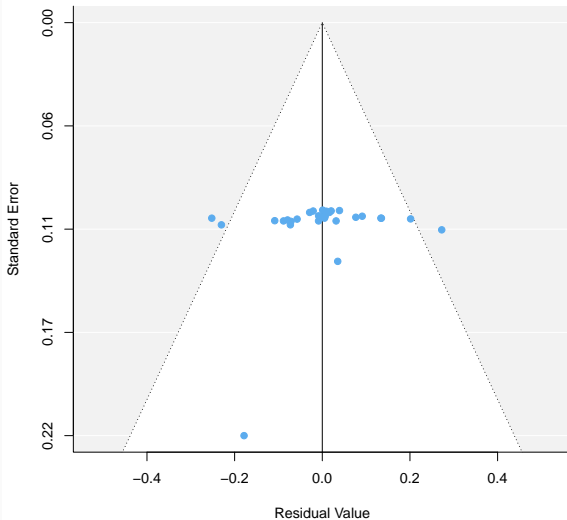
# Funnel plot asymmetry

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**Figure 6:** Funnel plot: All experiments

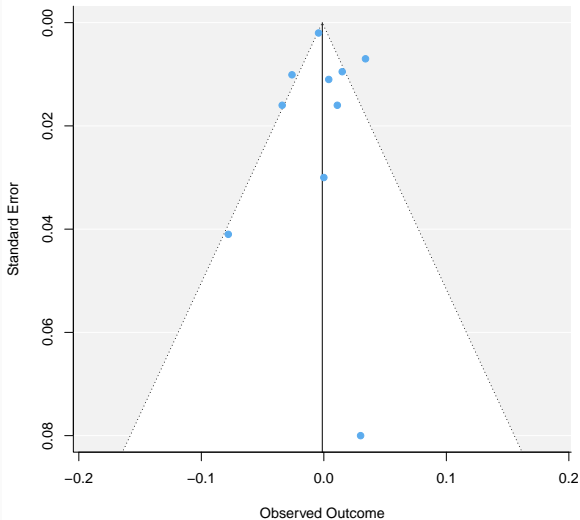


## Funnel plot asymmetry [Back](#)



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

# Funnel plot asymmetry

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**Figure 8:** Funnel plot: Field experiments

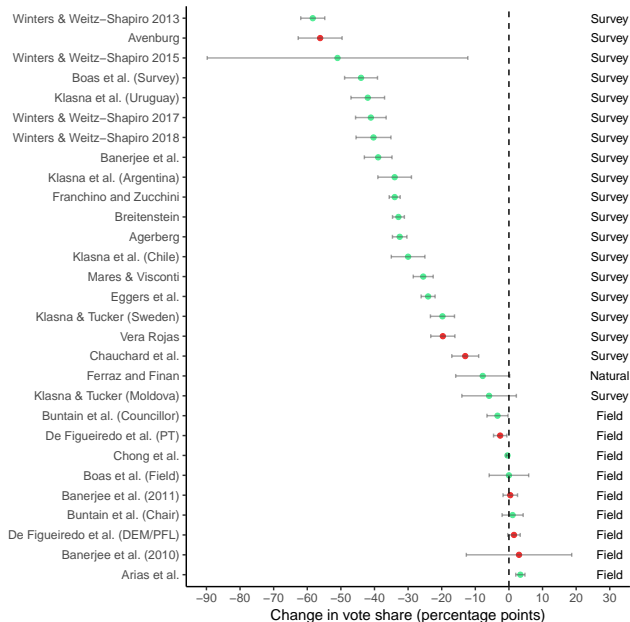
**Table 3:** Do p-values predict publication status?

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

*Note:*

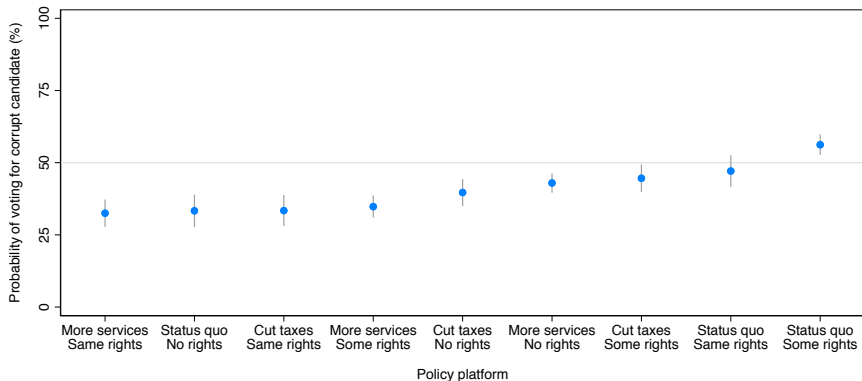
\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

# All experiments by publication status [Back](#)



# Additional conjoint replications: Franchino and Zucchini (2015)

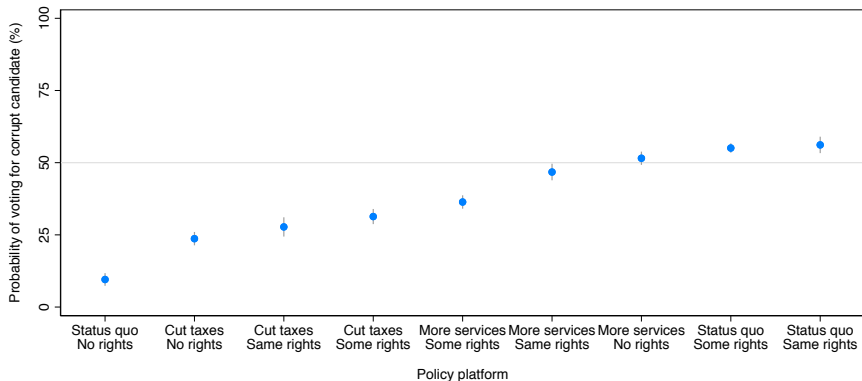
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**Figure 10:** Franchino and Zucchini (2015) conjoint: can policy positions overcome corruption (conservative respondents)?

# Additional conjoint replications: Franchino and Zucchini (2015)

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

## References

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- 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.