

# My Taxes are Too Darn High

## Why Do Households Protest their Taxes?

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Berkeley*

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# Introduction

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- ▶ In the U.S., households can file a protest to legally reduce the amount they pay in property taxes.
- ▶ Tax protests provide an interesting laboratory to study attitudes towards taxation.
  - ▶ Revealed-preference, high-stakes and naturally-occurring.
- ▶ Large differences protest rates suggestive of unequal access.
  - ▶ E.g., Large differences by wealth and ethnicity.

# Research Design

- ▶ We study two distinct mechanisms:
  - ▶ Expected tax savings: households protest if they expect more tax savings.
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# Research Design

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  - ▶ Expected tax savings: households protest if they expect more tax savings.
    - ▶ We leverage quasi-experimental variation through the homestead cap.
  - ▶ Filing frictions: households do not protest because it takes too much time, or they don't know how to.
    - ▶ We leverage a large-scale field experiment designed to mitigate filing costs.

# Preview of Findings

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- ▶ Expected tax savings: households highly elastic (\$100 increase expected tax savings increases protest probability by 2.14 pp).
- ▶ Filing frictions: important barrier (average hassle cost of \$232).
- ▶ Disparities: large economic and racial disparities in protest rates.
  - ▶ Our intervention can mitigate disparities, but only if targeted.



# Contribution to Literature

- ▶ Main contribution: study tax protests.
  - ▶ Common around the world, yet overlooked in research.
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  - ▶ Common around the world, yet overlooked in research.
  - ▶ Few exemptions: Jones (2019); Avenancio-Leon & Howard (2019).
- ▶ Also contribute to literature on how information, salience, procrastination, or confusion can result in incomplete uptake of social benefits (e.g., Chetty et al., 2009; Bhargava and Manoli, 2015).
  - ▶ Targeting interventions is crucial (Alatas et al., 2012, 2016; Finkelstein and Notowidigdo, 2019).

# Outline of the Talk

- 1 Institutional Context
- 2 Expected Benefits
- 3 Filing Frictions
- 4 Racial Disparities
- 5 Conclusions

# Institutional Context

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- ▶ We focus on Dallas County, Texas.
  - ▶ Population over 2.5 million.
  - ▶ Close to 50-50 Democrat/Republican split.
  - ▶ In 2020, average household paid \$5,916 in property taxes (tax rate of 2.01%).
- ▶ Results expected to be similar in other counties.
  - ▶ Experimental and quasi-experimental designs could be directly replicated in other counties.

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  - ▶ Typically they argue that the proposed value is above market value.
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- ▶ If successful, proposed value is reduced.
  - ▶ Sometimes include informal/formal hearings (over email or phone).



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  - ▶ In 2020, 8.40% of households protested directly.
- ▶ Owners can also hire an agent to protest on their behalf.
  - ▶ Additional 8.42% of households did so, resulting in a total protest rate of 16.83%.
- ▶ We estimate that 69.7% of the protests in 2020 were successful.
  - ▶ Successful protests resulted, on average, in \$485 in tax savings.

# Expected Benefits

# Homestead Cap

- ▶ Ideal experiment: randomize expected tax savings.
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  - ▶ Control: household can save \$500.
- ▶ Quasi-experiment: homestead cap.
  - ▶ Homestead status sets a homestead cap.
  - ▶ Increases in the appraised value of a homestead property are limited to 10% per year.
  - ▶ This cap generates a sharp kink in the expected marginal benefits from protesting.

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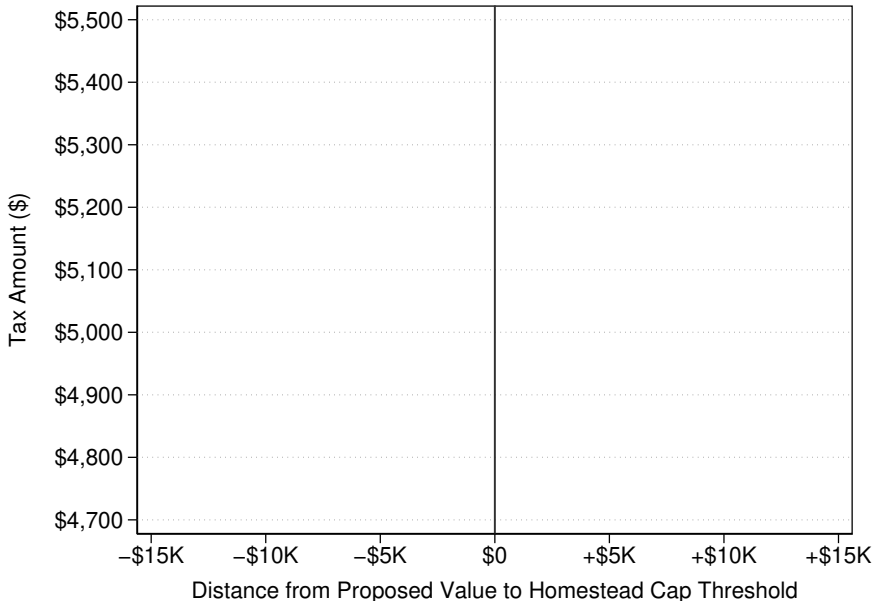
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  - ▶ 0 cents for each dollar up to \$10,000 of taxable value reduction.

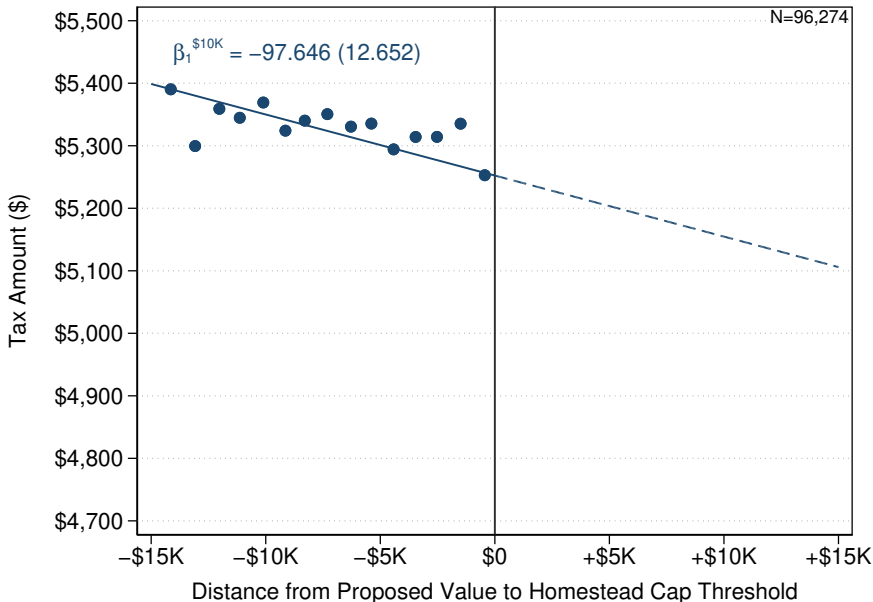
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  - ▶ 2 cents for each dollar above \$10,000 of taxable value reduction.

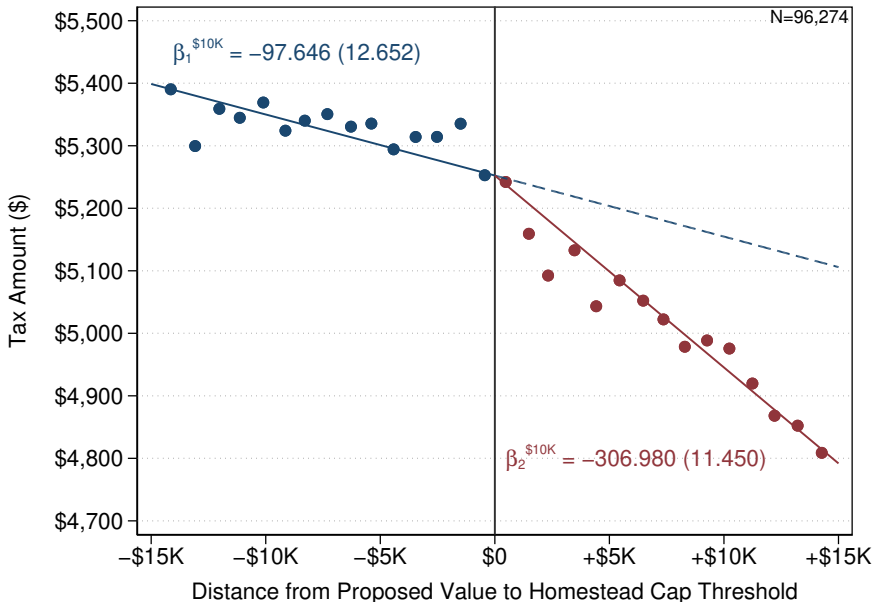
# Homestead Status: Tax Amount



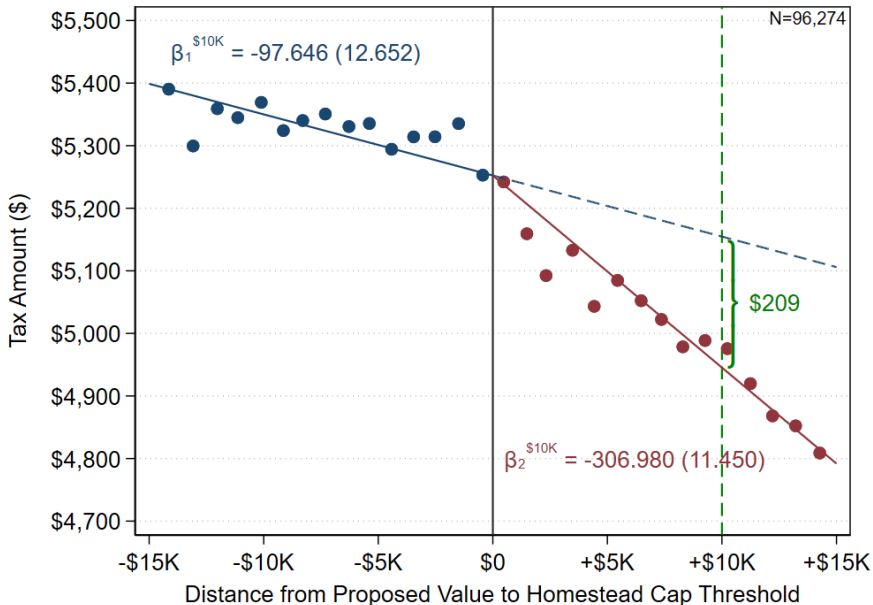
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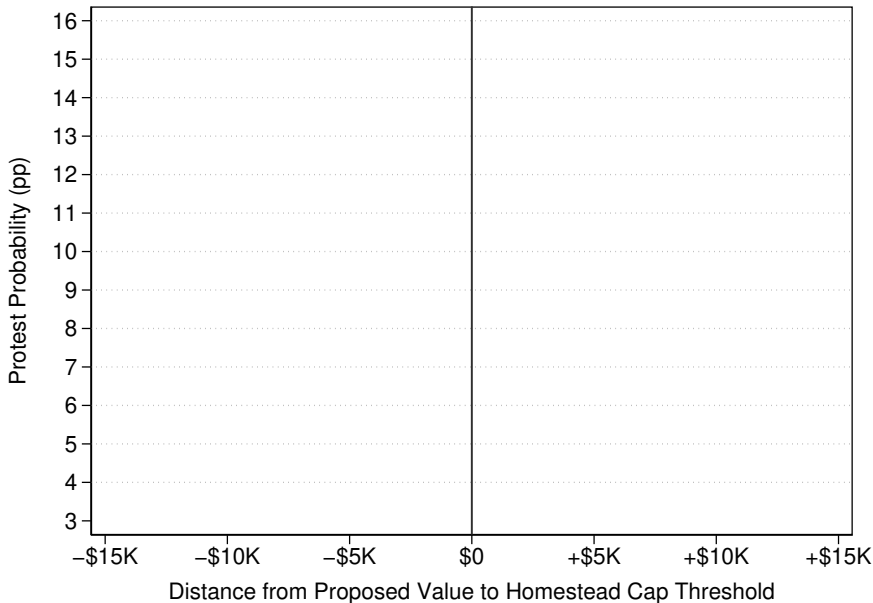
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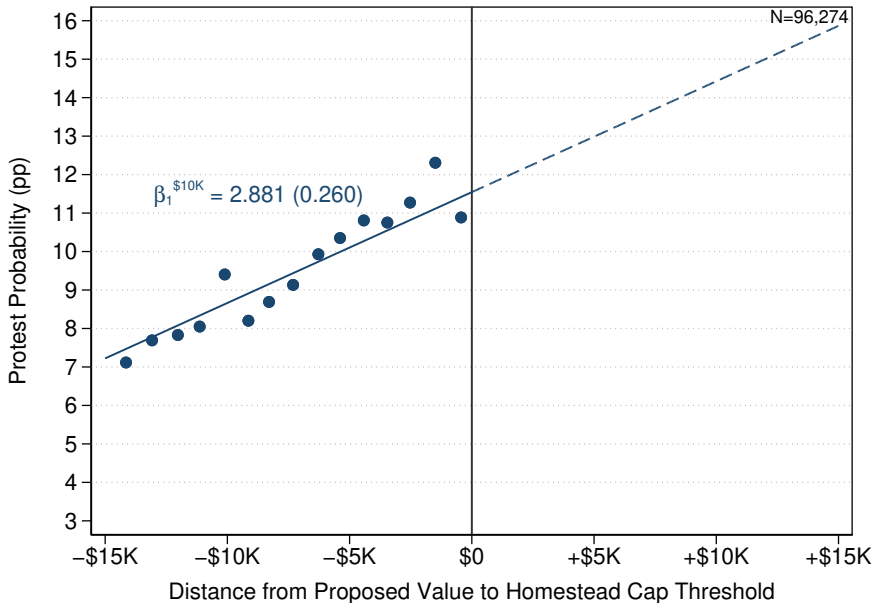
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# Homestead Status: Protest Rate

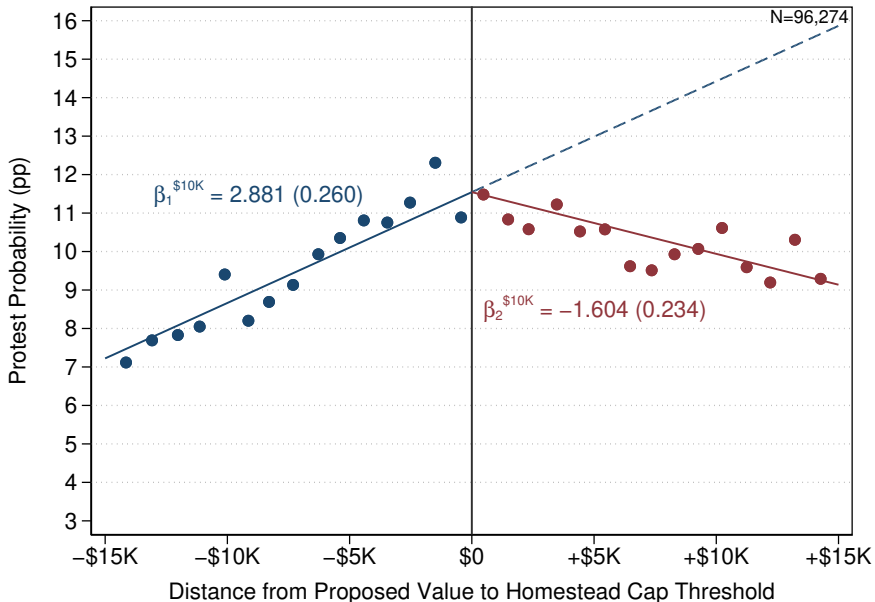


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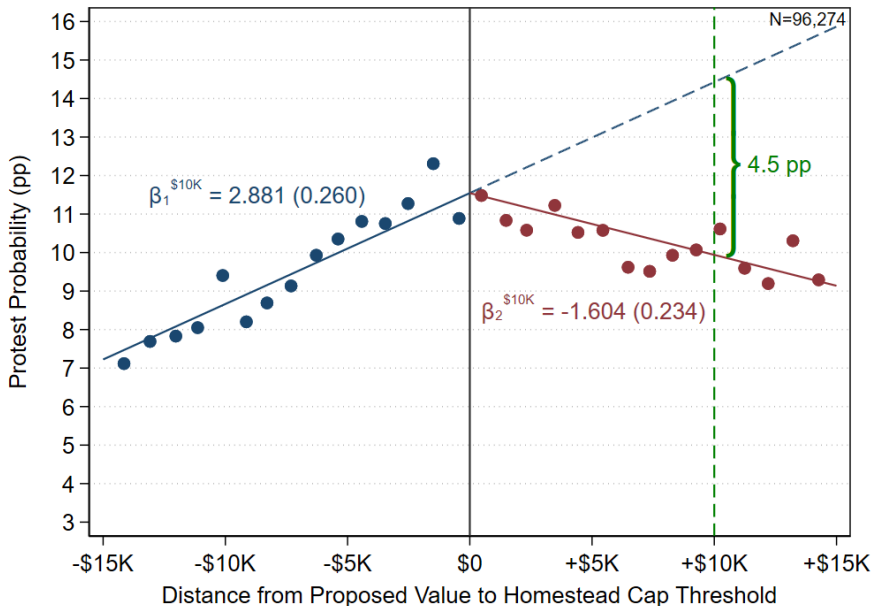




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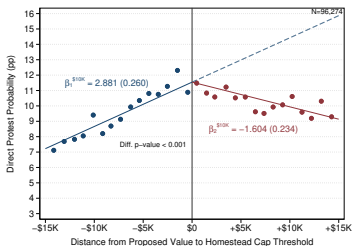
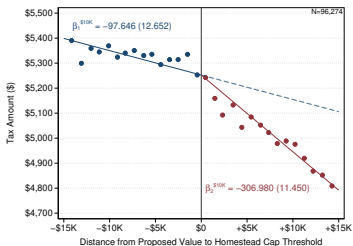


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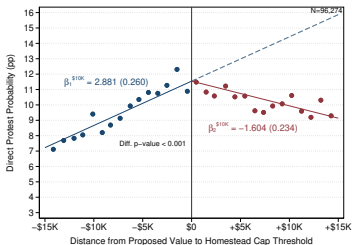
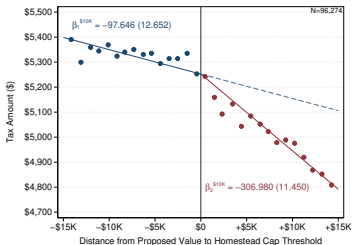
# Falsification Test

## Homestead Cap

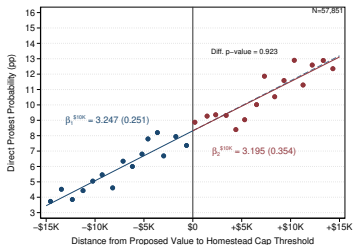
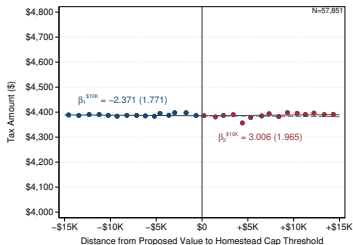


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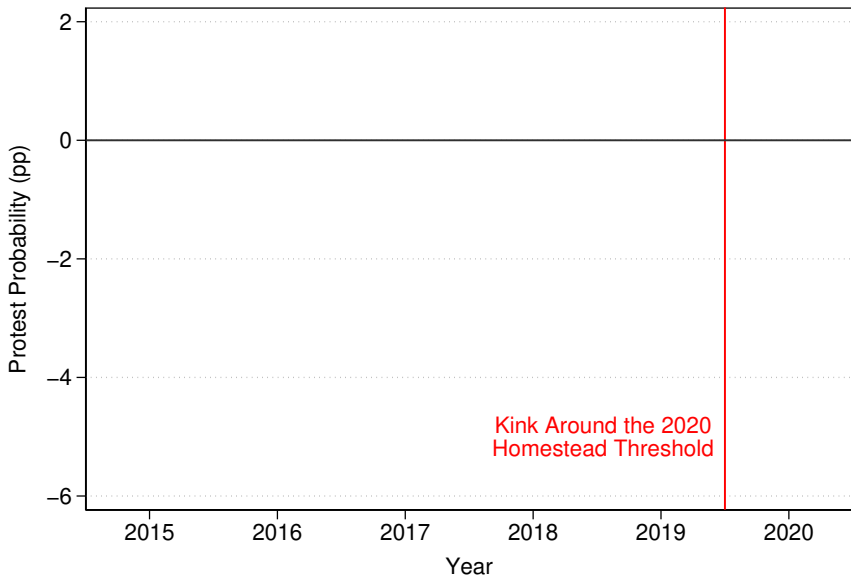
## Homestead Cap



## No Homestead Cap

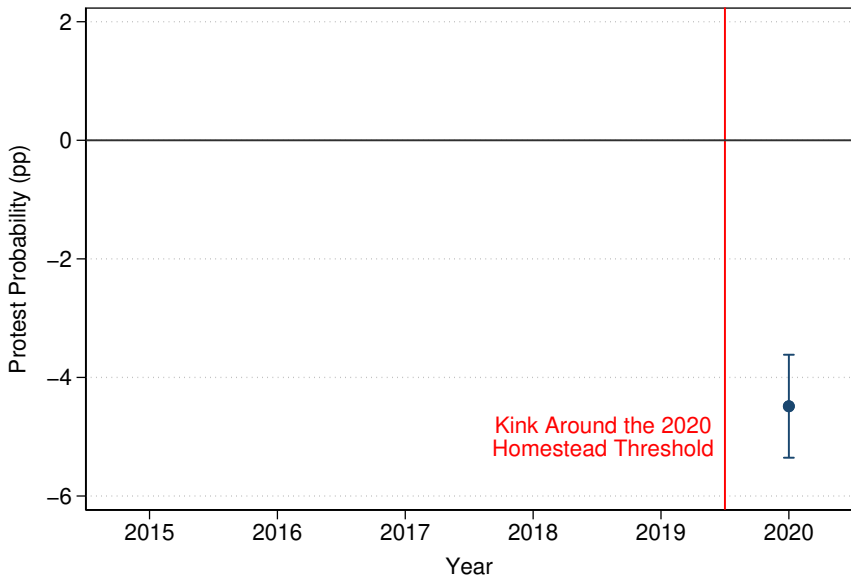


# Event-Study Analysis



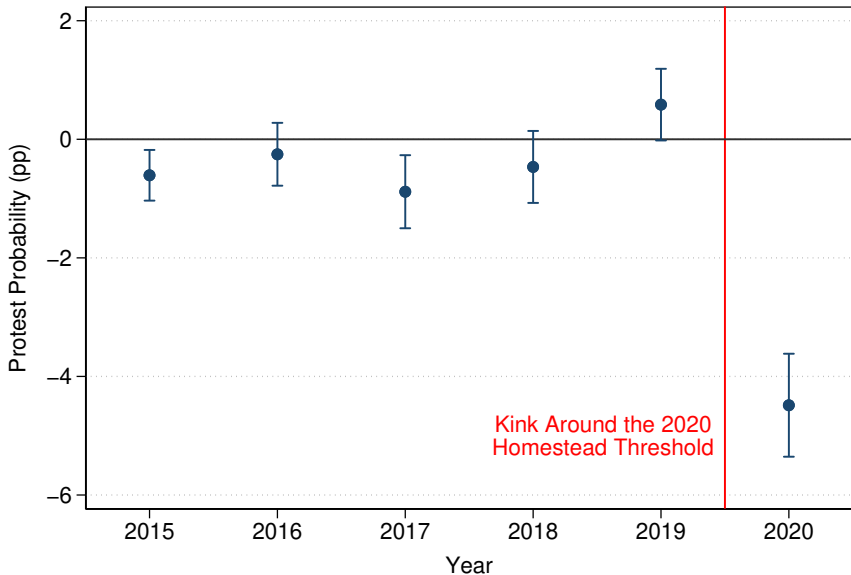
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# Magnitude of the Effects

- ▶ For each \$100 reduction in the tax amount due to the homestead cap the protest probability decreases by 2.14 pp.
  - ▶ Households are highly elastic to private benefits.



# Filing Frictions

# Research Design

- ▶ Households who *want* to protest may not do so because of filing frictions.
  - ▶ Hassle costs.
  - ▶ May not know where to start.

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- ▶ Households who *want* to protest may not do so because of filing frictions.
  - ▶ Hassle costs.
  - ▶ May not know where to start.
- ▶ Designed field experiment to reduce filing frictions.
  - ▶ Hypothesis: probability of protesting should go up.

# Letter: First Page



May 15th, 2020

Dear Joan Robinson,

We are researchers at The University of Texas at Dallas and we are reaching out to you as part of a research study. **You can lower your tax burden by protesting the taxable value assessment of your property.** We want to share information that we hope will be useful.

Some people may choose to protest because they feel they are paying more than their fair share. Find below some information about the estimated 2020 taxes for your home at 5329 Jordan Ridge D (Dallas, TX) in Dallas County:

	YOUR HOME	AVERAGE DALLAS HOME
<i>Proposed Value</i>	\$174,810	\$294,846
<i>Estimated Tax Amount</i>	\$3,057	\$5,916
<i>Estimated Tax Rate</i>	1.75%	2.01%

**Source:** Data provided by Dallas Central Appraisal District (CAD). *Proposed Value* is Dallas CAD's estimate of the home's market value as of January 1st, 2020. *Estimated Tax Amount* is our estimate of taxes due this year using the least tax rates available (some exemptions might not be included). *Estimated Tax Rate* is the estimated tax amount divided by Proposed Value. *Average Dallas Home* values are based on all single-family homes in Dallas County, excluding condos, townhomes, and mobile homes.

The deadline to protest is June 15th, 2020. You can fill out a short form online or mail it in. You can find instructions on how to do this on the study's website:

<https://www.utdallas.edu/taxproject/>

If you would like to help us with our study, we kindly ask you fill out the following confidential survey, it only takes a couple of minutes, and we would greatly appreciate your participation:

Visit <http://www.utdallas.edu/taxsurvey/> and enter validation code **AAFQGD**

800 W. Campbell Road  
Richardson, TX 75080

Website: <https://www.utdallas.edu/taxproject/>

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recycle ♻️

43137

# Basic Aid

- ▶ Information on latest proposed value and estimated tax amount.
- ▶ Key information on protest process (e.g., deadline).
- ▶ Access to step-by-step instructions through the project's website.

# Letter: Second Page

If you'd like to file a protest, it is really simple. You do not need an agent. You do not need to attend a hearing if you accept an online settlement offered by the county. If the county schedules a hearing and you do not attend it, the protest will simply be dismissed with no penalty.

When you protest you need to provide an argument in a few sentences. For example, you may argue that the appraised market value is too high. In that case, you could use the following:

Value is over market value      Opinion of value: \$160,000

And remember to attach a separate page (or file, if protesting online) with your argument:

*I found a home that is similar to mine but was recently sold for less than my home's appraised market value. The property located at 5148 Reorgan Rd (Dallas, TX) is 0.29 miles away from my home, and has the same number of bedrooms and a similar square footage. That property was sold on 10/31/2019 for \$160,000.*

You can find information about this sale by searching for the property's address on Zillow.com or Redfin.com. On these websites you can find other comparable properties to support your protest. You can also protest based on the appraised market values of comparable properties, which can be found on [www.dallascad.org/SearchAddr.aspx](http://www.dallascad.org/SearchAddr.aspx).

Your household was randomly chosen to receive this letter. We will not send you any more letters in the future. If you have any questions about the study, you can find contact information on the study's website.

Thank you for your attention!

Alejandro Zentner  
Associate Professor  
University of Texas at Dallas

4037  
JOAN ROBINSON  
5329 JORDAN RIDGE DR  
DALLAS, TX 75236-1895  


# Extra Aid Message

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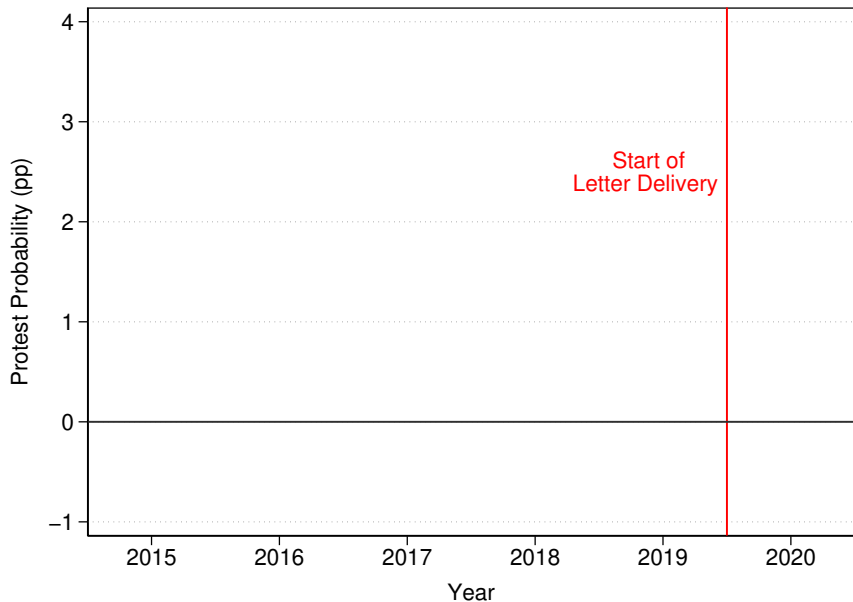
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# Implementation Details

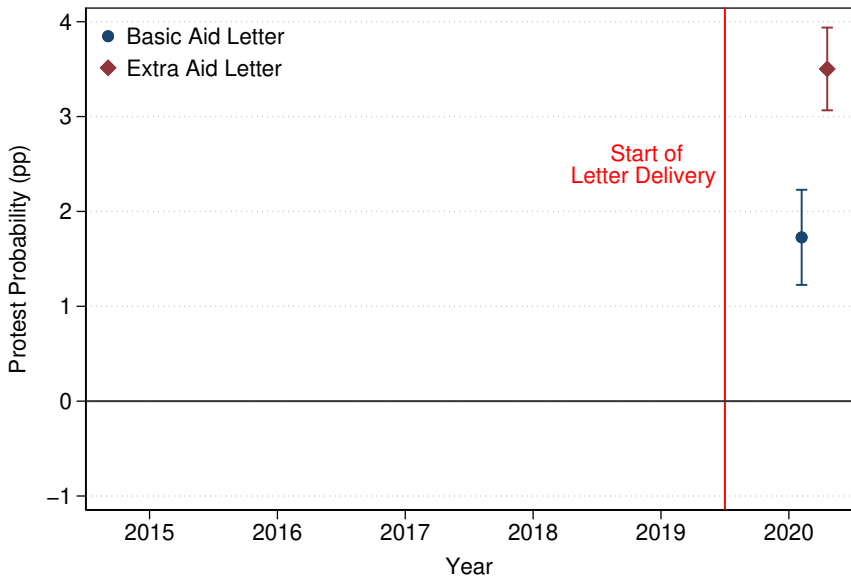
- ▶ Subject pool of 78,462 households.
  - ▶ No Letter: 28,068 HHs.
  - ▶ Basic Aid Letter: 25,012 HHs.
  - ▶ Extra Aid Letter: 25,382 HHs.
- ▶ Letters delivered on May 21-22, 2020.
  - ▶ 6 days after the window to file a protest opened.
  - ▶ 23 days before the window closes.
- ▶ Hypothesis: letters will affect the probability of protesting directly.
  - ▶ Baseline: in no-letter group, 8.67% of households protested directly.



# Event-Study Analysis

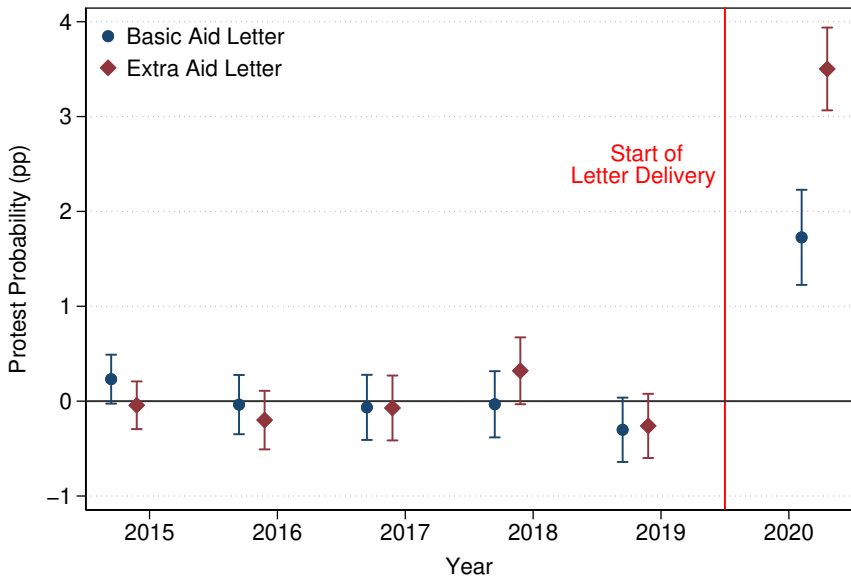


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# Magnitude of the Effects

- ▶ ITT effect: full letter (basic + extra aid) raised direct protests by 3.51 pp.
  - ▶ Roughly 40% of the baseline rate (8.67 pp).
- ▶ TOT effect: 4.98 pp.
  - ▶ Non-compliance: we estimate 29.7% of letters were lost in the mail or never opened.
- ▶ Lots of evidence on the precise mechanisms at play, how they copy and paste the information in the letter, spillovers, etc. – see paper for details.

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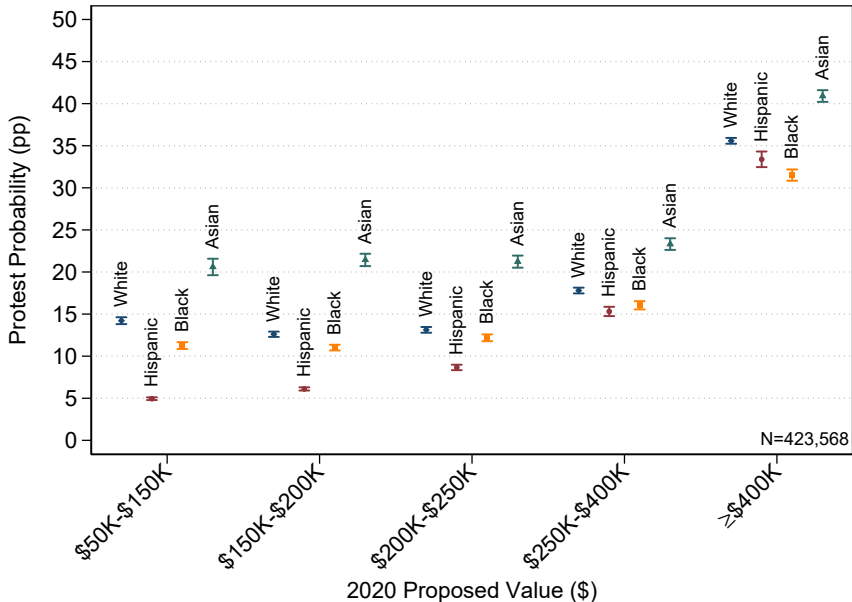
- ▶ Back of the envelope calculations: average hassle costs of \$232.
  - ▶ Homestead cap would need to cap the tax amount by \$232 to reduce the protest rate by 4.98 pp.
  - ▶ Smell test: close to flat fees from tax agencies (\$139-\$305).

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  - ▶ Homestead cap would need to cap the tax amount by \$232 to reduce the protest rate by 4.98 pp.
  - ▶ Smell test: close to flat fees from tax agencies (\$139-\$305).
- ▶ Average hassle costs (\$232) close to average tax savings (\$338).
  - ▶ If most households do not protest, that does not mean they are not selfish.

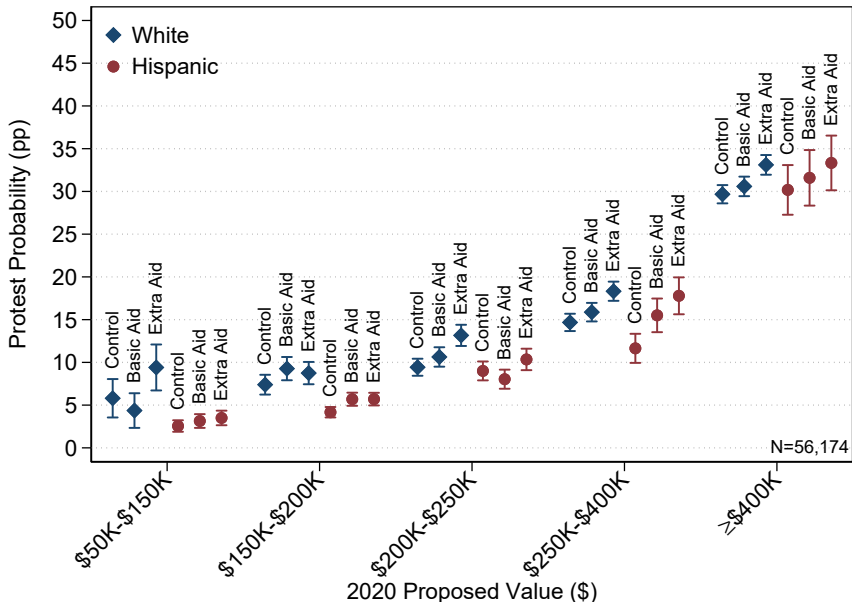
# Racial Disparities

# Disparities by Race and Home Value





# Disparities by Race and Home Value



# Targeting

	Protest Rate (pp)			Tax Savings Rate (pp)		
	(1) Control	(2) Basic Aid	(3) Extra Aid	(4) Control	(5) Basic Aid	(6) Extra Aid
<i>Panel A. By Home Value</i>						
≥ \$250,000	22.325 (0.352)	23.886 (0.378)	26.436 (0.389)	0.814 (0.022)	0.857 (0.023)	0.951 (0.024)
< \$250,000	7.175 (0.218)	8.528 (0.252)	9.311 (0.259)	0.201 (0.013)	0.211 (0.013)	0.226 (0.013)
Diff. Above - Below \$250,000	15.150	15.358	17.125	0.613	0.646	0.725
Diff. p-value	[i0.001]	[i0.001]	[i0.001]	[i0.001]	[i0.001]	[i0.001]
Observations	28,068	25,012	25,382	28,068	25,012	25,382
<i>Panel B. White Vs. Hispanic Households</i>						
White	18.694 (0.352)	19.796 (0.380)	21.967 (0.389)	0.655 (0.021)	0.680 (0.023)	0.735 (0.023)
Hispanic	8.139 (0.309)	9.190 (0.350)	10.178 (0.363)	0.254 (0.018)	0.306 (0.021)	0.345 (0.022)
Diff. White - Hispanic	10.556	10.606	11.789	0.401	0.374	0.391
Diff. p-value	[i0.001]	[i0.001]	[i0.001]	[i0.001]	[i0.001]	[i0.001]
Observations	20,094	17,789	18,291	20,094	17,789	18,291

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- ▶ Identified two important factors in the decision to protest taxes.
  - ▶ Expected benefits.
  - ▶ Filing frictions.
- ▶ Uncovered large economic and racial disparities.
  - ▶ Information interventions can mitigate them, but only if targeted!