Becoming Legible to the State: The Role of Identification and Enforcement Capacity in Tax Compliance

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To Collect Taxes, Government Must Develop 3 Dimensions of Tax Capacity

- Identification Capacity: Identify the tax base
  - Digital registries and databases
  - More difficult in settings with large informal economy
- Detection Capacity: Verify the tax liability
  - Third party information, property valuation
- Enforcement Capacity Enforce tax laws and collect taxes owed
  - Majority of unpaid liabilities go uncollected for several years in many LMICs e.g. DRC (Weigel, 2020), Ghana (Dzansi et al., 2022), Haiti (Krause, 2020), Pakistan (Khan, Khwaja and Olken, 2015), Senegal (Knebelmann, 2019)
  - May include delinquent notices, penalties and interest, wage garnishment, sanctions and prosecution

Why is it Important to Distinguish Identification, Detection and Enforcement Capacity?

- Identification often overlooked in many models but first-order problem in many lower-income contexts
- Crucial role of detection/ information for tax compliance well established (Kleven, Kreiner and Saez 2011, 2016, Pomeranz 2015, Naritomi 2018)
- Enforcement often assumed (Allingham and Sandmo 1972)
- **Each type of tax capacity requires a different policy response**

This Paper

- Two experiments to answer: What is the impact of increasing citizens' perceptions of **identification capacity** and, separately, **enforcement capacity** on tax compliance?
- Context: Real estate tax compliance in Greater Monrovia area, Liberia

Context: Tax Compliance in Liberia is Very Low

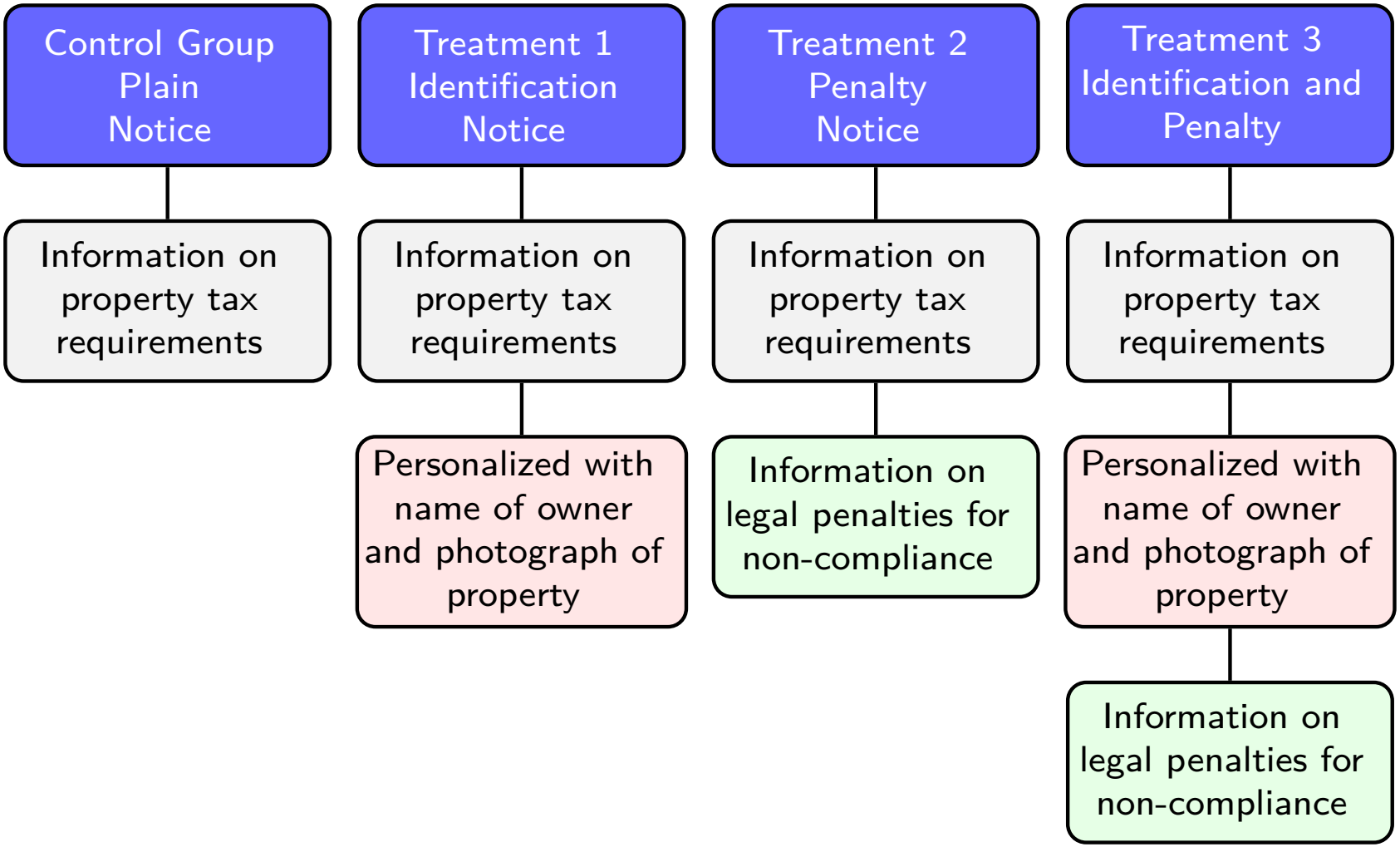
- Very low levels of real estate tax compliance in Liberia (also for other tax types)
  - 5% of residential properties in Monrovia on tax roll
  - 40% year-to year compliance even for those on tax roll
- Low identification, detection and enforcement capacity
  - No cadastral; unstandardized billing procedures
  - No court convictions: Typically only repeated visits, posting a temporary notice on property
  - Focus on highest valued commercial property

Context

- Annual tax
  - Non-trivial rates: 1.5% on commercial property, 0.25% on residential property (Avg. $70 per annum for residential property compared to $96 one month GDP per capita)
  - Payment plans possible

Experiment 1 Design

Sample: Properties in pilot community not on tax register (N=571 properties, 461 owners)



Implementation

- **April - June 2014:** I worked with LRA to train agents who conducted door-to-door enumeration and awareness about real estate tax
  - Collected information on property using mobile devices: **owner**, use, size, materials, “address", **photo**
  - First time tax authority had electronic records and digital photos of these properties
  - Pilot project in one community (this paper). Over time, LRA expanded to 40k+ properties across the city.
  - Made the tax base “legible" (Scott 1998, *Seeing Like a State*)

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- **March - May 2017:** Tax authority agents delivered notices to property owners
  - To track responses, each notice had a unique number and property owners were asked to bring the notice along when they came to register

Assistant Commissioner
Real Estate Tax Division

LRA

March 22, 2017

NOTICE OF REAL PROPERTY TAX OBLIGATION

To: All Real Property Owners, Lessors, Caretakers and Occupants

The Liberia Revenue Authority (LRA) through the Real Estate Tax Division wishes to inform you of your real property tax obligation. Section 2004 of the Liberia Revenue Code requires all property owners to file a listing of all properties owned with the Liberia Revenue Authority.

We request that you visit the Real Estate Tax Division (2nd floor) of the Liberia Revenue Authority to register your property (ies) and obtain a Tax Identification Number. LRA staff will be available assist you in completing the easy registration process. Please bring with you the following documents:

1) Valid identification (such as passport, birth certificate, driver's license or voter card)
2) One recent passport photograph
3) Photograph of the property
4) Land deed (if available)

Please note that the real estate tax is an annual tax that is due between **January 1st and June 30th** of each year, after which it becomes delinquent. **For a limited time, there is a partial waiver on penalties and interests that may have accumulated on your property from unpaid taxes in previous years.**

PLEASE PAY YOUR TAXES NOW TO AVOID SUBSEQUENT ENFORCEMENT ACTIONS.

Note that failure to pay your taxes will make you liable to enforcement actions which may include placing of a tax lien on your property (ies) pursuant to Section 2007, Temporary Closure (Section 78) and forwarding of your delinquency to the Ministry of Justice for prosecution through the Tax Court.

We anticipate your timely cooperation as the development of Liberia depends on your taxes.

With Professional Sentiments,

Signed by: Manager, Enforcement

Real Estate Tax Division

LIBERIA REVENUE AUTHORITY

REAL ESTATE TAX DIVISION

PROPERTY IDENTIFICATION SHEET

Notice Number [redacted]

Owner/ Caretaker Name:

[redacted]

Owner/ Caretaker Contact:

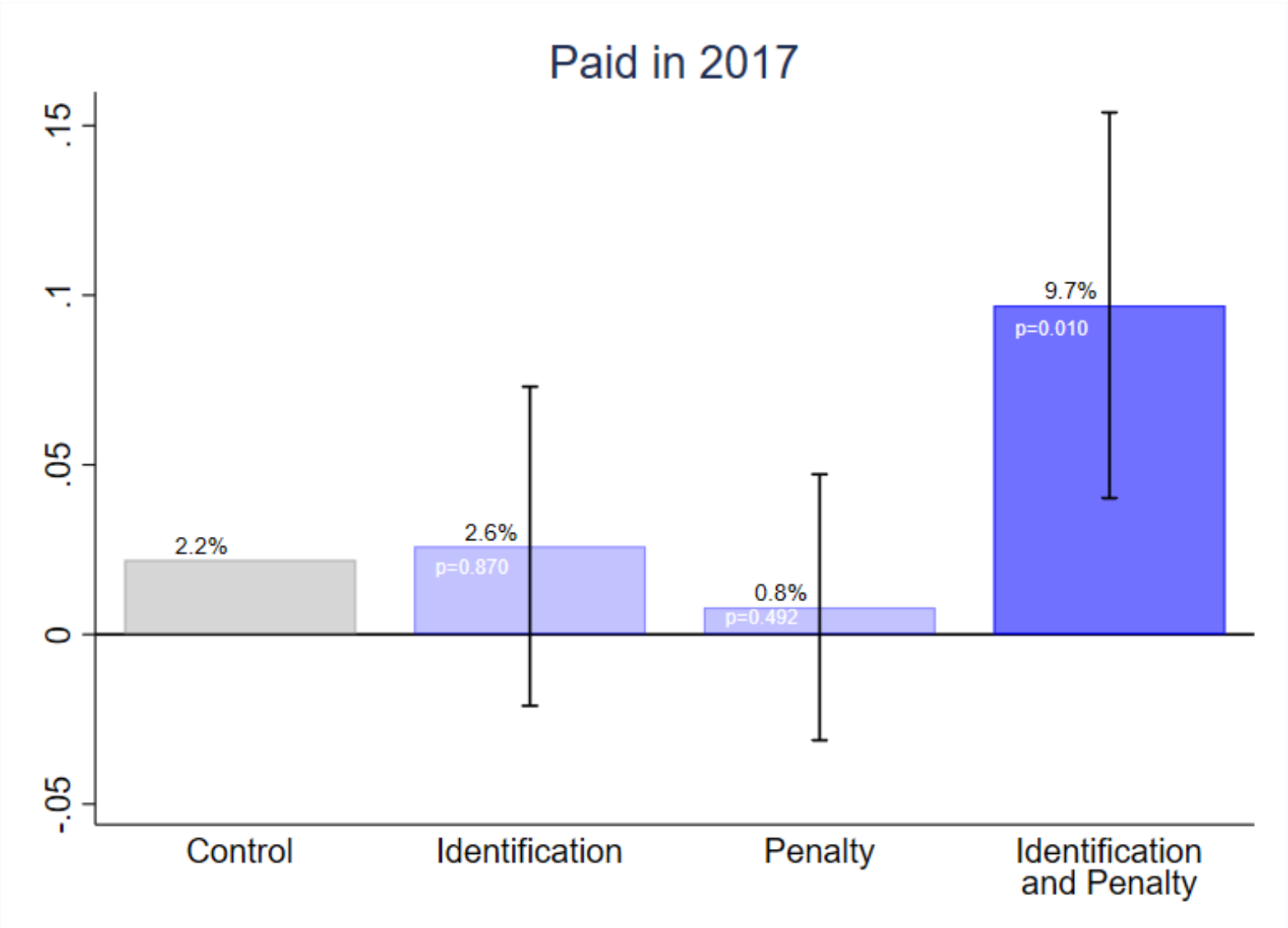
[redacted]

Location:

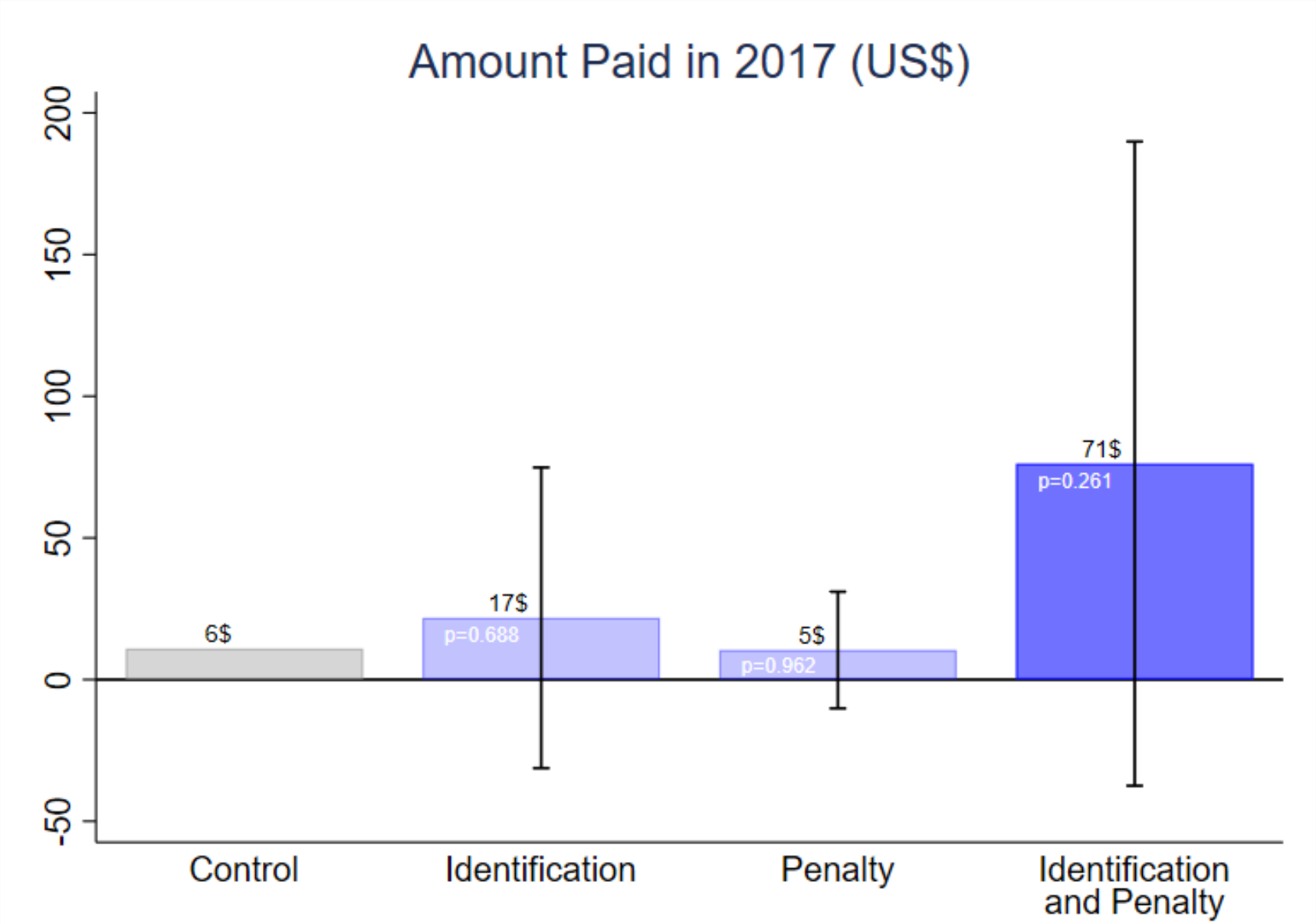
SMALL TOWN

Please come to the Liberia Revenue Authority to verify and update your records

Identification and Penalty Notice Increases Payment Likelihood Five-Fold

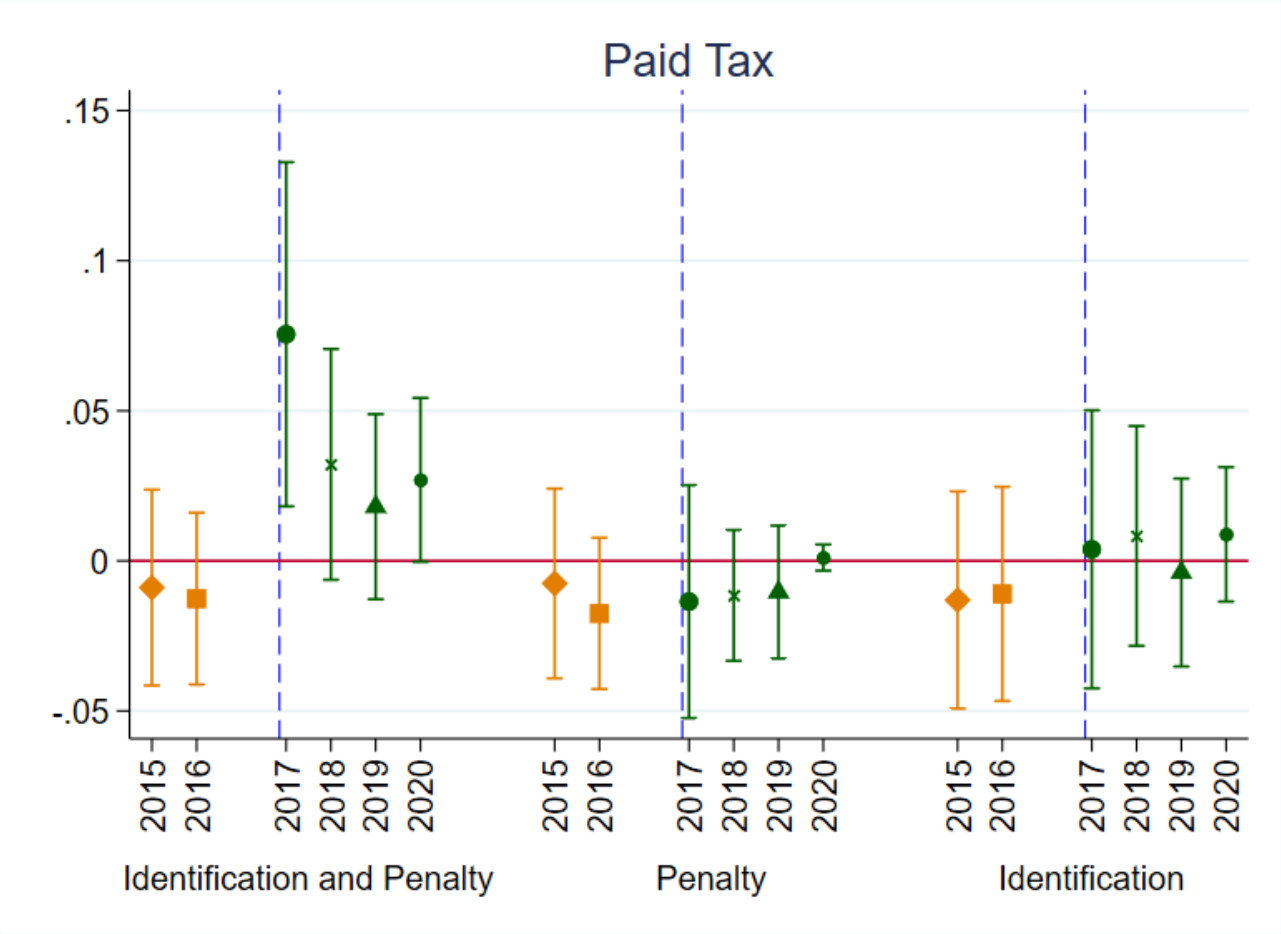


Impact of Notices on Amount Paid



Persistent Impact of Notices

- Tax revenues in first year more than cover the cost of property enumeration and notice delivery
- Sustained impact of identification and penalty notice 4 years later

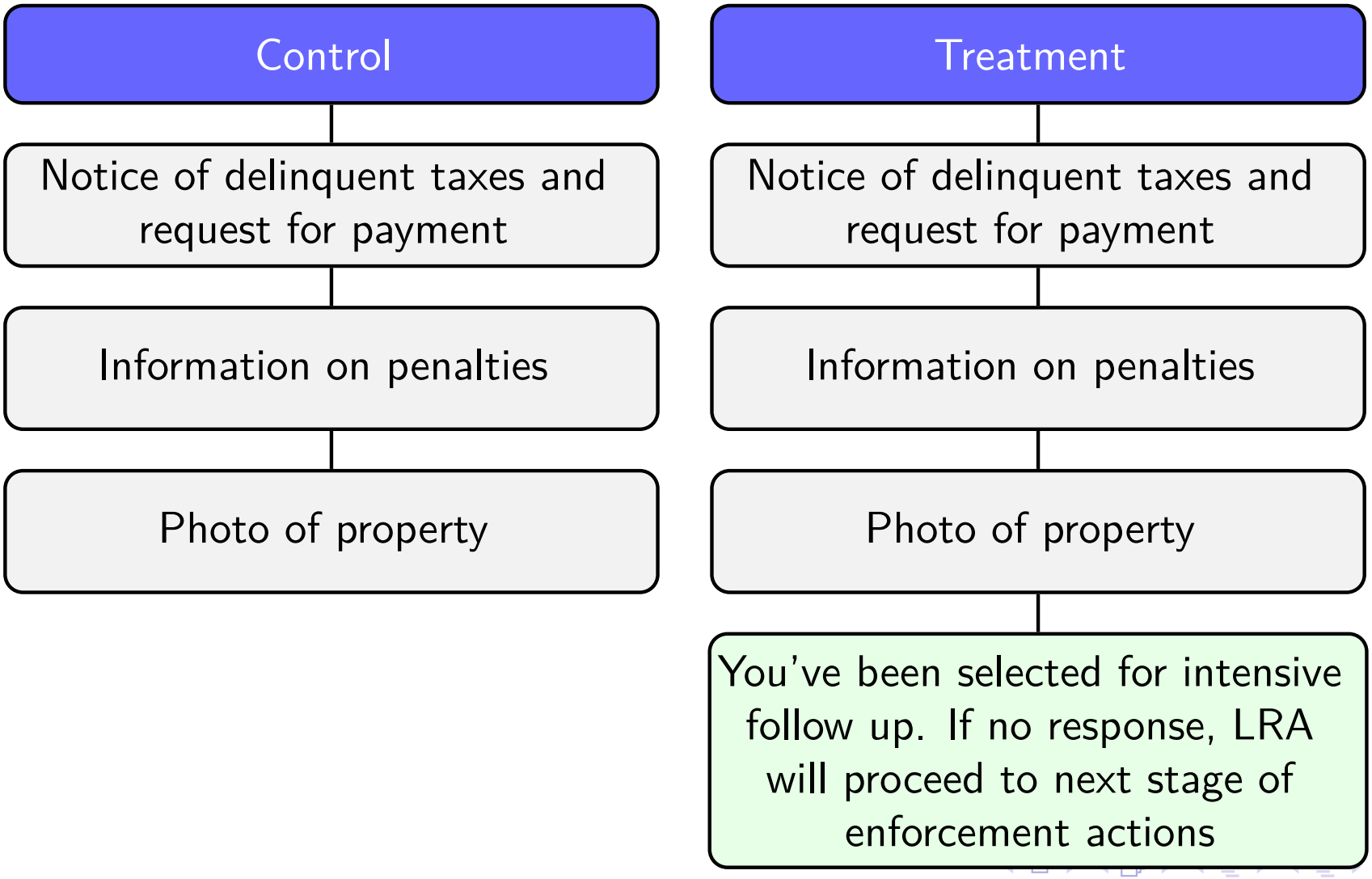


Why did so many citizens seem to ignore the messages?

- Faced with information that the government has detected their noncompliance and the legal penalties for noncompliance, over 85 percent of recipients do not respond.
  - Consistent with evidence from other studies e.g. Carrillo et al 2017
  - Unlikely to be explained by illiteracy, not receiving the notice
- **Hypothesis: Taxpayers have a low expectation that any penalties would be enforced on them.**
- A second experiment tests this hypothesis

Experiment 2 Design

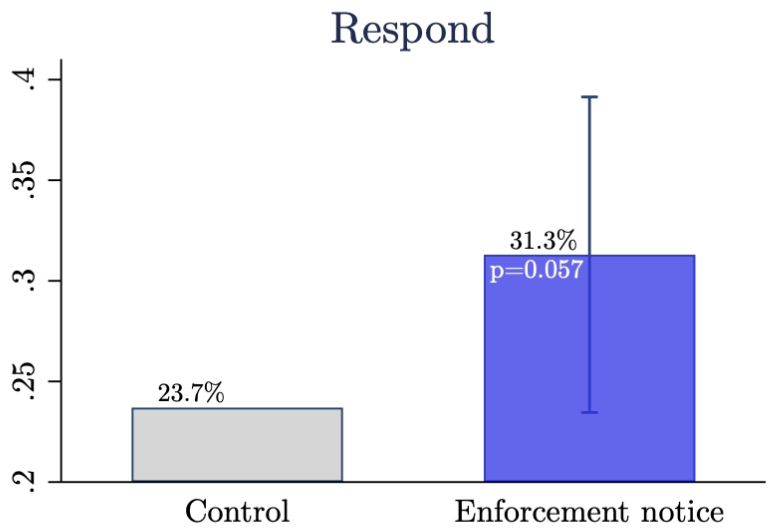
Sample: Delinquent property owners on tax roll (N=528)

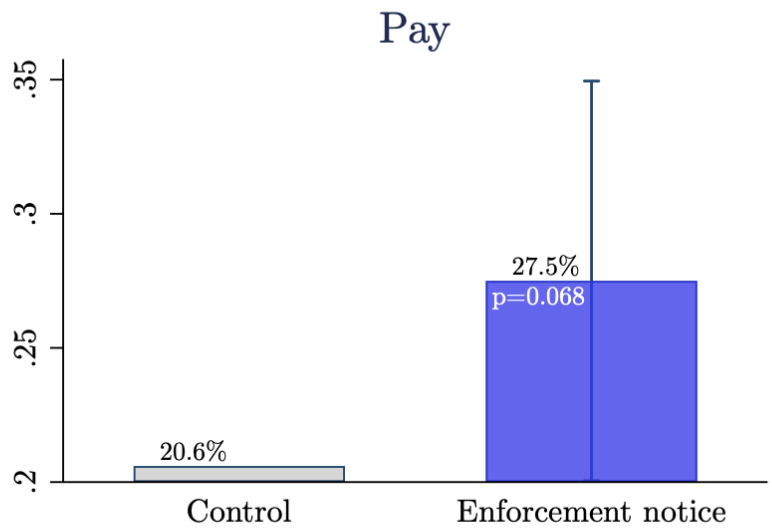


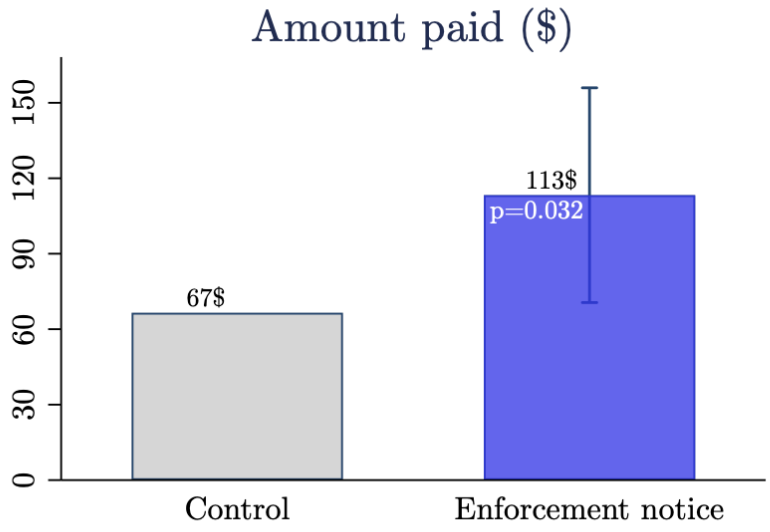
Implementation

- October - November 2018: LRA agents tracked locations of properties using vague and incomplete addresses in registration database (e.g. *John Smith, Catholic Hospital community, by the football field*)
  - Collected photo and GPS location of property
- May -June 2019: Tax authority agents delivered notices to property owners

Experiment 2 Results







(Not) Persistent Impact of Enforcement Notice

	(1)	(2)	(3)
	Paid in 2020	Amount Paid in 2020 ($)	Amount Paid in 2020 (IHS)
Enforcement notice	-0.002	10.924	0.000
	(0.028)	(12.289)	(0.160)
Number of observations	511	511	511
Control mean of dependent var	0.107	21.521	0.599

Conclusion

- Increasing perceived probability of identification increases tax compliance, when coupled with
  - information on penalties
  - signals of increased probability of enforcement
- Policy application: Investing in binding capacity constraint likely to yield more revenue impact
  - In practice, investments in enforcement capacity are harder to implement, often require stakeholders outside the tax authority E.g. legal system, political capital

Thank you!

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