

# RESEARCH INSIGHTS



## Can rewards improve tax compliance?



Rewards can encourage good citizenship. To reward good taxpayers and improve property tax compliance, the Santa Fe, Argentina municipal government held a lottery for the construction or renovation of sidewalks in front of winners' homes.



Lottery winners who were publicly recognized by the government showed higher tax compliance in the short run, and the construction of the new sidewalks had a large positive and persistent effect on compliance.



Tax compliance also improved for neighbors of the reward recipients—a spillover effect that was in some cases even larger than the direct effects.

### CONTEXT

As policymakers increasingly use rewards to encourage good citizenship, it is important to find a reward mechanism that does not curb intrinsic motivation, is long-lasting, and has effects that go beyond direct reward recipients. A policy innovation introduced by the Municipality of Santa Fe, Argentina allowed us to evaluate the potential of different mechanisms for encouraging tax compliance—participation in a lottery (financial motive), public recognition (*social image*), and provision of a visible and durable good (*reciprocity and peer effects*).

### THE PROJECT

To reward good taxpayers and improve property tax compliance, the municipal government of Santa Fe, Argentina organized a lottery (called the *Good Taxpayer Award*) in which winners received new or renovated sidewalks in front of their homes. The city announced a lottery for those with no pending tax arrears at a certain future date. After the deadline, the city government randomly selected 400 individuals among more than 72,000 taxpayers who had paid their property tax. Lottery winners were announced in local newspapers, and the sidewalks in front of their homes were constructed or renovated, where possible.

#### Key concept



#### PEER EFFECTS

We are influenced by the way our peers behave and are more likely to act a certain way when given the impression that the behavior in question is widespread among our peers.

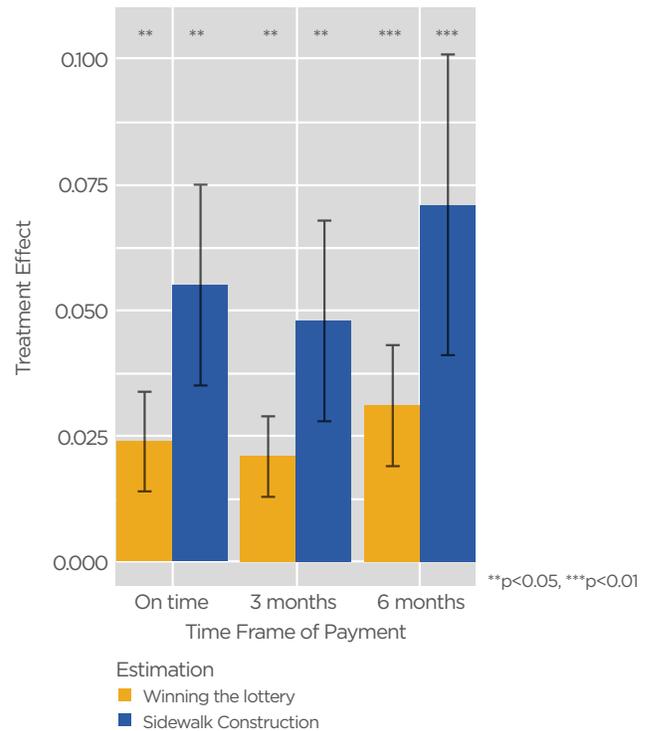
## RESULTS

Results indicate that rewarding taxpayers for their compliance has large positive and persistent effects for lottery winners and their neighbors.

1. On average, lottery winners were 3.1 percentage points more likely to pay their tax obligations on time. They were also 2.4 percentage points more likely to pay their property taxes within 3 months and 3 percentage points more likely to continue paying on time over the next few years compared to their peers. This effect persisted for at least 3 years after the intervention.
2. Not every lottery winner actually received the sidewalk construction prize. Where they did not, the effect of the lottery win and public recognition alone faded away after a few months. This suggests that, while taxpayers may feel good about being recognized in their local newspaper (*social image*), the effect is not big enough to impact their behavior in the long run.
3. Actually completing sidewalk renovations increased timely payments by an average of 7.1 percentage points. Tax bills were 5.5 percentage points more likely to be paid within 3 months. This effect persisted over time and is most likely due to *reciprocity*—once a sidewalk is built or renovated, taxpayers can better evaluate how their local government uses the money it collects. They also develop a sense that the government works for them.
4. Rewards also impact the neighbors of lottery winners. For example, neighbors of winners in areas with low public service provision were 7.5 percentage points more likely to pay on time. This can be explained by a combination of *peer effects* and *reciprocity*, which can be higher in areas with lower public service provision where new construction is more visible. Neighbors of winners also have direct evidence that people around them are paying their taxes (*peer effects*), which is likely to improve future compliance, especially for previously noncompliant taxpayers.

5. Lastly, people did not pay their taxes just to participate in the lottery, as they had no financial incentive to do so.

## Effect of Intervention on Share of Payments Made



### Key concept

#### SOCIAL IMAGE

As humans, we care about other people's perception of us and are often willing to take actions to make them see us as kinder, more generous and likeable individuals.

### Key concept

#### RECIPROCITY

We have a well-documented tendency to respond positively when individuals or organizations have shown us kindness in the form of favors, gifts or gestures.

## POLICY IMPLICATIONS

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These results have several implications for policymakers.

1. It is possible to reward good citizenship in a way that reinforces intrinsic motivation, in contrast to financial incentives or tax amnesties, which can sometimes weaken it.
2. It is a good idea to provide rewards that, beyond their utility to the winners, are visible, durable and of public utility. These characteristics of the sidewalks likely contributed to the persistence of the effect and its positive secondary effects. If the reward had been limited to the recognition of the taxpayers in newspapers, the effect would have been high, but short-lived.
3. Not every individual reacts the same to a reward. Targeting those likely to change their behavior significantly (such as noncompliant taxpayers or those living in areas with lower public-service provision) can increase the impact of such interventions.
4. Providing a public good seems to affect the relationship between the taxpayer and the government and among taxpayers. Thus, providing rewards that are visible, durable public goods may have positive implications beyond taxation, such as increasing trust and reducing corruption and crime.

## IDB BEHAVIORAL ECONOMICS GROUP

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### FULL STUDY

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[Carrillo, P. E., Castro, E., & Scartascini, C. \(2017\). Do Rewards Work?: Evidence from the Randomization of Public Works.](#)

## DEPARTMENT OF RESEARCH AND CHIEF ECONOMIST

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