RESEARCH INSIGHTS

How Do Messages Affect Taxpayers' Behavior?

The results of a field experiment in Argentina indicate that taxpayers who received a deterrent message (describing the penalties for non-compliance) are more likely to comply with payment of taxes than taxpayers in the control group.

After receiving reciprocity and peer effects messages, the probability of compliance increased for some contributors but decreased for others according to their underlying distribution of beliefs.

The use of messages on tax bills influences taxpayers depending on their prior beliefs, the location of their residence, and whether or not they live in the city where they have to pay the tax.

CONTEXT

Tax evasion is a widespread problem. While the standard economic model views tax evasion as a risk-benefit decision, most people file taxes more than the model suggests and not everyone evades their taxes. Some may value losses more than gains, overestimating the probability of detection or facing additional costs associated with evasion. Moreover, beliefs about other taxpayers' behavior and government use of revenues affect tax avoidance decisions. Therefore, it may be possible to reduce tax evasion by increasing sanction enforcement, the level of peer compliance, and the efficiency and/or effectiveness of government expenditures, the latter helping to increase trust.

PROJECT

A randomized field experiment was conducted in Junín, Argentina to evaluate strategies for reducing property tax evasion. This tax is ideal for study because compliance is perfectly observable by authorities: taxpayers receive a bill that they do or do not pay.

Some 23,000 taxpayers were divided into four groups. One received no treatment (the control group). The others received messages in their tax bills. The first treatment (T1) included messages featuring *deterrence* (the cost of not paying), the second treatment (T2) tests the *peer effect* (other citizens' tax compliance), and treatment three (T3) features *reciprocity* (how the government uses revenues).

Key Concept

PEER EFFECT TREATMENT

Beliefs about the behavior of other contributors.

RESULTS

Including messages in the tax bill is a good instrument for influencing taxpayer behavior. However, not all messages have the same effect, and the magnitude of the effect differs. The effect is largest for the most effective message, the deterrence message, which described the cost of not paying and provided an example, along with administrative and judicial measures that the municipality could take. The probability of compliance by a taxpayer who received the deterrence message was approximately 5 percentage points (pp) higher than that of an individual in the control group. Extrapolating these results to the population as a whole would be equivalent to an increase in total compliance of more than 10%. Taxpayers who received this message were also more likely to pay arrears and future obligations in advance. These results confirm that increasing the significance of sanctions affects compliance behavior.

The other two treatments, reciprocity and peer effects, did not change average behaviors. However, not everyone reacts to the messages in the same way. Individual compliance behavior, the level of public goods provision, the level of wealth, and the degree of daily interaction with the municipality seem to affect the message effectiveness. One interesting result, described in the figure 1, is that there are differences between taxpayers who own property in the city and live in the city and those who own property in the city but live outside it. This group may have different beliefs about the effectiveness of the local government than the rest of the population, as they have fewer interactions with the municipal government and with other taxpayers in the city. The evidence indicates that compliance among these taxpayers is 25% lower than average compliance in the city. However, the effect of deterrence and reciprocity messages tends to be greater for these taxpayers than for the rest of the population.

POLICY IMPLICATIONS

There are many other reasons why taxpayers decide to pay or not pay their taxes than the probability of detection and the size of the fines. Changing people's beliefs about enforcement but also about what the government does with the money it collects and what others are doing can matter to reduce tax evasion. Designing effective messages can be one way to increase voluntary tax compliance. This is cheaper and easier than other measures.

Not every message works, and results are not homogeneous; beliefs vary across citizens and so does the way they react to the messages. Therefore, universal campaigns may have no effect or backfire. In designing effective campaigns, the devil is in the details. In order to have impact, messages should be salient, clear and concise. Images and text included in the text should be consistent and transmit closely related concepts and ideas in a simple and precise manner. The credibility of informational treatments is crucial, and messages should be carefully tailored to avoid offending citizens' sensibilities.

Key Concept

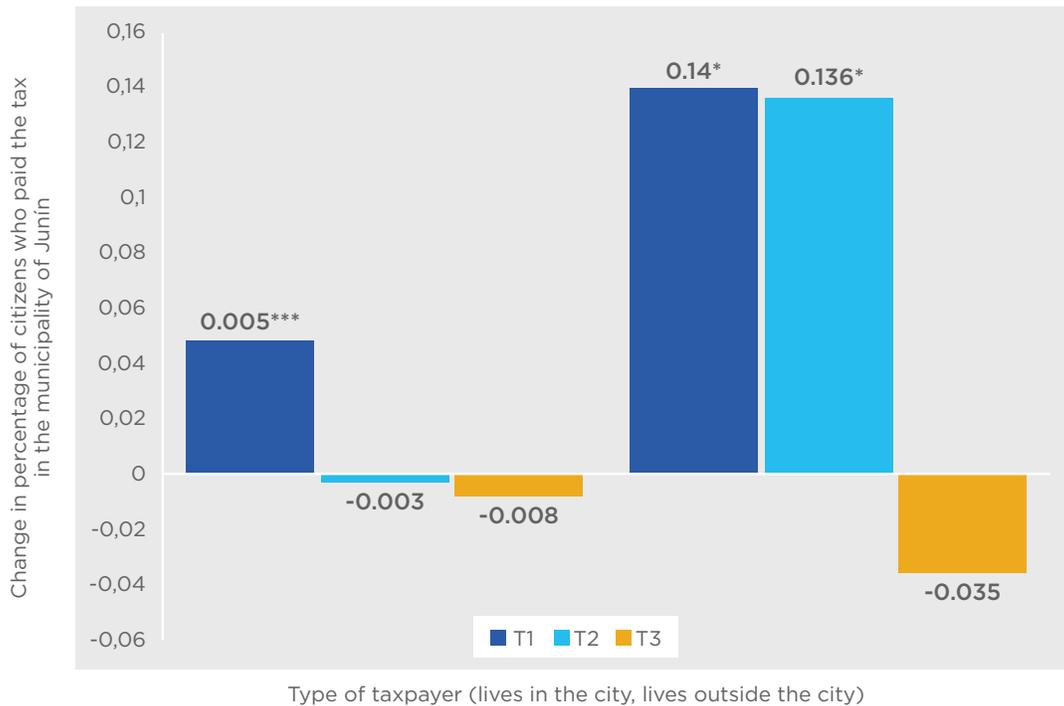### DETERRENT TREATMENT
Beliefs about enforcement and fines.

Key Concept

RECIPROCITY TREATMENT
Beliefs about government use of resources.

Figure 1. Treatment Effects across Types of Taxpayers (locals and outsiders)

Note: * p<0.10, ** p<0.05, *** p<0.01.

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FULL STUDY

Castro, Lucio y Carlos Scartascini. 2015. "Tax Compliance and Enforcement in the Pampas Evidence from a Field Experiment." *Journal of Economic Behavior & Organization* 116 (August): 65–82.

This study was also published as an IDB Working Paper.

DEPARTMENT OF RESEARCH AND CHIEF ECONOMIST

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