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The Impact of a Tax Holiday Lottery in Uruguay

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Sector(s): Political Economy and Governance

Sample: 28,646 individuals

Initiative(s): Governance Initiative (GI)

Target group: Urban population

Outcome of interest: Taxation

Intervention type: Incentives Information

AEA RCT registration number: AEARCTR-0000452

Research Papers: Is Paying Taxes Habit Forming? Experimental Evidence from Uruguay.

Partner organization(s): Intendencia de Montevideo

Municipalities in Brazil, Colombia, Ecuador, and Uruguay, among others, have experimented with reward programs that give "good taxpayers" some sort of meaningful prize (from cars to tax holidays) as an incentive to continue paying taxes in the future. Researchers tested in the case of Montevideo, Uruguay the impact of winning a tax holiday on subsequent tax compliance. Winners of the tax holiday lottery were 3 percentage points less likely to pay taxes in subsequent payment cycles, likely because the holiday disrupted the habit of tax paying, and this effect lasted for up to two years after the holiday. Researchers also tested the effects of informational messages on tax compliance and found that learning about the lottery did not increase tax compliance.

Policy issue

Low tax compliance in developing countries is often attributed to governments' weak monitoring capacity and their inability to induce payment. Municipalities in Brazil, Colombia, Ecuador, and Uruguay, among others, have experimented with reward programs that give "good taxpayers" a meaningful prize as an incentive to continue paying taxes in the future. Researchers tested the impact of winning a tax holiday on subsequent tax compliance in Montevideo, Uruguay.

Habit formation may play an important role in sustaining tax compliance or noncompliance. A tax paying habit may become disrupted when "good taxpayers" win a tax holiday. Understanding the impact of habit formation on compliance may have important implications for tax policies, especially in low- and middle-income countries that struggle to induce payment.

Context of the evaluation

In 2004, the government of Montevideo initiated a lottery to provide compliant taxpayers the chance to win a year-long tax holiday (i.e.: a year-long exemption from paying taxes). The lottery selected winners across four types of taxes: head, vehicle, property, and sewage. “Good taxpayers”-those that paid their taxes on time in the preceding year-had a one in five-thousand chance of winning the lottery in any year. These taxpayers made up 35 percent of all taxpayers at the time of this study, meaning that only 65 percent of tax bills were being paid on time. Even amongst “good taxpayers”, historical rates of tax compliance varied, with some of them having a better record of paying taxes than others.

The majority of taxpayers pay in person at local kiosks called “Red de Cobranzas”, some pay at City Hall, while others (around 20 percent) pay by automatic bank debit . For property owners, the average appraised property value was 956,000 Uruguayan pesos (around US$33,305 in 2004) and the annual value of property taxes was over 7,044 Uruguayan pesos (around US$245 in 2004).

The majority of taxpayers pay in person at local kiosks called “Red de Cobranzas.”

Image provided by researchers

Details of the intervention

Utilizing the results of Uruguay’s National Lottery, a natural experiment, researchers partnered with the municipal government in Montevideo to test the impact of winning a tax holiday on subsequent tax compliance. The intervention group consisted of 3,189 “good taxpayers” who had won the lottery in one of four tax categories since 2004. The comparison group consisted of 3,174 “good taxpayers” who had not won the lottery in any tax category, but had been eligible to win at the time.

In parallel, to determine whether learning about the lottery would in itself affect tax compliance, researchers collaborated with the municipal government in Montevideo to conduct a randomized evaluation to test the impact of informational messages on future tax payments. Through detailed administrative tax payment records and survey data, researchers randomly selected 10,655 individuals (including both “good” and “bad” taxpayers) to be in the comparison group and 10,799 individuals to receive an informational message. Different types of informational messages were sent out, with some messages providing a simple reminder of paying taxes, and others adding information emphasizing the existence of the lottery. Messages also tested different positive and negative framings to incentivize compliance.

Researchers complemented this data with qualitative interviews to measure the effect of the tax holiday on taxpayer attitudes towards the tax system, to determine whether any changes in attitudes could explain changes in tax compliance due to the lottery.

Results and policy lessons

Researchers found that the tax holiday led to a reduction in tax compliance in subsequent years for lottery winners. This was likely because the holiday disrupted the habit of tax paying, and not because the lottery affected tax compliance by informing taxpayers about the existence of a lottery, or because the tax lottery altered taxpayers’ attitudes towards the tax system.

Tax Holiday Lottery: Winners of the tax holiday lottery were 3 percentage points less likely to pay taxes in the next payment cycle (a 42 reduction in compliance over the 7 percent of “good taxpayers” who lost the lottery and didn’t comply). This effect lasted for up to two years on average after the holiday; though the effect diminished over time, suggesting that some taxpayers with a strong habit of complying might have gone back to paying taxes in the years following the lottery. These results imply that the lottery caused the government to lose revenue through the tax holiday and subsequent non-compliance by previously compliant taxpayers, and that winners’ accumulated tax debt increased.

However, winners of the lottery who were signed up for automatic debits did not lower their tax compliance, while winners with a relatively poorer record of complying with past taxes were even more likely to lower their tax compliance. This suggests that that the tax holiday lottery reduced compliance because it disrupted the habit of paying taxes amongst certain winners – those that paid taxes manually and those with worse compliance habits.

Informational Messages: Overall, informational messages about the lottery did not affect tax payment behavior. This suggests that the lottery did not achieve its intended effect of encouraging tax payers- particularly “bad taxpayers”-to increase their compliance in order to gain access to the lottery.

Attitudes towards the tax system: Information about the lottery did not seem to negatively affect taxpayers’ attitudes about the effectiveness of the municipal government or the tax system. Taxpayers informed about the lottery were more likely to believe that the tax system was transparent and equitable, and that tax compliance is important. Thus, it does not seem that taxpayers reduced their tax compliance in response to a change in their perceptions about the tax system after winning the tax lottery.

Researchers presented results from the randomized evaluation to the government of Montevideo, who is now planning to modify the tax holiday program for “good taxpayers.” As the results suggest that the existing program reduces tax compliance by disrupting the habit of payment among recipients, the municipality has proposed instituting a retroactive refund rather than a prospective tax holiday for reward recipients.