When Context Matters: Increasing Tax Payments in Poland

It’s the end of April in Poland. While everyone is happy the harsh winter weather is finally getting milder, the Polish Tax Authority is worried because 62% of the country failed to pay their taxes on time.

Over the past decade, the use of behavioral principles by tax administrations in different countries has been gaining ground. Given the country’s tax compliance rate, Polish authorities and the World Bank tested the use of behaviorally informed letters to late taxpayers in order to determine if this simple solution would help boost government revenues.

The Project

Our randomized controlled trial (RCT) reached a total of 149,925 individual late taxpayers across the entire country in urban as well as rural areas. Residents were randomly assigned to receive the default (unaltered) letter, or one of nine behaviorally informed letters that varied the opening paragraph text.

These behaviorally informed paragraphs can be broadly classified into soft- or hard-tone messages. Soft-tone messages, for example, informed delinquent taxpayers about the high percent of residents that had paid their taxes on time (reinforcing social norms), and promoted the salience of public goods. They also explained that taxes are used to finance schools, roads, and safety (public goods, positive framing) or that those services cannot be provided without taxes (public goods, negative framing).

Hard tone messages emphasized deterrence interventions, including sanctions for noncompliance and the framing of non-payment as an intentional and deliberate choice. Some letters used both techniques.

An experiment in Poland showed it was possible to increase the number of people paying taxes by 21% just by changing the wording on letters the government sent to non-payers.

Source: Ministry of Finance data. Notes: Error bars indicate 95% confidence intervals. Stars indicate a significant difference from the control group (dunning letter)—∗∗∗=0.01, ∗∗=0.05, ∗∗∗=0.001; daggers indicate significant differences in the treatment effects (with respect to the standard behavioral letter) between the two groups: †∗=0.1, †∗∗=0.05, †∗∗∗=0.01.
The Results

Behavioral insights have a large effect.
Each behaviorally informed letter was significantly more effective at bringing in payments, increasing payment amounts, and reducing tax liabilities of taxpayers compared to the existing letter. The most successful behaviorally informed letter yielded a 20.8% increase in the number of compliant taxpayers.

Cost savings are impressive.
In the future, if authorities send the best performing letter to all taxpayers covered by the trial, the Polish Tax Authority could generate a 56% increase in revenues (PLN 39,328,742). In addition, we tested ways to reduce the cost of sending letters by changing the delivery method from registered to regular mail, and found that regular mail was as effective. This suggests that the tax administration could save substantially by changing the delivery method.

Experimenting is key, and context matters.
Some of the findings were surprising. Although effect sizes and cost savings are similar to experiments run in countries such as Guatemala or the UK, the type of messages that were most effective in Poland were the least effective in the other two countries. In Poland, taxpayers reacted more to hard-tone messages than to milder, soft-tone messages; the social norm message, for example, showed no improvement to the baseline behavioral letter. Further analysis is needed to determine what factors influenced the different outcomes, but what this result clearly shows is that behavior is highly context dependent; therefore, experimentation is crucial.

Individual taxpayer characteristics also influenced responses.
Women had a higher repayment rate and were more responsive to hard-tone messages. Letters with public goods messages were not as effective among people between 50 to 64 years-old, but helped increase tax compliance among younger people. One explanation for the latter could be that the younger generation is more likely to benefit from the specific public goods listed in the letter. These letters also worked better with rural taxpayers, possibly due to a tighter link between the outcome of public good expenditures and its relevance to the community.
This intervention shows that adapting taxpayer communications with a behavioral lens could produce considerable gains. In addition to Poland, countries such as the United Kingdom, Australia, Chile, Costa Rica, and more recently Guatemala have experimented with behavioral insights with very promising results. The attractiveness of behavioral interventions is that they do not require lengthy and politically challenging reforms to tax legislation. It is crucial to test different messages, as their effects may vary with each country’s context, as well as across individuals. Calibrating reminder messages to different audiences could effectively increase tax compliance and increase government revenues. In addition, policymakers might want to review the delivery methods used to communicate with citizens, especially in the era of digital communication.

Policy Implications

Calibrating reminder messages to different audiences could effectively increase tax compliance and increase government revenues.

About eMBeD

The Mind, Behavior, and Development Unit (eMBeD), the World Bank’s behavioral science team in the Poverty and Equity Global Practice, works closely with project teams, governments, and other partners to diagnose, design, and evaluate behaviorally informed interventions. By collaborating with a worldwide network of scientists and practitioners, the eMBeD team provides answers to important economic and social questions, and contributes to the global effort to eliminate poverty and enhance equity.