The Role of Extrinsic and Intrinsic Motivations for Tax Compliance in Germany

Sector(s): Political Economy and Governance

Location: Germany

Sample: 35,603 individual taxpayers from 68 parishes of a Protestant Church District

Target group: Urban population

Outcome of interest: Taxation

Intervention type: Information Nudges and reminders

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Tax compliance is high in modern tax systems despite low probabilities of being audited and modest penalties for non-compliance, raising questions about the drivers of tax compliance. Researchers partnered with a Protestant church district in metropolitan Bavaria, Germany, to conduct a field experiment to reveal taxpayers' motivations to comply with a local church tax. Researchers found that simplifying the tax notification, highlighting the possibility of tax enforcement, and offering rewards and recognition for timely payment affected taxpayers' compliance behavior.

Policy issue

Tax compliance is high in modern tax systems despite low probabilities of being audited and modest penalties for non-compliance, raising questions about the drivers of tax compliance. Do taxpayers overestimate the likelihood of being audited? Are taxpayers' decisions to comply based on intrinsic motivations like moral sentiments, guilt, social norms, or generosity? Understanding taxpayers' reasons for compliance is a key question for improving tax systems. To fill this evidence gap, researchers tested the impacts of varying types of reminders and incentives on tax compliance behavior in Germany.

Context of the evaluation

Payment of a local church tax is a legal obligation in some European countries. In Germany, individuals baptized as Protestants at birth automatically become church members and are therefore liable for paying the local church tax once they turn 18. However, most individuals are not active parish members; fewer than nine percent of eligible members attend services in the parishes included in this evaluation, which focused on the local church tax in a metropolitan area of Bavaria. Participants in this evaluation were representative of individuals in this area: they were not overly religious, and half were married men with an average age of 45 and at least one child, earning about €43,000 in taxable annual income.

The local church tax is a progressive income tax with an annual tax liability of €5 to €100, depending on personal income. To collect this tax each year, the church district mails out a tax notification letter to all resident church members in May explaining the process for payment and the collection timeline. Church members are asked to self-assess their income, estimate the taxes owed, and transfer the amount into the church's bank account by September.

In the current tax system, 21 percent of tax compliers pay exactly what they owe or more, while the remaining 79 percent pay an amount less than what they truly owe in taxes. However, of those who evade tax compliance, 92 percent pay zero tax. Although churches have the legal right to cross-check members' paid taxes against personal income tax returns filed with the state tax

authority, they do not exercise this right, meaning that taxpayers face no legal repercussions for tax evasion. This lack of consequences suggests that compliance with the church tax was intrinsically motivated under the status quo, driven by reasons including moral sentiments, guilt, or social norms.



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A church in Stolberg, Germany.

Details of the intervention

Researchers partnered with a Protestant church district to conduct a randomized evaluation to examine taxpayers' motivation to comply with a local church tax during the 2012 tax season. Researchers manipulated the official tax notification with varying combinations of deterrence, simplification, misperception, and rewards or recognition to assess the impact of information and positive and negative incentives on paying the church tax.

Researchers randomly assigned 35,603 eligible individuals to the comparison group or 1 of 12 interventions. Participants assigned to the comparison group received the same notification letter that had been used by the church district in previous years. Other participants received one of twelve variations on the notification letter:

- Simplified tax notification: Some taxpayers received a significantly shortened letter that highlighted the legal obligation to pay the local church tax and moved salient information (e.g., payment deadlines and tax schedule) to the cover page.This intervention aimed to increase the information recipients had and the attention they paid to the local church tax.

All other variations used this simplified tax notification with an additional paragraph included on the cover to convey additional information. No other design changes were made.

- Enforcement information:Some individuals received the simplified tax information letter with an additional paragraph explicitly stating that there would be no enforcement of the tax. This intervention aimed to correct any existing misperceptions that the tax would be enforced, fully eliminating any extrinsic motivations for tax compliance.
- Deterrence:This tax notification informed recipients that the church had the legal right to enforce the tax. Three sets of taxpayers were told three different probabilities of audit. In addition, some taxpayers received information that if they paid more than€10, they would not be audited, but if they paid€10 or less, the likelihood of audit would increase to 50 percent. By making the possibility of audit more salient, this intervention aimed to increase the extrinsic motivations facing taxpayers.
- Reward and/or recognition:Some individuals were offered the chance to win a reward for complying in the form of public recognition in a local newspaper, being privately entered into a lottery to win either €250 or €1,000, or a combination of public recognition and being entered into the €1,000 lottery. The rewards were designed to change taxpayers' perceptions of the tax institution by signaling the voluntary aspect of the taxes and downplaying the mandatory nature of the tax requirements. Participants were informed that the probability of actually winning any of these rewards was very low, meaning that any change in tax compliance from this intervention would suggest a change in intrinsic motivation to comply.
- Social norms:Some individuals received information about the average amount that had been paid by taxpayers in 2011.
- Moral suasion:Some taxpayers received a tax notification that emphasized the social benefits of making a payment to their local parish.

Researchers linked church tax records to administrative income tax records from 2008-2011 to examine taxpayers' pre-evaluation behavior. They observed both the amount of taxes paid and the estimated taxes owed to measure compliance. Based on taxpayers' behavior in the year prior to the evaluation (2011), researchers created three categories of taxpayers to measure tax compliance: tax evaders, compliers, and donors. Tax evaders were defined as those who paid less than their legal obligation in 2011 (the year preceding the evaluation), compliers were those who paid exactly their legal obligation in 2011, and donors were those who paid more than their legal obligation in 2011.

Results and policy lessons

Researchers found that providing different types of information to taxpayers affected their compliance behavior. Specifically, simplifying the tax notification, highlighting the possibility of tax enforcement, and offering rewards and recognition led to observed changes in behavior.

Complexity of notification: Tax evaders who received the simplified tax notification were 2.7 percent less likely to evade, and they increased their payment amounts by 43.4 percent. On the other hand, the simplified tax notification had no effect on donors, suggesting that their earlier tax compliance was not driven by confusion about the letters or the legal requirement to pay. These results suggest that a considerable degree of tax evasion could be due to the complexity of tax notifications, and that compliance does not seem to be a product of taxpayers' confusion.

Intrinsic motivation:Researchers found that taxpayers' decisions to pay their taxes may be affected by internal guilt or the fact that it makes individuals feel good about themselves. The simplified notification did not increase compliance among compliers or donors, suggesting that compliance may be driven by intrinsic motivation, e.g. a preference to be a law-abiding citizen or a feeling of duty to pay.

However, the increased probability of enforcement highlighted in the deterrence interventions led to an increased probability of donating and an increase in tax payment amounts, as well as a decreased probability of evasion driven almost entirely by baseline evaders. Highlighting the legal obligation of the local church tax system encouraged evaders to become compliers, suggesting that increasing the (perceived) probability of detection can reduce non-compliance among those who are extrinsically, rather than internally, motivated to pay taxes.

Extrinsic motivation: Upon receiving an offer of reward or recognition, evaders increased their probability of evading by 1.3 percent and reduced their probability of increasing their payment amount by 16 percent. On the other hand, donors' probability of donating did not change, and they were more likely to increase the size of their donation in 2012. While the offer of rewards impacted tax compliance, the exact form of the reward seemed not to matter as much as the underlying motivation of the taxpayer.

Taken together, these results suggest that tax deterrence and enforcement, as well as rewards and recognition, affect taxpayers' compliance behavior. Rewarding taxpayers for paying their taxes, rather than punishing them for not complying with their tax liability, demonstrates the voluntary aspect of a low-enforcement tax system, which may encourage overpayment from those who are motivated by an intrinsic desire to contribute to the public good. At the same time, rewarding taxpayers may downplay the mandatory aspect of a legally binding tax system, thereby encouraging evasion among those who are motivated by external factors.

Informed by the results of the study, the church district switched to a simplified version of the notification letter. The administration of the Protestant Church in Bavaria also made available a summary of the results to other local church districts. However, as the design of the church tax notification letter is chosen locally, it is unclear whether those church districts adjusted their notification letters in response to the results of the intervention.

Dwenger, Nadja, Henrik Kleven, Imran Rasul, and Johannes Rincke. "Extrinsic and Intrinsic Motivations for Tax Compliance: Evidence from a Field Experiment in Germany." Working Paper, July 2015.