# How to Improve Tax Compliance? Evidence from Population-wide Experiments in Belgium

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### 1 Summary

De Neve et al. [1] use a three-year, population-wide experimental study in Belgium to analyze which factors are most influential for tax compliance. Contrary to other studies, they focus on complexity. In different experiments, the letters are simplified and they analyze if this has an effect on tax compliance. They compare the impact of complexity with deterrence and morale interventions. Their analysis shows that simplifying communication significantly increases the number of tax payers that pay / fill taxes on time, whereas invoking tax morale does not and can even have negative effects. Deterrence messages also positively influence tax compliance and the combination of simplification and deterrence can lead to the best results. According to the analysis, simplification is very cost effective and the the positive effects persist over the years.

# 2 Critique

Overall, the paper provides provides a good analysis of factors that influence tax compliance for the analyzed environment. They were able to do a randomized experiment for a whole country over a relatively long timespan (3 years), which makes the gathered data very valuable for such an analysis. Furthermore, there are no other experimental studies of tax compliance at this scale (as far as I know) and the paper is therefore a valuable addition to the literature on this topic. One potential caveat is that the results may not necessarily apply to other countries. The details of the tax process and the trust in the government/public institutions might influence tax compliance and also the impact of different measures a lot, so the results could be different in countries that differ among these dimensions.

The authors provide a lot of additional tables and plots (e.g., additional statistics about the different groups) and all relevant experimental aspects (e.g., the old and new letters or the exact questionnaire) are documented, which allows the reader to verify the important aspects. Because the experimental setting is completely randomized, their usage of a simple regression is fine. I think it is good that they also included additional controls in the equation (to improve the precision of the estimate), but including other ones that might be more predictive for the outcome (e.g., education status) could have increased the precision even more. While there is no problem with their regression model, modeling tax compliance in chapter 2 seems superfluous for this paper to me, as they do not use this model, except very briefly when they discuss the cost-effectiveness/marginal cost. It is therefore not clear what the value of this model is, as a short discussion of the optimal marginal cost (with a reference to the literature) would have also sufficed.

I like that they included a discussion of heterogeneous effects and did a short analysis of the important observables. However, I think that a more extensive analysis could lead to much more interesting insights (that might help policy makers for their decisions). I was quite surprised that simplification has an effect and their only explanation attempt is in the context of people with children (where the effect is strong), who "may have a harder time to track deadlines". This might be true, but it could also be that simplification is very effective for low educated people or persons with migration background (that may have more children on average, leading to this correlation). Including these

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variables into the causal forests algorithm would have been very interesting, but this might be difficult for privacy reasons.

I am not completely convinced by their cost-effectiveness analysis and disentanglement of standard enforcement actions/letter interventions. Methodologically, using a regression discontinuity design for this is a good idea in my opinion and they include the plots that visualize the effectiveness of the cutoff value. However, they implicitly assume that the behavior of persons does not change when the enforcement measures change. In the first year, this is probably true and the analysis is fine. But what would happen when the standard enforcement actions would be dropped/reduced? People might no longer take the letters seriously, which would significantly decrease their effectiveness. In the end, this is a complex game theoretic question that is simplified too much in their calculations.

## 3 Further Work

Because the results might differ per country, I would find it very interesting to extend such a study to other countries and analyze the differences. This could also shed some more light on the question why these factors are important, which is a very important for policy makers in my opinion. As discussed in Section 2, I could imagine that migration background is an important factor for the effectiveness of simplification. Therefore, another interesting study would be to investigate the effect of translating the letters to the mother language of immigrants. Many cantons translated the COVID fact sheets to multiple languages because they noticed that immigrants do not understand them otherwise, and it could be that there would be similar effects here.

Another dimension of tax compliance is the truthful reporting of taxable income. They mention this in the introduction, but it is only addressed in the questionnaire of the tax morale analysis (which is shown after the tax filing, I am therefore also wondering how honest people answered, even if it was mentioned that the survey is anonymous). I think that investigating which factors influence this dimension the most would be a very interesting research direction, especially in countries like Switzerland that do not rely on third-party reporting of income and where banking secrecy for residents still exists. This analysis could be very hard in practice because one does not have data on the real income and assets, but it might be possible to use datasets with informations about leniency applications (e.g., in Switzerland where banking secrecy ended for foreigners and there were many leniency applications before that).

#### References

[1] Jan-Emmanuel De Neve et al. "How to Improve Tax Compliance? Evidence from Population-Wide Experiments in Belgium". In: *Journal of Political Economy* 129.5 (May 2021), pp. 1425–1463. ISSN: 0022-3808. DOI: 10.1086/713096. URL: https://www.journals.uchicago.edu/doi/10.1086/713096 (visited on 11/16/2021).