Do negative emotions moderate the effectiveness of tax audits?

Žiga Puklavec¹, Janina Enachescu², Jerome Olsen³, and Erich Kirchler⁴

Tax compliance is important for any functioning state. The standard model of tax evasion (Allingham & Sandmo, 1972) postulates the audit probability as a main driver of compliance. Basic decision making research has shown that probabilities can be perceived differently, which can also depend on experienced emotions and affect. Here we raise the question whether this is also the case for tax decisions. Namely, we tested whether experiencing negative emotions alters the weighting of audit probabilities and therefore ultimately tax compliance decisions. According to Suter, Pachur, and Hertwig (2016) the probability weighting function, as defined in prospect-theory, is more strongly biased towards the S-shape (overweighting of small probabilities and underweighting of large probabilities) in affect-rich than in affect-poor situations.

Applied to taxes, we first expected a positive effect of audit probability on tax compliance (H1). Second, we expected that the effect of audit probability on compliance is moderated by affect-richness (H2). That is, the difference in tax compliance between the neutral and affect-rich condition should be smaller under mild than under low audit probability. These hypotheses express that lower audit probabilities should be overestimated more strongly in a situation where negative emotions are experienced than in a neutral condition. Moreover, we hypothesized that the manipulations of audit probability and affect-richness have an effect on enforced and voluntary compliance motives. Higher audit probability (20%) and affect richness are both expected to lead to higher enforced compliance motivation and less voluntary compliance motives (H3, H4). Furthermore, the manipulation of affect-richness was expected to influence procedural justice perceptions, with justice perceptions being lower in the affect-rich condition (H5).

The experimental design comprised a mixed-design with one repeated factor (12 tax decision rounds) and two between-subject factors with two levels each. The first between-subject factor manipulated the affect-richness (neutral vs. affect-rich) using different written descriptions of a tax audit procedure as well as different images of a tax officer. The affect-rich condition was intended to evoke negative emotions while the neutral condition contained neutral statements about the procedures of a tax audit. The second between-subject factor varied the tax audit probability (very low, 1%, vs. mild, 20%). Participants have been randomly assigned to one of the four resulting experimental conditions: (1) affect-rich description and very low audit probability, (2) affect-rich description and mild audit probability, (3) neutral description and very low audit probability and (4) neutral description and mild audit probability. The tax rate was randomly varied between 20%, 30% and 40% within subjects.

We ran linear mixed effects regressions with random intercepts for individuals to test the assumptions of our first two hypotheses. We found that higher audit probability did

¹ Tilburg University, Tilburg, Netherlands

² University of Vienna, Vienna, Austria

³ Max Planck Institute for Research on Collective Goods, Bonn, Germany

⁴ IHS-Institute for Advanced Studies, Vienna, Austria

significantly increase compliance levels (H1). But there was no support for the assumption that the effect of audit probability on tax compliance was moderated by affect-richness (H2). Linear regressions also revealed no support for H3 and H4. Thus, voluntary and enforced compliance motivations were not affected by our manipulation. Yet, procedural justice perceptions (H5) were perceived as significantly lower by participants assigned to the affect rich condition.

Our results replicate the established finding that tax compliance rates increase with increasing audit probability. However, people do not seem to overweight small probability to a stronger degree when experiencing negative emotions. Also, against our predictions, higher audit probability or the affect-richness do not lead to higher enforced compliance motivation or less voluntary compliance motives. But as expected, when participants experienced negative emotions regarding the described tax procedure, their procedural justice perceptions are lower.