

Referee report on Manuscript ID AER-2019-1641 entitled "Yellow Vests, Carbon Tax Aversion, and Biased Beliefs" American Economic Review.

The paper studies people's opinions regarding a carbon tax that is redistributed uniformly to all households, a policy that has the support of economists. It does so in France after the yellow vests protests, which were very much connected to a related policy, namely a carbon tax that went to general government revenue. The approach allows the authors to study the role of the personal economic impact, the progressivity of the tax, and its effectiveness on improving the environment. It documents a general rejection of the tax and distribute and argues it is due to several biases.

The paper has many strengths. In particular I think the question of what do people engaged in these types of protests think is extremely interesting and important. The following are some comments/questions:

1. A great virtue of the paper is to bring more data to study an important question. You may want to discuss in more detail the general setting/approach. For example, if the difference in the two policies is important (why is it useful to wait until there is a rejection to the policy Tax & Keep to study the rejection of the related but slightly different policy, Tax & Redistribute?). Do people understand this difference? What do they think about your own role (do they think you support the government's policy?). I can see that you expect trust in the government to play a large role. How does your empirical strategy allow you to study this?

2. The writing is somewhat disorganized. I had difficulty following exactly what you did. There are multiple rounds of successive treatments and it wasn't immediately obvious how the key results were estimated off them. One expects a correlation between rejection of the policy and distrust of government, support for the yellow vests, perceived impact on personal finances, etc. and it wasn't immediately clear which of the many treatments were helping you identify which parts of this relationship and what was the mechanism (first stage) effects of the treatments.

3. I apologize if some of the requests below are redundant, but I did spend quite a lot of time of the paper, which is relatively simple, and I had still had questions on what you were doing.

a. Please provide the complete survey in an appendix. I appreciate the opportunity to amortize my childhood investments at the Alliance Francaise but I doubt many readers will share the sentiment, so it should be in English and exactly as it was administered; the link provided, which is very helpful, notwithstanding (http://preferences-pol.fr/doc_q.php#_f)

b. Please provide the recruiting protocol in another appendix. Again exactly as it was administered. Obviously when the company Bilendi sent them the survey link there was an explanation that allowed the subjects to decide to take it.

4. Please concentrate all the details of the survey in one place. What is the attrition rate? What is the distribution of time employed answering the survey? The 4% employed that less than 7 minutes is calculated from all groups that finished the survey?

5. The research design (that is summarized in page 8) is pretty complicated, with multiple steps of questions and treatments. I understand that when you apply a new treatment, the past treatments are balanced across the new treatments. Can you provide some reassurances/data on this?

a. Also, don't you expect that some treatments affect each other? I imagine that the partial housing/transport reform treatment is related to the tax & dividend treatment (whether they were assigned to feedback, progressivity or feedback & progressivity), or do you not expect any reasons for this? In brief, I wasn't sure if you expect no cross effects or you had some way of filtering them.

b. Do you expect the treatments to affect the answers that they give you on the general questions? Is there any evidence (e.g., on whether the CC, PM etc affect the reported characteristics?

c. I am confused about the timing. I don't totally follow the timing of the questions used in section 4 (tests for self-interest and progressivity appear later than the one for effectiveness?). Do you have a way of estimating the updating of the effectiveness with pre information data?

6. How big is the role played by income reports? Could they be under-reported? If I'm interpreting correctly you calculate with administrative data the objective net gains for the household according to their self-declared income and energy usage. Then, you compare this objective net gains from the tax & dividend policy with the subjective net gains and hence the bias. But, as you say in page 16, we must assume that the characteristics reported by your respondents are correct for the bias to be correct. If the characteristics reported by your respondents aren't correct, the estimated bias could be the result, at least in part, of subjects that under-declare their income. Would this lead you to be overestimating their objective net gains? What I am trying to say is that you may want to consider the possibility that when subjects report their subjective net gains they are taking into account their true-correct income.

7. As I understand the general data, we have that support for the old tax (going to the government coffers) was 48% prior to the yellow vests and you find it is 10%, although now it is a somewhat different tax (as it will be redistributed) more in line with what economists like. What do polls say about support for the old tax scheme after the yellow vests?