This manuscript contributes to the literature on the possible efficiency gain of income tax in a context in which people care and invest on wasteful actions to signal their social status.

The paper assumes three sources of individuals' utility: consumption of goods, leisure, and social status. The latter is unobservable but can be signalled consuming an otherwise useless conspicuous good.
The manuscript evaluates under what conditions a linear income tax can reduce the wasteful consumption of the conspicuous good. This is done under two alternative assumptions about how individuals evaluate social status. The authors show that, if social status is quantified in terms of relative rank of the conspicuous consumption (ordinal social status), then taxing income reduces wasteful consumption only if inequality is low. When what matter for social status is the cardinal distance between signals, then the effect of taxing incomes is much less straightforward: independently from the level of inequality can lead to reduction or increase in wasteful consumption, it does not necessarily improve poorer individuals but can, even if inequality is high, lead to a Pareto improvement.

The manuscript definitely deserves to be published in *Economics*.

Main points

Having read the manuscript, one question that remains unanswered is to what extent the results obtained are driven by the fact that inequality here is summarized by a gap between two groups. To what extent results derived are robust to a more general situation in which productivities are distributed along a continuum? I understand that this would be a different paper, I am just suggesting to try to sketch an intuition in the text.

My understating is that social status (relative income) has not intrinsic value. What does have value is the signal, which end up being indistinguishable from social status itself. This seems to be contradicted by a few sentences in the text, for example P. 3: "the amount of income earned plays the twofold role of generating social status and granting the purchasing power required for the signal."

Showing the complexity of the possible effect of taxes when social status is cardinal is the main contribution of the paper. Then, the authors seem also to stress on the fact that under assumption of cardinal status, among possible effects, a Pareto improvement should not be excluded. It would be interesting, beside graphical representations, to assess how likely efficiency gains are (both in terms of welfare and wasteful consumption reduction). I am not thinking at simulations. I simply wonder whether it would be possible to imagine plausible value ranges for the parameter of the model.

Minor issues

- A few sentences could be rephrased. Reducing the length of some sentences will help the reader (for example end of page 3/beginning of page 4 there is a five-line sentence I had to read twice to get the message).
- Similarly, I suggest to reduce the complexity of the abstract (which contains three sentences in parenthesis). In the abstract is also a little confusing the reference to "the relationship between the inequality of pre-tax wage and the change in waste".
- Page 6: I understand this is somehow far from the focus of the paper but I would have appreciated at least a sentence referring to the literature on progressive consumption taxation (Carroll and Viard, 2012).
- Footnote may be integrated into the literature review in Section 2.
- Function (1) assumes separability: the value of status is independent from the consumption of goods and leisure. The authors may want to succinctly discuss why it makes sense to rule out complementarity.
- First paragraph of page 8: here it is not clear how μ transform x into an argument of ϕ.
- Footnote 12: is this true for every possible function μ?
- Page 11: result 2 is interesting because it links the change in tax with earning potentials. Would it be possible to connect this result with results obtained by contributions that have focused on earning potential instead of actual income?
- Page 12: to what extent result 3 is driven by the shape of the utility function assumed?
- Beginning of page 14: from my point of view this is the most intriguing intuition of the paper. Again, I am left with the doubt about whether this crucially depends on the existence of two separated groups with uniform productivities.
- Page 14: line 2 Section 5: do they depend on the incomes? Or on the distance between the incomes?
- Page 16: "*wage inequality negatively affects waste through the cardinal direct effect.*" Do the authors mean increases or decreases? In case you mean "decreases" this contradict the last sentence of the paragraph.