

# Majority support for global redistributive and climate policies

## Responses to the Editor and Reviewers

January 29, 2025

**Editor's comments** *Dear Dr. Fabre,*

*Thank you for submitting your revised manuscript "International Majorities Genuinely Support Global Redistributive and Climate Policies" (NATHUMBEHAV-24041461B). It has now been seen by the two original referees from the first round and their comments are below. As you can see, the reviewers find that the paper has improved in revision. We will therefore be happy in principle to publish it in Nature Human Behaviour, pending minor revisions to satisfy the referees' final requests and to comply with our editorial and formatting guidelines.*

We are very grateful for this positive decision and for the opportunity to improve the paper further.

*We are now performing detailed checks on your paper and will send you a checklist detailing our editorial and formatting requirements within two weeks. Please do not upload the final materials and make any revisions until you receive this additional information from us.*

We have now received the checklist and formatting requirements and carefully complied with every instruction. We would like to highlight that we changed the title to "Majority support for global redistributive and climate policies", in line with editorial suggestions. Note that if it is possible to add "in major countries" at the end of the title, we would like to make this additional change.

**Reviewer #1** *The structure of the paper is much improved, and the choices justified (although I still do not think all the choices were good ones, such as splitting the US sample in two waves in a way not done in Europe).*

*I do not have any comments I would classify as major at this stage, but a number of minor comments:*

Thank you for your positive assessment of the revised version. We did our best to comply with your comments and hope that you will be fully satisfied with the new version.

*Abstract You write: “Using different experiments, we show that the support for the GCS is sincere and that electoral candidates could win votes by endorsing it.” I believe the first part can largely be supported by the survey, but not the second part about winning votes. The question concerns “hypothetical progressive and conservative platforms» and even if these were related to real political platforms, I do not believe a stated preference study can conclude that candidates could actually win votes by endorsing the policy. Your results might be an indication that endorsing the policy could help a politician win votes, but it certainly does not show that it does so.*

We acknowledge that the modal verb “could” was used ambiguously and would have overstated our result concerning the electoral effect of endorsing the Global Climate Scheme. Therefore, we replaced “electoral candidates could win votes by endorsing it” by “political programs that include it are preferred to programs that do not.”

*Introduction I do not think you can call the CGS an “established approach” even though several elements of it has been discussed in previous research.*

Following your concern, we removed the word “established” from the introduction. The sentence now reads: “We call this approach to global carbon pricing the “Global Climate Scheme” (GCS).”

*When mentioning relevant global initiatives, I would include the shipping fee discussed and likely to be agreed by the IMO (it would function as global carbon price on emissions from shipping, whether it would be redistributive or not depends of course on which revenue use agreed upon).*

We are grateful for this comment. Indeed, we were hesitant to keep the reference to the IMO, present in the original submission, precisely because the outcome of the negotiations will likely not involve international transfers. However, you are right to point out that all options are still on the table, and some countries are pushing for a redistributive outcome. Therefore, we added back that “the International Maritime Organization is poised to adopt

a global carbon levy on maritime fuel;” in the sentence: “While international negotiations have not yet led to ambitious globally redistributive policies, some recent prominent attempts are that the International Maritime Organization is poised to adopt a global carbon levy on maritime fuel; the African Union calls for a global carbon taxation regime, the UN is setting up a Framework Convention on International Tax Cooperation and Brazil is proposing a global wealth tax at the G20.”

*You write: “Using a global survey on 40,680 respondents from 20 high- and middle-income countries...» I believe this a little confusing as you have tried to “clean up” the relationship between what you do here and in Dechezlepretre et al. As this is the first survey mentioned in the introduction, the immediate impression is that this survey is what this paper is all about.*

We are grateful for pointing out this omission in our endeavour to clarify the relationship between our paper and the companion paper by Dechezleprêtre et al. We now removed the “we” from the sentence and specify that this is just a “first piece of evidence” to ensure the readers understand that our main contribution lies in the new surveys. The sentence now reads: “**As a first piece of evidence**, a global survey on 40,680 respondents from 20 high- and middle-income countries **reveals** substantial support for global climate policies” instead of “**Using** a global survey on 40,680 respondents from 20 high- and middle-income countries, **we reveal** substantial support for global climate policies”.

*You write: “... to assess whether the support would diminish in a context with real stakes, we ask respondents whether they are willing to sign a petition in favor of the GCS...” I do not agree that a hypothetical question about whether they are willing to sign a petition is “real stakes”. Yes, you are sending the aggregate results to the head of state, but that is not the same as signing your name on a petition (especially as it says “you will NOT be asked to sign, only your answer here is required and remains anonymous»). (You later say “in an environment that approaches real stakes” which is better).*

Here again, we are grateful for your scrutiny, as we missed this occurrence of the overstatement on “real stake” in our first revision round. We changed “in a context with real stakes” into “in a context that approaches real stakes”.

*I am not sure about the terminology of “global survey” and “main surveys”. In your title and abstract you largely point to the global findings. I believe “global survey” and “national surveys” or something similar would be more informative/correct.*

Thank you for allowing us to carefully think about our terminology. While we changed the wording from “Complementary” to “main” surveys in our last revision, you are right to point out that this term is not perfectly satisfactory. We replaced it by the word “Western”, which is more informative than “main” and more correct than “complementary”, while emphasizing the geographical difference between our global vs. Western survey.

*Results section You write: “The survey questions in both the European and U.S. surveys are identical . . . except for an additional question in US2”. That is not strictly true, as the policy design in some questions varies between the European and US versions.*

Thank you for pointing out this incorrect approximation. We replaced “identical” by “almost identical” and added “and variations in policy designs in some questions” at the end of the sentence.

*You write: “The main surveys ensured representativeness along key dimensions: gender, income, age, highest diploma, and degree of urbanization. While I agree that generally speaking the samples are well representative of the population, in the UK I notice that only 43% of respondents are female (vs. 50% in the actual population) according to table S10. This is a little concerning and should be noted and preferably also discussed/explained.*

The reason why surveys can never be fully representative is that, towards the end of the sampling, very specific demographics are needed to fill in the remaining combinations of quotas. At this stage of the sampling, quotas are relaxed to avoid screening out too many potential respondents.

Following your concern, we completed the sentence in the Methods section that comments on the sample representativeness, as shown in bold: “Our samples match the actual frequencies well, except for some imbalances **in specific quota demographics —such as gender in the UK (43% of women instead of 50%) or urbanity in Spain (15% rural instead of 26%)— that are corrected through our survey weights**, and in the U.S. vote (which do not affect our results, as shown by the results reweighted by vote in the *Support for the GCS* section below).”

We also modified the Results section in a way that preserves conciseness. We added the qualifier “broad” in “The Western surveys ensured **broad** representativeness”, indicating that representativeness is imperfect.

*You write: “Finding majority support for the GCS runs counter to the conventional skep-*

*ticism about the feasibility of global solidarity to addressing climate change». I do not fully agree with this statement. I believe the “conventional skepticism” is based on concerns over politics, political ideologies and the political economy (interests group lobbying), and not lack of public support.*

We acknowledge that this interpretation of the skepticism about the feasibility of global solidarity was unsubstantiated. We cut these unproven claims as follows: “Finding majority support for the GCS ~~runs counter to the conventional skepticism about the feasibility of global solidarity to addressing climate change.~~ This motivates the subsequent analysis of robustness and sincerity, novel to attitudinal surveys on instrument choice for environmental policy.”

*I am not sure the section on universalistic values needs to be in the main paper.*

As we comply with length constraints and this section has already been extensively shortened in the previous revision (with most results moved to the Methods section), we decided to keep it in the main text. Indeed, we find this section’s results informative and consider that it is the right place to indicate to the readers that more results on this topic can be found in the Methods section. Moreover, this section helps addressing a pre-registered hypothesis that could have explained the lack of prominence of global redistribution in the public debate: that the support for globally redistributive policies would conflict with people’s underlying values.

To better justify why we believe this section belongs to the paper, we rewrote its introductory sentence, which now reads: “We ask broad questions on people’s values to assess whether their core values are consistent with support for specific policies.”

*Discussion This section is not a discussion of the results presented, instead it introduces new topics (extremely interesting ones I agree), which I believe should be discussed elsewhere, reserving the Discussion for summarizing and placing the key results into context, and drawing implications for further research and for policy.*

Thank you for your feedback on the Discussion section. Following your comment, we attempted to streamline it to better integrate broader implications and better place the key results into context.

To clarify the link between our key results and the core of our discussion, we removed the sentence: “One limitation to this finding, inherent to any inquiry into hypothetical policies, is that the support might change once global policies are discussed in the public debate (as explored in the paragraph on *Pros and Cons*).” We shortened the fourth hypothesis that we

formulate, which becomes: “Fourth, many individuals, including policymakers, **may be unaware of specific proposals or** may perceive global redistributive policies as ill-defined or technically infeasible, ultimately dismissing them as unrealistic. ~~In particular, policymakers may have insider information about the technical feasibility of such policies. Alternatively, the perception of unrealism may stem from an unawareness of specific proposals.~~” Finally, we replaced the last sentences to clarify the implications in terms of future research and policy debate. The sentences were “Confirmation of any of these hypotheses would lead to a common conclusion: there exists substantial public support for global policies addressing climate change and global inequality, even in high-income countries. Uncovering evidence to support the above hypotheses could draw attention to global policies in the public debate and contribute to their increased prominence.” They now write: “Uncovering evidence to support the above hypotheses could shift the perceived boundaries of political realism on this issue. Their confirmation would further support the conclusion that there exists substantial public support for global policies addressing climate change and global inequality, even in high-income countries.”

The reason we did not undertake a more substantial modification of the Discussion is that our interpretation slightly differs regarding the role of the Discussion section in broad interest journals such as *Nature Human Behaviour*. As we understand it, while a summary of the results can be placed in Introduction (as we extensively do), the Discussion should not repeat the Introduction but be used to open up the reasoning to new ideas. We believe that our Discussion plays this role and already puts the key results into context, by drawing the consequences of the rejection of hypotheses that could have reconciled strong stated support for global redistribution to its rare occurrence in the public debate.

We hope that we have satisfactorily addressed your concerns and thank you for your insightful comments that have significantly improved the paper.

**Reviewer #2** *In my view, the paper has clearly improved and the authors have clarified most of my concerns. The paper itself is much better written and organized in comparison to the first submission, but remains a bit hard to read. It would be good to provide one more effort to streamline parts of the paper and to summarize the key findings in a more concise way. The paper would clearly benefit from that and it would also facilitate the dissemination of these important and interesting findings.*

We are grateful for your kind evaluation of the paper and appreciate that our revision satisfactorily addressed most of your concerns.

We thrived to streamline the paper further and highlight the key findings to facilitate their dissemination. For instance, in the introduction, we replaced “GCS” by the more transparent “Global Climate Scheme” in “Our main result is that the Global Climate Scheme is supported by three quarters of Europeans and more than half of Americans.” We also specified the magnitude of support in parentheses in “Support is very strong for a global tax on millionaires (69% in the U.S., 84% in Europe), and the median respondent prefers to allocate 30%

of the revenues of such a tax to low-income countries.” To streamline the paper, we cut unnecessary or redundant sentences. For example, we simplified the transition sentences: “Finding majority support for the GCS ~~runs counter to the conventional skepticism about the feasibility of global solidarity to addressing climate change.~~ This motivates the subsequent analysis”. We also streamlined the Discussion by cutting three sentences: “One limitation to this finding, inherent to any inquiry into hypothetical policies, is that the support might change once global policies are discussed in the public debate (as explored in the paragraph on *Pros and Cons*).” at the beginning, and “In particular, policymakers may have insider information about the technical feasibility of such policies. Alternatively, the perception of unrealism may stem from an unawareness of specific proposals” in the fourth hypothesis. Finally, to make the main results more visible, we added to Figure 3 results on foreign aid and the preferred share of a global wealth that should go to low-income countries.

*One open issue concerns the presentation of the results. Throughout the paper, shares are presented in terms of “relative support”, which the authors define as “the share of Somewhat or Strongly support among non-indifferent answers”. I may have misunderstood, but find this misleading and would definitely call for a different way in presenting results. To illustrate, suppose that for a given question 90 percent of respondents are “indifferent” between supporting and not supporting a particular policy, the other 10 percent support the policy. In this case the “relative support” would be 100 percent, when in fact most respondents are actually indifferent. To document “support” for a given item, the authors should use the fraction of supporting responses relative to all (!) possible responses. (In my example, this fraction amounts to 10 percent.) In its current form, I am afraid most readers will draw misleading conclusions from the numbers presented in the tables/figures. (Also, from the information provided in the tables/figures, we do not know how many respondents actually are indifferent.)*

We are grateful for this opportunity to improve the exposition of our results regarding the share of *indifferent* answers. As a primer, we realize that we misinterpreted a comment of (probably) yours in the first round of revision. The comment stated “4. I found the term “relative support”, which seems to include “indifferent” responses, misleading. For a better understanding, I would prefer Figure 1 to show actual “support” for the respective items. Also, the authors report both “absolute” and “relative” support in different parts of the paper. To me that was confusing. I would stick to one definition of support throughout the paper.” Following this comment, added a paragraph on *Absolute vs. relative support* in the Methods section to clarify our concepts, but we misinterpreted your concern about the figures. We thought that you recommended to simply use “support” in the legend (instead of “relative support”) while you actually meant to display absolute support in the main Figures instead of relative support. Now that we fully understand your comment, we reverted the legends of Figures 2 and 3 back to “Relative support” (instead of just “Support”) for a more

transparent exposition.

On the substance, we hold views different from yours and choose to stick to our current preference for displaying relative support in the main text and absolute support in supplementary information, rather than the other way around. Before explaining our choice, let us stress that we now provide information on the share of *Indifferent* answers in the Figures' legend to address your legitimate concerns. The Notes of Figure 2 now include the indication: "Shares of indifferent answers range from 11% to 48%, with quartiles 20%, 27%, and 33%." while the legend of Figure 3 includes: "Shares of indifferent answers range from 10% to 40%, with quartiles 19%, 25%, and 32%."

One preliminary observation is that the share of *Indifferent* is always contained to a minority of answers, which reduces the concerns that actual support would be overstated. Besides, we believe that the relative notion is a more informative measure of the distribution of attitudes in favor vs. against a policy compared to a measure that focuses on support and does not distinguish indifference from opposition. To illustrate that the relative notion leads to more prudent interpretations than the absolute one, let us assume that the pool of *Indifferent* respondents could turn into supporters or opponents under other circumstances: after they deeply think about the issue, after they are presented arguments, or if they were forced to make a choice. The absolute support provides a lower bound (while the sum of *Indifferent* and *Support* answers provides an upper bound) for the support once *Indifferent* answers have been disallowed. Conversely, the relative support lies between these two bounds and seems a better proxy for the support when compressing the distribution of answers into a single number. To conclude, let us stress that presenting absolute support could be misleading for inattentive readers who do not realize that there was an *Indifferent* option. Imagine a policy with 45% support, 30% opposition, and 25% indifference. An inattentive reader might believe that there are more people against the policy than in favor, while in reality, the policy garners 60% relative support.

We sincerely hope that we have satisfactorily addressed your concerns and thank you for your insightful comments that have significantly improved the paper.