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Research Report

Climate change concerns and actions – Can provision of information motivate people to fight climate change?

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Research Brief

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Climate change concerns and actions – Can provision of information motivate people to fight climate change?

By P. Tzamourani

Are individuals concerned enough about climate change to change their behavior and bear additional costs as a consequence? How can they be motivated to fight climate change? A Bundesbank survey conducted between April 2020 and December 2021 shows that people are more concerned about climate change than about the state of the economy. During most of the ongoing pandemic, only the coronavirus was of a higher concern. While people who rate climate change as a serious issue are also more willing to take on additional costs to help fight climate change, providing information on ways to reduce carbon emissions further increases their willingness to do so.

Are people concerned about climate change?

Individuals have a crucial role to play in the fight against climate change: their support is essential for the successful implementation of often costly policies. They can directly help fight climate change by reducing carbon emissions through their consumption and investment choices. But are individuals concerned enough about climate change to change their behavior and bear related costs?

The Bundesbank Online Panel Households Survey (BOP-HH) reveals that Germans are highly concerned about climate change. Between April 2020 and December 2021 we asked respondents to rate from 1 to 10 the seriousness of climate change and of four other current issues: the coronavirus, the

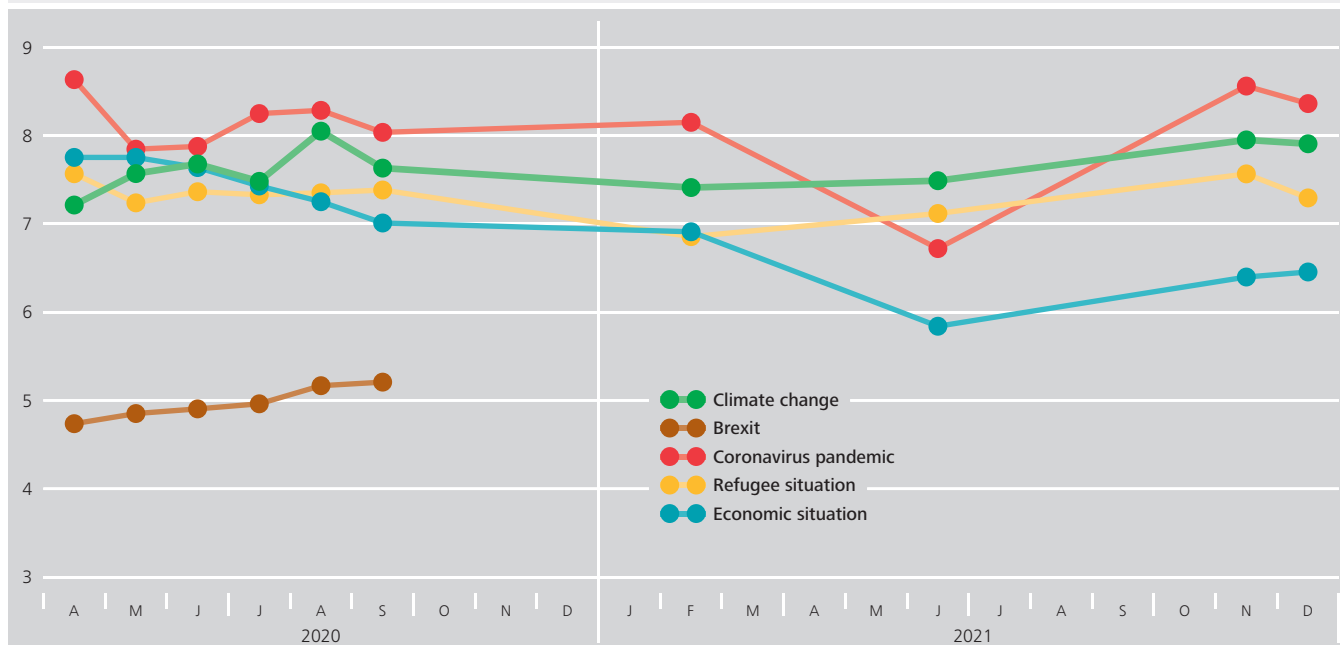
economic situation, the increasing number of refugees and Brexit. Figure 1 depicts the outcome of the survey. Climate change is persistently perceived as a serious concern, only second to the coronavirus, which scores the highest as a serious problem throughout most of the period considered. Only at the beginning of the pandemic in spring 2020, the economic situation and the refugee situation were rated higher than climate change. Brexit was of a much lesser concern throughout the study.

Evidently, Germans find climate change to be a serious problem. But to what extent do individuals take action to reduce carbon emissions and what kind of information motivates them to do so?

Self-reported perception of seriousness of current issues*

Figure 1

Means on a scale from 1 to 10



Source: Deutsche Bundesbank Online Panel Households (BOP-HH). * Question: To what extent do you think the following developments/matters are a serious problem at present? 1: No problem at all, 10: An extremely serious problem. The dots indicate the months on which the relevant survey question was asked.

Deutsche Bundesbank

Willingness to mitigate climate change

In a recent paper (Bernard, Tzamourani and Weber, 2022), we showed that peoples' willingness to contribute to fighting climate change can be increased by information on how to reduce individual carbon emissions. We in particular looked at the willingness to pay for offsetting air travel carbon emissions. We conducted a survey to find out how information affects respondents' willingness to pay. Respondents were randomly split into three groups that all received different pieces of information. Two groups received fact-based information on how to reduce their carbon emissions, and the so-called control group received only unrelated information. The fact-based information stated that individuals can reduce their carbon emissions "by avoiding excessive meat consumption as well as unnecessary air travel and journeys by car." The framing differed across groups: in one group the statement was presented as scientific evidence, i.e. either resulting from scientific research in general or from research by the Federal Government, so as to give the statement more

credibility. In the other group, the statement was presented either as what "many other people in Germany are trying to do", or as what "many people in the same age cohort are trying to do." Respondents were asked which amount they would be willing to pay to offset air travel emissions before and after receiving the relevant piece of information. We then compared the willingness to pay between the two different groups and the control group, which had received an unrelated piece of information. The comparison revealed a statistically significant difference in the willingness to pay between the two groups and the control group. Providing information on how to fight climate change increases individuals' willingness to pay for offsetting carbon emissions. Presenting the information as behaviour of peers is equally effective as presenting it as scientific research. What is more, while individuals who expressed higher concerns about climate change had a stronger reaction, there was also an increase in the willingness to pay in the group that was less concerned about climate change.

Conclusion

Individuals consider climate change a very serious issue. Providing information on ways how an individual can help fight climate change seems to be an effective way to increase the willingness of people to do so. Understanding better the effects of information provision and of the ways it is communicated can help improve the design of information campaigns to engage a larger share of the public in fighting climate change.

Reference

Bernard René, Panagiota Tzamourani and Michael Weber (2022). Climate change and individual behavior. Discussion Paper, No. 01/2022, Deutsche Bundesbank.



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News from the Research Centre

Publications

"(Un)expected Monetary Policy Shocks and Term Premia", by Martin Kliem (Deutsche Bundesbank) and Alexander Meyer-Gohde (Goethe University Frankfurt) will be published in the *Journal of Applied Econometrics*.

"Financial Integration and Business Cycle Synchronization: Evidence from U.S. States" by Martin Götz (Deutsche Bundesbank) and Juan Carlos Gozzi (Federal Reserve Board) will be published in the *Journal of International Economics*.

Events

20 – 21 June 2022

6th Annual Macprudential Conference
(joint with De Nederlandsche Bank and Sveriges Riksbank)

23 – 24 June 2022

Joint Spring Conference on Monetary Policy and Expectations of Households and Firms (joint with Banque de France)

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