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Further Reading: Hynes, S., Armstrong, C., Xuan, B., Ankamah-Yeboah, I., Needham, K., Tinch, R., and Ressurreição, A. (2021). Have environmental preferences and willingness to pay remained stable before and during the global Covid-19 shock? *Ecological Economics*, 189, 107142.

Contact:
stephen.hynes@nuigalway.ie

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Testing the stability of environmental preferences and willingness to pay through the Covid-19 pandemic

This study tested the stability of environmental preferences and willingness to pay (WTP) values using a discrete choice experiment (DCE) across three countries pre and post the peak of the first wave of the Covid-19 pandemic. A DCE examining the public's preferences for alternative environmental management plans on the high seas, in the area of the Flemish Cap, was carried out in Canada, Scotland and Norway in late 2019 and was rerun in early May 2020 shortly after the Covid-19 pandemic had officially peaked in the three countries. The same choice set sequence was tested across the two periods, using different but nationally representative samples in each case. Entropy balancing, a multivariate reweighting method, was used to achieve covariate balance between the pre and post Covid samples in the analysis. The multi-country assessment provides a much broader test than a single-country survey could. It increases the potential robustness of the conclusions drawn on the stability of environmental preferences and WTP during a global shock.

Research Findings

The four attributes assessed in the DCE were the health of commercial fish stocks, the density of marine litter, the size of the area that is protected and the possible expansion of the ocean economy in the area associated with the creation of new marine-related jobs. The results suggest that both preferences and WTP for the attributes remain relatively stable in the face of a major public health crisis and economic upheaval. No statistical difference in environmental preferences pre and post the Covid-19 crisis were found across any of the models. Our a priori expectation that a person's marginal WTP for the environmental attributes would decline due to the heightened uncertainty and concern for future income caused by the global pandemic, was not shown in the results. Hypothesis testing of the difference in the means suggested that the marginal WTP estimates for all attributes across all country models were not significantly different pre and post the Covid-19 crisis outbreak. It may be that the experience of lockdowns impacted the perception of the vulnerability of nature, as well as increasing the perceived value of ecosystem services delivered by nature, thus cancelling out any potential negative income effect. However, based on the results of a series of Poisson tests some statistical difference were found across the periods in the empirical distributions of a number of individual-level WTP coefficients.

Policy Implications

The relatively stable environmental preferences found for all three countries pre and post the peak of the first wave of the pandemic gives strong support to societal priorities regarding the conservation of deep-sea environments far removed from direct use or experience. Even under extremely stressful conditions; mentally, economically and socially, human preferences regarding environmental conservation would appear to remain relatively robust. It may be that society has come to respect, and value the environment more than before the crisis, even when faced with greater financial insecurity. If this is indeed the case then the public might draw on the lessons from this crisis and be more willing to make the necessary choices to address the climate and biodiversity challenges ahead.