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Climate shocks and the supply and demand for climate governance

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Existing studies have demonstrated substantial and robust effects of temperature shocks on economic growth, agricultural output, labor productivity, conflict, and health. These studies help clarify the impacts of climate change on social and economic systems, yet the relationship between climate shocks and political outcomes are less well identified. What effect do climate shocks have on states' climate policies? In this paper, I estimate the relationship between national-level temperature and rainfall shocks and the supply and demand for international climate governance. Temperature shocks may increase the salience of climate change in national politics and lead political leaders to adjust policies to match. Similarly, temperature shocks may have material consequences that induce adaptation---one avenue being to use international institutions to coordinate a global response to climate impacts. I argue that the responsiveness of national governments to climate shocks is conditioned by the political and natural context in which governments operate. Specifically, I expect that democratic governments will be more responsive to climate shocks, as will countries that are more vulnerable to the impacts of climate change. I assess whether countries that experience more frequent and more severe climate shocks participate more in international climate politics and adjust their climate policies. I examine four sets of outcomes at the national level: (1) membership in international institutions that govern climate change, (2) the provision and receipt of climate finance, (3) representation at the UN climate conferences, and (4) national climate policies. As the climate changes, we are developing stronger evidence about the underlying natural relationships, but the heterogenous effects across socio-political contexts are less well understood. This paper contributes to our understanding of how climate change shapes national policy and with it the ability of countries to manage and adapt to climate change.