Hurricanes, Mitigation and Capital Formation*

Haaris Mateen[†]

October 26, 2022

Abstract

A number of recent papers have documented damage from climate change events using panel regression methods. However, there is scarce evidence on the mitigation response of governments and firms. Using hand collected and web scraped statutory property tax rate data in the U.S., I find that local governments respond to hurricanes by raising tax rates. The hike in tax rates is a 1.5% increase over existing rates and remains persistent for 3-4 years after hurricane impact. Using a novel data set of firm facilities, I find that firms initially decrease investment in the quarter following a disaster and increase it by the second year after impact. A one standard deviation increase in exposure leads to an increase in second year quarterly investment that is 11% of average quarterly capital expenditure. Both government and firm responses increase by a multiple of 1.5 and 3 times respectively if there are hurricanes in consecutive years. I interpret these findings in the light of recent general equilibrium models with disaster risk where the tax rate is a sufficient statistic for mitigation and firms response depends on the extent of government response.

^{*}I thank Harrison Hong, José Scheinkman, and Joseph Stiglitz for their guidance and support. I also thank Dario Romero for valuable feedback. Priyanka Maiti provided excellent research assistance. I am grateful for financial support from the Program for Economic Research, Columbia University.

[†]Columbia University. hm2692@columbia.edu.