

Abstract

This study investigates the average and median impact of large natural disasters on government debt. It includes 163 countries for the period 1971 to 2014. We apply a panel synthetic control method which constructs a counterfactual for the disaster country. This synthetic control group consists of nondisaster countries that closely resemble the macroeconomic, institutional, geographical and other characteristics of disaster country in the predisaster period. We investigate the difference in government debt between the disaster countries and their respective synthetic control groups. Our findings reveal a considerable increase in government debt for most damaging and deadliest disasters. This study also deals with possible endogeneity of the disaster identification method by using the disaster magnitude. Government debt, on average, increases by 11.3% of GDP compared to the synthetic control group. The median effect on government debt is 6.8% of GDP. Some natural disasters result in a debt increase over 20% of GDP. When we investigate only the 0.5% largest natural disasters, this study finds even larger effects on government debt.