Local Labor Market Impacts of Hurricane Disasters

Abstract: The paper focuses on understanding local labor market impacts of hurricane disasters and the role adaptation plays in mitigating these higher order impacts. Employing synthetic control methodology allows identifying not only the effects of the 2005 hurricanes on county quarterly employment and per worker earnings, but also investigating time to recovery to a hypothetical “no-hurricane” employment level, that was forgone because of devastations. Significant negative effects of hurricanes on employment are found in counties at the extreme end of damage distribution. Opportunity loss of employment due to the hurricanes is estimated at around 7.3% for these counties and shock is found to be very persistent, no complete recovery even 7 years after the 2005 hurricanes. Results indicate that where long-term mitigation programs are implemented by FEMA counties are more resilient to disaster shocks. Counties, where flood hazard and non-structural mitigation projects are initiated by local governments, exhibit similar responses. Nonetheless, significant evidence of two sources of moral hazard problem is found in relation to provision and generosity of both disaster-related public assistance as well as unemployment insurance benefits. The policy relevance of the results is very important, because adaptation policy design aims for long-term sustainability and resilience of socio-economic systems. Generosity of unemployment benefits and assistance payments in response to major disaster declarations could induce the moral hazard issue and thus amplify distributional burdens of disasters. While these benefits could be welfare improving for those directly affected by disasters, because of the moral hazard issue, they could reduce overall social welfare if those affected continue living in risk prone areas and enjoy continuous subsidy from tax payers living in safer places.