Regional economic impacts of the 2013 heavy flooding events in Germany

Topic: Input-Output Analysis of Desasters

Author: Johannes Többen

Co-Authors: Hagen Schulte in den Baeumen, Thomas Schröder

During May and June 2013 heavy rain caused disastrous flooding events in several countries of central Europe. For Germany's eastern and south-eastern federal states it has been the third 'flood of the century' since 1997. In the particularly affected states of Bayern, Sachsen and Sachsen-Anhalt alone damages are estimated at 6 billion euros, which is approximately in the order of 1% of gross regional product. In addition to these direct damages substantial impacts on regional economies not directly affected by the flooding event can be expected, due to the heavy dependence of modern economies on inter-regional trade.

In the current paper we account for the economic impacts of the recent flooding events on the economies of Germany's 16 federal states. Industry- and region-specific direct impacts are estimated from lost working hours due to the disaster. These direct damages to regional economic output capacities are then used to account for indirect economic impacts in other federal states using a new high-resolution model of the German subnational economy (MRIO) for disaster impact analysis.