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Does Federal Disaster Assistance Crowd Out Flood Insurance?

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Abstract

We empirically analyze whether federal disaster aid crowds out household purchase of disaster insurance. We combine data on annual household flood insurance purchases for the United States over the period 2000-2011 with data from the two main U.S. post-disaster federal aid programs (FEMA's Individual Assistance grants and SBA's low interest disaster loans). Estimating both fixed-effects and instrumental variable models to account for the endogeneity of disaster assistance grants, we find that receiving individual assistance grants decreases the average quantity of insurance purchased the following year by between \$4,000 and \$5,000. The reduction we find is roughly 3% of the mean insurance coverage in the sample but larger than the average flood-related IA grant in our sample, which is \$2,984. IA is currently limited and larger grants could have different impacts. The crowding out is on the intensive margin; we find no impact on take-up rates, likely because there is a requirement that recipients of disaster aid purchase an insurance policy. We do not know how take-up rates might change without such a requirement. Low interest post-disaster government loans have no systematic effect on insurance purchases.

Keywords:

Natural Disasters and Extreme Events, Flood Insurance, Disaster Relief

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