

Insurance and Propagation in Village Networks *

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Abstract

Networks in village economies can provide insurance and facilitate use of labor and intermediate inputs in production. Ironically, as not everyone is engaged in all of these networks simultaneously, arguably due to various distinct frictions, networks can both provide insurance and yet propagate shocks. We show that when one household experiences a significant health shock with associated large expenses, this can propagate to other households linked to it via the production village network. This occurs when the shocked household is not in the insurance network and, as a result, adjusts production decisions—drawing down working capital, cutting input spending, and reducing labor hiring—hence affecting households who supply inputs and labor. Likewise upstream businesses close to the under-insured households in the supply chain network experience reduced local sales and increased inventories. Similarly, workers closer to the under-insured households in the labor network have lower probability of working locally and experience reduced earnings. In turn there is evidence of ex-post adjustments of these upstream households, shifting resources towards activities with lower exposure to local shocks. Policy remedies should be geared to mitigating the underlying frictions that limit the size of these various networks.

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