The Evolution of Networks During the Development Process: Evidence from Rural Gambia

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Abstract

This paper sheds light on the question of how the process of economic development affects interactions in economic and social networks. To this end, we study networks of exchanges in 56 rural villages of The Gambia, West Africa. For each household in these villages we collect detailed data on six different dimensions of economic exchanges and exploit a randomly placed Community-Driven Development (CDD) project, which provides an exogenous source of variation to village-level stocks of productive capital, to identify the effect of economic development.

The paper contributes to the literature in several ways. First, we study a randomized program that directly allocates resources of an economically significant magnitude to villages, but does not specify the sector in which funds are supposed to be used, which enables us to study the effect of development more broadly defined. This complements the existing literature, which studies the effects of the creation of a specific market (either finance or insurance), and considers programs that do not directly provide additional resources to villages or networks. Second, our data allow us to investigate possible mechanisms, in particular changes in reciprocity, formality of exchanges, and changes in the interactions with village outsiders. Third, we study one possible implication of the program-induced changes in networks, namely changes in risk-sharing. To this end, we collect detailed data on shocks, and study whether the ability to cope with shocks, as signaled through the existence of economic links, differs between treatment and control villages. A final, more specific set of contributions is made to the literature on the economic and institutional effects of a widely used development intervention, namely the CDD programs.

We find significantly fewer interactions within economic networks in treatment villages, but no evidence for heterogeneous program effects. We investigate several possible mechanisms, and our findings are most consistent with a village-level transformation process from a gift economy to a more formal economy. Regarding development interventions, our findings suggest the networks-channel as an avenue through which programs may have unintended consequences that should be considered when costs and benefits are evaluated.