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Informal Insurance Arrangements in Ghanaian Migrants' Transnational Networks: The Role of Reverse Remittances and Geographic Proximity☆

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Summary. — Risk pooling literature argues the need for geographic proximity to ensure the functioning of informal insurance arrangements. This paper investigates whether these arrangements exist between migrants and their network members back home and, if so, how they work in the absence of geographic proximity. Analysis of a simultaneous matched sample of migrants in the Netherlands and network members in Ghana reveals the existence of reverse remittances. These remittances show that there is risk pooling between migrants and network members. The paper elaborates on the institutional arrangements that make such a system possible.

Key words — migration, remittances, insurance, transnational networks, Africa, Ghana

1. INTRODUCTION

This paper reports an investigation of how informal insurance arrangements work between overseas migrants and their network of friends, family, and business partners back home. Informal insurance arrangements have predominantly been conceived at the village level (Ligon, Thomas, & Worrall, 2002; Townsend, 1994) where geographic proximity allows insurance partners to monitor and enforce informal contracts effectively. But the question arises, how do informal insurance arrangements work over large distances? A few empirical studies have looked at informal insurance arrangements beyond the village boundary (Grimard, 1997; Rosenzweig & Stark, 1989). This explorative study builds on this literature, but, rather than focus on consumption outcomes as existing empirical studies have done, it analyzes the institutional arrangements that make such a system possible where there is no geographic proximity to ensure effective monitoring and enforcement. In so doing, the paper brings together literature on risk pooling in developing countries with literature on the new economics of labor migration (NELM).

In many developing countries, formal insurance markets are rare owing to the difficulty of writing and enforcing market contracts, low educational levels, and high communication costs due to poor infrastructure. These factors together with a risky environment lead to high premiums that most of the local population cannot pay (Besley, 1995). Insurance in such societies is provided through mutual help relationships, otherwise referred to as informal insurance arrangements, where people pool their risks together so that when one or several members incur a shock, other members will help them to recover from the shock. Typical shocks that are investigated are loss of labor due to illness and death and crop failure due to adverse climatic conditions. These arrangements are informal because the costs paid for being insured in times of need (called premiums) and the help ultimately received are not strictly defined. Empirical studies of such informal arrangements analyze the consumption outcomes of these arrangements. In general, they find that those who are ensured have smoother consumption streams than those who are not attesting to some degree of insurance taking place (Doss, 2001; Grimard, 1997; Rosenzweig & Stark, 1989).

While these empirical studies focus on outcomes, the theoretical literature concentrates on how such informal insurance arrangements work. The key to this is effective monitoring and enforcement mechanisms (Arnott & Stiglitz, 1991; Stiglitz, 1990). These mechanisms ensure that people do not engage in riskier behavior just because they are part of such an arrangement (moral hazard), and that they will not opt out of a contract once they have received help (free riding). Platteau (1997) explains that monitoring and enforcement in informal arrangements can best take place in small, homogeneous groups, which share customs, language, and religion, thereby ensuring that there is a common understanding by all participants of the rules of the game.

Indeed, empirical studies confirm that geographic proximity is fundamental for effective informal insurance arrangements. Most works focus on the household or village level where groups and communities tend to be homogeneous and can easily monitor and enforce their rights and duties (Arnott & Stiglitz, 1991; Coate & Ravaillon, 1993; Platteau, 1991,

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1997). Furthermore, studies that look at what happens when people move away from their villages find that they do not use informal insurance arrangements anymore. For example, Gluckman (1960) and more recently Ferguson (1999) have found that laborers who leave their villages to mine in the Copperbelt of Zambia disrupt their support networks and therefore cannot as easily rely on them in times of crisis. Dekker (2004) shows that, in resettlement villages in Zimbabwe where households from across the country were brought together to form new villages (that is to say, where there is no history of geographic proximity), villagers tend to use informal insurance arrangements less than they do in pre-existing villages where the population has been living together for a long time.

All of the above-mentioned studies take the household or the village as their unit of analysis. Recent studies have used other units, such as networks of people who depend on each other for help (De Weerdt & Dercon, 2006). However, here too, data are collected from one village and thus predominantly relate to intra-village networks. These studies thus leave open the question of what happens to risk pooling when members of a household or village migrate.

Research that looks at risk pooling beyond village boundaries, such as at informal insurance arrangements *between* villages in the Philippines (Fafchamps & Gubert, 2007), also concludes that geographic proximity is the major determinant of risk-sharing networks. Furthermore, recent work attests to the fact that moral hazard can be a problem in insurance arrangements when members are geographically far from each other. Azam and Gubert (2006) found in the Kayes area of Mali that those households in a reliable insurance arrangement with a migrant were agriculturally less productive than households without a migrant. Chami, Fullenkamp, and Jahjah (2003) argue that moral hazard explains why they find that remittances are negatively correlated with economic growth. Thus empirical studies and theory suggest that geographic proximity is fundamental for effective informal insurance arrangements.

A few studies that have looked at insurance on a larger scale, nationally (Rosenzweig & Stark, 1989) or ethnically (Grimard, 1997), indicate that informal insurance arrangements seem to work even at these higher levels. These studies conclude that insurance exists, at least to some degree, between members of groups with ethnic or marital ties who live geographically dispersed, because their consumption is partially influenced by the income of the group as a whole. This conclusion suggests that people who are socially proximate (i.e., linked by ethnic or marital ties) are able to monitor and enforce informal contracts.[1] Nevertheless, because they concentrate on consumption outcomes, these studies leave unanswered how such monitoring and enforcement work over great distances. This paper puts forward an explanation in a similar vein to Greif's (1993) analysis of another form of long-distance contract: how informal insurance works within social networks of geographically dispersed people.

Another branch of literature, that is relevant for this study, is the economic studies of migration. These studies often describe migration as an insurance strategy for households. Even before the introduction of NELM, economists studying migration argued that family welfare was a main motivator to remit (Johnson & Whitelaw, 1974), in contrast with neo-classical economic models that explain migration as a reflection of wage differentials between countries. NELM theory developed this idea further to argue that the decision to migrate is taken at the household-level as part of a household-level strategy for dealing with risk (Lucas & Stark, 1985; Stark & Bloom, 1985; Stark & Levhari, 1982; Taylor, 1999). The family helps the migrant move to a place where income opportunities are expected to be better. The migrant then sends remittances either as delayed payment for the initial investment the family has made in the migration, or as insurance to the family in times of shock (Gubert, 2002; Stark & Lucas, 1988). In this latter case, remittances help households deal with imperfect or non-existing insurance markets by way of providing households with an external source of income not prone to the same risks as locally earned income. Thus by conceptualizing the decision to migrate as a household-level decision, NELM theory explains remittances as the outcome of a self-enforcing contractual arrangement between migrants and their families from which both parties expect to gain.

Indeed, Lucas and Stark (1985) find evidence in Botswana that migrants remit more to their households after they have experienced a shock, attesting to remittances fulfilling an insurance function for the rural household. There is a growing body of literature investigating the effects of remittances on income and consumption streams of the receiving household (Adams, 2004; Lucas, 2005), but more needs to be known about how informal insurance works between the migrants and their families, as Doss (2001) also concludes.

NELM literature discusses the question, what motivates migrants to abide by the contract as once they have migrated they could easily cut ties with the family and use their earnings for themselves. Three motives are discussed: altruistic feelings toward the family, the desire to be eligible for family inheritance, usually land or cattle, and co-insurance, that is to say, that the migrant is also insured by the contract (De la Brière, Sadoulet, de Janvry, & Lambert, 2002; Hoddinott, 1992; Lucas & Stark, 1985). While the first two motives are investigated empirically, the last motive has not been part of empirical analysis largely due to the absence of data on migrants.

Very few studies include migrants in their samples. Hoddinott (1994) uses one of the few economic datasets where some migrants are also interviewed. Yet there is a growing body of literature on transnational migration that highlights that migrants are linked to their families back home not only because it is easier to do so due to modern information, communication, and transportation technologies, but also because in many cases their insecure position in the host country society makes it important for migrants to maintain linkages with their support networks in case of need or unforeseen crises (Basch, Glick Schiller, & Szanton Blanc, 1994; Levitt, 2001; Mazzucato, 2007; Vertovec, 2001). A major contribution of transnational studies has been to recognize the individual migrant as a member of a larger whole that extends beyond geographical boundaries. As such, these studies focus on units such as transnational networks, communities, circuits, or villagers (Guarnizo, Portes, & Haller, 2003; Levitt, 2001; Rouse, 1992; Smith, 2001). However, most studies are small-scale and do not collect data systematically (Mazzucato, 2008; Portes, 2001). They thus remain separate of risk pooling and of NELM literature discussed above.[2]

This study uses transnational networks as the unit of analysis by collecting data from a matched sample of Ghanaian migrants living in the Netherlands and at least a subset of their social network members based in Ghana to contribute to an understanding of how informal insurance works. While NELM empirical studies such as those mentioned above deduce migrant motivations from the data collected from the receivers of remittances, we investigate these motives by collecting data from migrants. Are migrants really concerned about inheritance? The only evidence in the literature is that