

MICROINSURANCE AS A RISK MITIGATING MECHANISM FOR THE POOR

Sheikh Aftaab-ul-Marroof¹,

Senior Research Fellow

Department of Business and Financial Studies

University of Kashmir

Srinagar, Jammu and Kashmir, 190020

Prof. Mohi-ud-Din Sangmi²

Department of Business and Financial Studies

University of Kashmir

And

Director, UGC Human Resource Development Center

University of Kashmir, Srinagar. 190006

Abstract

People under poverty are generally short of resources to satisfy basic needs and are therefore vulnerable to number of perils. Poverty is related to the vulnerability and thereby risk. People under poverty are found to have more income variance and therefore, more probability of falling under poverty. On the other hand, people with high risk exposure are expected to have more income variance, hence are more vulnerable to poverty. People under poverty rely on informal means to manage the risk which often do not serve the purpose in time of high risk exposures. Microinsurance focusing the low income segment of the population is a formal risk management mechanism. Over the past one decade, microinsurance has been developing at quite a remarkable pace, and has been providing relief to the people under poverty. At the end of 2012, data reveals that 174 million lives in India, 44.4 million in Africa and 44 million in Latin America has been brought under the umbrella of microinsurance. There is still a considerable portion of the population not having any formal risk mitigating mechanism, and hence are facing the catastrophic events under poverty. Therefore, microinsurance needs a further push to bring more and more poor under the coverage to restrict the adverse consequences of risk exposures.

Key words: *Income variance, Microinsurance, Poverty, Risk management and Vulnerability.*

Background

People with lower income live in the environment which is highly risky and are prone to number of perils, including illness, disability and death due to accident, property loss due to fire or theft, agricultural losses etc. The poor are highly vulnerable to many of such risks than rest of the population and at the same time are least able to cope up when crises does occur. Poor households often rely on informal means to manage risks, which provide them insufficient protection. Microinsurance is the formal risk management mechanism for the poor. Microinsurance is the insurance for low income people, who generally because of poverty, unawareness and lower affordability do not have an access to insurance facilities. Microinsurance is having the potential to assist the poor people to cope up with shocks, such as health shocks, death, crop loss and natural hazards (Dercon, 2005; Dror and Jacquier, 1999; Barnett, Barrett and Skees, 2008; Gine Townsend and Vickery, 2008). The inability to cope with adverse outcomes of shocks may reduce a society's capacity to accumulate innovate and develop (Fafchamps and Lund 2003). Microinsurance by offering a payout on happening of some unfavorable outcome reduces the need to adopt costlier strategies thus protecting their income earning opportunities.

Objectives

The paper aims to achieve the following objectives;

1. To throw light on the concepts of poverty, vulnerability and risk management by the poor.
2. To highlight the Microinsurance as a risk mitigating mechanism for the poor.

Poverty, vulnerability and risk

Poverty has been considered traditionally as an individual's or a family's inability to command sufficient resources to satisfy basic needs (Fields, 1994). Basically, it is a situation in which a person's income or consumption in a certain time falls below a certain threshold, which is referred to as the poverty line. Poverty cannot be regarded as only a static concept that deals with one's welfare condition at a certain point in time. In reality, poverty is a dynamic concept, since households frequently move in and out of poverty overtime. This highlights an issue of 'vulnerability' to poverty.

Vulnerability to poverty is the probability that a household will become poor in the near future. Since the concept deals with probability, we can say that there is always a chance that a currently non-poor may end up being poor in the near future. Non-poor households may fall into poverty due to events such as natural shocks disasters, economic shock or crisis, security problems and many others. Conversely, people who are currently poor also have a chance to escape from poverty. The improvement in economic situation may bring more job opportunities, providing sources of income to the people, hence enables poor people to climb up from poverty. Several approaches and methodologies have been applied in the studies on the dynamics and vulnerability of poverty. The simplest approach is tabulating the frequency of the event when a household falls into poverty over some fixed time frame. Alternatively, Bane and Ellwood (1983) carried the methodology based on the notion of 'spells' of poverty, using exit probabilities to examine the length of time that people spend in poverty. They argued that many households climb in and out of poverty over a given period. They also highlighted the fact that although many only have short spells in poverty, most of them who are poor at a given point in time would have very long spells of poverty before they escape.

Another approach is measuring the variability of income or consumption. A person with high variance of income is more likely to fall into poverty. Such approach was carried by Chaudhuri (2000), and later applied by Pritchett *et al.* (2000) and Suryahadi and Sumarto (2001) using the data from Indonesia. The studies expand the definition of poverty by combining information on current consumption with the probability that the future consumption levels will fall below the poverty line. In their study, Suryahadi and Sumarto (2001) show the significance of the vulnerability to poverty. The combination of macroeconomic shock and political instability during the Indonesian economic crisis in the late 1990s has doubled the number of poor household almost doubled from 1996 (pre-crisis data) to 1999 (post-crisis). This was equivalent to about 27 million additional poor during the period. However, number of households who are statistically not poor but facing relatively high probability of falling below poverty line have increased from 13 million to 38 million; illustrating how the crisis has put near-poor Indonesian households at risk of falling into poverty by three times.

Vulnerability to poverty is closely related to the concept of risk. Risk refers to “uncertain events that can damage well-being” (World Bank, 2001). There are many sources of risk. The nature and environment are sources of risk, as well as health, economic and socio-political condition. Some types of risk affect just the individual or a household (idiosyncratic), for example accident, sickness or crime. Other types of risk affect a wider range of people (covariant). Small natural disaster, epidemic disease, riots or bad weather may affect the entire community within a village. Big disaster, war, economic crisis or regime change will affect the entire nations or even create a contagious effect to the neighboring countries.

A person with high risk exposure is expected to have greater income variance; hence he or she will be more vulnerable to poverty. But there is also a reverse effect – poverty brings more exposure to risk. Most of poor people live in unhealthy and unsafe environments, which expose them to a greater risk of health and security. A study by Jalan and Ravallion (1996) using data from the rural China confirms that consumption level of the bottom decile of population is the least protected against income fluctuations. Morduch (1994) furthermore characterize three factors that contribute to greater vulnerability to poverty in low-income countries:

1. Since most of the poor in low-income countries are in the agricultural sector, weather and price variability are responsible for a large part of income fluctuations and, thus, poverty.
2. Poorly developed financial institutions, which accounts for the lack of access to protection against risk such as credit, savings or insurance.
3. Weak social insurance institutions.

Risk Management by the poor

Whether they are wealthy or poor, people cannot avoid risk. But people can manage risk. Risk management can be classified into risk mitigation (*ex-ante*) and risk coping (*ex-post*). The main idea of risk management is to deal with the fluctuation of income and consumption through income diversification, insurance or savings-borrowing schemes. The main difference between the rich and poor people in managing risk is the latter have more limited access to formal mechanisms of risk management. Formal risk management mechanisms include those that are available in the market or publicly provided. Private insurance, bank credits and pension funds are example of market-based formal mechanisms. Examples of publicly provided mechanisms are public health care or

social security systems. The lack of access to these formal mechanisms makes poor people rely mostly on informal mechanisms of risk management.

a) *Individual risk management*

Poor individuals or households mitigate the effects of income shocks by diversifying their sources of income. In rural agricultural areas, where most of the world's poor people live, farmers often diversify their crops and use multiple seed varieties. In some cases they also diversify their occupations. For example, in addition to work in farms, rural agricultural people tend to work as part-time workers in the nearby towns.

If a shock occurs, the poor cope with falling income by adjusting their expenditure. Usually, adjusting expenditure means spending less for non-basic needs, eating less or making dietary changes, like consuming less meat and other side dishes. Another way of coping is work for longer hours. If there is not too many alternatives to work more in their village, they usually move to the other places seasonally or temporary. Income shocks also create the needs for the other family members who were previously not working to search for a job. This in turn creates the increased number of child labor or school drop-out rate during economic shocks.

Even though income fluctuates, people would try to smooth consumption level over time. People smooth their consumption by saving some of the current income instead of consuming everything they earn today. During bad times, they eat up some or all of what they have saved. Or, they may borrow from someone else and repay it back later in the future.

Wealthier people have access to the saving, credit and insurance. They save some of their wealth into bank deposits or other financial assets. Then during periods of low income they use their savings or ask for credits. However, poor people generally lack access to formal financial system. As a result, they cannot save in modern financial assets or instruments. Instead, they save their wealth in terms of land, cattle or durable goods and other valuables assets like jewelries. They sell their assets or consume their cattle when bad time comes.

b) *Community or group risk management*

In most cases, poor people rely on the others in the group or community in managing their risk. In the most common case, poor people borrow from their extended family members, distant relatives or neighbors when facing financial hardships. Apart from that, there are also social institutions that serve as community-based risk management arrangements.

Microinsurance as a risk mitigating mechanism

The poor in developing countries are exposed to numerous risks in their daily lives. However, the capacity of the poor to deal with such risks is often very limited. To cope better with risk, many societies and economic systems have learned to share risks on a structured, reciprocal basis through what is known as insurance and such insurance, specifically targeting the poor, is called microinsurance. Over the past decade, the number of different microinsurance schemes has increased significantly around the world, as well as the number of stakeholders involved in the sector. Various approaches are being tested in the search for an easily scalable, highly affordable, yet financially sustainable microinsurance approach (Radermacher and Brinkmann, 2011).

Microinsurance is often referred to as the provision of insurance to low income populations (Churchill 2006, SwissRe 2010). This definition has two main components: insurance and a specific target group. Insurance is the provision of financial protection against the occurrence of a predefined risk in exchange for an ex-ante premium payment. Insurance works by pooling different risks together. “Micro” is often used to specify that the insurance targets the poor, usually in developing countries. Targeting this group often leads to limited benefit packages as a result of the effort to keep premiums affordable, or in other words: micro premiums are paid for micro coverage. Like any insurance, microinsurance can cover all kinds of risk, like death of family members, costs of ill-health, loss or damage of property, agricultural risks, and so on. Traditionally, a risk has been understood as insurable if the occurrence of the harm insured against is, at least to a reasonable degree, uncertainly distributed within an insured population (as opposed to certain), if the occurrence of such a risk for one insured is largely independent from such a risk happening to another insured in that population, if the occurrence of the risk is outside the control of the insured, if the damage is verifiable and if there is an insurable interest from the side of potential clients. Furthermore, low probability of occurrence (Churchill et al. 2003, Brown and Churchill 1999) of the risk leverages the full advantage of risk pooling—as protection in a large pool of insured can be provided rather cheaply. The higher the probability of occurrence (making it almost certain), the more costly to insure such an event; however, high frequency events, even when low in cost for a single event, often constitute a considerable burden on the poor when aggregated over a year. Therefore, some microinsurance schemes try to cover relatively common events like consultation with a doctor or the purchase of drugs. Microinsurance can be provided by different institutional arrangements like, Partnership Model (*Partner-Agent Model*), Full Service Model, Community based Model and Providers Model (for a more detailed discussion of health insurance models, see Radermacher and Dror, 2006). The main distinguishing factors among forms of microinsurance are the nature of the risk carrier and whether the scheme works for profit or not. In a partner-agent model (McCord 2006), an insurance company targets the market of the poor and links up with local institutions, which have a much better ability to reach the target group, such as microfinance institutions (MFIs) or non-government organizations (NGOs) working in the development field. Due to their work, such institutions possess inroads into the community and often enjoy the trust of the target group. In the partner-agent model, such proximity to the potential clients can be used for the distribution of the insurance product and sometimes for assistance in servicing of the insurance (claim processing and verification). The insurance company typically pays an agent fee to the MFI or NGO for each policy sold, while available profits are absorbed by the insurance company. Now and then governments take the role of insurance providers and collaborate in a similar fashion with MFIs or NGOs, but without a profit motive. However, sometimes NGOs or MFIs decide to organize insurance themselves—without the involvement of an insurance company (Brown et al. 2000; Churchill et al. 2003). As many of these institutions have a development objective, their in-house operated insurance might be not for profit. Without being linked to an external insurer as a safety net, they carry the risk of losses. A third major model of insurance provision is the mutual model (Fischer 2006; Fonteneau 2006). In a mutual model, the members of the institution insure each other. Insurer and insured are thus identical; profits and losses are shared among the members. Mutuals are usually governed by their members following democratic principles. In each of these models, the control over product, business processes, business practices, and claim settlement is organized differently, and there are typically different stakeholders, with different degrees of influence when it comes to processes and products.

Microinsurance at the Global level

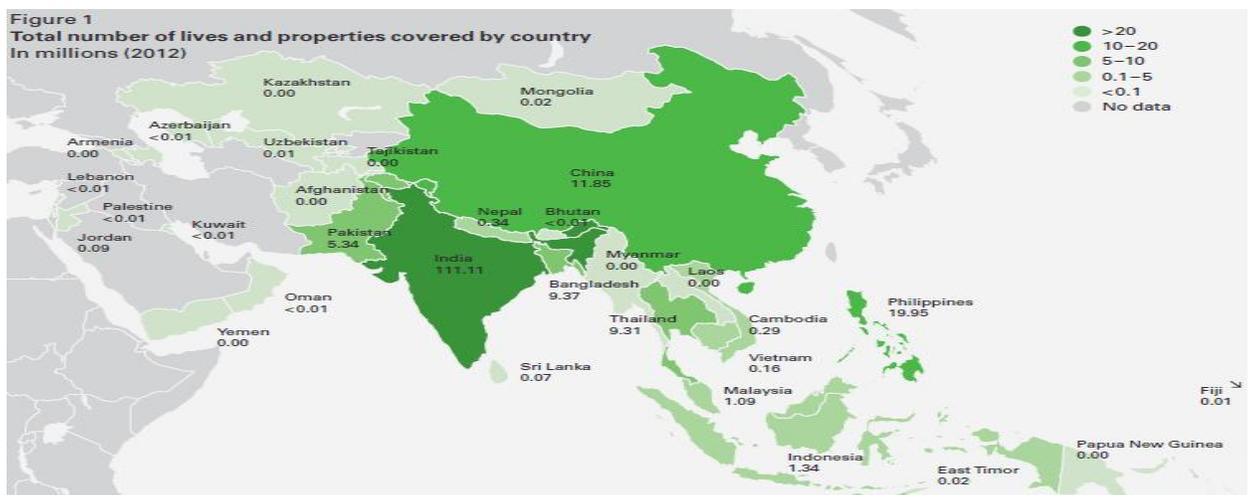
The global microinsurance industry has recorded increasing market activity with rapid growth observed in almost all regional markets since 2000 (Swiss Re, 2010). The potential global coverage of the market is estimated at 4 billion low-income persons with the likelihood of generating US\$40 billion (Swiss Re, 2010). Out of the estimated market of 4 billion people only 78 million were covered in 2007 (Roth *et al.*, 2007). This has however grown quite remarkable to 174 million lives in India, 44.4 million in Africa and 45 million in Latin America (McCord *et al.*, 2012; ILO, 2013).

A landscape study of microinsurance in Asia and Oceania 2013 published in 2014 (Jointly published by Munich Re Foundation and GIZ-RFPI, in partnership with Microinsurance Network), reported 170.4 million individuals and properties as having microinsurance in the region, at the end of 2012. As per number of policies force, a total of 82.3 million has been reported in 2012. Amongst the 31 countries that were included in the study 24 countries have an active microinsurance sector, as displayed in figure 1.1 (Mukherjee *et al.*, 2014).

With coverage of 111.1 million people, India leads the Asian microinsurance market in terms of outreach. In 2012, India alone generated 66% of all microinsurance premia in the Asian market. Apart from India, the Philippines and China are also important performers within the microinsurance sector, each of them covering more than ten million people. Although China's coverage is relatively low considering its huge population, outreach in the Philippines is significant (Mukherjee *et al.*, 2014).

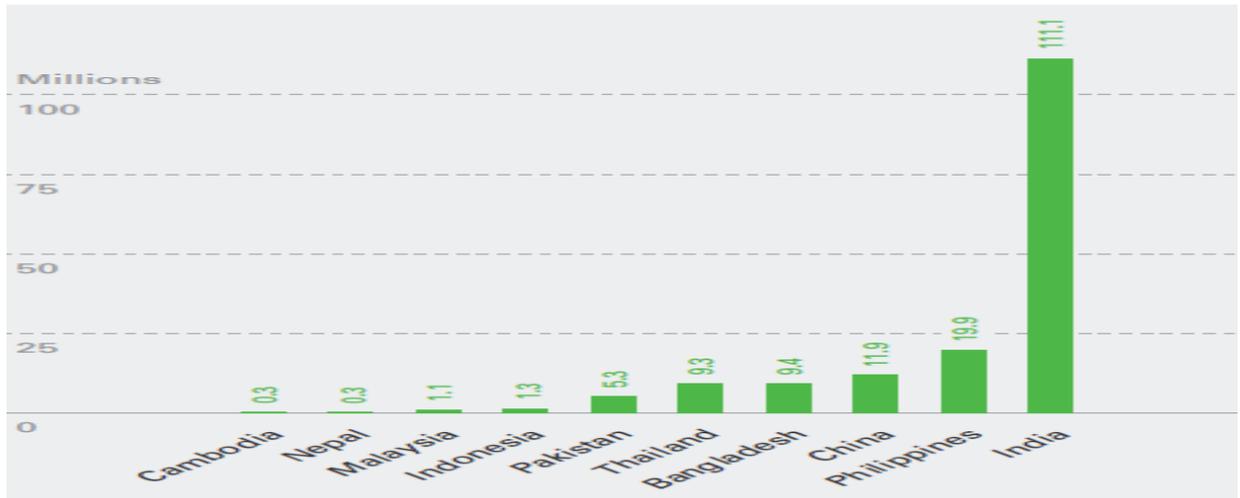
A third group of key microinsurance countries can be identified and includes Bangladesh, Thailand, Pakistan, Indonesia and Malaysia, each covering more than one million individuals and properties. Although, ten largest microinsurance markets contribute close to 99% of total coverage in Asia and Oceania (Mukherjee *et al.*, 2014) (see figure 1.2).

Figure 1.1 Total number of lives and properties covered under microinsurance by country in millions (2012)



Source: The Landscape of Microinsurance in Asia and Oceania 2013. *Microinsurance Network*

Figure 1.2 Ten countries (Asian and Oceania) with highest coverage in millions (2012)

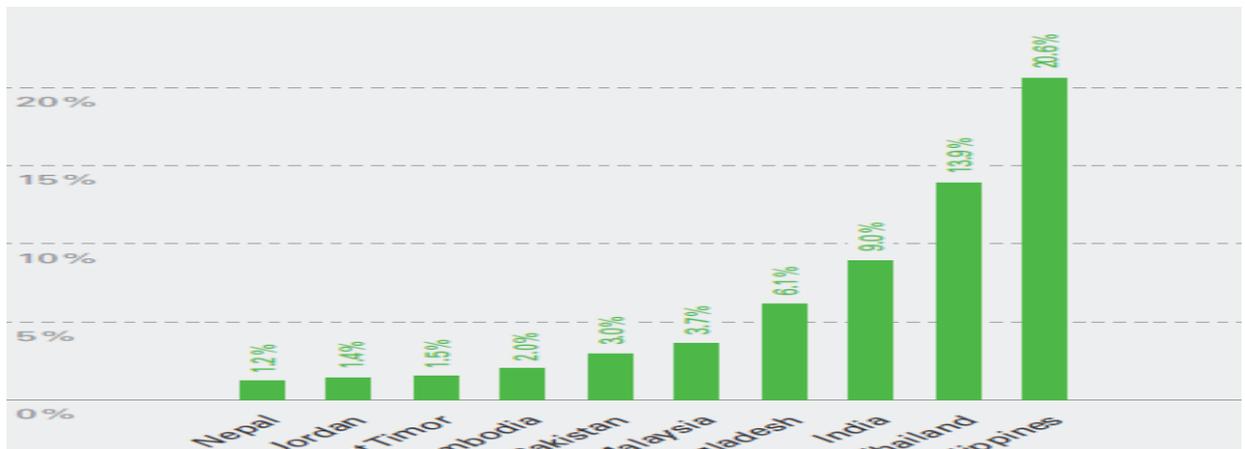


Source: The Landscape of Microinsurance in Asia and Oceania 2013. *Microinsurance Network*

Even though the absolute number of lives and properties insured is significant, the microinsurance sector has only been able to cover only 4.3% of people on the continent. **This demonstrates the extent of the potential unexplored as yet.**

This penetration is similar to Africa (4.4%), although front-runner countries in Africa have managed to reach a significant penetration level. For example, the South African coverage ratio exceeded 50% in 2011. Latest report from the Microinsurance Network in 2015 has confirmed 5.4% of total population covered in Africa under microinsurance, which in other words means coverage to 61.9 million people (McCord and Biese, 2015). Similarly another report (McCord and Biese, 2014), confirmed a coverage of 7.9% of total population in Latin America and Caribbean region (48.6 million total people insured). As mentioned above coverage ratios in Asia are much lower, except for the Philippines and Thailand, the coverage ratio in most of the countries does not reach the double digit bracket in 2012 (Mukherjee et al., 2014) (See figure 1.3).

Figure 1.3 Ten countries with highest coverage ratios (2012)



Source: The Landscape of Microinsurance in Asia and Oceania 2013. *Microinsurance Network*

The Global coverage in Health microinsurance reveals 84.4 million people insured in African region (McCord and Biese, 2015), 7.6 million in Latin America and the Caribbean region (McCord and Biese, 2014) and 27.9 million in Asian and Oceania (Mukherjee et al., 2014).

Conclusion

People under poverty are short of resources to satisfy their basic needs. People at this stage are generally found to have irregular income and therefore, frequently move in and out of poverty overtime. This highlights the issue of vulnerability to poverty which is closely related to the risk. A person with high risk exposure is expected to have greater income variance; hence he or she will be more vulnerable to poverty. Poor people are generally not adequately equipped to fight the adverse outcomes of the uncertain future, and often end up with informal costlier risk management strategies. On the occurrence of the shock people adjust expenditures, following the income shortfall, usually by spending less for non-basic needs, eating less or making dietary changes, which further add to the worry. To cope better with risk, many societies and economic systems have learned to share risks on a structured, reciprocal basis through what is known as insurance and such insurance, specifically targeting the poor, is called microinsurance. Over the past decade, the number of different microinsurance schemes has increased significantly around the world, as well as the number of stakeholders involved in the sector. Microinsurance can be provided by different institutional arrangements like, Partnership Model (*Partner-Agent Model*), Full Service Model, Community based Model and Providers Model. Globally, microinsurance has seen a considerable development. Data reveals that till 2012 it has covered 174 million lives in India, 44.4 million in Africa and 45 million in Latin America. There is still a considerable part of the population outside the coverage of microinsurance. Therefore, there is a need to further better figures to come out overall and in different dimensions like health, crop and other important sectors.

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