



## Demand for Micro Insurance: An assessment of Driving Factors

### KEYWORDS

Insurance, Financial Services, Demand

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**ABSTRACT** *Poor people generally do not have adequate financial support to face the risks in future and their consequent shocks. Uninsured risks have adverse implications and can be a cause of persistent poverty. Microinsurance has been introduced as a mechanism with the potential to assist the poor in dealing with risk. Microinsurance as having a developmental focus should increase its utilisation by poor. Generally because of lower access, unawareness, and other factors; poor people are unable to utilize these financial services. This study makes an assessment of factors responsible for uptake of demand for microinsurance. Different factors affecting the demand for microinsurance have been identified i.e., economic, social, personal, structural and culture specific.*

### Introduction

Microinsurance has the potential to assist poor people in developing countries in coping with shocks such as health shocks, death, crop loss and natural hazards (Dror and Jacquier, 1999; Dercon, 2005). Poor people often lack the financial reserves to cope with these risks and its consequent shocks. Uninsured risk has welfare implications which go well beyond consequences for short-term consumption; and is a cause of persistent poverty (Townsend, 1994; Dercon 2004). The inability to deal with these shocks may reduce a society's capacity to accumulate, innovate and develop (Fafchamps, 2003). In recent years microinsurance has been introduced as a mechanism with the potential to assist the poor in dealing with risk. Microinsurance as a mechanism to assist the poor in coping with risk is receiving increasing attention among governments, donors, policymakers and NGOs. This is demonstrated, for example, by the publication of microinsurance regulations by the Insurance Regulatory and Development Authority (Micro-Insurance) Regulations, 2005 of the government of India. Mention of insurance in article 4.8 and decision 5/CP.7 of the United Nations Framework Convention on Climate Change (UNFCCC): "...insurance... to meet the specific needs and concerns of developing country parties arising from the adverse effects of climate change." It is also shown by the participation of Oxfam America in a partnership with Swiss Re and International Research Institute for Climate and Society (IRI) in the Horn of Africa Risk Transfer for Adaptation (HARITA) microinsurance program through which 13,000 Ethiopian small scale farmers insured themselves in 2011 (Swiss Re, 2011). At the same time investments in microinsurance by the commercial sector are increasing. It has been suggested that the global micro insurance market is worth USD 40 billion to the insurance industry and that it has the potential to reach out to 2.6 billion low-income people worldwide in the future (Swiss Re, 2010). Lloyds sees microinsurance as an opportunity to reach an under-served target-market (Lloyds, 2009). A recent estimation of the outreach of microinsurance suggests an increase from 78 million risks insured in 2006 to approaching 500 million risks insured in 2011 (Churchill and McCord, 2012)

### Objective

- To throw a light on the risk management needs of the poor and microinsurance as a risk management alternative.
- To critically review the factors responsible for the uptake of demand for microinsurance.
- To suggest the future research direction.

### Risk Management needs

Risk is ever present in the lives of the poor. Risk comes in

many forms, for example illness, death of a loved one, fire or theft etc. Faced with shocks, poor people draw on their financial, physical, social and human assets to meet the resulting expenses which push them into adverse poverty. There is a need to explore the risks to which low-income people are vulnerable. Vulnerability is closely associated with poverty. Poor are more vulnerable to shocks because they have fewer resources not only to meet the immediate costs of the shock, but also the secondary expenses incurred in getting back on their feet. These shocks create financial pressure and when the pressure exceeds cash flow capacity, people must seek finance from outside sources, and Microinsurance is a viable alternative (Sabstad and Cohen, 2006).

### Factors influencing Uptake of Demand for Micro-insurance Economic Factors

#### 1) Price of Insurance (including Transaction costs)

As per standard economic theory, the price of any normal good is expected to be inversely related to demand for goods (or services). Several studies estimate price sensitivity of Micro-insurance by randomizing discount vouchers or subsidies. Cole et al. (2013) find significant price sensitivity for rainfall insurance demand in India.. Mobarak and Rosenzweig (2012) find that a 50 percent price decline relative to the actuarial price increases the probability of take-up by 17.6 percentage points. Likewise Dercon et al. (2012) find that reductions in price lead to significant effects on health insurance demand, with 20% discount vouchers leading to a 12 percentage point increase in probability of purchase, yielding a price elasticity of 0.6. Most of the studies on insurance demand use premiums, in one form or another, as the 'price' variable but, in the 'real world', there are other transaction costs to buying insurance. Thornton et al. (2010) identify cost of time and effect as an important reason for choosing not to enrol in health insurance, even when it is subsidized. Cole et al. (2013) find that even when prices are significantly below actuarially fair prices, fewer than half of households purchase rainfall insurance. Some evidence suggests that lack of demand is associated with lack of experience with insurance. Thornton et al. (2010), Fitzpatrick et al. (2011), Bauchet (2013) find that retentions rates drop significantly following expiration of subsidies, running counter to the notion that familiarity will improve results.

#### 2) Wealth (access to credit/liquidity) and income

Several studies show a positive relationship between wealth and Micro-insurance purchase wealth provides liquidity and/or access to credit so that the purchase on insurance is feasible. Access to credit refers to borrowing opportunities; liquidity refers to availability of assets. Gine et al. (2008) find that take-up rates for rainfall insurance in rural India

are higher among wealthier households. Similarly, Cole et al. (2013) find that wealthier households are more likely to purchase rainfall insurance. Households without access to credit have less ability to smooth consumption in case of a shock and they thus may place higher value on insurance as a means to reduce income volatility (Gine et al., 2008). On the other hand, households lacking access to credit may not have funds enough to buy insurance even though a shock may be more damaging to them than to households less constrained. Access to credit/liquidity alone, however, will not necessarily raise Micro-insurance demand significantly. Clarke (2011) shows that even for farmers who are not credit constrained and who are offered actuarially fair premium, basis risk causes them to purchase less than full insurance. Other scholars, such as Ito and Kono (2010) and Karlan et al. (2012) find little or no effect of credit constraints on Micro-insurance demand.

## Social and Cultural Factors

### 3) Risk Aversion

In contrast with the predictions of Expected Utility theory, studies in Micro-insurance markets show a negative association between risk aversion and demand. Gine et al. (2008), Cole et al. (2013), Kouame and Komenan (2012) and Giesbert et al. (2011) find that more risk-averse households are less likely to purchase insurance. Several possibilities have been proposed to explain this consistent observation that risk aversion and insurance purchase are negatively related. Dercon et al. (2011) observe difference in risk attitudes across the two domains, but do not find those attitudes to be significant in regard to insurance purchase.

### 4) Non-performance and basis risk

The inverse relationship between risk aversion and Micro-insurance demand is the possibility of non-performance (Doherty and Schlesinger, 1990), including basis risk (Dercon et al., 2011) in Micro-insurance products. Dercon et al. (2011) observes that expectations of non-performance influence demand for Micro-insurance. Non-performance may arise from contract exclusions, insurer bankruptcy, and other factors. One factor given specific attention in the literature is that of basis risk, which can be significant in indexed crop coverage. Basis risk here refers to the situation when insurance payouts are not perfectly correlated with underlying losses. Clarke (2011) demonstrates that low demand for insurance can be explained by risk aversion in the presence of basic risk.

### 5) Trust and Peer effects

A second aspect of 'non-performance' risk may manifest itself as lack of trust. Gine et al. (2008) note that trust in the insurance provider is a key determinant of rainfall insurance demand in India. Similarly, Cole et al. (2013) find that households in India do not fully trust or understand insurance, and that their demand is 36 percent higher when there is a recommended (i.e., trusted) insurance educator involved in the purchase process. Morsink and Geurts (2011) find that clients of a Typhoon related Micro-insurance program in the Philippines rely on the claim payout experiences of trusted peers.

### 6) Financial Literacy

Financial Literacy is expected to increase insurance demand. A commonly used measurement is a set of questions developed by Lusardi and Mitchell (2006) that tests understanding of basic financial concepts such as interest rate compounding, inflation, and risk diversification. Cole et al. (2013) find that demand is higher among households with higher financial literacy. Cai and Song (2011) and Norton et al. (2011) find increased insurance take-up following insurance games. Gine et al. (2008) find that lack of product understanding is the second most (after insufficient resources) commonly cited reason for not purchasing insurance.

Distinct from financial literacy, education has been posited as a relevant factor in insurance demand. While education has been used as a proxy for financial literacy when no other

measure is available, the two are considered different from one another (Lusardi and Mitchell, 2006).

## Structural Factors

### 7) Informal Risk sharing

Informal risk-sharing networks are an important part of coping with risk in developing countries (Fafchamps and Lund, 2003; Morduch, 1999). Furthermore, the level of informal risk-sharing in a social network can have a significant impact on demand for formal risk-sharing mechanisms such as insurance. Jowett (2003) finds that individuals living in highly interconnected communities in Vietnam are far less likely to purchase government health insurance. The findings suggest that strong informal networks may crowd out government interventions.

### 8) Quality of service

De Allegre et al. (2006) suggest that the decision to enrol in community-based insurance in rural West Africa is closely linked to the quality of the health centre. Dong et al. (2009) note that along with health needs and health demands, quality of care is an important factor in insurance drop-out. Similarly, Nguyen and Knowles (2010) find that demand for health insurance in Vietnam increases significantly with the expected benefits of insurance as measured by distance to and quality of a provincial hospital.

### 9) Risk exposure

Several studies have investigated how risk exposure, particularly the effects of past shocks, affects demand for microinsurance. In a study of Sri Lanka, Arun et al. (2012) find strong evidence for a positive relationship, with past shocks increasing the probability of using Micro-insurance; however, Cole et al. (2013) and Galarza and Carter (2010) find no such evidence.

## Personal and Demographic Factors

### 10) Age

In the Micro-insurance literature to date, the results with regard to age have been ambiguous (Eling et al., 2013). Some studies find that age has a positive effect on demand (Cao and Zhang, 2011; Chen et al., 2013); others find a negative effect (Gine et al., 2008) or none (Cole et al., 2013). For life insurance, Arun et al. (2012) find no evidence of a life-cycle effect as take-up decreases with age (and increases after a certain point), which is in contrast with Giesbert et al., (2011) who not that take-up increases with age.

### 11) Gender

Risk attitudes of women have been perplexing to researchers for some time. The majority, although certainly not all, research on the topic appears to demonstrate lower risk tolerance by women than men, even though the cause is unclear either theoretically or empirically (Cohen Einav, 2007).

## Conclusion

Microinsurance as focussing the poor is having a developmental purpose. But because of lower accessibility and lesser affordability of poor and sometimes because of complex formalities, most of the poor remain away from insurance utilization, and thus reduces the demand for microinsurance. In order increase the demand for microinsurance products it is of essence to take into consideration the factors determining demand. Price of the products should be set after carefully assessing the wealth and income of the poor. Insurers should try to increase the trust among the poor. Steps should be taken to increase the financial literacy of the people. Besides this successful Micro-insurance products need to give careful attention to clients' demand and satisfaction. In order to develop successful products, it is crucial to obtain a better understanding of why people do or do not take up insurance products when offered: what limits the usage of insurance? Increased demand through well-informed choices of individuals is a prerequisite for scaling up microinsurance products to reach large number of poor people.

**Future research direction**

- There is a need to find out the reasons, why people buy or don't buy insurance products when offered and why do people not renew their insurance.
- Study should be conducted to find out, to what extent are clients satisfied with current microinsurance products and what so they value.
- For which risks and for whom can microinsurance provide better value in terms of appropriateness, affordability and accessibility compared to or in combination with other risk-management options.
- To find out whether there is scope for market segmentation to assist penetration.
- Why do consumers not trust insurance, insurance provider and system and how the insurance can build the trust among clients?

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