



Determinants of Demand for Micro-insurance in Cameroon

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Abstract

This study aims at identifying the determinants of demand for micro-insurance in Cameroon using a methodology based on the analytical framework proposed by Heckman (1979). These are counting models with double selection. First, a bi-probit selection model is estimated to determine membership of an association on the one hand, and subscription to a micro-insurance on the other. Second, interest models called counting models are estimated to identify and analyze the factors that affect the number of micro-insurance policies. Data for the study are from the Fourth Cameroon Household Survey (ECAM4), a survey with national coverage conducted by the National Institute of Statistics (NIS) in 2014. The

results make it possible to identify significant factors that are positively correlated with membership of an association and subscription to a micro-insurance. These are mainly factors such as level of education, age squared and household size. Conversely, the results show that male gender and the age of the household head significantly and negatively influence membership and subscription. Furthermore, male gender, age squared, household size and insurance premium are positively related to the number of micro-insurance policies purchased by household heads. Finally, age and level of education are negatively correlated with the number of micro-insurance policies purchased. Furthermore, the inverse of the Mills ratio indicates that the number of micro-insurance policies is negatively correlated with unobserved characteristics. In a context of poverty, these results call for several actions by public authorities to promote micro-insurance as a way of achieving universal social security protection.

Introduction

According to Knight (1921), an economic actor faced with the problem of choice in an unspecified future may face either a risky or an uncertain situation. A risky situation is where the economic actor has a probability distribution related to the various contingencies in the future. Conversely, an uncertain situation is one where the actor does not have a probability distribution for the eventualities. Whether risky or uncertain, it is obvious that a situation of which the outcome cannot be determined beforehand can have disastrous repercussions for an individual's wealth. This calls for rational reflection on the strategies to be adopted to cushion the effects of negative shocks caused by unpredictable events. It is in response to this concern that insurance organizations were created. It is precisely in an economic environment plagued by uncertainty and risks that insurance is important. This importance is more pronounced in a context of widespread poverty where economic actors experience serious difficulties in coping with fluctuations in income. However, the low penetration rate of insurance in developing countries suggests, on the one hand, that products are unsuitable and, on the other hand, a lack of awareness of the stakes involved in covering risk.

Regarding awareness, it should be noted that concerns about risk and uncertainty are well integrated into the economic analysis of business actors in developing countries. People do not only live in the present, but they also analyze their past and formulate expectations about their future. In other words, they are aware of the shocks and crises to which they are exposed daily and try to integrate these eventualities into their economic calculations. However, because they do not know when these unfortunate events could occur, people feel vulnerable.

Vulnerability highlights the impact of risks and uncertainties on the well-being of these economic actors and calls for the development of protection or management

mechanisms. In fact, the management of risks and uncertainties within poor populations is very often done in informal micro-insurance groups little known by the regulations. Micro-insurance refers to small-scale insurance, which has its roots in under-banked countries where informal financial institutions and informal social protection mechanisms are predominant. Although these informal financial practices are mostly found in poor countries, it is worth noting that the vast majority of countries worldwide, even the most industrialized ones, have experienced at an earlier stage of their development traditional savings, credit and micro-insurance practices similar to those found in African countries (Lelart, 2002).

Built on mechanisms like those of formal insurance,¹ micro-insurance has undergone remarkable development in recent years to compensate for the shortcomings of traditional insurance, particularly its inability to cover a wide geographical area and meet the challenges of universality. However, micro-insurance is not simply a matter of lowering the price of traditional services in order to make them accessible to less well-off populations, but rather its capacity to develop its own solutions suitable for the target population both in terms of the needs to be covered and the resources available. In this regard, the BIT (2008) defines micro-insurance as inclusive insurance whose main objective is to offer specific insurance products to a population that is currently excluded from the traditional system due to a lack of knowledge or financial resources. It enables these populations to benefit from insurance cover against various risks² based on premium payments tailored to their financial capacity.

In Africa, the provision of micro-insurance products is provided by various entities: insurance companies in the formal sector, non-governmental organizations (NGOs), microfinance institutions (MFIs), cooperatives, mutual health insurance companies, community programmes, associations and other support groups. The African formal micro-insurance market grew by 30% between 2011 and 2014, a sign of the vitality of the continent. Nevertheless, it should be noted that insurance penetration rate is less than 5% in this region. According to McCord and Biese (2015), in 2014, US\$647 million (FCFA389 billion) worth of premiums were issued in Africa against US\$387 million (FCFA232 billion) three years earlier. The weighted average loss of the providers represented only 26% in 2014 against 44% in 2011. These figures suggest that the development of micro-insurance activity on the African continent is contributing to better risk management and a decrease in the number of insurance claims.

While it is true that life and credit micro-insurance account for many policies in Africa, other formal micro-insurance products are experiencing remarkable growth.

1 Protection of a natural or legal person against one or more risks in exchange for a premium.

2 Climate, health, anthropic and mechanical risks, risks of accident, illness, or death, and commercial or financial risks.

For example, between 2011 and 2014, the number of people covered by health micro-insurance grew by 562% from 1.2 million to 8.1 million, those covered by agricultural micro-insurance and individual accident micro-insurance grew in the same proportions (more than 500% growth), while the number of people covered by property micro-insurance also increased sharply: 3.2 million people were insured in 2014 compared to only 800,000 in 2011 (+308%).

Formal micro-insurance is particularly developed in Southern Africa and provides good insurance coverage in West Africa. It covers 64% of the South African population, 22% of the inhabitants of Zambia, 21% of people in Swaziland and 15% in Namibia. Coverage rates are still low in other countries of the sub-region, but formal micro-insurance is present in almost all of them in significant proportions. In West Africa, Ghana is the country with the highest formal micro-insurance coverage: 30% of its population was covered in 2014. With 3.4%, 2.8% and 2.1% of their populations covered, respectively, Togo, Burkina Faso and Benin are far behind Ghana, but ahead of Senegal (1.1%) and Nigeria (1%).

In Central Africa, formal micro-insurance is poorly developed: apart from Cameroon (1.8% coverage rate), DR Congo (0.4%) and Congo (0.1%), formal micro-insurance seems to be non-existent in other countries of the sub-region. In North Africa, micro-insurance is still in its infancy. The coverage rate is 2.2% in Tunisia, compared to 1.3% and 0.3% in Morocco and Egypt, respectively.

These statistics show that micro-insurance has not developed to any great extent in most African countries. However, informal channels such as associations are the cornerstone of micro-insurance in Africa, particularly in Cameroon. Indeed, the report of a study conducted by the NIS (2015) indicates that 37.7% of household heads in Cameroon are covered by informal micro-insurance. The distribution according to employment sector shows that 69.4% of the insured people work in the informal sector compared to 16.3% in the formal sector. The inactive population represents 14.3% of subscribers. Looking at standard of living, the poor are in the majority, accounting for 85.5% of subscribers. Moreover, there is a higher uptake of insurance services in urban areas (56.2%) compared to rural areas (43.8%). These statistics illustrate, on the one hand, the strong presence of micro-insurance in Cameroon and, on the other hand, the demand, which is essentially from urban populations and more from the poor.

The residential area and living conditions of stakeholders in the micro-insurance market in Cameroon justifies the need for this study in the context of alleviating poverty. That is why the objective of this paper is to identify the determinants of demand for micro-insurance in Cameroon. Knowing the determinants of microinsurance could provide a basis for public authorities and development partners to develop and implement policies aimed at securing the livelihoods of vulnerable populations.

Methodology

The objective of this research is to identify the determinants of demand for micro-insurance. To achieve this, we will conduct an analysis on the demand for micro-insurance based on the diversification of the risk management portfolio.

Conclusion and policy recommendation

The purpose of this paper was to identify the determinants of demand for micro-insurance policies in Cameroon. To achieve this, a literature review on micro-insurance was conducted, and based on this review a methodology was adopted. A two-stage selection model was used to produce the econometric results. Data from the fourth Cameroonian household survey (ECAM4) were used in this study.

The results were discussed in three parts. First, the regression results from the bivariate probit model, which highlighted the determinants of demand for membership in an association and for adoption of a microinsurance. At this stage, several significant factors were identified that are positively correlated with membership as well as adoption. These are mainly factors such as level of education, age squared and household size. However, other variables have significantly and negatively impacted the membership demand and adoption demand. There include male gender and age of the household head. In addition to these variables, the amenity parameters regarding membership of an association (i.e. the reason for belonging to an association) were also found to be significantly positive on the demand for adoption. Finally, Wald's test on the correlation of errors highlighted the requirement for carrying out a joint regression of the two demand equations.

Second, regressions from the counting models were used to identify the variables that affect the number of micro-insurance policy. By examining the over-dispersion compared to the average, the Poisson model was chosen. The statistically significant parameters indicate that the variables of male gender, age squared, household size and insurance premium are positively linked to the number of micro-insurance policies held by household heads. On the other hand, age and level of education are negatively correlated to the number of micro-insurance policies. Similarly, the inverse of the Mills ratio indicates that the number of micro-insurance policies is negatively correlated to unobserved characteristics.

These results highlight the limitations of the current social protection policy in Cameroon. The social protection policy is clearly geared towards the financial participation of private companies for their employees or the civil servants, excluding the unemployed and those employed in the informal sector. Moreover, a current initiative by the government, which aims to enable other segments of the population to benefit from the universal social security protection scheme, seems unrealistic in

view of growing impoverishment. Moreover, insurance schemes and the products available in the formal sector are not adequately suited to local realities. A few private initiatives for the provision of micro-insurance products so exist, but they are still not suited to local realities and therefore attract very few people.

Therefore, the only way that government can promote social protection is by putting in place a mechanism that provides a range of micro-insurance products tailored specifically to the needs of the poor. In order to do this, it should take a closer look at the realities of the associations on the ground, understand how they operate, and understand the issues that motivate their members, given the fact that micro-insurance is more focused in these associations.

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