



RESEARCH ARTICLE

AN ASSESSMENT OF THE LEVEL OF ACCESS TO EYE HEALTH CARE SERVICES: A CASE STUDY OF ONESIGHT – GAMBIA

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ABSTRACT

In the past few years, there have been significant initiatives to increase low - income people's access to financial services, first with microfinance and then moving on to micro-insurance. Insurance businesses incur inherent risks in serving the low-end market due to the complexity of insurance and the fragility of the target population. This study identifies these risks, explains the measures used by Nigerian insurance companies to mitigate them, and suggests innovative ways to reduce them. Twelve companies that offer micro-insurance products in Nigeria were selected using purposive sampling, and one hundred and twenty key informants responded to the survey. Percentages, means, and standard deviations were calculated to aid in the description of the data. Pearson Correlations and Chi-Square Tests were performed to determine the level of correlation between the variables of interest. Low penetration, limited distribution channels, correlation risks, policy lapse, product design, pricing, adverse selection, and a rigid regulatory framework are all risks that micro-insurance providers face, according to the survey. Use of technology to reduce administration costs, control of moral hazard and adverse selection, rigorous investigation of claims, development of risk measuring models, public awareness campaigns, and constant monitoring of clients are some of the measures being employed to mitigate the risks. To effectively reduce micro-insurance risks, micro-insurance service providers should invest in research and actuarial services to optimize product pricing, develop innovative distribution channels, build technology-conscious partnerships, establish Risk reference bureaus where clients' risk profiles can be shared and exploit new flexible premium payment terms. The National Insurance Commission (NAICOM), the industry regulator, is also urged to help ensure that micro-insurance policies are written in plain language that clients easily understand.

INTRODUCTION

Micro-insurance is a type of insurance that protects low-income people from specific risks in exchange for regular premium payments that are proportional to the risk's likelihood and cost (Bhattamishra & Barret, 2008). It usually refers to insurance services that are largely provided to low-income consumers who have limited access to traditional insurance and other risk-management strategies (Churchill, 2006). Micro-insurance differs from other types of insurance in terms of its scope since it has fewer assets and less volatile premiums. Although low-income earners face risks and economic shocks that are similar to those faced by traditional insurance clients, the low-end market is more vulnerable due to a lack of resources and knowledge (Maleika & Kuriakose, 2008), are unable to mitigate risks as effectively as higher-income participants, and are less prepared to deal with the consequences of perils. As a result, micro-insurance is their greatest option for restoring financial stability and wealth in the event that risks emerge also, Micro-

insurance has begun to emerge as a result of increasing demand for varied micro-financial services. (Butt, 2010). Risk management is the process of identifying, assessing, and prioritizing risks, then deploying resources in a coordinated and cost-effective manner to reduce the likelihood and/or impact of unfavorable events (Njogo, 2012). It is neither a risk-avoidance nor a risk-eradication idea. Risk management's primary goal is to identify, measure, and, most crucially, monitor an organization's risk profile (Pierro & Desai, 2007). Idiosyncratic (household-specific) and covariate risks (common to all) are two types of risks faced by the poor; Risk pooling (for example, funeral and burial societies), income support (for example, credit arrangements and transfers), and informal insurance or risk-sharing schemes such as grain storage, savings, asset accumulation, and loans from friends and relatives have all been used in the past to combat these risks (Tadesse & Brans, 2012). However, the common forms of risk management (in kind savings, self-insurance, mutual insurance) that were relevant in the past are no longer adequate and feasible (Giesbert & Steiner, 2012) because they have a limited reach and benefits typically cover a small portion of the loss (Churchill, Protecting the poor:

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A micro-insurance compendium, 2006), provide minimal protection, low returns for households, and are prone to breakdown during emergencies (Pierro & Desai, 2007; Bhattamishra & Barret, 2008). According to the (World Bank, 2011), 1.2 billion people (20%) live on less than \$1 per day (extreme poverty), while another 1.8 billion (30%) live on less than \$2 per day (moderate poverty). Only one to three percent of the poor have access to insurance goods of any kind (Tucker, 2007). The lack of formal insurance options does not deter these poor people from trying to reduce risk. In fact, according to (Tucker, 2007), poor city dwellers spend around 9.2% of their income striving to reduce disaster risk without the benefit of insurance. This indicates that micro-insurance services are in high demand but are underserved. According to Rudden, (2022), despite being home to nearly 17% of the world's population, Africa's insurance market accounts for less than 1% of all insured catastrophic losses. Despite the low levels of insurance uptake, large international brokers, insurers, and reinsurers continue to show growing interest and concentration. The value of insurance premiums in Africa reached about 45 billion dollars in 2017. In Africa, low insurance uptake can be ascribed to low income levels. In 2015, South Africa dominated the non-life insurance market in Africa, while Morocco accounted for 23% of the continent's life insurance market. Major Western insurance providers have only recently begun to pay close attention to the rising sub-Saharan African insurance market. Zambia, Nigeria, Ghana, and Uganda had some of the fastest insurance growth rates in Sub-Saharan Africa between 2014 and 2018.

Micro-insurance in Nigeria is still in its early stages, but it is rising. According to the EFINA Access to Financial Services (A2F) in Nigeria 2016 survey, just 0.3 million individuals out of 96.4 million use micro-insurance. A closer examination of the survey results revealed that, while adoption is currently low, 32.1 million persons will be interested in adopting Micro-insurance in the future. This creates a huge opportunity for micro-insurance firms to produce solutions that meet the needs of adult Nigerians. The National Insurance Commission (NAICOM), Nigeria's insurance regulator, has issued guidelines for micro-insurance operations, which provide a standardized set of rules, regulations, and standards for the conduct of micro-insurance business in Nigeria, effective January 1, 2018. These are indicators that Nigeria's micro-insurance business is waking up and taking low-income insurance distribution into consideration. Micro-insurance was defined in the guidelines as insurance designed for low-income people, with low-cost plans issued by licensed institutions, operated according to generally accepted insurance principles, and paid by premiums. Micro-insurance products, it stated, are insurance products that are tailored to the low-income market in terms of cost, terms, coverage, and delivery mode. It also defines the scope of Micro-insurance for operators, noting that the sum insured under a Micro-insurance policy(ies) cannot exceed N2,000,000 per person per insurer. This study focuses on an aspect of risk management in the context of micro-insurance provision that has not been explicitly addressed by other studies: risk management in the context of micro-insurance service. This research aims to identify the unique risks that micro-insurance businesses face, record how Nigerian insurance companies are dealing with the risks, and provide policymakers with practical solutions for mitigating risks at the firm and industry levels.

LITERATURE REVIEW

Risks Faced by Insurance Service Providers

Moral Hazard: In the context of micro-insurance, moral hazard refers to fraudulent acts in which customers overvalue their assets or make false claims (Churchill, 2007). Moral hazard is common in the micro-insurance industry since clients stand to gain a lot while losing very little (Weiss, 2006). The insurer's ability to check the validity of assets and the diligence that the insured places on insured assets against loss possibilities is hampered by the market's physical distance. Moral hazard jeopardizes the protection of clients and distorts the insurer's financial viability (Dalal & Morduch, 2010).

Regulatory Risks: Micro-insurance regulatory risks vary depending on the country, institutions, and product (McCord, 2011). The delivery methods, intermediate market, registration, and product approvals are usually specified in micro-insurance regulations (McCord, 2011). Although regulation might be advantageous, applying traditional insurance regulations on micro-insurance stifles the sector's growth (Churchill, Insuring the low-income market: Challenges and solutions for commercial insurers, 2007; (IAIS), 2007). While liberal insurance regulation has resulted in the expansion of insurance services, strict legislation has the potential to stifle the growth of the micro-insurance industry. Appropriate legal infrastructure protects policyholders' interests while also reducing institutional risks (Churchill, 2007).

Policy Lapse: (Hayes, 2021), A lapse occurs when a privilege, right, or policy is removed or expires as a result of time or actions. When the person who is to receive the benefit fails to meet the terms or standards set forth in a contract or agreement, the privilege lapses owing to inaction. When an insurance policy expires, it is usually due to one party failing to fulfill its duties or violating one of the policy's provisions; an insurance policy will lapse if the holder fails to pay the premiums.

Inadequate Distribution Channels: All micro-insurance programs face the danger of inadequate distribution channels. Micro-insurance is typically distributed via Microfinance Institutions (MFIs), post offices, Non-Governmental Organizations (NGOs), or firm personnel (Roth, McCord, & Liber, 2007). Micro-insurance has minimal premiums, thus distribution expenses must be kept to a minimum (Mahul & Stutley, 2010). Insurers are frequently constrained by a lack of low-cost distribution channels that can reach the target market of low-income earners. With remoteness, low confidence in insurance products, and low awareness among clients, most insurers collect premiums and settle claims through direct contact between the policyholder and the relevant department within the insurer; however, this method of product distribution poses significant risk (Fischer & Qureshi, 2006).

Pricing: Because of the need to balance prices, costs, sustainability, and affordability, micro-insurance pricing poses major issues. The price charged should cover all claims and running costs while also making a profit. Low-income people acquire insurance if the products are affordable and fulfill their needs (Brown & McCord, 2000). As a result, the premium for micro-insurance policies is frequently lower than the administrative costs, making them unprofitable in the absence of economies of scale. Distribution costs, underwriting expenditures, claims assessment expenses, transaction costs of

collecting premiums, and administration costs are all common operating expenses included in the premium (Weiss, 2006).

Adverse Selection: Adverse selection happens when people who are predisposed to risks or have high risk expectations are more likely to buy insurance, meaning that a disproportionate number of high-risk people join an insurance system (Weiss, 2006), raising the cost of insurance coverage. Because the risk-pooling ideology assumes that a reduced proportion of the insured will incur losses, adverse selection destabilizes the insurance system (Brown & Churchill, 2000). (Hayes, 2021), Adverse selection in the insurance industry refers to the tendency of people with dangerous employment or high-risk lifestyles to buy products like life insurance. In these situations, the buyer is the one with better knowledge (i.e., about their health). To combat adverse selection, insurance companies limit coverage or raise premiums to lessen their exposure to significant claims. Avoiding adverse selection in insurance requires identifying groups of people who are more at risk than the overall population and charging them more money. When deciding whether or not to provide an applicant a policy and what premium to charge, life insurance firms, for example, go through underwriting. Underwriters look at an applicant's height, weight, present health, medical history, family history, career, hobbies, driving record, and lifestyle hazards like smoking; all of these factors have an impact on the applicant's health and the company's ability to pay a claim. The insurance firm then decides whether or not to issue the applicant with a policy and, if so, how much of a premium to charge for taking on that risk.

Product Design: In the context of micro-insurance, product design risk arises because potential clients are exposed to a wide range of risks, none of which can be guaranteed (Roth, McCord, & Liber, 2007; Mbogo, 2010). Consumer expectations are not met by the products created (Brown & McCord, 2000). Furthermore, there is insufficient differentiation between insurance company products, making it difficult for consumers to identify between competitor offerings in terms of product features ((AKI), 2008). The quality of the service is also influenced by the product design. Although micro-insurance clients may not be able to afford high premiums, they require high-quality products, specifically better-quality micro-insurance products (faster claim settlement, fewer exclusions, and broader coverage) in order to be attracted to insurance. According to (Pralhad, 2005), even the poor are brand conscious.

Risks correlation: (IRMI), The degree to which several risk profiles fluctuate in respect to one another is known as correlation. When exposed to the same set of stimuli, correlated risk profiles move in lockstep. The Dow Jones Industrial Average (DJIA) and the Standard & Poor's (S&P) 500 Index, for example, have a high degree of correlation because they are both influenced by the same causes. Uncorrelated risk profiles, on the other hand, react to completely distinct stimuli (for example, a book of ocean marine business and a book of products liability insurance). When uncorrelated risk profiles are integrated, the total volatility is reduced. Risk source, correlation, frequency, and intensity are all factors that influence insurers' ability to supply micro-insurance products. Risks can be catastrophic (low frequency, great economic impact) or non-catastrophic (high frequency, low economic impact) (Maleika & Kuriakose, 2008). Covariant risk poses a significant barrier to micro-insurers in any case (Weiss, 2006).

Micro-insurance is a largely a developing-world phenomena. This is due in part to poor insurance penetration and the fact that government-sponsored social safety plans only cover a small percentage of the population.

Micro-Insurance Risk Management Strategies

Public Awareness: Churchill, Insuring the low-income market: Challenges and solutions for commercial insurers, 2007), Insurance sales to the poor will be more successful if they are preceded by a financial education campaign that explains how insurance works, what it can and cannot do, and how it works in conjunction with other financial services. To develop an insurance culture, communication and education activities must go beyond sales. It took generations in many industrialized countries for people to turn to insurance to meet their risk-management demands. If micro-insurance providers service their clients' needs in a fair and equitable manner, they can contribute to the development of an insurance culture. Insurance policies must be simple to comprehend, especially in areas where insurance illiteracy, or illiteracy in general, is prevalent. Customers lose interest in micro-insurance until it is demonstrated to settle losses (the bare minimum need). For a micro-insurance program to work, it must meet a number of criteria, including client comprehensibility and understanding (Morelli, Onnis, Ammann, & Sutter, 2010).

Moral Hazard Control: (Maverick, 2021), Risk-taking is the essence of moral hazard. Moral hazard occurs when one party or individual in a transaction takes risks knowing that if things do not work out, the burden of the negative consequences will fall on another party or people. Disservice to the second party might occur during the transaction, in order to facilitate the transaction, or even after the transaction has occurred. Incentives, policies to discourage immoral behavior, and constant monitoring are all options for reducing moral hazard.

Efficient Distribution Channels: Micro-insurance product distribution solutions must be practical, cost-effective, and transparent. Community-Based Groups (CBOs), local community organizations, MFIs, NGOs, and cooperative societies are among the most common distribution channels (Garand & Wipf, 2006). Despite collaborating with others, the insurer pools, controls, and absorbs risk. In the provider model, microfinance institutions and commercial banks directly promote micro-insurance products to potential clients (Maleika & Kuriakose, 2008). When used in low-income, low-margin sectors such as rural locations with dispersed people, this approach has a wide reach in the general insurance market but suffers from high transaction costs (Maleika & Kuriakose, 2008). Funeral homes, direct selling, mobile services, stores, supermarkets, gas stations, and public utility corporations are all suggested by (Osero, 2009) as potential distribution channels for micro-insurance.

Development of Risk Measurement Models: To grow and develop the business, micro-insurance service providers should design a clear and sound micro-insurance policy framework. Firms should keep documentation of existing risk management schemes and micro-insurance procedures used by insurers, as well as adequate data on risk prevalence in certain areas and demographics of their clients (Makove, 2011). Risk measurement models for micro-insurance products and underwriting can also be developed by insurance companies, taking into account the special needs of the low-income market,

such as client needs, product design, delivery systems, and even business models.

Thorough Scrutiny of Micro-Insurance Claims and Applicants: Moral hazard is reduced when claims are scrutinized (Dalal & Morduch, 2010). The claims scrutiny criterion must be built into the product design process. One strategy is to employ relationship community structures (Dalal & Morduch, 2010), in which clients are educated about the need of making authentic claims. Adverse selection can be reduced by screening applicants (Siegel, Alwang, & Canagarajah, 2001). Clients who pose a risk are identified and excluded from coverage.

Responsive Regulation: Regulation is a crucial aspect in lowering micro-insurance risks and building trust in the insurance industry (Zingales, 2009). The regulatory framework for micro-insurance should encourage the use of a diverse range of distribution channels (Makove, 2011). Traditional insurance has influenced the development of insurance laws, regulations, and rules. Traditional products are still out of reach for the poor. To improve micro-insurance, errant insurance companies, dishonest brokers, and deceitful clients should face legal action (Morelli, Onnis, Ammann, & Sutter, 2010).

Use of Technology to Enhance Efficiency: (Churchill, 2007), Due to the general information processing aspect of the micro-insurance industry, technology can help it grow. Large insurance companies pushed for the development of sorting, tabulating, and calculating devices long before the computer. Small insurers now have access to these features as well. Micro-insurers of all sizes must employ smartcards, mobile phones, the Internet, and wireless communications, among other tools, to increase productivity.

Flexible Payment of Premiums: Micro-insurance companies must devise premium payment systems that ensure maximum collection to offset income fluctuation. In addition to bancassurance and mobile money transfers, policyholders should be asked to pay when they have the money, such as at harvest time or when they receive a loan or a government cash transfer (Siegel, Alwang, & Canagarajah, 2001; Gitonga, 2009) (Mbogo, 2009). According to (Maleika & Kuriakose, 2008), there are four models of premium collection, one of which is the premium linked model, in which micro-insurance products are linked to other end products, such as loans. A direct deduction from the policyholder's bank account is used in the automatic premium deduction from savings account model. The interest-premium model, in which premiums are paid from savings account interest, is another possibility. Finally, the door-to-door premium collection model ensures that premiums are physically collected, either by visiting door to door to collect individual payments or by using a group mechanism to collect multiple payments at once. The premium payment process must strike a balance between efficiency, sustainability, and client capacity for micro-insurance to flourish.

Partnering with Other Mediators in The Value Chain: Micro-insurance programs linked to other mediators can help mitigate some risks by reducing distribution costs while boosting outreach, affordability, and economies of scale (Churchill, 2006). To communicate with customers and manage marketing and administration activities, the insurer may engage NGOs, MFIs, agro enterprises, or local banks.

Marketing to A Certain Audience: When evaluating the micro-insurance market, consider the size of the geographical region, the number of possible clients, the culture, and the ability to pay (Churchill, 2007). Adequate market research on micro-insurance aids in determining the prospective market and identifying those parts of the market that have distinct usage and attitude issues. The insights should be used to develop client recruitment strategies (Prahald, 2005). An insurance firm should foresee and meet the needs of its various clientele in order to develop a strong foothold in various regions. As a result, insurance companies should develop policies that target certain markets.

Price Reviews: In most cases, insurers lack good data to improve accurate pricing, therefore the rates charged may be less than or significantly more than the costs. To solve this issue, insurers can allow for a margin of error and then make modifications once claims are filed (Patel, 2002). (Churchill, 2007) recommends micro-insurers to use actuarial services to make price adjustments on a regular basis.

RESEARCH METHODOLOGY

Research Design: In order to determine the micro-insurance risk management strategies of insurance companies in Nigeria, the study used a quantitative descriptive research design (Burns, 2000). A sample survey was carried out among micro insurance firms in Nigeria. Relevant data from annual publication from the National Insurance Commission (NAICOM) and the Nigerian Insurers Association (NIA) were used in support of the sample survey.

Population and Sample Design: The study's population consisted of the 58 insurance businesses that had been registered in Nigeria by February 10, 2021. Twelve companies that offer micro-insurance products were chosen through purposeful sampling. Managers who deal with micro-insurance products were among those who responded with 9 others from their departments making a total of 10 respondents from each company (for a total of 120).

Measuring Instruments: Questionnaires with five constructs were used to obtain primary data. On a 5-point scale, the identified risks, product design, adverse selection, moral hazard, price, risk correlation, regulatory framework, fraud, premium default, inadequate distribution channels, and limited penetration were measured. Risk management measures currently utilized by organizations on a 5-point Likert scale measured how much they employed the approaches to manage micro-insurance risks. On a 5-point Likert scale, respondents were asked to rate the strategies that can be used (as good practice) to control risks that micro-insurance service providers face in the fifth section. Use of technology to reduce administration and transaction costs, innovative distribution channels, public awareness campaigns, niche marketing, use of sponsors to subsidize costs, flexibility in premium payments, price adjustments, formation of risk reference bureaus, and writing policies in languages understandable in the target market were among the strategies adopted.

Reliability and validity of the Measuring Instruments: The internal consistency of the measurement scales was calculated using the Cronbach alpha coefficient. Cronbach alpha, values of more than 0.7 were found in all of the scales. On the basis of a literature review and discussions with key informants in the

Nigerian micro-insurance industry, sufficient proof of content and criterion-related validity was established.

Data Analysis: To aid in the description of the data, percentages, means, and standard deviations were calculated. To determine the level of association between the variables of interest, Pearson Correlations and Chi-Tests were used.

RESULTS

Micro Insurance Company's Profile: Life and savings, health and disability, agriculture and livestock, burial, property, credit/loan protection, and crop insurance are among the micro-insurance products available in Nigeria. (Table1 Appendix) is a composite of respondents' social demographics and data on company profiles. According to the table, 66.7% of respondents are men and 33.3% are women. 70.8% of respondents were in senior management, 13.3% were in middle management, and 15.8% were in junior management. Furthermore, 53.3% of respondents have worked for 5-6 years, 25% for more than 6 years, 14.2 percent for 3-4 years, and 7.5 percent have worked for less than 2 years. Furthermore, 23.3% of respondents work in risk management, 25.8% in underwriting, 27.5% in claims, and 23.3% in other departments like marketing, finance, and so forth. Micro-insurance services were available for less than two years (12.5%), three to four years (15%), five to six years (48.3%), and more than six years (48.3%). (24.2%). The goal of the study was to figure out how likely it was for micro-insurance policies to be renewed and for claims to be paid. 16.7% said the insurance had a 20% probability of renewal or less, 17.5% thought they had a 21-40% chance, 43.3% thought they had a 41-60% chance, and 22.5% thought they had a 60% chance or more. 11.7% of respondents believe that payments of claims have a 20% likelihood or less, 15% believe there is a 21-40% chance, 53.3% believe there is a 41-60% chance, and 20% believe there is a greater than 60% chance of payment.

Micro-Insurance Risks Faced by Insurance Companies in Nigeria: Table4.2 shows the respondents' perspectives on the risks that micro-insurance providers face. It reveals that the majority of the risks encountered by micro-insurance providers are significant. 51.7% of respondents believe Nigeria's strict regulatory structure restricts micro-insurance availability to a large extent, 50% believe micro-insurance is constrained to a large extent by inadequate distribution channels, 39.1% believe micro-insurance service providers have low penetration to a small extent, and 40.9% believe micro-insurance service providers have low penetration to a large extent. Moral hazard (53.3%), policy lapse (45%), pricing (47.5%), adverse selection (49.1%), product design (48.4%), and risk correlation (49.1%) are all major concerns for micro-insurance providers. The results of the Spearman rho bivariate-correlation study are shown in (Table2, Appendix) The results demonstrate a substantial positive correlation between the duration of the firm's micro-insurance product and insufficient distribution channels, pricing against cost risks, adverse selection, product design issues, risk correlation, and low micro-insurance penetration.

Risk Management Practices of Micro-Insurance Service Providers: All of the respondents agreed that risk management policies were in place at their organizations. Risk management practices used by micro-insurance providers include public awareness campaigns (43.3%), denying claims for self-

inflicted losses (40.9%), monitoring of clients' risk profiles (38.4%), constant price reviews (46.7%), use of technology (45%), thorough scrutiny of micro-insurance claims (45.8%), use of actuarial services (45%), excluding high-risk clients' (45.9%), and developments of risk measurement methods. The chi-test results for the association between company's profile such as duration that the company has offered micro-insurance services, chances of renewal, chances of claims payment and some risk management practices of micro-insurance providers such as Conducting campaigns on insurance to boost public awareness, Constant monitoring of client's risk profile, Use of technology to minimize micro-insurance administration costs, Development of risk measurement models, Use of actuarial services to perform risk analysis. The results obtained from each test implies that there is no significant association between micro-insurance company's age and risk management practices, (p>0.05).

Risk Management Practices	Chi-Square	p-value
Public Awareness	26.109a	0.513
Client's risk profile	18.364a	0.892
Technology use	30.504a	0.292
Risk measurement models	21.981a	0.738
Actuarial services	19.209a	0.862

Strategies to Reduce Micro-Insurance Risks: Strategies for micro-insurance risk management, including legislation to allow insurance policies to be written in local languages (63.3%), investment in research and development or actuarial services to assist in product pricing (45.8%), adoption of a flexible premium payment mode (50.8%), adoption of sponsors/partners to offer micro-insurance at a subsidized rate (55.8%), and embracing technology (42.5%). These techniques, according to the respondents, will help to a large extent if implemented. (Appendix- Table4). The chi-square test for the association between Company's profile and some strategies recommended to reduce micro-insurance risks such as, Legislation should allow micro-insurance policies be written in languages comprehensible to the locals, Insurance firms should invest in research and development or actuarial services to help in pricing of products, insurance firms should adopt the use of partners/sponsors so as to offer micro insurance at a subsidized rate, Insurance firms should adopt selective targeting of geographical areas and clientele demographic to reduce adverse selection. The results obtained from each test implies that there is no significant relationship between micro-insurance company's age and strategies recommended to reduce micro-insurance risks, (p>0.05).

Micro insurance Risk management Strategies	Chi-Square	P-value
MI policies	17.636a	0.914
Research	29.609a	0.332
Partnership	21.706a	0.752
Targeting	24.663a	0.593

DISCUSSION OF RESULTS

Risks Faced by Micro-Insurance Service Providers in Nigeria: Low penetration of insurance services, constrained distribution channels, regulatory risks, and correlation risks are all identified as major risks facing micro-insurance companies in the study. These findings are in line with those of (Weiss, 2006; Churchill, 2007; Makove, 2011). In Nigeria, low penetration is due to a lack of public trust in insurance services. The use of traditional channels that serve the high-end market, according to (Churchill, 2007), is to blame for the distribution

channel problems. Maleika and Kuriakose, (2008), on the other hand, link the constrained channels to capitalization and distribution channel regulations, also, they went on to say that low-cost micro-insurance products are unattractive to brokerage firms or agents because they pay low commissions, further limiting distribution channels. Micro-insurance service providers face a number of regulatory issues, including minimum capital requirements, licensing, distribution channels, and investment rules (Makove, 2011). Correlation of risks has also been identified as a major issue in the supply of micro-insurance services, owing to the fact that the clients who acquire the insurance are those who have a larger risk of loss (Maleika & Kuriakose, 2008). Correlation risks are however addressed as the micro-insurance provider gets more experience in offering the services. Experienced micro-insurance providers, on the other hand, must consider the risk of adverse selection because they tend to attract more clients, raising the selection risk.

Micro-insurance Risk Management Practices of Insurance Firms: Insurance companies control moral hazard risks by denying claims for self-inflicted or aggravated losses, according to the study. However, (Weiss, 2006) advised companies utilizing this method, stating that insurance companies have a difficult time authenticating the care that micro-insurance clients devote to their assets. Furthermore, (Brown & McCord, 2000) warn that many claims in the micro-insurance setting are paid without verification due to the high expenses of conducting inspections, which are partly attributed to the low premium charged and geographic locations. The study indicated that insurance companies perform constant micro-insurance pricing reviews/revisions so as to prevent the danger of cost incurred being more than the price charged or the policy being too expensive to be afforded by the low-end market. In addition, (Patel, 2002) found that insurance companies regularly examine policy rates and build a large margin for error, then make adjustments, upwards or downwards, as claims experience begins to flow in, to reduce the chance of premiums being lower than claims paid. Similarly, (Brown & McCord, 2000) discovered that management information systems are critical for tracking policy premium performance in terms of claim payment. According to the study, insurance companies in Nigeria collaborate with other businesses to reduce risks and capitalize on each other's competitive advantages. For example, (Churchill, 2006) advocated for tying micro-insurance programs to other intermediaries and forming partnerships to reduce distribution costs.

The survey also discovered that insurance companies run public awareness initiatives to promote public awareness of insurance and, as a result, increase penetration. According to (Siegel, Alwang, & Canagarajah, 2001), this strategy increases the penetration of micro-insurance products. The study also found that insurance firms give clients a flexible premium payment terms to avoid non-payment. (Mbogo, 2009) agrees, attributing it to the lack of a consistent income stream among low-income earners, and suggests that premium payment procedures be made more flexible to allow participation. The study shows that Nigerian companies rarely reinsure micro-insurance products underwritten, a fact that (Siegel, Alwang, & Canagarajah, 2001) attributes to the cost inefficiency associated with micro-insurance policies due to the low premiums. (Pralhad, 2005), in contrast to these findings, believes that all risks should be insured.

Micro-Insurance Risk Management Strategies: To improve in product pricing and risk reduction, insurance companies should invest in research and development and actuarial services. These findings support (Churchill, 2007) recommendation that insurance companies invest in research and development to improve the financial feasibility of insurance products, the number of subscribers needed to make the product profitable, and product price. Researchers recommend that insurance companies run public awareness and education campaigns about Micro-Insurance benefits. (Pralhad, 2005) and (Morelli, Onnis, Ammann, & Sutter, 2010) agree, noting low financial service understanding among bottom-of-the-pyramid participants. The report also urges insurance companies to employ flexible premium payment options, which supports (Ogodo, 2010) findings. This can be accomplished by investing in more advanced technology and new distribution channels, as well as allowing for more frequent premium payments. In addition, the study found that legislation should allow micro-insurance plans to be drafted in local languages, as (Makove, 2011) has urged previously. In order to reduce claims costs, insurers should form partnerships or seek sponsorship in policies from companies upstream or downstream of the policy insured, according to (Rodriguez & Miranda, 2004); (Roth, Churchill, Ramm, & Namerta, 2005); (Gitonga, 2009). Micro-insurance service providers can subsidize premiums through partial sponsorship. Furthermore, the research revealed that insurance companies must develop alternative distribution channels, such as hiring agents. (Maleika & Kuriakose, 2008) emphasize this point by advising insurers to take advantage of existing distribution channels such as banks, retailers, and microfinance institutions (MFIs). Micro-insurers must adjust their prices to reflect loss or offer discounts, particularly where previously thought-to-be high-risk areas turn out to be low-risk. This is in line with (Churchill, 2007) recommendation that micro-insurance providers make modifications once claims start coming in. To prevent adverse selection, the study suggests that insurance companies adopt selective targeting of geographic areas and clientele demographics. Risk diversification is aided by segmenting the market by certain types of insurance and assessing the incidence of a risk event for a specific population in a given geographic place and time period (Pralhad, 2005). It was discovered that establishing 'risk reference bureaus,' where clients' risk profiles could be shared, was an effective strategy to manage adverse selection risks. According to (Pralhad, 2005), this would be useful information for insurers on high-risk individuals or geographic areas. As a result, insurance companies that provide micro-insurance products to these markets may charge different rates.

Recommendations

Moral hazards, adverse selection, and a rigid regulatory environment are just a few of the problems that micro-insurance companies confront. Researchers recommend that insurance firms institute risk management department that identifies and continuously monitors the risks inherent in micro-insurance service provision. The insurance firm should examine its ability to deal with such risks, their business significance, and use the intelligence acquired or risk assessed to take the right actions indicated by the study. Although actuarial services are utilized by insurance companies to price new policies, there is no evidence that the same services are employed for ongoing risk management. As a result, we urge that actuarial services be used on a regular basis in risk management. This will allow for the tracking of a client's risk

profile. Furthermore, to save costs in underwriting policies, corporations should collaborate with other companies and reinsure micro-insurance products. Risk management can be improved by innovative strategies such as the formation of risk reference bureaus and risk-based pricing. According to the study, regulatory authorities should develop policies that promote rather than suffocate the micro-insurance industry. As a result, these regulations should allow for more flexibility in terms of capitalization and distribution channels for the micro-insurance industry. Legislation should be enacted to allow co-insurance of micro-insurance risks, in which different organizations pool their resources to cover specific risks, and to allow policies to be written in a language that is understandable to the general public. The fact that the study relies on respondent opinions to draw its conclusions is one of the study's major flaws. We propose four areas for further investigation. To begin, we recommend that a study be conducted to determine the best regulatory structure for micro-insurance service providers in Nigeria. Second, we recommend conducting research to determine the elements that influence risk management policies used by micro-insurance service providers. Thirdly, we recommend that study be conducted to determine the impact of religious and cultural factors on the use of micro-insurance services in Nigeria. Finally, as our study focused on the supply side of micro-insurance, we recommend that a study be conducted on the demand side.

Conclusion

The findings of this research are significant. Regulators must handle a variety of risks that deter micro-insurance companies from serving the low-end consumer market segment if they are to thrive. These risks include a lack of demand for insurance products (low penetration), a lack of distribution channels, and restrictions that limit distribution and capitalization. Additionally, micro-insurance service providers must improve their use of technology to reduce costs, collaborate with others in the value chain, review their prices on a regular basis (up or down) depending on the circumstances, and use actuarial services to perform risk analysis not only for new products but also for existing products. To be able to offer affordable micro-insurance products, insurance companies can seek additional subsidies from donors and the government. Finally, the study urges authorities to revisit the regulations that govern micro-insurance service providers' operations in order to better handle capital requirements and distribution channels.

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APPENDIX

Table1. Social Demographics And Company's Profile

		Frequency	Percent
Sex	Male	80	66.7
	Female	40	33.3
Management Level	Junior	19	15.8
	Middle	16	13.3
	Top	85	70.8
Job Experience	Less than 2years	9	7.5
	3-4years	17	14.2
	5-6years	64	53.3
	More than 6years	30	25
Department	Risk Management	28	23.3
	Underwriting	31	25.8
	Claims	33	27.5
	Others (marketing, finance, etc.)	28	23.3
Duration that the firm had offered micro-insurance	Less than 2years	15	12.5
	3-4years	18	15
	5-6years	58	48.3
	More than 6years	29	24.2
Chances of renewal of policies	Less than 20%	20	16.7
	21-40%	21	17.5
	41-60%	52	43.3
	More than 60%	27	22.5
Chances of claims payment	Less than 20%	14	11.7
	21-40%	18	15
	41-60%	64	53.3
	More than 60%	24	20

Table 2

Micro-Insurance Risks	Not at all (%)	Little Extent (%)	Moderate Extent (%)	Great Extent (%)	Very Great Extent (%)
The Risk of Moral Hazard	15(12.5)	18(15)	23(19.2)	28(23.3)	36(30)
Nigeria's strict regulatory structure restricts the availability of micro-insurance.	25(20.8)	20(16.7)	13(10.8)	42(35)	20(16.7)
Policy lapse (high prevalence of premium default)	18(15)	22(18.3)	26(21.7)	27(22.5)	27(22.5)
Micro-insurance is constrained by a lack of distribution channels.	21(17.5)	15(12.5)	24(20)	30(25)	30(25)
Pricing against cost risks (micro-insurance policy price is less than the administrative cost insured, thus unprofitability)	25(20.8)	20(16.7)	18(15)	23(19.2)	34(28.3)
Adverse Selection (underwriting risky clientele due to false information)	22(18.3)	18(15)	21(17.5)	34(28.3)	25(20.8)
Product Design challenges i.e. products not meeting clients' needs	22(18.3)	18(15)	22(18.3)	32(26.7)	26(21.7)
Correlation of risks, i.e. when an incident occurs, it has an impact on the insured clients.	27(22.5)	22(18.3)	12(10)	28(23.3)	31(25.8)
Micro-insurance experiences low penetration hence diseconomies of scale	22(18.3)	25(20.8)	24(20)	23(19.2)	26(21.7)

Table 3

Risk Management Practices	Not at all (%)	Little Extent (%)	Moderate Extent (%)	Great Extent (%)	Very Great Extent (%)
Conducting campaigns on insurance to boost public awareness, thus, raise penetration	19(15.8)	15(12.5)	34(28.3)	27(22.5)	25(20.8)
Control of moral hazards by denying claims to self-inflicted losses	20(16.7)	28(23.3)	23(19.2)	26(21.7)	23(19.2)
Constant monitoring of clients risk profile	25(20.8)	21(17.5)	28(23.3)	20(16.7)	26(21.7)
Conducting constant micro-insurance price reviews	27(22.5)	21(17.5)	16(13.3)	33(27.5)	23(19.2)
Use of technology to minimize micro-insurance administration costs	25(20.8)	18(15)	23(19.2)	29(24.2)	25(20.8)
Thorough scrutiny of micro-insurance claims	26(21.7)	19(15.8)	20(16.7)	22(18.3)	33(27.5)
Giving clients a flexible premium payment terms to avoid non-payment	28(23.3)	22(18.3)	21(17.5)	28(23.3)	21(17.5)
Development of risk measurement models	19(15.8)	19(15.8)	25(20.8)	22(18.3)	35(29.2)
Mitigating adverse selection by excluding clients/areas of high risks probability	23(19.2)	25(20.8)	17(14.2)	35(29.2)	20(16.7)
Use of actuarial services to perform risk analysis of new products before releasing it to the market	20(16.7)	22(18.3)	24(20)	26(21.7)	28(23.3)

Table 4.4

Recommendation	Not at all (%)	Little Extent (%)	Moderate Extent (%)	Great Extent (%)	Very Great Extent (%)
Legislation should allow micro-insurance policies be written in languages comprehensible to the locals	18(15)	13(10.8)	13(10.8)	28(23.3)	48(40)
Insurance firms should invest in research and development or actuarial services to help in pricing of products	18(15)	28(23.3)	19(15.8)	27(22.5)	28(23.3)
Insurance firms should adopt flexible premium payment mode	19(15.8)	19(15.8)	21(17.5)	28(23.3)	33(27.5)
insurance firms should adopt the use of partners/sponsors so as to offer micro insurance at a subsidized rate	20(16.7)	16(13.3)	17(14.2)	31(25.8)	36(30)
Insurance companies should embrace the use of technology to reduce administration costs	27(22.5)	17(14.2)	23(19.2)	19(15.8)	34(28.3)
Insurance firms need to formulate innovative distribution channel i.e. use of agents	15(12.5)	22(18.3)	23(19.2)	20(16.7)	40(33.3)
Insurance firms should adopt selective targeting of geographical areas and clientele demographic to reduce adverse selection	19(15.8)	25(20.8)	11(9.2)	22(18.3)	43(35.8)
Prices adjustment should reflect loss or discount offered where perceived high risk areas turns out not to be	22(18.3)	22(18.3)	17(14.2)	22(18.3)	37(30.8)
Risk reference bureaus should be established by insurance companies where clients' risk profiles can be shared.	25(20.8)	13(10.8)	31(25.8)	16(13.3)	35(29.2)
