**INCLUSIVE INSURANCE MARKET DEVELOPMENT IN AFRICA: CREATING A FERTILE ENVIRONMENT**

1. **Executive summary**

This study focuses on key factors influencing microinsurance market development and creating fertile environment for microinsurance operation. Using data covering 110 observations in 22 African countries for the years 2014 – 2018, this work focuses on demographic, economic, and institutional variables’ influence on microinsurance density used as a gauge of microinsurance development, and ease of doing business as a gauge of how conducive the regulatory environment is to starting and operating a local firm. Employing the multilinear regression approach, key findings show that merchandised trade, and business freedom positively influence microinsurance development while population growth Rate, mobile-cellular telephone subscriptions, percentage of population living in rural area, inflation, and real interest rate, all negatively influence microinsurance development. Percentage of individual using internet, GNI per capita, real interest rate, business freedom, openness of economy, and property right, all influence positively to conducive environment to starting and operating local firms. Some implications of these key finding are discussed.

**1.1 INTRODUCTION**

Microinsurance is an essential mechanism for protecting the health and livelihoods of under-served low-income population of Africa, Asia, and the emerging markets. It covers the protection against specific perils including fires, accidents, natural disasters, droughts, etc. The policy holder buys the policy and pays premium to the microinsurance company, for which the insured may be compensated upon the occurrence of a covered loss[[1]](#footnote-1). Microinsurance activities started in early 1990s as a form of charity with services delivered through variety of institutional channels including the Community Based Organizations, Non-Governmental organizations (NGO’s), micro financial institutions etc. (AIG, 2009).

Access to microinsurance products in developing countries remain low–often below 5% of the total population of the countries (NAIC, 2020). In Africa in 2017, 15 million people were insured by microinsurance products with a gross premium of US$ 420 million (Microinsurance Network, 2019). Microinsurance products are known to be much less costly than those of traditional insurance products and policies are extend protection to a much wider market (Insurance Information Institute, July 23, 2019).

This study focuses on understanding what factors contribute to microinsurance development in Africa using five year data for 22 countries in Africa covering the periods 2014-2018. It examines the influence of key variables on microinsurance market development. The explanatory variable include demographic factors, economic, and institutional factors collected for the study.

**1.2 Significance of the study.**

The study contribute to the development of microinsurance market; creating fertile environment in Africa. Not only that this work contributes to extent literature, it also serve as a guide and highlight the implications for policymakers and the private sector wishing to scale up inclusive insurance market development in Africa and will help inform their decision to minimize microinsurance investment losses.

The remaining parts of this paper include the theoretical background and the model in section 2, followed by data and model estimation results in section 3, discussion in section 4, and ends with the conclusion and Appendix.

**2. THEORETICAL BACKGROUND AND THE MODEL**

**2.1 Theoretical Background**

Extent literature reviewed shows that, one of the work that relates with this work is those of H. Park et al (2002). These researcher focused on the determinant of insurance pervasiveness. They used the multilinear regression model and estimated the specifications of the model using Ordinary Least Squares (OLS). They regressed various demographic, socio-economic and institutional variables on insurance penetration. They included the cultural and sociopolitical variables and their significant influence on insurance pervasiveness. Key findings from show that, masculine-feminine dimensions of the national culture, aggregate income, government regulation, and the sociopolitical stability statistically significantly affect insurance penetration.

B. Elango & James Jones (2011) also focused on drivers of insurance demand in emerging markets. These researchers adopted the panel regression model using demographic, socio-economic, and institutional variables as explanatory variables on insurance demand using insurance density and insurance growth rate as proxies. This study revealed an opposite direction in the measure of growth rate influence in non-life and life density of the country. GNI per capita, interest rate, merchandise trade, business freedom, and growth rate influence insurance density of the country. This study does not consider cultural dimensions.

**2.2 Hypothesis used for the study.**

The hypothesis used for the study include:

* **Hypothesis 1**: Demographic factors positively affect microinsurance market development and creating fertile environment for microinsurance operation.
* **Hypothesis 2**: Economic factors positively affect microinsurance market development and creating fertile environment for microinsurance operation.
* **Hypothesis 3**: Institutional factors positively affect microinsurance market development and creating fertile environment for microinsurance operation.

**2.3. The Model**

Based on extant literature on the insurance market demand and development, a multilinear regression model was employed to determining the contribution of the key factors towards microinsurance market development (e.g. B. Elango & James Jones, 2011; Beck & Webb, 2003; Browne et al, 2000). The proxies used for this study are microinsurance density[[2]](#footnote-2), and ease of doing business[[3]](#footnote-3). Figure 1. Shows the factor categories influencing microinsurance market development used in the model.

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Whererepresent the country considered*, t* =1, 2…….. represent the time*,* where *j* = 1, 2…… represent coefficients of factors, = 1, 2, 3 factor category considered, represents the time-specificintercepts, and represents the country-specific random error term.

**Institutional Factors**

**Economic Factors**

**Demographic Factors**

**Microinsurance Market Development**

**Figure 1.** Factors Influencing Microinsurance Market Development in Africa with proxies used.

* Demographic Factors: They refer to the distribution of individuals in a society measured in terms of population, age, sex, income, education, etc., which affect the buying patterns.
* Economic Factors: These cover the overall economic situation of a given county. They determine whether underlying demand profile could be sustained by the options.
* Institutional Factors:According to (North, 1981), these are human device constraints that structure human behavior. The formal or informal mechanisms define the Countries’ institutional structures are that governs human behavior (B. Elango & James Jones, 2011). They include the legal system in place to protect property rights of the people and companies in the country.

1. **Data and Model Estimation Results.**

**3.1 Data**

The data used for the study consist of 110 observations from the years 2014 to 2018. The African countries from which the data were collected are shown in table 1 below.

**Table 1:** Countries included in the study.

|  |  |  |
| --- | --- | --- |
| Benin | Malawi | South Africa |
| Burkina Faso | Morocco | Tunisia |
| Botswana | Mozambique | Togo |
| Egypt | Namibia | Uganda |
| Ethiopia | Niger | Zambia |
| Ghana | Nigeria | Zimbabwe |
| Ivory Coast | Rwanda |  |
| Kenya | Senegal |  |

Table 2 below shows the variables and data sources for each variable used for the study. All analysis were done using R and Python.

**Table 2:** Variables used for the study and their sources

|  |  |  |
| --- | --- | --- |
| VARIABLE  CATEGORY | VARIABLES | SOURCES |
| DEMOGRAPHIC | Population Total | **World Development Indicators** |
| Population Growth Rate |
| %Population Poor |
| % Population Living in Rural Areas |
| Mobile-cellular telephone subscriptions. |
| % individual using internet | **ITU** |
| ECONOMIC | GNI per Capita | **World Development Indicators** |
| Inflation |
| Real Interest Rate |
| Merchandised Trade |
| INSTITUTIONAL | Business Freedom | **Heritage Foundation (various years)** |
| Openness of Economy |
| Financial Freedom |
| Property Right |
| Investment Freedom |
| Labor Freedom. |
| Fragile State Index | **Fund for peace** |

**Note:**

Number of observations = 110

Data sources links:

* World Development Indicators*:* [***https://databank.worldbank.org/source/world-development indicators***](https://databank.worldbank.org/source/world-development%20indicators)
* ITU: [***https://www.itu.int/en/ITUD/Statistics/Pages/stat/default.aspx***](https://www.itu.int/en/ITUD/Statistics/Pages/stat/default.aspx)
* Heritage Foundation (various years): [***http://www.heritage.org/index/explore***](http://www.heritage.org/index/explore)
* Fund for peace: [***https://fundforpeace.org***](https://fundforpeace.org)
  1. **Model Estimation Results.**

1. It provides the means for insuring crops, livestock, and other properties from risk associated with natural disasters, flood, fires, drought etc. [↑](#footnote-ref-1)
2. This is used as a gauge for microinsurance development (see Lee et. al 2013). [↑](#footnote-ref-2)
3. This is used as a gauge for how conducive the regulatory environment is to commencing and operating a local firm. [↑](#footnote-ref-3)