

## RESEARCH METHODOLOGY

### 3.1. INTRODUCTION

This chapter presents the technical process involved in designing of research instruments, the sources of primary and secondary data, the data collection method, the population, the sampling method adopted as well as the data analytical models applied in the study. It also presents the restated statements of hypotheses.

### 3.2. RESEARCH DESIGN

This study mainly focuses on the systematic collection and presentation of data to examine the impact, positive or otherwise of the Universal Banking System on the Nigerian insurance industry. It examined in particular the different variables that influence the operations of the insurance operators. Some of such variables arose from the relatively low level of insurance education in Nigeria, the unsatisfactory performance of the insurance companies in the past, and most importantly, the inadequate capital base of the insurance companies.

The issues raised above suggested the use of qualitative and quantitative data from a select group of eight insurance companies namely: - NICON Insurance Plc, Industrial and General Insurance (IGI) Plc. Universal Insurance Plc., Alpha Insurance Brokers Ltd. (non bank-owned), Zenith General Insurance Plc., Union Assurance Plc., ADIC Plc. and FBN Insurance Company Ltd. (bank-owned) all operating in Enugu in the South East Geopolitical Zone of Nigeria. The data collected, were analyzed to find out the effects of Universal Banking system in Nigeria on Insurance Industry and to also find out if the insurance industry's

capital base is adequate to face the challenges posed to it by the Universal Banking System in Nigeria.

### 3.3. SOURCES OF PRIMARY AND SECONDARY DATA

The materials for this study were sourced from both primary and secondary data. Data refers to information collected for the purpose of conducting investigation. In developing a plan for data collection, the researcher considered what information that were needed, from whom to collect the information, in what sequence the collection should be made and the most suitable methods of collecting them.

#### 3.3.1. Primary Sources

The primary data (otherwise raw data), for this study, were collected from questionnaires, interviews, telephone calls and personal contacts made especially to the management and staff of the aforesaid insurance operators based in Enugu. Primary data remain the principal source of information for this study.

#### 3.3.2. Secondary Sources.

Secondary sources of data were from existing literature, research reports, government documents, institutional publications and statistical reports. Secondary data are therefore that information that is already in existence. Some of the articles were obtained during the researcher's visits to the following libraries namely: the Central Bank of Nigeria (CBN), National Insurance Commission (NAICOM), the National Bureau of Statistics, Madonna University, Okija, as well as leaflets from some of the sample firms. Relevant textbooks, seminar papers, university published journals and unpublished papers were also vital. The researcher also visited the internet via Google for some secondary information during the course of this study.

### 3.4. POPULATION OF STUDY.

Population is defined as the collection of elements, units or individuals for which information is sought. The elements in the population are the units of analysis and their nature is determined by the survey objectives. Population of the study refers to all inhabitants within the study boundary and having bearing with the subject of the research. *Okeke, (1995: 10)*

Below are some of the insurance companies.

#### 1 N.I.C.O.N. Insurance Plc.

The researcher's choice of NICON is informed by the fact that it is the most highly capitalized insurance company in Nigeria. It was before now wholly owned by the Federal Government of Nigeria and served then as the Re-insurer to all the other companies and also has the monopoly of the Federal and State Governments' insurance businesses. It has branches in virtually all the states of Nigeria.

#### 2 Industrial and General Insurance Plc (I.G.I.)

Industrial and General Insurance Plc is a fast-growing and new-breed insurance company with very wide branch network throughout Nigeria. It has a sizeable share of the Nigerian insurance market and is very strong in oil/gas and aviation insurance business. It is a publicly quoted and composite insurance company.

#### 3. The Universal Insurance Plc.

Universal Insurance Plc. (a.k.a. "Our Word is Our Bond"), is a house-hold name in Insurance in Nigeria and particularly in the South East Geo-political zone of this country. It is one of the surviving old generation insurance companies in Nigeria after the last upward re-capitalization of the capital base of



insurance companies. Like the previous companies, it also operates an extensive branch net-work throughout Nigeria.

### 3 Alpha Insurance Brokers Limited.

Alpha Insurance Brokers Ltd. is one of the leading insurance brokerage companies in Nigeria with branches in all the major cities in the country. It has both national and international accounts to its credit.

The study population would include the management and staff of all the above given insurance operators.

The estimated population of the study is 115 shown as follows: -

NICON Insurance Plc	20
I.G.I. Plc.	20
The Universal Insurance Plc.	15
Alpha Insurance Brokers Limited	<u>60</u>
Total	<u>115</u>

### 3.6. SAMPLE AND SAMPLING DETERMINATION

Sampling involves the selection of a number of units from a defined study population. A sample is therefore a smaller representative of the larger population. In drawing a sample for this study, the researcher considered the following: -

- a) How many people are needed in the sample?
- b) What group of people is the sample to be drawn from?
- c) How are these people to be selected?

Because cost is involved and finance is difficult to raise, sampling becomes a big problem in a research study. In drawing the

sample, the researcher applied the *Taro Yamane Formula (1964:18)*, which stated thus: -

$$n = \frac{N}{1 + Ne^2}$$

Where  $n$  = sample size  
 $1$  = Constant  
 $N$  = Population (in this case 115)  
 $e$  = Error limit = 0.05 or 5%

$$\text{Therefore } n = \frac{115}{1 + 115(0.05)^2} = \frac{115}{1.2875} = 89$$

The total sample size in this study is 89.

Now that the sample is determined, it is necessary to know the sampling fractions, using this formula:  $n_i = \frac{n \times (N_i)}{N}$  ;  $i=1, \dots, 4$

N

Where  $N_1, N_2, N_3,$  and  $N_4$  are the subsets of the total population,  $N$ , under study. (See page 54)

$n$  = Total sample  
 $N$  = the total population  
 $N_1$  = the sample proportion from N.I.C.O.N  
 $N_2$  = the sample proportion from I.G.I. Plc.

$N_3$  = the sample proportion from The Universal Ins. Plc.

$N_4$  = the sample proportion from Alpha Ins. Brokers Ltd.

Where  $n_1, n_2, n_3, n_4$  are sample sizes from the companies, respectively for study,

$$n_1 = \frac{89(20)}{115} = 15$$

$$n_2 = \frac{89(20)}{115} = 15$$

$$n_3 = \frac{89(15)}{115} = 12$$

$$n_4 = \frac{89(60)}{115} = \frac{47}{89}$$

### 3.7. METHODS OF COLLECTING DATA.

There are two methods, which researchers normally use for the collection of data for research works.

One is the direct approach which involves the measurement or observation of the subject

The other is the indirect approach involving interviewing and questionnaire administration. The indirect approach was used.

The questionnaires were administered, with the assistance of some research assistants, to the respondents. Questionnaires refer to a device for securing answers to questions by using a form that the respondent fills himself. I employed both structured and unstructured types of questions. Questionnaires constitute a principal source of data from which an inference is drawn.

### 3.8: RESEARCH INSTRUMENTS.

Research instruments refer to the basic tools of the research for measuring, evaluating and exploring data with the aid of statistical techniques.

The Chi-square (manual and computerized SPSS Windows Chi-Square) tests were adopted. Chi-square is used to test the various hypotheses as indicated in section 3.9.

Chi-square is defined by: -

$$\chi^2 = \sum_{i=1}^k \frac{(O_i - E_i)^2}{E_i}$$

Where

$\Sigma$  = Summation (sigma)

O = the observed frequencies

E = the expected frequencies

The expected frequencies were obtained using the formula as:

$\frac{\text{Row Total} \times \text{Column Total}}$

Grand Total

### DECISION RULE

As the difference between the observed frequency and the expected frequency increases, the value of the Chi-square increases. If they are the same, Chi-square will be zero. The calculated value of the Chi-square must be greater than or equal to theoretical/table value for the Null Hypothesis ( $H_0$ ) to be rejected, otherwise accept the Alternative Hypothesis ( $H_1$ )

Degrees of freedom were determined according to the number of categories. In this case/study  $df = k - 1$ , hence  $df = 4 - 1 = 3$

### PEARSON CORRELATIONS INSTRUMENT.

The researcher, as an alternative to the Chi-Square tests, also used the Pearson Correlation instrument with a view to confirming the results previously obtained from the earlier tests. The applicable formula is given thus:

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

The correlation coefficient is an index of the extent of the relationship between two variables.

Where:  $r$  = coefficient of correlation

$X$  = Independent variable

$Y$  = Dependent variable.

$\sum$  = Summation sign (Sum of).

### DECISION RULE.

$r$  = Positive (+) value means positive linear relationship.

$r$  = Negative (-) value means negative linear relationship.

$r$  = Zero (0) value means no relationship

### 3.9. STATEMENT OF HYPOTHESES.

The primary task in this research is to test the contention that the Universal Banking System reduced the profitability and revenue income of the insurance industry in Nigeria.

1  $H_0$ : Universal Banking system in Nigeria does not affect the revenue income of the insurance industry.

$H_1$ : Universal Banking system does improve the revenue income of the insurance industry.

2  $H_0$ : Universal Banking system does not pose challenges to the Insurance Industry in Nigeria.

$H_1$ : Universal Banking system poses challenges to the Insurance Industry in Nigeria.

3  $H_0$ : Insurance companies are adequately capitalized to operate profitably under the Universal Banking system in Nigeria.

$H_1$ : Insurance companies are not adequately capitalized to operate profitably under the Universal Banking system in Nigeria.

The alternative hypothesis will of course be accepted wherever the null hypothesis is rejected