INVESTMENT DECISION AND PROFITABILITY IN BREWERY INDUSTRY (A CASE STUDY OF NIGERIA BREWERY PLC)

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ABSTRACT

One of the problems faced by companies is that of making investment decisions. Since resources such as men, materials and money are limited, it therefore means that companies must have certain objectives in mind to enable them make rational decisions. The principal aim of this research work is to examine the rationale behind selecting various types of investment open to companies vis-à-vis choosing that alternative course of action that yield the greatest future benefits. This project is primarily concerned with the strategies or techniques available to companies for evaluating investment proposals in relation to their expected return and risk in order to create and add value to the business. It was found in the study that various types of investment decisions are open to a company and that investment projects are carried out based on the cost and the funds available to the company. Also there are various techniques for measuring the payoffs from these projects. Finally, the project yields useful suggestions on how companies can improve their decisions on investment and thus their level of profitability.

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INTRODUCTION

One of the problems faced by companies is that of decision making since resources are generally scare (Kramer, 1988). Basically, there are three major decisions a company must make for it to be able to create value and remain in business – the investment decision, the financing decision and dividend decision (Damodaran, 2006; Yulia, 2017). All the three decisions must be considered in relation to the company's objectives and an best possible mix of the three will create value out of the three kinds of decision mention above. This study focused on the investment decision (Damodaran, 2006; Yulia, 2017).

Investment decisions by their nature usually involve the allocation of huge funds to investment proposals to yield future benefits. But because the future is uncertain, investment proposals necessarily involve risk. Secondly, long term investment, which is mainly our concern in the research work, must have some influence on the perceived value of the company and maximization of profit (Ambrose & Vincent, 2014). Maximization of profit regarded as the proper objective of the firm, thus, since firms must move towards its objectives in a rational manner, they must select from the range of alternative course of action (Ambrose & Vincent, 2014). There exist alternatives that bring company nearer to profit maximization objective. This idea is however criticized based on its motivational and cognitive assumptions. The motivational critics claim that profit is just one of a firm's objectives, the others being survival. Liquidity, employees welfares, revenue maximization and growth. Investment decision can be seen as most critical and crucial and particularly difficult decision because it

entails the commitment of huge funds in anticipation of being able to earn in the future, a profit greater than the funds committed. The researcher's curiosity on how companies in the Brewery industry make their investment decisions, how such investment decision are evaluated, the criteria employed to evaluate various investment project and sources and procurement of funds used to sustain growth and survival and thus its effect on the Nigeria economy led us to an in-depth study of the topic and focus was made on the Nigeria Breweries, Plc.

Investment decisions are of various forms and these depends on appraising a project using one or a combination of the investment appraisal methods. These appraisal methods include payback period, annual rate of return, net present value and discounted Cash flow before a final decision is made. Another challenge is source of funding the investment and these both the internal and the external sources. Internal sources include the existing equity and reserves while the external sources include long-terms like debentures. Against this background, this research directed itself towards providing answers to the research questions stated below as they relate to the Nigerian Breweries Plc.

Research Questions

1. What are the various investment decisions open to a company?
2. What are the strategies or appraisal techniques used for evaluating Investment decisions?
3. How is investment decisions used to maximize profit?
4. What are the procedures for investment decisions?
5. What are the sources of funds for companies?
6. What effect does the state of the economy have on the investment decisions of Nigeria Breweries Plc?

Objectives of the Study

The factors that affect investment decision and the profit of the company are examined in this project. Specifically, the following are the objectives of the research.

1. Examine the various types of investment decisions open to a company.
2. Investigate the strategies and appraisal techniques used for evaluating investment decision.
3. Ascertain how investment decisions are used to maximize profit.
4. investigate the procedures for taking investment decisions
5. Examine the sources of funds for the company
6. Ascertain the effects the state of the economy (the brewery industry) have no investment decisions of the Nigerian Breweries Plc.

Research hypotheses

The following hypotheses testing shall guide us during the course of writing this project. The null hypothesis shall be as H_0 and H_1 is the alternative hypothesis

1. H_0: There are no superior particular techniques for making the best investment decisions.
   H_1: There are superior particular techniques for making the best investment decisions.

2. H_0: The investment decision made cannot change the optimum profitability for the organization.
   H_1: The investment decisions made can change the level of optimum profitability for the organization.

3. H_0: Poor or negative on investment does not drastically reduce the rate of investments.
   H_1: Poor or negative returns on investment drastically reduces the rate of investment.

LITERATURE REVIEW

Financial management entails planning for the future of a person or a business enterprise to ensure a positive net cash flow. It includes the administration and maintenance of financial assets. Besides, financial management covers the process of identifying and managing risks. The primary concern of financial management is the assessment rather than the technique of financial qualification. A financial manager looks at the available data to judge the performance of enterprises. Managerial finance is an interdisciplinary approach that borrows from both managerial accounting and corporate finance. Some experts refers to financial management as the science of money management. The primary usage of this term is in the world of financing business activities. However, financial management is important at all levels of human existence because every entity needs to look after its finances.

The financial manager has two broad responsibilities, which can boil down to two simple questions. What investment should the firm make? How should it pay for those investments? Richard Brealey and Steward Myers (1996:4). Decisions are made by investors and investment managers. Investors commonly perform investment analysis by making use of fundamental analysis, technical analysis and gut feel. Investment decisions are often supported by decision tools. The portfolio theory is often applied to help the investor achieve a satisfactory return compared to the risk taken. The investment decision is the most important of the three decisions financial manager can make when it comes to the creation of value. Capital investment is the allocation of capital to investment proposals whose benefits are to be realized in the future because the future benefits are not known with certainty. Investment proposals necessarily involve risk. The investment

decision, then, determines the total amount of assets held by the firm, the composition of these assets and the business risk complexion of the firm as perceived by supplied of capital (James Van Hon, 2001:6).

Olowe (1997) is of the opinion that the capital investment decision is not limited to investment in capital assets such as fixed assets e.g. (land and buildings) etc. but that it can also include intangible fixed asset (e.g. research and development) and also working capital. According to Pandy (1996:6), there are two aspects to the investment decision and these include "the evaluation of the prospective profitability of new investment and the management of a cut off rate against that the prospective return of new investments could be compared." We can see from above that the objective of the investment or capital budgeting decisions is to firm's growth and development, even its ability to remain competitive and to survive depend upon a constant flow of new investment ideas. Accordingly, a well managed firm will go to great lengths to develop good capital budgeting proposals, especially if the firm has capable and imaginative executives and employees and if its incentive system is working properly.

A capital expenditure plan is based on two factors and these costs of capital and the return of profit on the capital. Appraisal or evaluation of capital expenditure (i.e. investment) is therefore done in terms of cost and revenue. This may appear to be common sense. You to have to compare the costs and benefits of the project and if the benefits outweighs the cost by an acceptable margin, you go ahead with the project. The above principle appears simple, but one may wonder how many business managers in this country engage in such analysis before going ahead with a project of their dream. The number could turn out to be low. In

appraising a project (before a final decision is made), it is advisable to use one or a combination of the following methods and these include the payback period, annual rate of return, net present value and discounted Cash flow (DCF)

Payback Period

This is the number of years it will take a business to recover the original investment from net cash flow. A simple formula for calculating payback period can be stated as follows:

$$\text{Payback} = \frac{\text{Initial Investment}}{\text{Annual Cash Flow}}$$

An implicit assumption in the above formula is that net profit will be realized in equal annual amounts throughout the forecast period. This is not likely to be the case in practice. It is important note that the above formula does not take into consideration the timing of the arrival of the net cash inflow. The payback has it strength and weakness. The greatest advantage is that it is easy to calculate this case in calculation enables management to determine quickly the degree of risk involved in the proposed investment.

Discounted Payback Period

Some companies' discount the cash flows before they compute the payback period. The discounted payback rule asks, "How many periods does the project have to last in order to make sense in terms of wet present value"? This modification to the payback rule surmounts the objection that equal weight is given to all flows before the cutoff data. However, it still stakes no account of any cash flow after the cutoff date.

Annual Rate of Return (Accounting Rate of Return)

This method is also known as return on investment (ROI) and it uses accounting information as revealed by

financial statements, to measure profitability of an investment. Under this method, the profit on the investment is expressed as a percentage of the capital outlay. This technique is based on accounting profits, not cash flows and is similar to the measure of return to capital employed in questioning a company's overall profitability.

$$ARR = \frac{\text{Average Annual Accounting Profit}}{\text{Average Investment}} \times 100 \quad \text{OR}$$

$$ARR = \frac{\text{Net Profit}}{\text{Capital Employed}} \times 100 \quad \text{OR}$$

$$ARR = \frac{\text{Estimated Total Profit}}{\text{Estimated Average Investment}} \times 100$$

$$\text{Average Investment} = \frac{\text{Initial Investment + Scrap value}}{2}$$

Under the annual rate of return, the firm sets a large of return acceptable to it. For a project to be accepted, the rate of return must be higher than the projected rate.

Net Present Value Method

Capital Budgeting Is Essentially An Application Of The Basic Valuation Model Of The Firm, however, when the present value model is used in budgeting. It is applied to single project rather than to the firm as a whole. Or rather, net present value (NPV) is a discounted cash flow method of calculating the present value of cash flows of an investment proposal using the company's cost of capital or the appropriate discounting rate and finding out the NPV by subtracting the present value of cash inflows. It specifically recognizes the time value of money. It correctly states that cash flows arising at different times differ in value and are only comparable when they are equivalent i.e. present value calculated. The acceptance or rejection criteria for the NPV method of appraisal is: NPV greater than zero, the project should

be accepted, if it's less than zero the project should be rejected. The mathematical formula for finding the NPV is as follows:

$$NPV = \left(\frac{C_1}{(1+k)^1} + \frac{C_2}{(1+k)^2} + \frac{C3}{(1+k)^3} \ldots\ldots + \frac{C_n}{(1+k)^4} \right) - C$$

$$NPV = \sum_{t-1}^{n} \left(\frac{Ct}{(1+k)^t} - Co \right)$$

Where

C_1C_2…… represents net cash inflows in Year 1,2,…….

K = opportunity cost of capital. This is assumed known and constant.

C_o = initial cost of investment

N= expected useful life of investment

The logic behind the NPV method is that an entrepreneur will not invest N1.00 today unless he expects to receive back, something more than N1.00 in future i.e. he expects to earn a return on his investment put another way, if you desire to earn N1.00 in the future, you will invest something less than N1.00 today.

Discounted Cash Flow (DCF) OR Internal Rate Of Return (IRR)

The DCF rate of return is the rate of discount at which the NPV is zero. It is the rate of interest, which the future net cash flows of a project into equality with its capital cost. The NPV and the IRR methods are both known as discounting method because both of them take risk factors and the time value of money into consideration in determining the profitability of a project. The early difference between the NPV and IRR methods is that in the NPV method, the discount rate or cost of capital in specified and then NPV is found in the case of IRR method, the value of interest of discount rate which forces the NPV to equal zero ahs to be found such IRR (DCF) rate is usually found by trial and error i.e. you will continue to try different interest rates and find the NPV

until you arrive at the one that equates the combined resent value of cash flow to the project cost so that the NPV is zero or very close to zero. It is important to note that, under the IRR method, a project will be unaccepted if its rate of return does not exceed the cost of financing the project by a sufficient margin to compensate for the risk involved. The two discounting methods are superior to both the payback and accounting rate of return methods. This is because the discounting methods take the timing of cash flows and risk factors into consideration. The formula for calculating the IRR is

$$Co = \sum_{t-1}^{n} \frac{Ct}{(1+k)^t} =$$

$$Co = \sum_{t-1}^{n} \frac{Ct}{(1+k)^t} - Co = 0$$

This equation for IRR and NPV are the same with the difference being than in the NPV method, the required rate of return, it is assumed to be known and the net present value is found, while in the IRR method, the value of r has to be determined at which the NPV is zero. While the discount methods are superior to the first two methods, they too have their drawbacks with regard to NPV method, its major drawback is the necessity to decide in advance on the appropriate discount rate or cost of capital to be used. Cost of capital is a subject on which there is considerate controversy; especially where there are differences in degree of risk for different projects being appraisal with regards to IRR, a major drawback is that method involves an implicit assumption that all profit can be reinvested to yield the internal rate of return. In conclusion, we can say that the first two appraisal methods are acceptable where small – to – medium scale projects are involved. The payback can be used as an initial screening device. NPV is good for

ranking mutually exclusive projects, i.e. where the approval of one project means the rejection of the other. The IRR should be used where risk is an important consideration and finance is severely limited.

METHODOLOGY

Research methodology used to arrive at the research findings is next. It contains detailed explanation of the tasks and techniques used to collect and collate the research data. The general presentation is carried out under the following sub-headings namely research design, population of study, sample techniques, questionnaire design, data collection methods and techniques for data analysis.

Research Design

For the sake of this project work, the research has been designed using a case study of Nigerian Breweries Plc (MBPLC) and we are mostly concerned about their investment project and profitability for the periods between 1990 and 2001.

Population of Study

The Population Refers To The Entire Group Being Studied With Some Specific Information. The population is very important because it is the subject matter of an experiment. Because of certain inevitable circumstances, the population was limited to the staff of Nigeria Breweries Plc. The questionnaire was administered to 20 of the staff after seeking approval from accountant.

Sample and Sampling Techniques

Sampling implies taking a little from a population with the desire to know fully what the population contains. Igudia (2002:53). It is about finding out what parameters or characteristics of a population are, by looking at some members of the population. For the

purpose of this research, we limit our sample to the staff of Nigerian Breweries using the probability sampling techniques.

Questionnaire Design

The questionnaire is defined as a written or printed list of questions to be answered by a number of people. For this project, a total of twenty seven questions were asked in order to assist the researchers to measure the variables, which will help in answering the researcher's question and also to collect other related data.

Method of Data Collection

Data for the project is collected from two main sources and these include the primary data and the secondary Data. Primary data include all data gathered from direct observation of the event and responses to questions. Examples of primary sources of data are the questionnaire and personal interview. Secondary data include data collected from the primary source but which have further been refined. Examples are the company's annual report, journals, text-books, internet browsing etc. Data collected for this study are from questionnaire which is the primary source and the company annual report which is the secondary source.

Techniques for Data Analysis

Relevant data will be presented in tabular forms to allow for easy understanding and comprehension. The chi-square was employed to test the hypothesis formulated in the study.

Research instrument

This study employed a questionnaire eliciting the necessary information from the respondents. The questionnaire consist of two major parts, the bio data which consist of items relating to respondents personal

data and the second part addressed issues relating to the research problem. The question response-format of the items in part II was in form of five-point Likert scale type with items ranging from a region of strong agreements (SA), through a neutral zone, not sure to a region of strong disagreements (SD).

Data Presentation, Analysis and Discussion of Results

Part A: Respondents' Characteristics and Classifications

Analysis of the respondents' characteristics for the basic element for determining the reliability of the responses received.

Table 4.1: Official Status of Respondents

Official Status	Numbers of Respondents	Percentage (%)
Accountant	7	35
Supervisors	4	20
Manager	9	45
Total	**20**	**100**

Source: Field Survey, 2017

Table 4.1 shows that the largest respondents are the managers representing 45% of the respondents. The supervisors have the least percentage with 20% while the Accountant has 35%. This shows that most respondents are managers who are really in charge of investment decisions and profitability.

Table 4.2: Sex Distribution

Sex	Numbers of Respondents	Percentage (%)
Male	11	55
Female	9	45
Total	**20**	**100**

Source: Field Survey, 2017

Table 4.2 shows that 55% of respondents are male, while 45% of the respondents are females.

Table 4.3 Marital Status Of Respondents

Marital Status	Numbers of Respondents	Percentage (%)
Single	7	35
Married	13	65
Total	**20**	**100**

Source: Field Survey, 2017

As shown in the table 4.3 above, from the 20 copies of the questionnaire collected from respondents, 35% of the respondents are single while 65% of the respondents are married.

Table 4.4: Educational Qualification

Educational Qualification	Numbers of Respondents	Percentage (%)
Post Primary Qualification	6	30
First Degree Qualification	6	30
Post Graduate Degree Qualification	6	30
Professional Qualification (ICAN,IBIU)	2	10
Total	**20**	**100**

Source: Field Survey, 2017

As indicated above in table 4.4, six respondents representing 30% have post primary qualification, first

degree qualification, post graduate qualification, while two respondents representing 10% have professional qualification.

Table 4.5: Years of Experience

Years of Experience	**Numbers of Respondents**	**Percentage (%)**
0- 5 years	9	45
6-10 years	5	25
11-15 years	4	20
16and above	2	10
Total	**20**	**100**

Source: Field Survey, 2017

Table 4.5 shows that nine respondents representing 45% of the respondents have been in service for 5 years and less, while five respondents representing 25% of the respondents have been in service for 11-15 years, while two respondents representing 10% of the respondents have served for 16 years and above. This shows that majority of the respondents have a good number of years and experience to discuss the subject matter.

Part B: responses to question 1-10

Question 1- Investment decisions are made in your company following a stated procedure.

Table 4.6

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	13	65
Agree	4	20
Undecided	1	5
Disagree	2	10
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.6 above shows that 13 of the respondents (65%) strongly agree that investment decisions are made following a stated procedure, 4 of the respondents (20%) also agree, 1 respondent (5%) is undecided and 2 respondents (10%) disagreed. It means investment decisions are made by this company following a stated procedure.

Question 2- Investment decision should be made for the acquisition of fixed assets and replacement of plant and machinery.

Table 4.7

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	6	30
Agree	9	45
Undecided	-	-
Disagree	4	20
Strongly Disagree	1	5
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.3.2 above shows that 6 of the respondents (30%) strongly agree that investment decisions are made following a stated procedure, 9 of the respondents (45%) also agree, while 4 respondents (20%) disagree and 1 respondent (5%) strongly disagreed. It means there is need to acquire more fixed assets and also there should be a replacement of worn-out or outdated plant and machinery.

Question 3- Investment decisions should be made for the expansion of working capital

Table 4.8

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	4	20
Agree	9	45
Undecided	2	10
Disagree	2	10
Strongly Disagree	3	15
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.8 above shows that 4 respondents (20%) and 9 respondents (45%) agree that investment decision should be made for expansion of working capital, 2 respondents (10%) is undecided, 2 respondents (10%) disagreed while 3 respondents (15%) strongly disagreed. It means decision should be made for the expansion of working capital.

Question 4- The investment decision should be for diversification to other product lines.

Table 4.9

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	4	20
Agree	7	35
Undecided	-	-
Disagree	7	35
Strongly Disagree	2	10
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Results: Table 4.9 above shows that 4 respondents (20%) strongly agree that there should be diversification to other product lines, 7 respondents (35%) also agree with this, while 7 respondents (35%) disagreed and 2 respondents (10%) strongly disagreed with this question. It means Nigeria Breweries Plc will have to diversity to some other product lines perhaps in the future, but should concentrate on its present product lines for now.

Question 5- The Company needs to combine all the various types of investment decisions mentioned above

Table 4.10

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	19	95%
Agree	-	-
Undecided	1	5
Disagree	-	-
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Results: Table 4.10 above shows that 19 of the respondents (95%) strongly agree that there is need to combine the various investment decisions while 5% was undecided. It means there should be a combination of the various types of investment decisions.

Question 6- Over the last fifteen years, the investment decision made by this company has had a good/favourable effect on turnover/profit of the company.

Table 4.11

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	16	80
Agree	2	10
Undecided	1	5
Disagree	1	5
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Results: Table 4.11 above shows that 16 respondents (80%) had a favourable effect on turnover, 2 respondents (10%) agree with this, 1 respondent (5%) was undecided and 1 respondent (5%) also disagree with this question. Investment decision made by the company has a favourable effect on turnover of the company.

Question 7- Government regulation of the Brewery industry has affected the investment decision and consequently the profit made by your company.

Table 4.12

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	9	45
Agree	8	40
Undecided	1	5
Disagree	2	10
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.12 above shows that 9 respondents (45%) strongly agree that government regulation affect investment decisions and the profit of the company, 8 respondents (40%) also agree, 1 respondent (5%) was undecided and 2 respondents (10%) disagreed. It means government regulation of the Brewery industry affects the investment decision being made and likewise the profit.

Question 8- Government regulations of the Brewery Industry has led to the upward shift in cost of production factors and a cut down on the staff strength of the company.

Table 4.13

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	12	60
Agree	6	30
Undecided	2	10
Disagree	-	-
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.13 above shows that 12 respondents (60%) strongly agree that Government regulations of the Brewery Industry has led to the upward shift in cost of production factors and a cut down on the staff strength of the company, 6 respondents (30%) also agree with this, while 2 respondent (10%) were undecided. It means government regulation has brought about upward shift in production cost and a cut down on the staff strength of the company.

Question 9- Due to the scarcity of foreign exchange, you agree with the company's idea in investing on locally produced raw materials.

Table 4.14

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	12	60
Agree	8	40
Undecided	-	-
Disagree	-	-
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.14 above reveals that 12 respondents (60%) strongly agree and 8 respondents (40%) also agree with company's idea in investing on locally produced raw materials. It means the Company should invest on locally produced raw materials due to scarcity of foreign exchange.

Question 10- The Company's investment on locally produced raw materials had brought about operation at low capacity.

Table 4.15

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	1	5
Agree	8	40
Undecided	7	35
Disagree	3	15
Strongly Disagree	1	5
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.15 above reveals that 1 respondents (5%) strongly agree, 8 respondents (40%) also agree that investment on locally produced raw materials has brought about operation at low capacity, 7 respondent (35%) were undecided, 3 respondents (15%) disagreed while 1 respondent (5%) strongly disagreed. It means having the switch from foreign raw materials to locally produced raw materials brought about production at low capacity, but a large proportion of the respondents (35%) are undecided because the turnover of this company has actually increased.

Question 11- The CBN monetary guidelines on foreign exchange transaction have affected the decision usually made by your company.

Table 4.16

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	13	65
Agree	2	10
Undecided	2	10
Disagree	1	5
Strongly Disagree	2	10
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result:

Table 4.16 above shows that 13 respondents (65%) strongly agree The CBN monetary guidelines affected the company investment decision, 2 respondents (10%) also agree with this question, while 2 respondents (10%) were undecided, 5% disagreed and 10% strongly disagreed. It means Central Bank of Nigeria monetary guidelines on foreign exchange transaction affect the decisions made by the company.

Question 12- The investment decisions made are required to be disclosed.

Table 4.17

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	6	30
Agree	9	45
Undecided	1	5
Disagree	3	15
Strongly Disagree	1	5
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result:

Table 4.17 above reveal that 6 respondents (30%) strongly agree and 9 respondents (45%) also agree that investment decisions made are required to be disclosed 1 respondent (5%) was undecided, 3 respondents (15%) disagreed while 5% also strongly disagreed with this question. It means investment decisions are required to be disclosed

Question 13- Fund necessary to carry out investment projects should be generated from all the various sources available.

Table 4.18

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	12	60
Agree	8	40
Undecided	-	-
Disagree	-	-
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.18 above reveals that 12 respondents (60%) strongly agree while 8 respondents (40%) also agree that Fund should be sources from all available sources. It means funds for investment projects should be generated from various sources.

Question 14- Funds should be sourced from available sources depending on the cost involved.

Table 4.19

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	5	25
Agree	8	40
Undecided	6	30
Disagree	1	5
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.19 above shows that 5 respondents (25%) strongly agree and 8 respondents (40%) also agree that funds should be sourced from available sources depending on the cost, 6 respondents (30%) was undecided, while 1 respondent (5%) disagreed. It means funds should be sourced for investment project depends on the cost.

Question 15- The company use any or all the appraisal techniques available in appraising project (i.e. payback period, accounting rate or return, net present value, internal rate of return, etc.)

Table 4.20

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	12	60
Agree	6	30
Undecided	-	-
Disagree	-	-
Strongly Disagree	2	10
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.20 above shows that 12 respondents (60%) strongly agree and 6 respondents (30%) also agree that the company makes use of the appraisal techniques mentioned while 2 respondents (10%) strongly disagreed with this. It means company makes use of the various appraisal techniques in appraising projects.

Question 16- The Company should select just one or two of the methods of appraisal techniques and stick to them to determine the profitability of an investment.

Table 4.21

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	4	250
Agree	8	40
Undecided	1	5
Disagree	2	10
Strongly Disagree	5	25
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.21 above reveals that 4 respondents (20%) strongly agree and 8 respondents (40%) also agreed that the company should just adopt one or two of the appraisal techniques, 1 respondent (5%) was undecided, 2 respondent (10%) disagreed and 5 respondents (25%) strongly disagreed. It means the company must select and adopt some appraisal techniques for appraising their projects.

Question 17- The investment decision made by this company over the years has improved because of the appraisal techniques used.

Table 4.22

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	9	45
Agree	5	25
Undecided	3	15
Disagree	-	-
Strongly Disagree	3	15
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.22 above shows that 9 respondents (45%) strongly agree and 5 respondents (25%) also agree that the investment appraisal technique used improve the decisions made, while 3 respondents (15%) were undecided, and 3 respondents (15%) strongly disagreed with this. It means the appraisal techniques used to assess projects has improved investment decisions made over the years.

Question 18- The negative returns on some investment projects has hindered the development of other projects.

Table 4.23

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	-	-
Agree	18	90
Undecided	-	-
Disagree	2	10
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.23 above shows that 18 respondents (90%) agree that negative returns on projects can hinder the development of other projects while 2 respondents (10%) disagreed with this. It means the development of new project is hindered due to negative returns on past projects.

Question 19- The investment made by your company has promoted growth in the Nigeria economy as a whole.

Table 4.24

Options	**Number of Response**	**Percentage(%)**
Strongly Agree	6	30
Agree	12	60
Undecided	1	5
Disagree	1	5
Strongly Disagree	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.24 above shows that 6 respondents (30%) strongly agree and 12 respondents (60%) also agree that the company's investment has promoted growth in the Nigeria economy, 1 respondent (5%) were undecided, while 1 respondent (5%) disagreed with this. It means investment made by Nigeria Breweries Plc has promoted growth in the Nigeria economy, through payment of tax, creation of job opportunities etc.

Question 20- Which appraisal techniques is preferable to you?

Table 4.25

Options	**Number of Response**	**Percentage(%)**
Payback	4	20
ARR	4	20
IRR	5	25
NPV	7	35
Others	-	-
Total	**20**	**100**

Source: Field Survey, 2017

Interpretation of Result: Table 4.25 above reveal that 4 respondents representing 20% prefer the payback period, 4 respondents (20%) prefers the accounting rate of return (ARR), 5 respondents (IRR) and 7 respondents (35%) prefer the net profit value (NPV) method. It means that the Company uses both the traditional method of appraisal techniques and the discounting method of appraisal techniques.

Hypotheses Testing

For the purpose of testing the 1st hypothesis, question 15, 16, and 17 of the questionnaire were applied.

Hypothesis 1

H_o: There are no superior particular techniques for making the best investment decisions.

H_A: There are superior particular techniques for making the best investment decisions.

Bringing out the various options and responses from the questions and their percentage

Table 4.26

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	25	41.7
Agree	19	31.6
Undecided	4	6.7
Disagree	2	3.3
Strongly Disagree	10	16.7
Total	**60**	**100**

Source: Field Survey, 2017

Using the chi square formula

$$X^2 = \frac{(o_1-e_1)^2}{e_1} + \frac{(o_2-e_2)^2}{e_2} + - - - \frac{(o_k-e_k)^2}{e_k}$$

Where O= observed frequency

e= expected frequency

X^2 = chi square

From the table above,

Expected frequency = 60/5=12

Table 4.27

Options	**O_1**	**e_1**	**O_1-e_1**	**$(o_1-e_1)^2$**	**$(o_1-e_1)^{2/e1}$**
Strongly Agree	25	12	13	169	14.08
Agree	19	12	7	49	4.08
Undecided	4	12	-8	64	5.33
Disagree	2	12	-10	100	8.33
Strongly Disagree	10	12	-2	4	0.33
Total					**32.15**

Computed by the researcher

$X^2C = 32.15$

Approx. 32.2

Calculating the Degree of freedom

$d = (r-1)(c-1)$

where r= row, c= column

Δ= degree of freedom

$d = (5-1)(2-1)$

$= 4 \times 1 = 4$

$X^2t = \pm 9.49$

Therefore, $X^2C > X^2t$

Interpretation and design based on result: Based on the calculated chi square of 32.2 which is greater than the tabular value of chi square at 4 degree of freedom which is ±9.49, it is therefore suggested that we reject the null hypothesis which says there are no superior particular Techniques for making the best investment decision and accept the alternative that says there are superior particular techniques for making the best investment decision.

Hypothesis II

For the purpose of testing this hypothesis, question 6, 7 and 10 of the questionnaire were used.

Hypothesis II

H_o: The investment decision made cannot change the level of optimum profitability for the organization.

H_A: The investment decision made can change the level of optimum profitability for the organization. Bringing out the various options and responses from the questions and their percentages, we have

Table 4.27

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	26	43.3
Agree	18	30
Undecided	9	15
Disagree	6	10
Strongly Disagree	1	1.7
Total	**60**	**100**

Source: Field Survey, 2017

Using the chi square formula

$$X^2 = \frac{(o_1-e_1)^2}{e_1} + \frac{(o_2-e_2)^2}{e_2} + - - - \frac{(o_k-e_k)^2}{e_k}$$

Where O= observed frequency

e= expected frequency

X^2= chi square

From the table above,

Expected frequency (e)= 60/5 = 12

Table 4.27

Options	**O_1**	**e_1**	**O_1-e_1**	**$(o_1-e_1)^2$**	**$(o_1-e_1)^{2/e1}$**
Strongly Agree	26	12	14	196	16.33
Agree	18	12	6	36	3
Undecided	9	12	-3	9	0.75
Disagree	6	12	-6	36	3
Strongly Disagree	1	12	-11	121	10.08
Total					**33.16**

Computed by the researcher

$X^2C = 33.16$

Approx. 33.2

Calculating the Degree of freedom

$d = (r-1)(c-1)$

where r= row, c= column

d= degree of freedom

$d = (5-1)(2-1)$

$= 4 \times 1 = 4$

$X^2t = \pm 9.49$

Therefore, $X^2C > X^2t$

Interpretation and decision based on result: Based on the calculated chi-square of 33.2 which is greater than the tabular value of chi-square at 4 degree of freedom which is ±9.49, it is therefore suggested that we reject the hull hypothesis which says that investment decision made cannot change the level of optimum profitability and accept the alternative which says that the investment decision made can change the level of optimum profitability for the organization.

Hypothesis III

For the purpose of testing, this hypothesis, question 18 of the questionnaire was used.

Hypothesis III

H_0: Poor or negative on investment does not drastically reduce the rate of investments.

H_A: Poor or negative returns on investment drastically reduces the rate of investment.

Bringing out the various options and responses from the question and its percentage,

Table 4.28

Options	**Number of Response**	**Percentage (%)**
Strongly Agree	0	0
Agree	18	90
Undecided	0	0
Disagree	2	10
Strongly Disagree	0	0
Total	**20**	**100**

Source: Field Survey, 2017

Using the chi square formula

$$X^2 = \frac{(o_1-e_1)^2}{e_1} + \frac{(o_2-e_2)^2}{e_2} + - - - \frac{(o_k-e_k)^2}{e_k}$$

Where O= observed frequency
e= expected frequency
X^2= chi square
From the table above,
Expected frequency = (e)= 20

Table 4.29

Options	**O_1**	**e_1**	**O_1-e_1**	**$(o_1-e_1)^2$**	**$(o_1-e_1)^{2/e1}$**
Strongly Agree	0	4	-4	16	4
Agree	18	4	14	196	49
Undecided	0	4	-4	16	4
Disagree	2	4	-2	4	1
Strongly Disagree	0	4	-4	16	4
Total					**62**

Computed by the researcher

$X^2C = 62$

Approx. 32.2

Calculating the Degree of freedom

$d = (r-1)(c-1)$

where r= row, c= column

Δ= degree of freedom

$d = (5-1)(2-1)$

$= 4 \times 1 = 4$

$X^2t = \pm 9.49$

Therefore, $X^2C > X^2t$

Interpretation and design based on result: Based on the calculated chi square value of 62 which is greater than tabular value of chi square at 4 degree of freedom which is ±9.49, we therefore reject the null hypothesis which says that poor or negative returns on investment does not drastically reduce the rate of investment and accept the alternative which says that poor or negative returns on investment drastically reduces the rate of investment.

CONCLUSION AND RECOMMENDATION

CONCLUSION

Having painstakingly examined and analyzed the data in this research work, there are reasonable grounds on which conclusions was drawn. Firstly making the right investment decisions or carrying out what is known as capital budgeting has a great impact on the operations of a going concern. Secondly capital budgeting must necessarily involve the measurement of profitability or payroll from such investment projects. Thirdly there must be adequate financing for such projects to survive. In a nutshell, the main objective of capital budgeting is to improve the performance of firms and profitability of operations. Thus, the importance of making sound investment decisions to improve profitability of firms in

the Nigerian Brewery Industry cannot be overemphasized.

RECOMMENDATION

We hereby recommended that for continuous improvement of investment decisions and profitability for firms in the brewery industry. There should be adequate deliberation when making investment decision to ensure that objective and realistic decisions are taken since the future performance of the firm is largely dependent upon it. Since capital budgets include huge outlay of funds companies should ensure that investment decision on capital projects are reviewed from time to time to avoid over or under investment, in order to make maximum use of the scarce resources of the organization. For Nigerian Breweries to enhance competitive which is the hallmark of a thriving industry, the firms must determine and ensure that the right amount of investment expenditure is expended on projects in order to prevent failure that results from under or over investment. Without adequate finance, the investment decisions made and its profitability will be jeopardized. Thus, there is need for companies in the brewery industry to source for the best form of finance necessary to carry out capital projects. There must be proper timing for the purchase and acquisition of assets to enhance the quality of asset purchase by the firms. Employees at all levels must be properly trained and their health and safety guaranteed to ensure better productivity.

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