

Risk Analysis: A Panacea for Capital Budgeting Decisions

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Abstract: The purpose for every business undertaking is profit which serves as a return from investment activities. Profit creation in business will forever remain a mirriage if business activities are not properly anticipated, planned and coordinated. Risk analysis is one of the major means of projecting the future outcome of any business before a decision to embark on it or not can be taken, hence the reason for this study. In this study, the researcher observed the role that risk analysis played in investment decision making (capital Budgeting) in business organizations, determine the level of acceptability of risk analysis as investment decision tool, ascertain the impact financial risk analysis has in the evaluation of projects viability and investment portfolios selection, and make recommendations to stakeholders in the investment sector in Nigeria using Niger Mill Ltd, Calabar as a case study. The statistical instruments employed to collect data for this study are questionnaires and oral interviews which constitute the primary sources, while published textbooks, Journals and internet materials serve as the secondary sources of data. The sampling method used for this study is the stratified random sampling method, while chi-square (χ^2) statistical model was used to test the three hypotheses formulated for this work. Major findings made from this study are that; there is a high level of acceptability of risk analysis as a major tool for investment decision, staff of various organizations in Nigeria are well acquainted with the various methods of financial risk Analysis, there are enough trained hands in the country to handle risk analysis related issues, and the fact that there can be no meaningful investment decision without a proper financial risk analysis.

Keywords: Capital Budgeting, Risk Analysis, Investment decisions, Business organizations, Risk Analysis tool, investment projects viability, investment Proffolios Selection.

INTRODUCTION

In today's business environment, company executives often require participation in capital budgeting process as; sponsors, reviewers or approving authorities of investment decisions, in any of these capacities it is imperative that the executive understands many of the key aspects of capital budgeting such as; analysis of income statements, balance sheets, cash flows, appropriate discounting of cash flows, and most importantly, identification of risk. Daunfeldt and Fredrik (2014) are of the opinion that managements investment decision is pivotal for the success of any company, hence over the years, a number of capital budgeting methods have evolved. They concluded by saying that capital budgeting decisions are very

important for financial managers, since they determine the choice of investment projects that will affect company value.

Previous international and local researches on this topic indicated a preference for the internal rate of return (IRR) as a capital budgeting method over the net present value (NPV), and that risk incorporation was relatively rarely incorporated into the capital budgeting process (John Hall and Sollie Millard, 2010). According to Abdelsamad (1979), many a times the decisions regarding investments are irreversible in the sense that liquidation of a particular investment after a commitment, can be costly and/or devastating to the financial strength of the company. Thus, to ensure that investment decisions do not lead to negative

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consequences, company executives need to analyse the risks involved in every investment portfolio before accepting or rejecting it. It should be noted at this point that, of all the decisions that business executives must make, non is more challenging (and non has received more attention) than choosing alternative capital investment opportunities. What makes this kind of decisions so demanding of course, is not the problem of projecting return on investment under any given set of assumptions, rather the difficulty is in the assumptions and in their impact. Each assumption involves its own degree (often a high degree) of uncertainty; and taken together, these combined uncertainties can multiply into a total uncertainty of critical proportions. This is where the element of risk enters, and it is the evaluation of this risk that the executive has been able to get little help from currently available tools and techniques such as RISK ANALYSIS. Risk analysis therefore, is a mean by which a business executive can sharpen key capital investment decisions by providing him or her with a realistic measurement of the risks involved. Armed with this gauge which evaluates the risk at each possible level of return, he or she is then in a position to measure more knowledgeably, alternative courses of action against corporate objectives.

Today's business world is constantly changing. It is unpredictable, volatile, and seems to become more complex every day. By its very nature, it is fraught to risk. Historically, business executives have viewed risk as a necessary evil that should be minimized or mitigated wherever possible (Daunfeld and Fredrik, 2014).

Risk analysis or assessment provides a mechanism for identifying which risks represent opportunities and which represent potential pitfalls.

Certainly one way of looking at the viability of any investment project is by looking at the risk involved. Hence, the higher the risk, the higher the return and vice versa. Thus for a particular investment project to be accepted or rejected, business executives need to assess the risk involve in the project before taking such vital decision. This paper provide practical guidance in risk assessment to examine the benefits and opportunities available to organizations that systematically embed risk assessment into their existing business processes.

AIM AND OBJECTIVES

The main aim of this study is to determine the role of risk analysis in capital budgeting decision making in business organizations. Specifically, this aim will be achieved through the following objectives;

1. Determine the degree of acceptability of risk analysis by business organizations as a major tool for investment decisions making.

2. Determine the impact that financial risk analysis has in the evaluation of projects viability
3. Ascertain how suitable risk analysis is in the choice of investment projects.
4. Make recommendations (based on the findings of this study) to those involve in investment decision making on issues relating to investment decision and risks assessment.

Significance of the Study:

The outcome of this study is significant for various purposes;

First, the result of this study will be of immense benefits to many corporate organizations and business executives who view risk analysis or assessment as a veritable tool for investment decision making. Among other things, the outcome of the study will help them to understand;

1. The theoretical background underlying the subject matter of Risk Analysis and capital budgeting decision making.
2. The justification for risk analysis in capital budgeting decision.
3. Projects viability evaluation in capital budgeting
4. Investment projects selection in capital budgeting by means or risk analysis.

Secondly, the discoveries from the study will also serve as reference materials for future researchers on the same or similar subject matter relating to risk and capital budgeting decisions.

Review of Related Literature:

Conceptual Review:

Capital budgeting is all about investment decision making for the purpose of generating future earnings based on the discounting of future streams of cash flow (Horngren, 2006). To show reason why risk analysis is necessary in this type of financial investment decisions, efforts shall be made here to explain basic concept associated with the subject matter known as "RISK –RETURN-TRADE OFF" or "RISK REWARD CONCEPT" in order to establish the relationship between risk and business earning for proper understanding of the issues in this study.

Risk –Return Tradeoff Concept:

This is a principle which states that potential return rises with an increase in risk. According to Farog Malik (2015), Low levels of uncertainty (Low risk) are associated with low potential returns, whereas high levels of uncertainty (high – risk) are associated with high potential returns. Different researchers have conceptualized the risk- return relationship as being positive, negative, or curvilinear (Ananda, Ashay, & Peter, 2008). According to them, an important foundation of the risk- return relationship is the notion that managers are generally risk averse which is based

on notions of individual rationality and maximization of utility. Financial theory posits that risk averse behavior is manifest when low risk is associated with low return, as well as when high risk is rewarded by high return (Fisher & Hall, 1969). This risk averse outlook also assumes that for each strategic alternative, firms and managers will choose that alternative which maximizes utility (shoemaker, 1982).

In summary therefore, invested money can render higher profit only if it is subject to the possibility of being lost. Because of the risk-return tradeoff, we must be aware of our personal risk tolerance when choosing investment for our portfolio. It should be born in mind that taking on some risk is the price of achieving returns; therefore, if we want to make money, we can't cut out all risk.

The goal instead is to find an appropriate balance (i.e. one that generates some profit but still allows us to sleep at night).

Empirical Review:

Kenneth A. Froot (2007) attempts to provide a detailed framework for the pricing and allocation of risk by insurers and reinsurers. He employed secondary source of data which allowed him to build on the previous work by froot and stain (1998), when capital market imperfections are paramount, by adding imperfections that come from the product-market sensitivity of customers to risk, and by also adding features that allow for the pricing of a symmetric risk distribution as a key feature facing insurers and reinsurers.

The result of the study indicates that internal pricing for the firms studied differs from external pricing of risk in the capital market because of imperfections. The implication of this is that the model results are positive in the sense that insurers and reinsurers are in practice, concerned with risk management and capital allocation.

Sam Kabiru Saidu (2014) in his study titled "The problems and prospects of capital Budgeting Among Nigerian Firms: Literature Analysis" centrally focus on the identification and examination of the most present tools of analysis in Nigerian environment with the view of bringing to light their inherent strength and weakness. The study made use of secondary data by using both local and international literature on capital budgeting application as the main source. The result obtained from the study indicates that the discounted cash flow method is widely popular but grossly misapplied even in advanced economics owing to its technicality and lack of dedicated capital budgeting personnel. The implication of this result is that a more accurate tools or combine tools such as; the real – options along with the NPV, as well as the capital budgeting manual and post investment audit should be

entrenched in order to improve the techniques and process of complex investment decision.

Also, John Hall and Sallie Millard (2010) in their study titled "capital Budgeting practices used by selected listed South African Firms" investigated the application of capital budgeting techniques and the incorporation of risk into the capital budgeting process among a sample of South African Industrial firms listed on the JSE Securities Exchange for at least ten years. The study employs sampling method which aims at targeting large and well established listed firms. In other words, the study employs primary data method. The outcomes of the study indicate that the NPV is just as popular as, and sometimes more so than, the internal Rate of return (IRR). Furthermore, compared to previous studies, risk is incorporated into evaluating capital budgeting projects more often. Sensitivity analysis is the most popular method, but adjustments to cash flows and discount rate are becoming more popular. The implication of this result is that during the last decade, the use of non-financial criteria to accept or reject a project has also increased in South Africa.

Theoretical Framework:

This study is anchored on profit maximization theory popularly referred to as "DECISION THEORY OF PROFIT MAXIMIZATION OF FIRMS". It defines the prime aim of neoclassical theory of the firm as being profit optimization. It must acknowledge the empirical proof overwhelming points towards other objectives of firms such as; sales optimization, output optimization, contentment optimization and utility optimization among others. Profit maximization theory has its pioneer work attributed to the work of Joseph Haring and Gorman smith (1959) who stresses the theory to be pure profits which are the excess above the average cost of production (i.e. The amount left with the entrepreneur after he has made payments to all factors of production, including wages of management. It is a residual income over and above his normal profits to enable him achieve organizational objectives. Under this, the firm maximizes its profits when it satisfies the two rules:

MC =MR (i.e. Marginal cost = Marginal Revenue
MC curve cuts the MR from below.

Its major assumptions include;

1. The objective of the firm is to maximize its profits where profits are the difference between the firm's revenues and costs.
2. The entrepreneur is the sole owner of the firm.
3. Tastes and habits of consumers are given and constant.
4. Techniques of production are given.
5. The firm produces a single, perfectly divisible and standardized commodity.
6. The firm has complete knowledge about the amount of output which can be sold at each price.

7. The firm's own demands and costs are known with certainty.
8. New firms can enter the industry only in the long-run. Entry of firms in the short run is not possible.
9. The firm maximizes its profits over some time-horizon.
10. Profits are maximized both in the short-run and the long-run.

RESEARCH METHODOLOGY

Scope and Delimitation of the Study:

This study is aimed at determining the role of risk analysis in capital budgeting decision making in business organizations with Niger Mill Calabar as the case study. This in effect means that all data were collected and analyzed from Niger Mill, Calabar only. Data obtained and analyzed are limited to only those that are concerned with the issue of risk analysis and capital budgeting in Niger Mill, Calabar only for the period understudied. The result obtained from this study shall be generalized to cover other firms of similar nature and location.

Limitation of the Study:

This study was limited by certain factors such as; funding, duration of the study as well as the attitude of some of the staff of the company who probably saw this study as an investigation that may bring bad name to their company. Since the study was purely an academic exercise, it was not sponsored by any organization and so the entire study depended solely on the lean resources of the researcher. Some staff of the company in possession of some vital information needed by the researcher refused to release them for fear of being punished by management for such act. Consequently, some of them assumed an uncooperating posture with the researcher throughout the entire study period. Be it as it may, the researcher is convinced that the results obtained from this study represent the true position of things in the company and by extension, other firms alike, with regard to issues relating to risk analysis and capital budgeting decision making.

Research hypotheses

To help the researcher to arrive at some useful conclusions about the issue understudy, three basic hypotheses were developed from the specific objectives of the study for testing in this study. These hypotheses are as stated here under in their null forms;

- Business organizations have not accepted Risk Analysis as a veritable tool for capital Budgeting decision making.
- Financial Risk Analysis has no impact on projects viability evaluation process.
- Financial Risk Analysis is not suitable for investment projects selection.

- These statistical hypotheses were tested by means of chi-square test method. This is denoted by χ^2 and deals with the observed and expected frequencies. The formula for its computation is as stated here under;

$$\chi^2 = \frac{(fo-fe)^2}{\sum fe}$$

Where;

fo= observed frequencies

fe= expected frequencies

The observed frequencies (fo) in this study represent the raw and direct responses received from the respondents either through their entries in the questionnaire or direct face to face interviews, while the expected frequencies (fe) are computed from the observed data using

The formula;

$$\frac{CT \times RT}{GT}$$

Where;

CT= Column total

RT= Row total

GT= Grand total

The degree of freedom (df) used is determined by the formula;

$$(C-I)(R-I)$$

Where;

C= Number of Columns

R= Number of Rows

I= Constant

Decision Criterion:

Accept the null hypothesis (Ho) if $CV < TV$, or Accept the Alternative hypothesis (H_1) if $CV > TV$

Where;

CV= Calculated value of χ^2

TV= Table value of χ^2

However, these statistical hypotheses can equally be tested by means of "Regression Analysis" to find out the perception of the business community on risk analysis and capital budgeting, and whether risk analysis has any impact on projects viability evaluation and investment projects selection.

A simple regression model is denoted as;

$$Y = b_0 + b_1x_i \dots \dots \dots t_u$$

Where;

Y= the dependent variable

X= the explanatory variable

bi= the slope measuring the amount of change in Y associated with a unit change in X.

U= the random disturbance term.

For our purpose in this study, risk analysis represents the independent variable, while capital budgeting decision (which stand a change of being improved or not) is the dependent or explanatory variable.

Data Method:

By definition, a research is said to be a scientific step by step investigation which is aimed at solving an identified problem (Rozaki, 2004). Therefore, such investigations must embrace all aspects of research methodology. To achieve the objectives of this study, primary sources of data were used to gather all relevant information required for this work through the instrumentality of questionnaires and oral interviews. This method enable the researcher to put across to respondents all the research questions and other enquiries for their responses which were very vital for the purpose of this study. Some of the data gathered from this process were quantified, analyzed and used in providing answers to the research questions and also in testing the research hypotheses formulated for this study.

Another approach adopted in this study is the use of statistical hypotheses employed to scientifically determine the impact of risk analysis on Capital

budgeting decision. This is so because it is not enough to base our investigation only on raw responses from the respondents whether verbal or written. This approach will give the study a scientific backing, hence the test of statistical significance that goes with this method, and which empowers the researcher to discuss the problem objectively once he discountenances the influence of error.

Aside from the primary data, secondary date were also obtained from related textbooks, journal articles and publications on the internet for the purpose of compiling this research work. The entire staff and management of Niger Mill Calabar numbering up to one thousand (1,000) form the population of this study out of which a sample size of fifty (50), comprising ten (10) top management staff, sixteen (16) lower management staff and twenty –four (24) senior staff, were randomly selected and used for this study. This make the sample size 5% of the entire population which is a fair representative of the entire population size. The choice of a mix population and sample size of both primary and secondary sources was born out of the desire to make this study an effective exercise. This practice is supported by the assertion that effective research papers often use a mix of both primary and secondary sources just as teachers and professors will often specify a mix between the two types (Rozakis, 2004).

DATA ANALYSIS AND RESULTS

In this section, a presentation and analysis of the primary data collected in the course of this study are made and results appropriately interpreted and discussed for proper understanding of the end users of the outcome of this work.

TABLE 1: Perception Of Risk Analysis By The Business Community: Responses

PERCEPTIONS	SA		A		U		D		SD		TOTAL	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1. Risk Analysis is general accepted within the business community as a veritable tool for investment decision making.	20	40	15	30	5	10	7	14	3	6	50	100
2. Financial risk analysis has great impact on projects viability evaluation process	15	30	25	50	2	4	3	6	5	10	50	100
3. Financial risk analysis is suitable for investment projects selection.	30	60	10	20	3	6	4	8	3	6	50	100
4. Staff of various organization within the business community are acquainted with the various methods of financial Risk Analysis	10	20	15	30	10	20	8	16	7	14	50	100
5. There is a general believe that capital budgeting decision is impossible without financial Risk Analysis	30	60	10	20	0	0	5	10	5	10	50	100
6. There is enough trained hands to handle Financial Risk Analysis in business organizations in Nigeria	15	30	12	24	5	10	11	22	7	14	50	100

Source: Field Survey 2016

TABLE 2: Test of Hypothesis (1) Using Chi-Square Model

RESPONSES	FREQ	SA	A	U	D	SD	TOTAL
Top Management	fo (fe)	5 (4)	3 (3)	1 (1)	1 (1.4)	0 (0.6)	10 (10)
Lower Management	fo (fe)	7 (6.4)	5 (4.8)	2 (1.6)	1 (2.24)	1 (0.96)	16 (16)
Senior Staff	Fo (fe)	8 (9.6)	7 (7.2)	2 (2.4)	5 (3.36)	2 (1.44)	24 (24)
TOTAL		20	15	5	7	3	50

Source: Compiled from table 1 using responses to item No. 1 only

fo	fe	fo - fe	(fo - fe) ²	(fo - fe) ² /fe (ie.x ²)
5	4	1	1	0.25
3	3	0	0	0
1	1	0	0	0
1	1.4	-0.4	0.16	0.114
0	0.6	-0.6	0.36	0.6
7	6.4	0.6	0.36	0.056
5	4.8	0.2	0.04	0.008
2	1.6	0.4	0.16	0.1
1	2.24	-1.24	1.5376	0.686
1	0.96	0.04	0.0016	0.002
8	9.6	-1.6	2.56	0.267
7	7.2	-0.2	0.04	0.006
2	2.4	-0.4	0.16	0.067
5	3.36	1.64	2.690	0.800
2	1.44	0.56	0.3136	0.218
$\therefore \sum x^2$		\rightarrow		3.174

Note:

- Tests are conducted at 5% significance level
 - Degree of freedom = (C-1)(R-1)
 - = (5-1)(3-1) = (4)(2)
- $\therefore df = 8$

Now: At 5% level of significance and 8 degree of freedom, the table value of X² is 2.733.

The result obtained from table 1 indicates that there is a high level of acceptability with regard to the use of financial risk analysis as a major tool for investment decision. The frequency scores show a total of 35 (70%) respondents on the affirmative. Also the fact that Financial Risk analysis is very suitable for projects viability determination and investment projects viability selection, were also revealed by the schedule. This can be seen clearly in table 1 as the frequency scores indicate 40 (80%) respondents for each of them on the affirmative out of a total sample of 50 respondents studied.

Other facts exposed by the same schedule are that;

1. Staff of various business organizations is well acquainted with the various methods of Financial Risk Analysis. This fact was agreed to by 25 (50%) respondents as against 15 (30%) respondents who disagreed.

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2. Generally people within the business community believe that there could hardly be any meaningful capital budgeting decision without Financial Risk Analysis. This also was confirmed by 40 (80%) respondents as shown in the said table.
3. There are enough trained hands in Nigeria to handle Financial Risk analysis related issues in our business organizations.
4. On the whole, it can be said from the findings that there is a positive perception of Financial Risk analysis in the Nigeria business environment.

Test of Hypotheses:

Hypothesis I:

- Ho:Business organizations have not accepted Risk Analysis as a veritable tool for capital budgeting decision making
- H₁:Business organizations have accepted Risk Analysis as a veritable tool for capital Budgeting decision making.

Note:

Test is based on responses to research question 1 by the respondents as contained in table 1.

Thus for our hypothesis 1, since the calculated χ^2 is 3.174 it falls outside the range of feasible solutions, hence the alternative hypothesis is hereby accepted that **“Business Organizations have accepted Risk Analysis as a veritable tool for capital budgeting decision making”**. This position further confirm the outcome of our earlier analysis based on responses received from respondents regarding item No 1 in table 1.

Hypothesis 2:

H₀: Financial Risk Analysis has no impact on projects viability evaluation process.

H₁: Financial Risk Analysis has impact on project viability evaluation process

NOTE: As is the case with Hypothesis I forgone, the test of hypothesis 2 is based on respondents’ responses to research question 2 in table 1.

TABLE 3: Test of Hypothesis (2) Using Chi-Square Model At 5% Level of Significance and 8 Degree of Freedom.

RESPONSES	FREQ	SA	A	U	D	SD	TOTAL
Top Management	fo	4	5	0	1	0	10
	(fe)	(3)	(5)	(0.4)	(0.6)	(1)	(10)
Lower Management	fo	6	7	1	1	1	16
	(fe)	(4.8)	(8)	(0.64)	(0.96)	(1.6)	(16)
Senior Staff	Fo	5	13	1	1	4	24
	(fe)	(7.2)	(12)	(0.96)	(1.44)	(2.4)	(24)
TOTAL		15	25	2	3	5	50

Source: Compiled from table 1 using responses to item No. 2 only.

fo	fe	fo – fe	(fo – fe) ²	(fo – fe) ² /fe
4	3	1	1	0.333
5	5	0	0	0
0	0.4	-0.4	0.16	0.4
1	0.6	0.4	0.16	0.267
0	1	-1	1	1
6	4.8	1.2	1.44	0.3
7	8	-1	1	0.125
1	0.64	0.36	0.1296	0.203
1	0.96	0.04	0.0016	0.002
1	1.6	-0.6	0.36	0.225
5	7.2	-2.2	4.84	0.672
13	12	1	1	0.083
1	0.96	0.04	0.0016	0.002
1	1.44	-0.44	0.1936	0.134
4	2.4	1.6	2.56	1.067
$\therefore \sum \chi^2$		→		4.813

Again, the test of hypothesis 2 shows that the calculated X^2 is greater than

The critical table of χ^2 (ie.4.813 \gg 2. 733). Hence, the null hypothesis is rejected in favor of the alternative hypothesis which states that **“Financial Risk Analysis has impact on projects viability evaluation process”**.

Hypothesis 3:

H₀: Financial Risk Analysis is not suitable for investment projects selection.

H₁: Financial Risk Analysis is suitable for investment projects selection.

TABLE 3: Test of Hypothesis (3):

RESPONSES	FREQ	SA	A	U	D	SD	TOTAL
Top Management	fo	6	2	0	1	1	10
	(fe)	(6)	(2)	(0.6)	(0.8)	(0.6)	(10)
Lower Management	fo	8	4	1	2	1	16
	(fe)	(9.6)	(3.2)	(0.96)	(1.28)	(0.96)	(16)
Senior Staff	fo	16	4	2	1	1	24
	(fe)	(14.4)	(4.8)	(1.44)	(1.92)	(1.44)	(24)
TOTAL		30	10	3	4	3	50

Source: Compiled from table 1 using responses to item No. 3 only.

fo	fe	fo - fe	(fo - fe) ²	(fo - fe) ² /fe
6	6	0	0	0
2	2	0	0	0
0	0.6	-0.6	0.36	0.6
1	0.8	0.2	0.4	0.05
1	0.6	0.4	0.16	0.267
8	9.6	-1.6	2.56	0.267
4	3.2	0.8	0.64	0.2
1	0.96	0.04	0.0016	0.002
2	1.28	0.72	0.5184	0.405
1	0.96	0.04	0.0016	0.002
16	14.4	1.6	2.56	0.178
4	4.8	-0.8	0.64	0.133
2	1.44	0.56	0.3136	0.218
1	1.92	-0.92	0.8464	0.441
1	1.44	-0.44	0.1936	0.134
$\therefore \sum x^2$		\rightarrow		2.897

The above result indicates that the calculated x^2 is greater than the table value of X^2 at 5% significant level and 8 degree of freedom.

(ie. $2.897 \gg 2.733$). This means that the alternative hypothesis in this case has to be accepted while the null hypothesis rejected. Thus by implication, the result shows that “Financial Risk Analysis is very suitable for investment projects selection”. This result is also in conformity with the earlier result obtained through frequency scores analysis of responses from respondents to item No.3 in table 1.

DISCUSSION OF FINDINGS

One of the major findings of this study is that there is a high level of acceptability of financial risk analysis as a major tool for investment decision making. This fact is affirmed by both the frequency scores of 35 (70%) responses from respondents to research question 1 in table 1 and the outcome of the test of hypothesis 1.

Also revealed by the work is the fact that financial Risk Analysis is not only suitable for projects viability analysis but also investment projects selection. These two facts are clearly confirmed by the separate responses of respondents to research questions 2 and 3 which show 40(80%) and 40 (80%) respectively in the affirmative as can be seen in table 1 and further corroborated by the results obtained from the tests of both hypotheses 1 and 2 in the study.

Other outstanding exposition of the study are the fact that;

Staff of various business organizations are well acquainted with the various methods of Risk Analysis.

There are enough capable trained hands in Nigeria to handle financial Risk Analysis related issues in our companies and other business organizations.

There is a general believes within the entire Nigeria business community that capital budgeting decision cannot be effectively taken without recur to investment risk analysis.

Sequel to all the findings made here in this study, it will be safe to authoritatively say that there is generally a positive perception of financial risk analysis in the entire business environment of Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study on Risk Analysis has proved beyond reasonable doubt that financial Risk Analysis is indeed a panacea for capital Budgeting decision. This fact is confirmed by the results obtained from both the frequency scores analysis and the hypotheses tests earlier conducted in this work.

Given this assertion, the great questions in the minds of many are;

1. Why are there still many incidents of business failure and poor performance in the country today if there are enough hands in the country to handle Risk Analysis related issues in our business environment?
2. Does this outcome of unfavorable business performances suggest compromise between the operators of businesses in our environment and the risk analysts or could it be that the whole concept is mis-applied?
3. Are we even sure that all our business men are determining the fate of their ventures through the instrumentality of Risk Analysis before taking them up?
4. What model of risk analysis tool do operators of business in Nigeria use when determining the viability of the various options or alternative opportunities available to them in or order to ensure right choice of projects to be undertaken?

5. Are the models used by our business operators suitable for our kind of business environment?
6. Are the government agents doing enough to compel every businessman (through appropriate legislations) to base his/her business decision on appropriate risk analysis?

Certainly, the answers to these and several other questions on the subject matter will best explain the reason(s) for our business miscarriage in the country today. This of course falls outside the scope of this study and so will form the focus of further researches in this area by future interested researchers. The researcher hereby concludes that the study indicated that no meaningful investment decision can be made without accurate/efficient risk analysis, but that the degree of success of this whole process will depend to a greater extent, on the efficiency of the analyst, the method(s) used, and the suitability of such method(s) to the business environment concerned.

Recommendations:

Arising from the findings made in this study the researcher hereby recommends as follows;

1. That government at all levels should take necessary steps to ensure that the operators of businesses in Nigeria base their future business decisions on appropriate risk analysis suitable to our business environment.
2. That a technical study group should be commissioned by government of the day to investigate and come out with a risk analysis model suitable for Nigeria business environment.
3. Efforts should be intensified to train more experts on the acceptable model for our business environment who will make sure that the right analyses are made at all times to support the take off of any business in future in our environment.
4. An institution should be established to regulate and monitor the outcome of such analyses to ensure that no compromise or dirty deals exist between business analysts and prospective venturers in order to forestall future poor performances of business in Nigeria.
5. Finally, more researchers should be sponsored in future to look at other related areas of this subject matter not covered by the scope of this study.

REFERENCES

1. Mukherji, A., Desai, A. B., & Wright, P. (2008). A contingent relationship between risk and return: toward a behavioral model of decision making. *Journal of Behavioral and Applied Management*, 9(3), 240.
2. Daunfeldt, S. O., & Hartwig, F. (2014). What determines the use of capital budgeting methods?: Evidence from Swedish listed companies. *Journal of Finance and Economics*, 2(4), 101-112.
3. Malik, F. (2015). Revisiting the relationship between risk and return. *Review of Quantitative Finance and Accounting*, 44(1), 25-40.
4. Fisher, I. N., & Hall, G. R. (1969). Risk and corporate rates of return. *The Quarterly Journal of Economics*, (83), 79-92.
5. Horngren, C. T., Foster, G., Datar, S. M., Rajan, M., Ittner, C., & Baldwin, A. A. (2010). Cost accounting: A managerial emphasis. *Issues in Accounting Education*, 25(4), 789-790.
6. Hall, J., & Millard, S. (2010). Capital budgeting practices used by selected listed South African firms. *South African Journal of Economic and Management Sciences*, 13(1), 85-97.
7. Froot, K. A., & Stein, J. C. (1998). Risk management, capital budgeting, and capital structure policy for financial institutions: an integrated approach. *Journal of financial economics*, 47(1), 55-82.
8. Froot, K. A., & Stein, J. C. (1998). A new approach to capital budgeting for financial institutions. *Journal of Applied Corporate Finance*, 11(2), 59-69.
9. Froot, K. A. (2007). Risk management, capital budgeting, and capital structure policy for insurers and reinsurers. *Journal of risk and Insurance*, 74(2), 273-299.
10. Chadwell-Hatfield, P., Goitein, B., Horvath, P., & Webster, A. (1997). Financial criteria, capital budgeting techniques, and risk analysis of manufacturing firms. *Journal of Applied Business Research (JABR)*, 13(1), 95-104.
11. Robert, B., Lan, M., et al., (2009). A new approach to Risk Management: the implication of E3, *Palgrave Journal of Risk Management*, 11 (1), PP. 30-43.
12. Lunkes, R. J., Ripoll-Feliu, V., Giner-Fillol, A., & da Rosa, F. S. (2015). Capital budgeting practices: A comparative study between a port company in Brazil and in Spain. *Journal of Public Administration and Policy Research*, 7(3), 39-49.
13. Rozaki, L. E. (2004). Research Methods, *New York, Marie Butter Knight*.
14. Saidu, S. K. (2014). Problems & prospect of capital budgeting among Nigerian firms: Literature analysis. *Research Journal of Finance and Accounting*, 5 (4), 72-75.
15. Schoemaker, P. J. (1982). The expected utility model: Its variants, purposes, evidence and limitations. *Journal of economic literature*, 529-563.
16. Ho, S. S., & Pike, R. H. (1992). Adoption of probabilistic risk analysis in capital budgeting and corporate investment. *Journal of Business Finance & Accounting*, 19(3), 387-405.