

Developing Small and Medium Size Enterprises (SMES) in the South West Region of Cameroon: Problems and Perspectives.

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Abstract

This paper examines the role, constraints and prospects of SMEs sub-sector of the industrial sector in the South West Region of Cameroon. The paper utilizes the primary data where questionnaires were administered to some 80 randomly selected respondents. The data were later analyzed using simple descriptive statistics of the chi-square test. The results show that SMEs have significantly over the years contributed to the growth and development of the South West Region. However, some constraints to sustainable industrial development in the Region were also identified; they include, inadequate existing infrastructural facilities like energy, water, good roads, corruption, lack of adequate communication, funding, lack of qualified human resource to man the enterprises, lack of adequate communication and lack of adequate incentives among others. Hence the need for government to improve on the provision of these fundamental supporting facilities to enhance the performance of the SMEs in the growth of the South West Region and possibly assuring the sustainable development of Cameroon at large.

Keywords: Development of SMEs, problem, prospects, Cameroon

Introduction

World-wide, Small and Medium Size Enterprises (SMEs) are generally considered as engine of growth to any economy. History has revealed that industrialization begins with Small scale and metamorphoses to a larger corporate and later multinational corporation. They have for over the ages contributed significantly to the sustainable growth and development of economies especially the LDCs as they accommodate larger proportion of the labour employment. This is particularly true with developing economies like Cameroon which are hastily downsizing the SOEs i.e. state owned enterprises. According to Tchoungan, Penda, Douanjni and Numba, (1999) “a successful industrialisation campaign must have an indigenous base and expansion of the SMEs sectors would develop entrepreneurial and managerial skills as a basis for efficient investment in the management of larger industries. SMEs are noted for their immense contributions to the nation's development process and as engine of economic growth (Taga, Dongmo, Manga, 1999; and Jensen 1976). They are furthermore promoted as a critical segment of the manufacturing sub-sector, effective strategy for tackling unemployment, diversifying output and achieving trade balance of payment, manageable number of workers and reduced capital intensiveness. The small business as economic catalysts also serve as seedbeds for entrepreneurs, contribute to more balanced development and rapidly facilitate the process of adjustment in large enterprises, by emerging as competent suppliers of products and services previously not available in the market place. These contributions, thus explain why government and international agencies forever continuously mobilize efforts towards the realization of sustainable industrial growth and the creation of mass employment through the rapid growth and development of SMEs (Nanna, 2003). As observed by the Minister of Small and Medium Size Enterprises to the South West Region in a message at the Seminar on Small and Medium Size Enterprises organized by the Ministry of Small and Medium Size Enterprise in collaboration with Women Education and Empowerment Initiative (WEEIN) and the Association of Cameroon Female Entrepreneurs, (08 February 2014). “Apart from providing

employment and income for the bulk of the population (60% - 70%) as well as the primary sources of new jobs, Small and Medium Size Enterprises have been acknowledged as the critical breathing and nurturing grounds for domestic entrepreneurial capacities, technical skills, technological innovation and managerial competencies for private sector development” - the Minister of SMEs February 2014.

Globally, however, the success of SMEs is anchored on the provision of certain basic requisites inclusively; the guaranteed and viable credit facilities, enabling environment, supportive infrastructural facilities, communication, energy supply and effective transport network and friendly tax system. As argued by the World Bank (1995), what is required for the growth of SMEs is an investment friendly environment. Inadequate infrastructure is one of the major problems that militate against SMEs, past governments efforts at promoting SMEs through various schemes were thwarted by absence of supportive infrastructure especially the question of reliable and constant energy as well as factors of production- Land, Labor and capital for production to take place.

In Cameroon, just like most LDCs the poor performance of SMEs can be attributed to some of these factors; poor credit backing, poor infrastructure and encouraging policies. SMEs mostly lack fund and have been discriminated against by financial institutions because of high risk associated with financing them. Also, the introduced land use charged taxes and worsening security situation in some regions eg. the North of Cameroon, absence of long term funds from financial institutions, high taxes and unsustainable interest rate and forceful closure of some business premises.

From the above however, it is not to say efforts have not been made to develop SMEs in Cameroon. BEAC successfully persuaded the bankers committee in 2000s to agree that each bank should set aside 10% of its annual pretax profit for equity investment in SMEs. This is because of the persistent decline in the performance of the industrial sector and with the realization of the fact that Small and Medium Size Enterprises hold the key to the revival of the manufacturing sector and the economy. BEAC also regulates the escalation of interest rate to stimulate investment in small scale businesses.

Through barriers, SMEs are protected to a larger degree, special banks such as the SMEs Bank of FEICOM, and micro finance institutions are encouraged and monitored. Land reform is strictly an issue on the present agenda on agricultural reforms.

Despite the interest and tremendous concern on SMEs their expected contribution to sustainable economic growth and development is still lagging behind. It is therefore pertinent to investigate the obstacle that inhibit veritable success in SMEs, and further elucidate their contribution to economic growth and development in Cameroon. It is against this background that this study seeks to investigate and highlight the problems and prospects of Small and Medium Size Enterprises in Cameroon with the view to make suggestions/recommendations on how success can be attained in this sector. The study therefore seeks to achieve the following objectives:

To identify the role of SMEs in the economic growth of South West Region; to assess the performance of SMEs in their responsibility as engine of growth to all economies; to identify the problems militating against the growth of Small and Medium Size Enterprises in the South West Region and to offer a lasting solution to the identified problems facing the SMEs in South West Region.

The Business Environment in Cameroon

Weak infrastructure and weak institutions, United Nations Economic Commission For Africa (2003, 2007) And Gauthier, Soloaga and Tybout (2002), The business environment in Cameroun is Considered as scarce in resources and characterized by shortage of strategic resources, human and Financial capital. In addition, the African Development Bank, AFDB, (1997) reported that the development of the private sector in Central Africa in general and in Cameroon in particular has been hindered by three major categories of hurdles – complexity, dynamism and munificence of the environment (Luo and Peng, 1997). The complexity of the organizational environment in Cameroon is due mainly to political and legal factors. For example, the legal environment and the regulation are very complex. According to the United Nation Economic Commission for Africa, (UNECCA) (2003), the complexity is

due to the fact that the laws are generally vague and usually referring back to enforcement government decrees for their application which most often are late, contradictory to the laws to which they referred. In the same vein, the World Bank (2006) indicated that 77% to 92% of managers and directors of manufacturing firms surveyed in Cameroon consider that the interpretation and application of the regulations by civil servants are unpredictable, and the courts are unfair, partial, and corrupted. According to Tchoungang et al. (1999), Penda, Douajni, and Noumba (1999) the laws in Cameroon are often vague and interpretations decrees always administrative and often in contradiction with very laws they are supposed to clarify themselves, and they conclude that there is gross inefficient administration of the laws by the officers i.e. civil servants in charge; and that the functioning of the judiciary system is very slow and very costly with uncertain outcomes (Babisskana et.al(2000).

They all also reported the ineffectiveness of the inducements instrument for fostering investments at all levels with SMEs inclusive. Also, the geo – strategic position of Cameroon at the heart of Africa; its diversified physical, ecological, and climatic environment, its three different and conflicting colonial experiences(Germans, British and French); its multi – ethnic community(around 200) ; and the inflation of political parties constitute the elements of complexity of the social, political, economic and business environment in Cameroon. The socio – cultural environment is purported to include education, health, women condition, art and culture. Analysing the social environment of Cameroon, Tanga et al, Dongmo, doution, Ngah, and Manga (1999) reported that there are several hurdles constraining businesses at all levels – education, weakness in the legal frameworks as well as failures in its implementation; limited quantitative and qualitative resources, and the inadequacy between training and employment. The health system is also characterized by low access by populations to health care (Taga et al. 1999). Another feature of the social landscape reported by Taga et al (1999) is the low level of female education notably in the northern regions. The country is composed of more than 200 ethnics groups and national languages with relatively

high numbers of tribal groups. This also represent additional complexity facing businesses, (Fomekong, et.al 1999). Meanwhile, the economic environment is heavily affected by the role of government. Babissakana, et.al (1999) reported several handicaps that limit the efficiency of the public power in Cameroon. The first, handicap is the lack of clarification of the role of the government with respect to the role of the market. The second is that the transfer of power of resources allocation to the market is not effective. The third, is the inadequacy of the methods used to manage the economy which are more suited to managing administered economies than market economies, (Jenson, and Meckling 1976; Smith, 1993; Mbohwa, and Fukuda 2002; Hillary 1997, 2000).

The fourth, is the insufficiency of skills and managerial competencies capable of formulating and implementing the economic action of the state in a context of generalized competition; and the last, is the loss of autonomy in favour of international financial institutions as the World Bank and International Monetary Fund. Mballa, Momo, and Babissakana (1999) assessed the investment and the competitiveness of the economy of Cameroon at the micro and macro levels and reported that the weakness of the industrial sector losing two points of the Gross Domestic Product (GDP) per year since (1999 – 2000s), they in addition reported a low increase in the Foreign Direct Investment (FDI) as percentage of the GDP (2,7%) from 1995 to 1999 and 2014 -2015 hence, they all noted that the mobilization of the savings for investment is limited with the dearth of medium to long – term loan. In addition, entrepreneurship is not recognized and valued neither by the government, nor by the whole society. And finally, the authors reported that the level of corruption is very high in the country. Meanwhile, the blockage in the political relations has favored social schemes and has abundantly nourished the restoring of ethnic identities, (Fomekong et al, 1999; Youndo, et al, 2000; Aust, 1990; Cateora, 1996; and Dollinger, 2003).

In considering the technological environment for doing business, Fomekong et al (1998), Efedene, and Nzepa (1999) reported that the technological environment in Cameroon is characterized by (i) a maladapted training policy, (ii) an incoherent research policy, (iii) an

illusory policy of technology transfer, and (iv) an underdeveloped telecommunication infrastructure.

In considering a training policy, Fomekong et al (1999) contended that the late creation of technical secondary schools i.e. beginning in 1970s has not fundamentally changed the image of a technical training reserved to the under skilled rejected by the general secondary school system. The investment in human resources is very low. According to the authors, whereas the world trend is towards four accountants or engineers for 10,000 inhabitants in Cameroon, the Gross insufficiency of financial resources for research and development (R&D), and the absence of organized approach gave way to absolute inconsistency between the results of the R&D with the appropriate level of resources (Fomekong et al 1999). According to the authors, all attempts at technology transfer have remained tributary to the resource of foreign experts, without implication of local inputs, (Nana, Efedene, Lentchou, and Chaungueu, 1999).

They further reported that the industrial sector in Cameroon focused essentially as the import-substitution units, leaving R & D needs to the parent companies or to external partners. Moreover, the industrial sector in Cameroon had been limiting its sources on technology to Europe, and less to certain emerging economies with more appropriate technologies (Fomekong et al (1999). They added that the telecommunication network is suffering from several years of negligence and perverse administrative behavior. The national territory experiences very low telephone coverage rate, and concluded that there is great lateness in the development of the high technology in Cameroon that influences SMEs and businesses can be captured through the presentation of its economic evolution and description of the main segment, referring to Cogneau, Herrera, Monchy & Roubaud (2000); they include:

- I. The first period qualified by authors as a “good start” range from (1965 to 1985). The growth of the economy was driven by the exportation of farm products, and later by crude oils from (1977 to 1981). The public income was invested mainly in public investment and used to increase the standard of living of civil servants (Barney, 1991; Babissakana, Momo and Mballa

- 1999).
- ii. The second period as from (1985 to 1993) qualified by authors as The "crisis period " or the "fading hope period". The cause of the crisis was the falling prices of crude oils and other farm crops, the modification of exchange rate between the U.S dollar and the local currency (Gauthier, Solange, Manol and Tybout 1997)
 - iii. The third period from 1993 to date, was the adjustment period.

To face economic crisis, the government negotiated with the international financial institutions, the IMF and World Bank for solutions to the crisis. And the measures agreed were macro-economic reforms, the stabilization, the structural adjustment program (SAPs) from June 1995 included:

(a) reduce public expenses, (b) improve tax recovery , (c) restructure the public sector, (d) liberalization of the trade regime, (e) restructuring and privatization of SOEs, and (f) restructuring the banking sector latterly, from (1997-2000) saw the second phase of the structural adjustment program (SAP II), with objective to restore macro-economic equilibrium globally. Other aims were: (a) redefine economic goals of the state, and stimulate the effectiveness of the public sector (b) restructuring agricultural, energy and transportation sectors (c) fight against poverty, (d) exploitation of natural resources, and (e) follow ups of SOEs and debt recoveries.

The successful implementation of SAPII in October 2000 enabled Cameroon to reach the decision point of the Highly Indebted Poor Country Initiative (HIPIC); and thereby qualified her for the (SAPIII) by 2001 and over till April 2006 when Cameroon reached the completion point of HIPIC and by which she qualified for additional assistance from the multilateral Debt Relief Initiative (MDRI) and from Bilateral creditors belonging to the Paris Club group of countries, (Paul 2006; World Bank 1996,1997; IMF1986, 1995, 2000-2007; BAD 1997, 2003-2007; GICAM, 2011). However, the environment of business, the governance and anticorruption efforts are still grossly insufficient as such, Cameroon as expected by the global financial institutions, and players still has a long way to go to create an environment such as ideal for investment (all types): governance, strong

institutions and reduced corruption (World Bank, 2006). In this direction, the New Priority of Cameroun is the fight against poverty i.e. according to the Millennium Development Goals (MDG). The First Full Poverty Reduction Strategy, Program (PRSP) was finalized by the government in 2003 (World Bank, 2006). According to the World Bank (2006), the strategy frame for poverty reduction has seven pillars (i) promoting a stable and growth enhancing macro-economic environments (ii) strengthening growth through economies diversification, (iii) Empowering the private sector as the main engine of growth and partner in delivering social services (iv) developing basic infrastructure and natural resources in an environmentally sustainable manner, (v) accelerating regional integration within the Central Africa Economic and Monetary Community (CEMAC) frame world; (vi) strengthening human resource development and bolstering social service, and (vii) improving governance, including in public administration and the legal and judicial systems (Gauthier (1997; Gauthier, Sloaga & Tybout 2002; Kemal, 2000; Fambon, 2006; and Freeman, 1994).

Literature Review

The concept and definition of Small and Medium Size Enterprises is dynamic in character and varies with time and also varies among institutions and countries. Notwithstanding, the basic definitional parameter are the same. They include, Number of Employees, Asset base and Turnover. Hence current definitions are based on a mix of the above parameters.

A Small and Medium Scale Enterprises is an organization whose investments (include land and working capital) do not exceed 100,000,000 CFA (BEAC, 1998). Small and Medium Enterprise is also seen as investment working capital of between 1,000,000 CFA and 200,000,000 CFA excluding land but including working capital, while cottage and micro industries with an asset not exceeding 500,000,000 CFA excluding land but including working capital. A cursory glance at the structure of SMEs in Cameroon reveals that 50% are engaged in distributive trade, 10% in manufacturing, and 30% in agriculture and the rest 10% services. A special feature of Cameroon SMEs is that distributive trade component

generally considered more commercially viable than the manufacturing component hence they attract more funding from banks and other financial institutions (Ibru, 2004)

SMEs may respond flexibly under difficult and changing conditions as they depend less on infrastructure in relation to larger enterprises and their typical intensity allow product lines and inputs to be changed at relatively low cost. stated that, it is evident around the world that small and medium scale enterprises provide employment opportunities per unit of capital invested and aiding the development of local technology.

The globalization process has fostered the integration of small and medium scale enterprise to the global market through networking and sub-contracting with the multinational companies and the development of collective efficiency in the industrial estate. While reflecting the global trend in “down sizing of enterprises” multinational enterprises have continued to shift that focus of activity away from the giant vertically integrated corporations which dominated productive activities in the 1950s and 1960s towards small industries to gain competitive advantage.

Nana (2003) acknowledged that, small and medium scale enterprises are considered generally as the bedrock of the industrial development of any country. Apart from numerous goods produced by SMEs, they provide veritable means of large scale employment, as they are usually labour intensive. They also provide training grounds, for entrepreneur even as they generally rely more on the use of local materials. Moreover, if well managed, the SMEs can gradually transform into the giant corporations of tomorrow. These contributions thus explain why Governments and International Agencies efforts towards the realization of sustainable industrial growth and development of small scale enterprises. SMIEIS (2001) stated that 10% of profit before tax has been set aside and some N4.3 Billion has been disbursed. Many banks have either set up SMIEIS unit in-house or set up venture, capital subsidiaries (singly or jointly with other banks) to handle investment of their SMIEIS funds.

METHODOLOGY

Hypotheses

Though the study sought to achieve several specific objectives but only hypotheses that centered on the broad objective were tested.

Ho₁: Small and Medium Size Enterprise have not contributed significantly to the economic growth of the South West Region.

Ho₂: Small and Medium Size Enterprise have not encountered significant problems in the South West Region.

This section outlines the methodology employed in this study. The data was sourced primarily through administration of questionnaires and oral interview to 100 respondents from various staff and customers of SMEs in South West Region. Considering that the population size covers the entire SMEs and their customers in South West Region and thus too large for our coverage, we resorted to the use of simple random sampling techniques to gather our data. The obtained data was analyzed with simple percentage and tables. Chi-square technique was used in testing the hypothesis. The chi-square is given as:

$$\chi^2 = \sum \frac{(F_o - F_e)^2}{F_e}$$

Where; Fo = Observed frequency
Fe = Expected frequency

The degree of freedom was obtained using the following formula:

$$Df = (R-1)(K-1),$$

Where;
R = Row, K = Column

Data Presentation and Analysis

The sourced data is presented in table and analyzed in this section. The data were collected from the 100 questionnaires administered to the twenty one local councils of South West out of which (80) were completed and returned. The analysis however is based on the eighty successfully returned questionnaires. Interpretation of the result was also made at the end of each table.

Question 1: Do you think SMEs contribute to the economic growth of South West Region?

Table 1: Contribution of SMEs to the Economic Growth of South West Region

RESPONSES	FREQUENCY	PERCENTAGE
YES	67	83.75
NO	13	16.25
TOTAL	80	100

Source: Field Survey, (2008)

Table 2: How SMEs improved Economic growth and development of the region

	YES	NO	TOTAL
A	60 (75%)	20 (25%)	80
B	52 (65%)	28 (35%)	80
C	75 (94%)	5 (6%)	80
D	62 (78%)	18 (22%)	80
E	50 (63%)	30 (37%)	80

Source: Field Survey, (2008)

Test of Hypothesis 1

H_{01} : Small and Medium Scale Enterprise

has not contributed significantly to the economic growth of South West Region.

Respondents	A	B	C	D	E	TOTAL
YES	60	52	75	62	50	299
NO	20	28	5	18	30	101
TOTAL	80	80	80	80	80	400

Source: Field Survey, (2008)

CHI-SQUARE COMPUTATION

Fo	Fe	Fo-Fe	(Fo-Fe) ²	$\frac{(Fo-Fe)^2}{Fe}$
60	59.8	0.2	0.04	0.001
20	20.2	-0.2	0.04	0.002
52	59.8	-7.8	60.84	1.017
28	20.2	7.8	60.84	3.012
75	59.8	15.2	231.04	3.864
5	20.2	-15.2	231.04	11.438
62	59.8	2.2	4.84	0.081
18	20.2	-2.2	4.84	0.240
50	59.8	-9.8	96.04	1.606
30	20.2	9.8	96.04	4.754
TOTAL				26.014

The above table gives the calculated X^2 as 26.01 while at 5% level of significance and degree of freedom of 4; the critical value of the X^2 is obtained as 9.488. Since the calculated value is greater than the critical value, we conclude that the null hypothesis should be rejected, meaning that the SMEs in South West Region have greatly contributed to the economic growth of the region.

Problems Encountered by SMEs in South West Region

- Do you think poor standard of infrastructure poses a serious threat to SMEs in the region?
- Do you think the funding process in the state discourages growth in SMEs?
- Is the shortage of power and effective transport network a problem to SMEs in this region?

- d. Has the issue of distress financial institution affected the growth and development of SMEs in South West Region?
- e. Is financial indiscipline and poor record keeping a problem in running SMEs?
- f. Is collateral on credit from the financial institutions too stringent and constitute a problem to SMEs in the region?
- g. Do you agree with the view that most goods and services produced by SMEs have low patronage consequent upon low quality?
- h. Are you of the opinion that SMEs have restricted access to loans?
- i. Do you think SMEs in the region give priority to profit at the expense of quality?

Table 3: Identified Problems Facing SMEs in South West Region

	YES	NO	TOTAL
A	70 (88%)	10 (12%)	80
B	61 (76%)	39 (24%)	80
C	64 (80%)	36 (20%)	80
D	40 (50%)	40 (50%)	80
E	50 (63%)	30 (37%)	80
F	71 (89%)	8 (11%)	80
G	60 (75%)	20 (25%)	80
H	64 (80%)	16 (20%)	80
I	74 (93%)	6 (7%)	80

Source: Field Survey, (2008)

The table 3 above has shown the respondents' view on what have been the problems facing SMEs in South West Region. The question on the infrastructural buoyancy received negative response with 70%. This shows that poor standard of infrastructure is seriously a problem to the growth of SMEs in the state. Other factors such as the funding process, shortage of power supply, inadequate appraisal on the firms' performance, lack of strategic policy design and

adherence, stringent protocols in sourcing credit facilities and low product quality have also been confirmed by the respondents as the critical factors that threaten the full capacity utilization of SMEs in South West Region.

H₀₂: Their responsibility as engine of economic growth Small and Medium Scale Enterprises have not encountered any problems in the South West Region

Respondents	A	B	C	D	E	F	G	H	I	TOTAL
YES	70	61	64	40	50	71	60	64	74	554
NO	10	19	16	40	30	9	20	16	6	166
TOTAL	80	80	80	80	80	80	80	80	80	720

Source: Field Survey, (2008)

Chi-Square Computations

Fo	Fe	Fo-Fe	(Fo-Fe) ²	$\frac{(Fo-Fe)^2}{Fe}$
70	61.56	8.44	71.23	1.16
10	18.44	-8.44	71.23	3.86
61	61.56	-0.56	0.31	0.01
19	18.44	0.56	0.31	0.02
64	61.56	2.44	5.95	0.10
16	18.44	-2.44	5.95	0.10
40	61.56	-21.44	5.95	0.32
40	18.44	21.56	464.83	25.21
50	61.56	-11.56	133.63	2.17
30	18.44	11.56	133.63	7.25
71	61.56	9.44	89.11	1.45
9	18.44	-9.44	89.11	4.83
60	61.56	-1.56	2.43	0.04
20	18.44	1.56	2.43	0.13
64	61.56	2.44	5.95	0.10
16	18.44	-2.44	5.95	0.32
74	61.56	12.44	154.75	2.51
6	18.44	-12.44	154.75	8.39
TOTAL				65.42

Degree of Freedom $df (R-1) (K-1) = 8$, At 0.05 level of significance the critical value is 15.507. The calculated X^2 from the table is 65.42. From the decision rule since the calculated value of the Chi-square have fallen on the rejection region we therefore reject the null hypothesis and conclude that SMEs faces numerous problems.

Solutions to the Identified Problems of SMEs in South West Region

Questions

- Do you think an improvement in power supply standard will improve the present condition of out SMEs?
- Do you think that avoiding compromise to quality standard of goods and services will

help SMEs boost consumer confidence and patronage?

- Would less stringent collateral to credit facilities attract investors to raise enough capital for investment into the SMEs sector?
- Do you think exercising an average protection against foreign and unequal competition will help improve SMEs performance?
- Do you think ensuring neutral and strategic policy framework will help development in SMEs?
- Do you think maintaining constant performance appraisal will help SMEs improve their standard and status?

Table 4: Suggested ways of Solving SMEs Problems

	YES	NO	TOTAL
A	76 (95%)	4 (5%)	80
B	67 (84%)	13 (16%)	80
C	60 (75%)	20 (25%)	80
D	65 (81%)	15 (19%)	80
E	78 (98%)	2 (2%)	80
F	55 (69%)	25 (31%)	80

Source: Field Survey, (2008)

The response above shows the suggested ways of tackling problems hindering the growth of SMEs in the South West Region. All the suggestions have received positive response from the respondents. This is especially in the issue ensuring power supply and adherence to strategic policy design which received 95% and 98% support respectively. Others such as the need to improve product quality, lessened stringent protocols in sourcing capital, enjoying supportive protection, strict adherence to government policy designs have all been supported by most of the respondents. This is a clear indication that for SMEs to accomplish their entrusted responsibility of ensuring economic success a collective responsibility in meeting the above factors becomes inevitable.

Summary of Major Findings

The growth and development of economies is conditional on the performance of Small and Medium Scale Enterprises. Going by the evidences above, it is quite logical to attribute the present industrial and economic status of South West Region to the condition of SMEs in the state. The result of this research work as established by respondents revealed that SMEs serve as engine of economic growth and contribute a lot in terms of labour supply, provision of variety of product, breeding ground for capacity building and specialization, maintaining balance of trade and surviving the domestic markets. However, this is not to say that the sector is performing up to expectation, the findings here confirmed that the enterprises are facing a lot of challenges that inhibit full capacity utilization. This include the problem of ineffective infrastructural facilities, financial indiscipline, epileptic power supply, poor transport network, constraint access to credit facilities and disregard to policy framework. These problems called for strict compliance to policy framework, elimination of bottleneck of credit facilities, avoiding compromise to product quality standard.

In the promotion of the sub-sector, government, private sector and financial system must jointly ensure that the sub sector is given all the support it needs to play its role effectively.

Recommendations

The importance of the small and medium scale enterprises sector in the economic growth and development of low income earners has been widely recognized and cannot be over emphasized. This sector has the potential for the growth of employment and incomes as well as alleviating urban and rural poverty. In order for the sector to flourish, the playing field has to be leveled in terms of policies and strategies that are advanced for stakeholders in order to turn around the dwindling fortunes of the small and medium scale enterprises sector.

- I. Government should remove all industrial constraints on SMEs and expedite action on establishment of the clusters and industrial parks. These critical ingredients to increasing the participation of the private sector will be targeted at “growth poles”.
- ii. Government should provide an appropriate institutional support that can undertake studies aimed at attracting foreign investors, scanning overseas market and monitoring development that have implications for the sectors. Small and Medium Enterprises development agency will be provided infrastructure and executive capacity, and in collaboration with relevant agencies at state and local government levels, play the role of promoter, facilitator and coordinator of all SMEs policies of government.
- iii. Government should strengthen the legal and institutional framework for the operation of micro finance institutions including stream lining of the operational guidelines and tax incentives for SMEs. This will include explicit recognition of the informal sector and the resolution of the constraints to implementation of the small and medium industries equity scheme (SMEIS) and design of special incentive targeted at investors who would wholly specialize in exporting to foreign markets.
- iv. Promote the production of qualitative goods and services to facilitate a competitive export oriented manufacturing sector.
- v. Implementation of government procurement policy that patronizes locally manufactured goods and services especially that of SMEs.

- vi. Seminars and workshops should be organized by small and medium scale enterprises development agency of the agency responsible for the development of Small and Medium Scale Enterprises (SMEs).
- vii. Land use act should be enforced by government to favor investors anywhere they intend investing.
- viii. Investors should be provided loans at an affordable interest rate to avoid stringent actions by financial institutions.
- ix. Government should go into partnership with donors for assistance or support, for the effective growth of SMEs.

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Entrepreneurial Development: A Strategy Influencing Rural Economic Growth

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pp 13-21

Abstract

The study examined the factors influencing rural economic growth in Ibule, Ondo State, Nigeria. Simple random sampling technique was adopted to collect primary data through questionnaire administration on household heads in the community. A total of 132 household heads were sampled for the purpose of the study, 76 questionnaires were returned. Factor analysis was employed as a technique for data analysis. Findings showed that agricultural development (84.8%), industrialisation (78.2%) and health condition of the rural dwellers (65.6%) were the most significant factors that can influence rural economic growth. The study concludes that agricultural development, industrialisation and health of the rural dwellers serve as the most significant factors contributing to rural economic growth in the study area with the highest value of the extracted factors (84.8%, 78.2% and 65.6% respectively). The study recommended that people in the community especially the youth are expected to participate in agricultural development, these factors are likely to encourage participatory rural entrepreneurship development and employment promotion.

Keywords: strategy, entrepreneurship, rural development, transformation, economic growth

Introduction

Entrepreneurship is the primary engine that propels economic growth through the combination of existing resources with innovative ideas and adding value by commercializing new products, creating of new jobs, and building of new firms (Henderson 2006). It can also be referred to as a process by which individual's employed organized efforts in pursuing opportunities, creating values and growth by fulfilling the wants and needs through innovation and uniqueness.

The benefits of entrepreneurship to any nation cannot be over emphasised as it provide new jobs, diversify investment portfolios, generates higher incomes and increased wealth (Audretsch and Thurik 2004). The spatial benefits from entrepreneurial activity are highly varied. Hence, the link between new ideas and economic growth suggested a higher level of entrepreneurial activity with strong economic growth. Researchers perceived economic conditions as a cause for entrepreneurship because it is the major force of economic development in many rural areas which come along with change, innovation and production services (Markley, 2005). Entrepreneurship is therefore one of the activities which can resolve challenges such as unemployment, low income level, lack of economic diversity amongst others in rural areas and will in turn has positive impacts on other aspects of rural dwellers (Faraji, Hassanali, Seyed, Sajasi, Sadeghlou and Shahdadi, 2011).

Despite the importance of entrepreneurship and its contributions to rural economic growth, limited studies have been carried out in Nigeria, which is a gap the study intends to fill. This study aims to investigate the contributions of entrepreneurship to rural economic growth in Nigeria by employing Ibule, a rural community in Ondo State, Nigeria as a representative case.

Literature Review

Importance of Entrepreneurship to Economic Growth

The importance of entrepreneurship in economic growth has been documented by researchers Henderson (2006) recognized that entrepreneurship supports economic growth by turning knowledge into new products, new jobs, and new firms. The finding of his study also

shows that there exist strong relationship between the entrepreneurship and economic growth at various levels of economic aggregation. Robinson, Wylin and Ralph (2004) reported that small enterprise development is purported to be more sustainable as compared to traditional business attraction approaches that tend to be more costly, considering how much of the local tax base communities are expected to give away over a period of time. Due to the multiplier effects that enhanced small enterprise development, the most apparent contribution of entrepreneurship to increased community welfare is the creation of new jobs and the generation of additional income as new firms kick start while existing ones grow (Audretsch and Thurik, 2004).

Robinson, Wylin and Ralph (2004) argued that many development scholars and professionals believed that supporting small businesses within low-income communities is a plausible development strategy to combat poverty. Entrepreneurship is thus critical to the maintenance of a healthy economy and if economic development is to be effective, new businesses that focus on low-income areas must be started through local initiatives. Kolawole and Torimiro (2005) concluded that entrepreneurship development program include various components such as financial assistance, training, technology, marketing, general research services, institutional brokering and raw materials and other inputs. Government and community people must, therefore, work in partnership to realize the goal of sustainable rural entrepreneurship development and employment promotion for grassroots transformation.

The factors which are likely to encourage participatory rural entrepreneurship development and employment promotion are agriculture and small-scale industries which are primary employers of labour in rural communities (Anriquez and Stamoulis 2007). It has, therefore, been acknowledged that rural setting is an arena of many industries, which could be developed to contribute significantly to the national economy, just as rural people are more frequently self-employed or family workers than urban people (Ahmmad, Fauziah, Yusoff, and Ahmad 2011). Sidhu and Kaur (2006) asserted that entrepreneurship is the only solution to the growing employment among rural

youth. Women entrepreneurship helps to generate employment for number of people within their own social system. This is more beneficial for women in rural areas as it enable them to add to the family income while taking care of their farm, home and livestock centred tasks. Rural women possess abundant resources to take up an enterprise. She has the benefit of easy availability of farm and livestock based raw material and other resources. Hence they can effectively undertake both production and processing oriented enterprises. To be a successful entrepreneur, women should possess certain fundamental qualities beside the support of the family and government organizations. Entrepreneurial development among rural women helps to enhance their person capabilities but also decision-making status in the family and society as a whole.

Sathiabama (2010) opined that development of the society is directly related with the Income generation capacity of its members with agriculture, and the key income generation activity the entrepreneurship on farm and home can directly affect the income of a major chunk of our population. The growth of modernisation processes such as industrialization, technical change; urbanization and migration further encourage it. Sathiabama (2010) asserted that small scale entrepreneurship is one of the solutions to the problems of unemployment and proper utilization of both human and non-human resources and improving the living condition of the poor masses. Lashgarara, Roshaniand Najafabadi (2011) argued that one of the most important economic development objectives in any communities is employment, and its most important mechanism is the entrepreneurship. Entrepreneurship reduces unemployment, increases the people's productivity, resource, and the community's income.

Rural Development

Rural development is essentially a part of structural transformation characterized by diversification of the economy away from agriculture. Rural poverty and hunger will be alleviated through the development of rural areas. Nwachukwu and Ezeh (2007) have revealed that rural development is a veritable tool, for fighting poverty and achieving

economic prosperity, at the grassroots level. The concept of rural development embraced by most countries connotes a process through which rural poverty is alleviated by sustained increases in the productivity and incomes of low – income workers and households. Nwachukwu and Ezeh (2007) stated that rural development connotes a sustained improvement in the quality of life of the rural people. It implies consistency in approach in which micro and macro-economic, social, political, cultural and technological variables are engineered, combined and implemented as an organic and dynamic whole for the benefit of the people.

Anríquez and Stamoulis (2007) asserted that since the 1970's rural development, as a concept has been highly associated with the promotion of standards of living and as a precondition for reducing rural poverty. This pro-poor bias was born from the understanding that, particularly in societies where wealth is extremely concentrated, mean incomes could grow without improving the well-being of the most dispossessed. On the other hand, the focus on human capital formation, through the provision of social services in rural areas has been constantly stressed since the 1970's. Originally, this focus stemmed from social equity considerations: it is fair that all of society's members have access to services like education and health. Atchoarena and Holmes (2004) stated that in the late 1990's new thinking on rural development stressed concepts and approaches such as community participation, empowerment, and sustainable livelihoods in the broader context of poverty reduction. The development community is currently renewing its efforts towards rural development with fresh insights into the key factors that militate against rural development and poverty reduction.

Methodology

Ibule is a traditional community like other communities in Ifedore local government, Ondo State of Nigeria. It lies approximately on latitude 7° 18' 0" North of the equator and longitude 5° 7' 0" East of the Greenwich Meridan. It is located about two kilometres away from Akure the capital city of Ondo State. Most of inhabitants of the community engage in agricultural activities and small scale business that are likely to encourage participatory rural entrepreneurship

development and employment promotion which are primary employers of labour in rural communities

The target population of this study consist of household heads in Ibule community in Ondo State. The rationale for choice this set of responded stems from the fact that they are assumed to be the breadwinners and decision makers for their home. The sample frame for this study as obtained from the field count by the research assistant employed for the data

collection process is 279 and the application of Kothari (2004) formula gives a sample size of 132. Structured questionnaires were then administered through simple random sampling technique. The data collected was analysed using SPSS 21.0 and the results are presented using statistical tools. Ten variables were identified as factors influencing rural economic growth. The variables and their associated codes are presented in Table 1:

Table 1: Operationalization of variables

Variables	Code
Small scale enterprises development	SME
Industrialisation	IND
Proper utilisation of the resources	RES
Increased people productivity	IPP
Social empowerment	SOP
Education	EDU
Health of the rural dwellers	HET
Good road	GRD
Community participation	COM
Agriculture development	AGR

Source: Author's coding, 2015

Factor analysis was employed as techniques for the data analysis. The main purpose of using factor analysis is to determine the number of common factors that can adequately describe the correlations between observed variables, and estimating how each factor is related to each observed variable by estimating the factor loadings (Oyesiku, 2000).

Results and discussion

Based on the questionnaires administration, out of the 132 questionnaires administered only 76 were returned and this depicts that 58% response rate was achieved. This high response rate was achievable due to the effort of the

research assistants that followed up on the respondents. The retrieved questionnaires were then analysed towards achieving the goal of the research.

To evaluate the suitability of the data, internal consistency checks were conducted using Kaiser-Meyer-Olkin (KMO) measure of sample adequacy and Bartlett test of sphericity (See Table 2). This test is employed based on the requirement of factor analysis prior to factor extraction as suggested by Williams *et al* (2010). The importance of the test is to determine if the samples were adequate to allow the use of factor analysis.

Table 2: KMO and Bartlett's Test of sampling

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.738
Bartlett's Test of Sphericity	Approx. Chi-Square	202.073
	Df	45
	Sig.	.000

Source: Author's Computation, 2015

The result in Table 2 shows a sampling adequacy value of 0.738, which was significant at $p < 0.01$, indicating that the data obtained is adequate and suitable for the analysis. This is in agreement with Cornish (2007) that a KMO result should be above 0.700 for it to be sufficiently correlated. Therefore, with a value above this threshold, the data are reliable for the use of factor analysis.

The factors informing the choice of independent variable for economic development are naturally dependent on one another by a

degree of relationship each variable attracted to them. The correlation matrix (Table 3) of the variables under investigation reveals the nature of the relationship between the variables subjected for investigation in this study. It is observed that the correlation between all the variables shows positive and negative relationships. This implies that any effect on one of the positive factor will produce a corresponding measure of effect on the other and vice versa.

Table 3: Correlation matrix of factors influencing rural economic development

	<i>SME</i>	<i>IND</i>	<i>RES</i>	<i>TPP</i>	<i>SOP</i>	<i>EDU</i>	<i>HET</i>	<i>GRD</i>	<i>COM</i>	<i>AGR</i>
<i>SME</i>	1.000									
<i>IND</i>	.458	1.000								
<i>RES</i>	-.295	.213	1.000							
<i>IPP</i>	.015	.412	.181	1.000						
<i>SOP</i>	-.288	-.436	-.352	-.377	1.000					
<i>EDU</i>	-.038	.180	.144	.299	-.089	1.000				
<i>HET</i>	-.226	-.191	-.319	-.063	.196	.316	1.000			
<i>GRD</i>	.070	-.029	-.078	.082	-.040	-.050	-.061	1.000		
<i>COM</i>	-.121	.255	.162	.257	.061	.113	.035	-.109	1.000	
<i>AGR</i>	-.565	-.046	.411	.049	.171	.226	.209	-.237	.384	1.000

Source: Author's Computation, 2015.

Table 3 shows that the strongest correlated pair of variables are industrialisation and Small scale enterprises development ($r = 0.458$). This is obvious in that industry development will tend to enhance the development of small scale enterprises. Increased productivity was also found to have significant correlation with industrialisation ($r = 0.412$). Indeed, industrialisation and productivity has a close relationship together because the development of any industry depends on the level of its production. Therefore, industrialisation with high level of production will lead to the development of the area. Similarly, agricultural development has significant correlation ($r = 0.411$) with proper utilisation of the resources. This suggests the need for agriculture in resource production. Another pair of variables that are strongly correlated is agricultural development

and community participation ($r = 0.384$). This may be due to the fact that Agriculture is one of the primary employers of labour in rural communities

The results of the analysis in Table 4 showing the communalities estimates of the variables after extraction indicates that very little of the variance of the 'increased people productivity, social empowerment, education, good road and community participation with 35.0%, 40.2%, 29.4%, 3.9% and 19.8% respectively can contribute little to the most significant factors that influence rural economic growth'. However, the other variables with extracted values greater than 0.500 shows percentage variance that is high, and suggest the variables can be attributed to the most significant factors.

Table 4: Communalities of economic growth in the study area

	Initial	Extraction
Small scale enterprises development	.602	.628
Industrialisation	.515	.647
Proper utilisation of the resources	.560	.778
Increased people productivity	.369	.350
Social empowerment	.440	.402
Education	.281	.294
Health of the rural dwellers	.394	.481
Good road	.076	.039
Community participation	.275	.198
Agricultural development	.551	.726

Extraction Method: Principal Axis Factoring.

Source: Author's Computation, 2015

An examination of Table 5 indicates that the percentage of the total variance accounted for by the factor analysis shows four factors with eigen values greater than 1. The percentage of total variance explained indicates that factor one has an eigen value of 2.321 accounting for 23.22%, factor two reveals an eigen value of 2.230 thereby accounting for 22.30%. Similarly factor three reveals an eigen value of 1.361 thereby accounting for 13.61% and factor four reveals an eigen value of 1.055 accounting for 10.55% of the total variance explained by the analysis. The significance of these factor loadings provides a clear indication of the underlining dimensions of

the choice variables that have been reduced to four major factors with eigen values greater than 1.00. These are the dominant loadings for each factor. These eigen values are the proportion of the total variation in the data set that is explained or at best summarized by a factor. The cumulative percentage of variance revealed that the four factors alone account for 69.68%, which indicates the proportion of the total variation that is explained by these four factors. Meanwhile, the fifty factor accounts for very small proportion of the total variation of the explained variables of 9.49% as corroborated by Table 5.

Table 5: Total Variance of rural economic development in the study area

Factor	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.321	23.215	23.215	1.861	18.606	18.606
2	2.230	22.304	45.518	1.809	18.093	36.699
3	1.361	13.610	59.129	.872	8.719	45.418
4	1.055	10.548	69.677			
5	.949	9.492	79.169			
6	.633	6.331	85.499			
7	.564	5.639	91.139			
8	.405	4.055	95.193			
9	.276	2.761	97.955			
10	.205	2.045	100.000			

Extraction Method: Principal Axis Factoring.

Source: Author's Computation, 2015

According to Laudau and Everitt (2004), attempt must be made to identify the variables that can be used to explain the underlining dimensions of the issue under consideration. However, the communality in Table 4 alone cannot be relied upon to identify the factors that lead to rural economic growth in the study area; therefore, some method of factor rotation (varimax) is employed. The purpose is to maximize the variance of the squared loadings to produce orthogonal factors with a view to interpreting the factor analysis. In practice, an arbitrary threshold value of 0.4 is equated as high loadings while the factor loadings are reordered according to size (Laudau and Everitt, 2004).

Table 6 shows the rotated factor matrix of the explanatory variables. It can be observed

from the table that community participation, good road and education does not load on any of the major three factors extracted to be influencing rural economic growth in the study area. This indicates that the variables are not important in the discussion of the factors influencing rural economic growth in the study area

A careful examination of table 6 shows the factor loading of the identified variables. Agricultural development has a factor loading of 84.8% while, industrialization and health has a factor loading of 78.2% and 65.6% denoting that they are the loadings with the highest values from each group. These are found to be the most important factors that lead to rural economic growth in the study area.

Table 6: Rotated Factor Matrix of rural economic development

	Factor		
	1	2	3
Agricultural development	.848		
Small scale enterprises development	.707		
Community participation			
Good road			
Industrialisation		.782	
Increase people productivity		.581	
Social empowerment		.525	
Education			
Health of the rural dwellers			.656
Proper utilisation of the resources	.535		.645

Source: Author's Computation, 2015

Agriculture being a major employer of labour in rural communities has successfully served as means of livelihood and income generation for rural dwellers. It is on record that agricultural development is a catalyst to rural economic development (Anriquez and Stamoulis 2007). It has also been acknowledged that the rural setting is an arena of many industries, which could be developed to contribute significantly to the national economy. This is because rural communities basically serve as primary producers of raw materials for industrial production purpose (Ahmandet *al.*, 2011). The health condition of rural dwellers is a determinant of the level of their participation in agricultural and industrial activities that will gear up towards economic development of the area.

Finding

Entrepreneurship has been established as the bedrock for economic development and its sustainable growth. Finding from the study showed that agriculture, industrialisation and health of the rural dweller are the major factors influencing rural economic growth. The development of rural economic depends on the establishment of diversified skilled labour such as weaving, farming animal husbandry amongst others. The study also showed that the economic development of the area was influenced by the small scale skilled labour practiced by the residents.

Conclusion and Recommendations

To enhance the development of the rural area which will in turn support the growth of the urban area and then influence the economy at large, it is recommended that; People in the community especially the youth are expected to participate in agricultural development. These factors are likely to encourage participatory rural entrepreneurship development and employment promotion. Government and individuals need to set up an industry in the area for effective utilisation of the agricultural resources for economic growth. While it is important for the development of agriculture and industrialisation in the rural community, it is also important that the health condition of the rural dwellers be improved because this will determine the level of their participation in agricultural and industrial activities which in turn lead to economic development of the area.

The study subjected ten (10) variables believed to have contributed to the rural economic growth in the study area to factor analysis. Therefore, the study concludes that agricultural development industrialisation and health of the rural dwellers serve as the most significant factors contributing to rural economic growth in the study area. These variables have the highest value of the extracted factors of 84.8% for agricultural development, 78.2% for industrialisation and 65.6% for the health of the rural dwellers.

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Qualitative Assessment of the Challenges of Small and Medium Scale Enterprises in Nigeria

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pp 22-29

Abstract

Small scale industry orientation is part of Nigeria. Evidence abounds in our respective communities of what successes our great grandparents made of their respective trading concerns, yam barns, farming, cottage industries, iron smelting and the likes. In our time, very little attention has been paid to develop the industrial sector. The reason for the lackluster performance of the industrial sector is mostly associated with the poor attention paid to the promotion and development of small and medium scale subsector which is accepted worldwide to be the engine of economic growth and the basic foundation for the industrialization process of any nation that desires to experience industrial development. The paper assesses the challenges of small and medium scale enterprises in Nigeria and suggested what should be done in order to revamp this key engine of the economy. The literally assessment shows that there are indeed shortfalls from government efforts towards the growth of small and medium scale enterprises in Nigeria. The paper therefore recommended that the government should strategically take a holistic assessment of SMEs sub-sector with a cogent aim of revamping the sector. Priority attention be placed on SMEs which are found playing a potential role in all the sectors of the economy and the central Bank of Nigeria should compel other commercial banks to adhere strictly to the banking policies and regulations and to extend loan to SMEs as stipulated in the guidelines among others.

Keywords: Challenges of SMEs, qualitative assessment, government programmes

Introduction

The Nigerian economy since the early seventies has been dependent on oil products. As a result of the enormous revenue generation from the oil sector, very little attention has been paid to proper development of the industrial sector. The reason for the lackluster performance of the industrial sector is mostly associated with the poor attention paid to the promotion and development of the small and medium scale sub-sector, which is accepted worldwide to be the engine of economic growth and the basic foundation for the industrialization process of any nation that desires to experience solid development. This is more so because entrepreneurship development is a critical aspect of skill development and keystone for economic revival and growth (Osim, 2010).

It is on the basis of this premise that Ojo (2009) argued that one of the responses to the challenges of development in developing countries particularly in Nigeria is the encouragement of entrepreneurial development scheme. In Nigeria, despite the abundant natural resources, the country still finds it very difficult to discover her developmental bearing since independence. Quality and adequate infrastructural provision has remained a nightmare, the real sector among others have witnesses downward performance while unemployment rate is on the increase.

Most of the poor and unemployed Nigerians in order to better their lots have resorted to the establishment of their own businesses. Even the touted sectors (banks and companies) known to be the largest employers of labour are on the down-turn following the consolidation crisis and fraudulent practices of the high and mighty in the banking sector. The companies of course are folding up as a result of erratic power supply, insecurity and persistent increase in interest rate which has led to high cost of production and undermines profit making potentials of companies operating in Nigeria.

As a result of banking sector practices and continuous folding up of companies, a lot of Nigerians are today thrown into unemployment which inevitably detriment the economic situation of the country (Oni and Daniya, 2012). Enterprise success or breakthrough cannot be achieved without the direct intervention of the government and financial institutions

(Emmanuel and Daniya, 2012).

In recognition of the enormous potential roles of SMEs, various special measures, schemes and programmes have been designed and policies enunciated and executed by government to encourage their (SMEs) development and hence make them more vibrant in Nigeria (Onugu, 2005).

It has however been worrisome that despite the incentives, policies, programmes and support aimed at revamping the SMEs, they have performed rather below expectation in Nigeria. Other challenges and problems, which frustrate SMEs in Nigeria and make some of them to either die within their first two years of existence or perform below standard even after surviving in their early years abound. The key ones include inadequate infrastructural facilities (road, water, electricity etc.) insecurity of lives and property, inconsistent monetary, fiscal and industrial policies, limited access to markets, multiple taxation and levies, lack of modern technology for processing and preserving products, policy reversals, capacity limitations, data inadequacies, harsh operating environment, fragile ownership base and fragile capital base among others (Onugu, 2005).

The Nigerian national economy is characterized by mirage of problems which has constituted a sleepless night to developmental oriented governance. The most disturbing thing in the country is the menace of unemployment, poverty and poor standard of living. Nigeria is faced with the challenge of curbing increase in crime rate, unprecedented increase in prostitution, high mortality rate, increased poverty rate, poor standard of living, political thuggery, and insecurity among others which are traceable to youth unemployment. Moreso, dwindling economic growth and development attributable to insufficient number of economic activities call for people to engage in entrepreneurship in the form of small and medium scale enterprises especially at such a time as this which on the long run will translate to improved and sustainable growth and development otherwise, the country will suffer relegation in the committee of nations.

Gbandi and Amissah (2014) agreed with the above assertion that SMEs in Nigeria have underperformed despite the fact that they (SMEs) constitute more than 90% of Nigeria

businesses, their contribution to the nation's GDP could be attributed to amongst others; unfriendly business environment, poor funding, low management skills and lack of access to modern technology.

Furthermore, it is an established fact that small and medium enterprises face financial challenges. Asaolu, Oladoyin and Oladele (2005) have deduced that the financial challenges mar the developmental role of small and medium enterprises.

The small and medium scale industries survey conducted in 2005 by the Central Bank of Nigeria (CBN) provides some evidence that apart from the acute shortage of technology, managerial skills, poor management, adverse environment, and change in policy, capital is a source of great concern to the entrepreneur in the sector. The Small and Medium Enterprises owners do not have sufficient finance to carry out their due businesses due to low saving culture of people in Nigeria.

Successive governments in Nigeria have in the last three decades shown much interest in ensuring adequate financing for SMEs by establishing various schemes and specialized financial institutions to provide appropriate financing to the sub-sector but the growth of the sector to seem to justify government efforts in this direction. Many experts have attributed this bicycle growth of SMEs peculiarities in operating environment, institutional irresponsibility and the obvious shortage in managerial acumen of operators in this sector. This paper qualitatively interrogates these dimensions in the context of the Nigerian experience and suggested measures that should be taken to reposition this sector for enhance performance.

Characteristics of SMEs in Nigeria

A major characteristic for Nigeria's SMEs relates to ownership structure or base, which largely revolves around a key man or family. Hence, a preponderance of the SMEs is either sole proprietorship or partnerships. Even where the registration status is thus that of a limited liability company, the true ownership structure is that of a one-man, family or partnership business.

Other common features of Nigeria's SMEs include the following among others.

1. Labour-intensive production processes.

2. Concentration of management on the key man.
3. Limited access to long term funds.
4. High cost of funds as a result of high interest rates and bank charges.
5. High mortality rate especially within their first two years.
6. Over-dependence on imported raw materials and spare parts.
7. Poor inter and intra-sectoral linkages-hence they hardly enjoy economies of scale benefits.
8. Poor managerial skills due to their inability to pay for skilled labour.
9. Poor product quality output.
10. Absence or Research and Development.
11. Little or no training and development for their staff.
12. Poor documentations of policy, strategy, financials, plans, info, systems.
13. Low entrepreneurial skills, inadequate educational or technical background .
14. Lack of adequate financial record keeping.
15. Poor Capital structure, i.e. low capitalization.
16. Poor management of financial resources and inability to distinguish between personal and business finance.
17. High production costs due to inadequate infrastructure and wastages.
18. Use of rather outdated and inefficient technology especially as it relates to processing, preservation and storage.
19. Lack of access to international market.
20. Lack of succession plan.
21. Poor access to vital information.

Shortfall of Government Efforts towards the growth of SMEs in Nigeria

The Nigerian Government has made substantial effort on the development of small scale industries; nevertheless, part of the huge SMEs problems could be traced to the government. This is mostly in the area of improper implementation of its policies towards SMEs and a serious neglect in the areas of incentive and infrastructure development to facilitate business activities of SMEs. Government policies seem to have constituted a serious problem areas for SMEs. The beginning of harsh government policies toward SMEs can be traced back to 1982 with the introduction of

“stabilization measures” which resulted in import controls and drastic budget cuts. These, in turn, adversely affected the subvention to the financial institutions established to provide financial assistance to the SMEs. For example, in 1983, out of a total of 8,380 applications for loans received from the SMEs for a total of 46.66 million naira was disbursed (Alasan & Yakubu, 2011).

As the economic situation deteriorated, the government introduced the Structural Adjustment Programme (SAP) in 1986. Since the strategy of liberalization and deregulation of interest rates was implemented, interest rates have continued to increase. The SMEs, which prior to the SAP had been granted concessionary rates of interest (particularly for agricultural and housing loans) experienced great difficulties obtaining credit of a Stabilization Securities Account (SSA) whereby the banks were debited with liquidity in their accounts with the Central Bank.

Another shortfall of government is the misappropriation of funds and wrong allocation of credit facilities. Obi (2001) pointed out that the plan to provide, modest loan to small scale business operations was a flop, because loans were granted in most cases on political rather than on commercial or project viability considerations. What was supposed to be revolving fund designed to benefit so many SMEs owners ended up as a bonanza for a few and it became virtually impossible to recover most of the loans. Another factor is the government improper implementation of its policies. Its inability to recruit trained manpower and adequate equipment to aid the extension services it put in place to support the SMEs. According to Obi (2001), the development centers were not endowed with adequate manpower to carry out technical appraisal of applications for loans from surging applicants. In spite of these identified enormous challenges confronting SMEs in Nigeria, they still continued to strive at their very best and their existence is the key to national economic development. In Nigeria, if policies implementation is enhanced through efficient monitoring, periodic review and infrastructural facilities provided, the SMEs will be empowered thereby facilitating growth and development of the nation's economy.

Problems of Small and Medium Enterprises

The fact that has emerged from the appraisal of the various past schemes and policy initiatives on the promotion of SMEs in Nigeria is that although finance is a major constraint to the development of SMEs in Nigeria, it is by no means the only or most important constraint. Indeed, the effective utilization of the substantial financial resources provided under the various past programmes, was constrained by such factors as lack of adequate entrepreneurship and managerial skills as well as absence of the enabling environment for investment in small and medium scale industries. An attempt is made below to outline some of those other constraints. Bacdom (2004) asserted that the following problems militate against the effective operation of small and medium enterprises in Nigeria;

1. **Constrained Access to Money and Capital Markets:** Banking sector tends to be lukewarm in meeting the credit requirements of SMEs. This is because project proposals are poorly prepared, financial documentation and inadequate collateral are not provided, as well as the inability of the promoters of SMEs projects to raise the required equity contribution. Moreover, the banks regard many SMEs as high risk ventures because of absence of succession plan in the event of the death of the proprietor. As a result, working capital is still a major constraint on production, as most SMEs are restricted to funds from family members and friends and are therefore unable to respond to unanticipated challenges in a timely manner. More worrisome is SMEs' inability to adequately tap available finance from the capital market.
2. **High Rate of Enterprise Mortality:** The incidence of inadequate working capital, which constrains productive capacities of the SMEs as well as absence of succession plan in the event of the death of the proprietor, leads in many cases for frequent early demise of SMEs.
3. **Shortage of Skilled Manpower:** Inadequate financial resources, as well as desire to operate with limited openness on the part of proprietors lead many SMEs to employ semi-skilled or unskilled labour. This of course, affects productivity,

- restrains expansion and hinders competitiveness.
4. **Financial Indiscipline:** Some SME proprietors deliberately divert loans obtained for project support to ostentatious expenditure. Others refuse to pay back as and when due, the interest and the principal, because of political involvement and the misconceived notion of sharing the so-called National cake.
 5. **Lack of Infrastructural Facilities:** Inadequate provision of essential services such as telecommunications, access roads, electricity and water supply constitutes one of the greatest constraints to SME development. Most SMEs resort to private provisioning of these at great expense. A World Bank Study (1989) estimated that such cost accounted for 15-20 percent of the cost of establishing a manufacturing enterprise in Nigeria.
 6. **Poor Implementation of Policies:** The poor implementation of policies including administration of incentives and measures aimed at facilitating SMEs growth and development have had unintended effects on the sub section.
 7. **Poor Management Practices and Low Entrepreneurial Skill:** Many SMEs do not keep proper accounts of transactions. This hinders effective control and planning. Moreover, lack of relevant educational background and thorough business exposure contains their ability to seize business opportunities that may lead to growth and expansion.
 8. **Restricted Market Access:** Insufficient demand for the products of the SMEs also imposes constraint on their growth. Although many SMEs produce some inputs for larger industrial enterprises, the non-standardization of their products, the problem of quality assurance as well as weak purchasing power, arising from consumers' dwindling real incomes, effectively restrict their market access.
 9. **Overbearing Regulatory and Operational Environment:** The plethora of regulatory agencies, multiple taxes, cumbersome importation procedure and high port charges have continued to exert serious burden on the operations of SMEs.
- Many of them have to deal with a myriad of agencies at great cost.
10. **Lack of Continuity:** Most small scale establishments are sole proprietorship and such establishment often ceases to function as soon as the owner loses interest or dies. This raises the risk of financing such business.
 11. **Inadequate Information Base:** Small scale business enterprises are usually characterized by poor record keeping and that usually starve of necessary information required for planning and management purposes. This usually affects the realization of the sector.
 12. **Lack of Raw Materials:** In some small scale business enterprises, raw materials are sourced externally, hence the fate of such enterprises to foreign exchange behavior. The fluctuation of foreign exchange may therefore make it difficult to plan and that may precipitate same stock that may destabilize the setup.
 13. **Unstable Policy Environment:** Government policy instability has not been helpful to small scale businesses. That has been destabilizing and has indeed sent many SMEs to early fold-ups.
- Government's Programmes towards SMEs Financing in Nigeria**
- Over the years, the federal government has discovered SMEs as the cradle for industrialization and a prerequisite for rapid economic growth and self-reliance. As a result, the government enunciated a number of policies and programmes/incentive that would create a conducive environment for the development and promotion of SMEs. The government for instance, enunciated a number of financial policies through national development plans and budgets as well as through its agencies to fund and provide necessary extension service to SMEs.
1. **The Establishment of the Small Industries – Credit Scheme (SSICS):** In 1971, the then Federal Military Administration started to provide a more direct form of financial assistance to SMEs. As a first step, government established a Small Industries Development Programme to provide technical and financial support

for the SMEs. Later, it established the Small Industries Credit Committee (SICC) to administer Small Industries Credit Fund (SICF) all over the federation. The scheme was operated as a matching grant between the Federal Government and the State Government and designed to make credit available on liberal terms to enterprises with capital investment outlay not exceeding N150,000.00. The Fund was to operate as a revolving loan scheme.

2. **The Establishment of Industrial Development Centre (IDC):** This was another important effort of the Federal Government to promote SMEs under the Second National Development Plan (1970-1975). Under the Plan, N800,000.00 was allocated for setting up IDCs in various parts of the country. The establishment of the IDCs no doubt, made it possible for government to provide extension services to the SMEs, especially as it relates to product development, entrepreneurial training, and technical appraisal of loan applications as well as managerial assistance.
3. **The Role of State Governments:** Over the years, State Governments have been promoting the development of SMEs through their Industrial Development Centres (IDCs) as well as States' Ministry of Commerce and Industries. For example, in their annual budgets, certain sum of money are usually set aside by State Governments as an industrial fund that would help facilitate the development of SMEs in their respective states. In addition, some State Governments have been promoting SMEs through state-owned Finance and Investment Companies. Other Efforts are in the areas of;
 4. The Establishment of the National Directorate of Employment (NDE)
 5. Working for Yourself Programme (WFYP)
 6. The Nigerian Industrial Development Bank (NIDB)
 7. The Central Bank of Nigeria (CBN)
 - The Small and Medium Industries Equity Investment Scheme (SMIEIS)
 - Nigerian Agricultural, Cooperative and Rural Development Bank (NACRDB)

- The Bank of Industry
 - Refinancing and Rediscounting Facility
8. Funding of SMEs Through Multilateral Financial Institutions:
 9. Youth Empowerment Agricultural Programme (YEAP)
 10. Other Policy Measures to Reduce the Financial Burden of the SMEs

Conclusion

The significant of economic development cannot be undermined for a country that wants to be free from the shackles of unemployment, poverty and poor standard of living. This has been the focus of government at all levels in Nigeria. As a result several policies, schemes and programmes have been embarked upon to ensure that qualities of life of citizens are better.

In spite of the huge revenue yields largely from burgeoning crude oil sales at the time, the governments at the federal and state levels failed woefully in investing the resources in developing infrastructure, creating jobs and alleviating poverty. Currently, Nigeria is ranked third among countries with the highest population of extreme poor or people with abject poverty in the world. Unemployment is on the increase and standard of living is very poor.

In its latest report on the world's poverty index, titled "Prosperity for All – Ending Extreme Poverty", the World Bank listed Nigeria among five countries with the highest number of poor people in the world. The National Bureau of Statistics (NBS) state that a staggering 112.519 million Nigerians live in relative poverty conditions. This figure represents 69 per cent of the country's total population estimated to be 163 million.

Recommendations

1. Government should strategically take a holistic assessment of SMEs sub-sector with a cogent aim of revamping the sector. There should effective strategy towards the growth and development of SMEs in Nigeria.
2. Government should diversify the economic activities and place priority to SMEs which are found playing a potential role in all the sector of the Economy.
3. Given the emphasis on, and the increasing

- number of SMEs in Nigeria, there is need to take stock of the state of SMEs development in the country and review the effectiveness of the existing policies and institutional framework with the aim of developing guidelines for future utilization in this sector.
4. All administrative bottle-necks which make funds inaccessible to SMEs operators should be mitigated.
 5. The Nigeria Banks should encourage the development of SMEs through reduction in the interest rate on loans.
 6. Government should also provide financial support to encourage all training, workshop, seminar programme in Nigeria and extend loan facilities to the graduates to enable them start up business as per their proposals submission. There should be effective monitoring and quarterly assessment of the financial empowered SMEs clients for efficiency and proper handling of the resources provided.
 7. There should be measures to facilitate commercial Bank's lending to SMEs like tackling inherent collateral and information problems and introducing improved lending policies, systems and procedures for SMEs clients. Credit guarantees fund that minimize moral hazard by sharing risks with banks leasing can be used as mechanism for addressing smaller businesses' lack of collateral. A few SMEs with high return on capital can also be supported with venture capital funds.
 8. The CBN should as a matter of urgency compels all other commercial banks to adhere strictly to the Banking policies and regulations and to extend loans to SMEs as per guidelines.
 9. Government should provide adequate infrastructural facilities such as good road, water and electricity supply to mitigate rural to urban migration. This will help the rural areas have access to social amenities thereby check effect of polarization of rural areas. The much talked about urban migration in rural area with basic amenities.
 10. Government should put up measures to check corruption, instability, ethnic clashes and communal crises in the country.
 11. Government should revive its programmes and schemes towards achieving adequate economic development e.g. poverty alleviation programmes.
 12. There should be an instituted body to be established by government to support the development of SMEs in every state which will be effectively monitored by Federal Government. They should saddled with responsibility of quarterly reviewing the activities of SMEs and ensure compliance with the guidelines.

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Determinants of Profitability and Growth of Micro and Medium Scale Agribusiness Enterprises in Abia State, Nigeria

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Abstract

This study specifically studied the socio-economic characteristics of the respondents, the types of micro and medium scale agribusiness enterprise operating in Abia, the major problems limiting against profitability and growth of MMSE in Abia state as well as examined the level of growth and profitability of micro and medium scale agribusiness enterprise operating in Abia State. The study adopted a survey design and sourced primary data using questionnaire. Data analysis was done using descriptive statistics, Likert scale and Mac person growth model. The study revealed among others that they were involvement of more male entrepreneurs than female entrepreneurs in agribusiness the businesses recorded a growth rate of 0.60 and above while most of the enterprises were observed to be viable and profitable. The study showed low involvement of entrepreneurs in various agribusiness enterprises such as rabbitary, piggery, coca processing, and timber making enterprise in the study area. The study recommends protection of MMSE from harsh tax rate, provision of workshop and seminars to improve entrepreneurial skills and provision of credit facilities to encourage young entrepreneurs in Abia state.

Keywords: Profitability of agribusiness, agribusiness growth, medium scale enterprise

Introduction

Agribusiness describes all organizations whose basic raw material or final output are agricultural or are for agriculture. It spans the entire agricultural production, processing, distribution and consumption spectrum. It is explained to be the sum total of all operations involved in the manufacture and distribution of farm supplies, production operations on the farms, and the processing-distribution- storage of farm commodities and items made from them. Mbanasor (2013) defined agribusiness as the application of business management, technology, economics and entrepreneurial principles to the flow of activities in the agricultural commodity value chain leading to vertical integration of business. Umeabali (2001) describe agribusiness as the sum totality of all operations involved in the production and distribution of the food and fiber needs of the economy.

Entrepreneurs in both developed and developing countries are regarded as the driving force behind economic growth, job creation and poverty reduction. As such the agribusiness entrepreneurs are involved in both micro and medium scale agribusiness enterprises which contribute in the sustenance of the economy. In Nigeria the definition of micro and medium scale enterprises have continuously varied from time to time as each individual or institution observe it from varied points of view. The National Council of Industries (NCI) refers to business enterprises whose total cost excluding land is not more than two hundred million naira (200,000,000.00) only. The micro and medium enterprises have been described as the catalyst for socio-economic transformation of any country. The government at various levels recognizing the strategic role of micro and medium scale enterprise in the promotion of natural economic development, whether federal, state or local levels; have one way or the other focused on strengthening the micro and medium scale enterprise. At various time policies have been formulated aimed at facilitating and empowering the growth and development of the Micro and Medium scale enterprises. Also they have initiated the provision of soft loans and other fiscal incentives to ensure the growth of MMSE. It is notable that international agencies and organizations have been promoting the growth of

MMSE in Nigeria through advocacy and capacity building initiatives and have continued to canvass for better support structures for operators in the MMSE subsector (Mordi, 2005).

Micro and Medium Scale Enterprises represent a veritable vehicle for the achievement of national economic objectives of employment generation and poverty reduction at low investment cost as well as the development of entrepreneurial capabilities including indigenous technology. According to Olise (2006) in a developing country like Nigeria the micro and medium scale Agribusiness enterprise is positioned to ensure efficiency within the production, processing and distribution of frameworks. They are structured to ensure the adequate provision of the quality food needed for the ever increasing population, create employment opportunities, provide the needed raw material for the domestic industries, generate income to the employed ones and at the same time earn foreign exchange. The activities of the micro and medium enterprises to a great extent are expected also to enhance rural development which will check rural urban migration. As such the profitability and growth of micro and medium scale (MMSE) agribusiness enterprise is viewed, such as inadequate infrastructural facilities, bureaucratic bottlenecks and inefficiency in administration of incentives, lack of needed fund, lack of access to appropriate technology, lack of suitable training and leadership development, inability to penetrate and compete favorably in export market, intimidating operations of government agencies etc (Umeabali, 2009).

Micro and Medium Enterprises (MMSE) in Nigeria have not performed creditably well and hence have not played the expected vital role in the economic growth and development of Nigeria. These have constrained the profitability and growth of micro and medium scale enterprises in terms of their operations and level of output. This situation has been of great concern to the government, citizenry, entrepreneurs, organized private sector groups etc.

The government through budgetary allocations, policies and pronouncement has showed interest and acknowledgement of the crucial role of the MMSE sub sector of the economy. There have also been fiscal incentives,

grants, bilateral and multilateral agencies support and aids as well as specialized institutions all geared towards making the MMSE a vibrant sub sector. The micro and medium scale agribusiness enterprise have not been able to contribute optimally in the growth of the Nigeria natural economy due to various factors constraining its relevance. These factors have continuously constrained its profitability and growth and as such limited its impact (Osuagwu 2001).

In spite of the fact that the MMSE have been regarded as the engine room of Nigeria national economic development especially as regards to the micro and medium scale agribusiness enterprise, the sector nevertheless has had its own fair share of neglect which have directly reduced its profitability and growth level. The challenges of the micro and medium scale agribusiness enterprise have remained insurmountable as it ranges as: low level of entrepreneurial skills, poor management practices, lack of needed fund, poor infrastructural facilities, bureaucratic bottlenecks and administrative inefficiency, lack of access to appropriate technology, intimidating effects of government policies and agencies etc. Many other countries in spite of the constraining effects limiting its micro and medium agribusiness enterprise have been able to adapt strategies which have energized and transformed their MMSE to vibrant one that it has been able to contribute optimally to their economic growth and development. It is expected that the outcome of this research will ensure a turnaround of the Nigeria micro and medium agribusiness enterprise sub sector.

The broad objective of this study is to evaluate the profitability and growth of micro and medium scale (MMSE) agribusiness enterprises in Abia state Nigeria. The specific objectives of the study are to: determine the socio economic characteristics of the enterprise; determine the types of micro and medium scale agribusiness enterprises; identify the major problems which have limited the profitability and growth of micro and medium scale agribusiness enterprises, examine the level of growth in the enterprise; determine the level of profitability among the enterprises; and examine the effect between profitability and growth of micro and medium scale agribusiness enterprise

in Abia state.

Methodology

This work was carried out in Abia State, Nigeria. Abia State is a State created in 1991; the State was carved out from Imo State. The citizens are predominantly Igbo's. Abia State is located in the south eastern region of Nigeria. The State is approximately within latitudes 4° , 41^1 and 6° , 1411 North of the equator and longitudes 7° , 10^1 and 810 east of the Greenwich meridian. It has seventeen Local Government Area that are divided along three agricultural zones namely; Ohafia, Umuahia and Aba.

The State share common boundaries to the north with Ebonyi State, to the South and South west with Rivers State and the east and South East with Cross River and Akwa Ibom States respectively; to the west is Imo State and to the north west is Anambra state. The state is selected for this study because of the numerous agribusiness enterprise located in the rural, suburb and urban areas. It is noted that the agribusiness entrepreneurs operate formally in the suburb and urban centers and informally in the rural areas. Random sampling technique method was used to select the population to be studied. Data for this study was generated through cross sectional method using questionnaires administered to the entrepreneur or management team of the agribusiness enterprises. Description statistics, McPherson growth model, cost and return analysis and simple regression analysis were used to analyze the various objectives.

Result and Discussion

The Socio Economic Characteristics of the Micro and Medium Scale Agribusiness Entrepreneurs

The socio economic characteristics of the agribusiness entrepreneurs examined their age, gender, marital status, educational level, household size, location, etc. Descriptive statistics were used in the analysis and the result is presented in Table.1

Table 1: The Socio Economic Characteristics Of The Agribusiness Entrepreneurs.

Variable	Frequency	Percentage
Gender		
Female	23	46.0
Male	27	54.0
Total	50	100.00
Age in Year		
21-30	4	8.0
31-40	10	20.0
41-50	29	58.0
51-60	5	10.0
61-70	2	4.0
Total	50	100.00
Marital Status		
Single	15	30.0
Married	30	70.0
Total	50	100.00
Table 4.1 continued		
Educational Level		
Primary	0	0.0
Secondary	4	8.0
BSc./HND	30	60.0
MSc.	11	22.0
PhD	5	10.0
Total	50	100.00
Location		
Rural	13	26.0
Urban	37	74.0
Total	50	100.0
Number of Employees		
5-10	12	24.0
11-20	18	36.0
21 and above	20	40.0
Total	50	100.00
Firm's Age		
5-10	23	46.0
11-20	20	40.0
21 and above	7	14.0
Capital in Naira		
1000000-5000000	12	24.0
5001000- 10000000	23	46.0
10001000 and above	15	30.0
Total	50	100.00

Source: field survey data, 2016.

From Table 1, it was observed that 46.0% of the entrepreneurs were females while 54.0% of the entrepreneurs were males. This result is in line with the findings of Herrington *et al.*, (2008) in which the authors found that there is male dominance in the distribution of gender among entrepreneurs. According to age, it was found that 20% were in the age bracket of 31-40, 10% were in the age bracket of 51-60, 8% were in the age bracket of 21-30, 4% were in the age bracket of 61-70, while 58% were within the age of 41-50 years. The age distribution result indicates that most of the entrepreneurs fall under the age bracket of 41-50 years and this coincides with Nwibo *et al.*, (2013) who had a similar result.

In the distribution of the respondents according to their marital status which indicates that 30% of the respondents are single while 70.0% of the respondents are married, this result implies that there is high sense of responsibility among the majority and this is in consonance with the findings of Adegbite *et al.*, (2006) who found that married men and women worked harder and performed better in managing a business in the bid to meet the huge social, financial, and psychological responsibility with obligations emanating from the family. Most the agribusiness entrepreneur had tertiary education with 60.0% having BSc./HND, 22% having an MSc. (Masters Degree) and 10% having a PhD. However, the result also revealed that 8% had secondary education. In terms of location, it was found that 26% of the entrepreneurs operate in the rural areas while 74.0% of the entrepreneurs reside in urban centers. Unachukwu (2009) found that tertiary entrepreneurial education is essential for proper entrepreneurial

development.

Distribution according to number of employees showed that 24% Of the entrepreneur had 5-10 employees, 36% had employees ranging from 11-20 while 40% had employees of 21 and above. This result indicates that most of the agribusiness enterprise can be classified as micro and medium scale enterprises (Onwumere *et al.*, 2011). The distribution of the entrepreneurs according to the age of their firm's shows that 46% of the entrepreneurs had sustained his/her firm for 5-10 years, 40% for 11-20 years while 14% of the entrepreneurs have their firm's aged over 21 years. This implies that most of the entrepreneurs have gone through the conceptual stage of their project cycles.

The distribution of the entrepreneurs according to their capital structure indicates that 24% of the entrepreneurs had a capital value ranging from N1000000- N 5000000, 46% had a capital value ranging from N 5001000- N1000000 while 36% of the entrepreneur had a capital value ranging from N 10001000 and above. This result indicates that majority of the entrepreneur uses the debt capital structure, this is in consonance with the findings of Ukiwe *et al.*,(2007) who stated that most small and medium scale enterprises relies on debt as loans and credits for their finances.

Determining the Types of Micro and Medium Scale Agribusiness Enterprise in the Study Area

Various micro and medium scale agribusiness enterprise were sampled and its aggregate number was presented in the result in Table 2

Table 2: Types Of Micro And Medium Scale Agribusiness Enterprise.

Types of enterprise	Frequency	Percentage
Poultry enterprise	10	20.0
Piggery enterprise	3	6.0
Rabbitary enterprise	4	8.0
Fishery enterprise	6	12.0
Snailery enterprise	2	4.0
Cassava-processing enterprise	11	22.0
Cocoa-processing enterprise	5	10.0
Palm-oil processing enterprise	5	10.0
Timber-making enterprise	4	8.0
Total	50	100.00

Source: field survey data, 2016.

Table 2 shows the distribution of agribusiness enterprises present in the study area. The result shows that 20.0% representing 10 of the sampled agribusiness enterprises were poultry enterprise, 6.0% of the agribusiness enterprises were piggery enterprise, 8% were rabbitary enterprise while 12% were fishery enterprises. However 10 of the agribusiness enterprise were cocoa processing enterprises and palm-oil processing enterprises respectively while 4% representing 2 out of the sampled enterprise were snailery enterprises. 8% were tuber-making enterprises while 22.0% were cassava-processing enterprises. The result shows that majority of the agribusiness enterprises are least established in the study area. This findings is in contradiction with the work of (Moses *et al.*, 2002) who stated that poultry enterprise are the most common form of agribusiness enterprise in eastern Nigeria.

Problems Limiting the Profitability and Growth of Micro and Medium Scale Agribusiness Enterprises

A five point likert scale was used to ascertain the level of limiting influence the following problems had on the profitability and growth of micro and medium scale agribusiness enterprise. This is presented in table 3. Scores were ascribed to each of the responses i.e. Strongly agreed= 5; Agreed= 4; Undecided= 3; Disagree = 2; and Strongly disagreed= 1. The mean of this point was calculated and used to determine whether or not a problem-factor significantly limits the profitability and growth of micro and medium scale enterprises. The decision rule states that any factor which has a mean that is less or equal to 3 does not significantly limits the profitability and growth of agribusiness enterprise. Any factor with a mean that is greater than 3 is accepted to significantly limit the profitability and growth of micro and medium scale enterprise in the study area.

Table 3: Problems Limiting the Profitability and Growth of MMSE

Problem Factor	Strongly Agreed	Agree	Undecided	Disagree	Strongly Disagree	Total	Mean Score		Decision
Harsh rate tax	45.00 (225.00)	32.00 (128.00)	0.00 (0.00)	0.00 (0.00)	3.00 (3.00)	356.00	4.45	2nd	Sig
Low quality of farm produce	40.0 (200.00)	24.00 (96.00)	5.00 (15.00)	6.00 (12.00)	5.00 (5.00)	328.00	4.10	6th	Sig
Poor entrepreneurial skill	55.00 (275.00)	21.00 (84.00)	0.00 (0.00)	3.00 (6.00)	1.00 (1.00)	366.00	4.58	1st	Sig
Non-supportive govt. policy	19.00 (95.00)	35.00 (140.00)	10.00 (30.00)	4.00 (8.00)	12.00 (12.00)	285.00	3.56	9th	Sig
Poor Access to loan	33.00 (165.00)	32.00 (128.00)	10.00 (30.00)	4.00 (8.00)	1.00 (1.00)	332.00	4.15	5th	Sig
High interest rate	35.00 (175.00)	25.00 (100.00)	51.00 (153.00)	72.00 (144.00)	11.00 (11.00)	583.00	3.01	10th	Insig
Changes in technology	22.00 (110.00)	24.00 (96.00)	34.00 (102.00)	0.00 (0.00)	0.00 (0.00)	308.00	3.85	8th	Sig
Low access to incentive	56.00 (280.00)	10.00 (40.00)	11.00 (33.00)	0.00 (0.00)	0.00 (0.00)	353.00	4.41	3rd	Sig
Poor infrastructural facilities.	72.00 (360.00)	94.00 (376.00)	29.00 (87.00)	0.00 (0.00)	0.00 (0.00)	823.00	4.22	4th	Sig
Low extension service	25.00 (125.00)	43.00 (172.00)	6.00 (18.00)	6.00 (12.00)	0.00 (0.00)	327.00	4.09	7th	Sig

Source: field survey data, 2016

Decision rule: significant; mean > 3 not significant: mean ≤ 3

From table 3 above, it was analyzed that poor entrepreneurial skill was ranked the most significantly limiting factor with a mean of 4.58; harsh tax rate, low access to incentive, and poor infrastructural facilities were respectively ranked significant limiting factors with an average mean of 4.45, 4.22 respectively. However, high interest rate was analyzed to be an insignificant limiting factor. This findings agrees with Nnadozie *et al.*, (2000) who stated that

entrepreneurs of small and medium scale enterprise are usually indifferent to interest rates when they appeal for credits.

Level of Growth in Micro and Medium Scale Agribusiness Enterprise

The level of growth of the micro and medium scale agribusiness enterprises in the study area was analyzed using descriptive statistics. Table 4 below presents the distribution of agribusiness enterprise according to their growth rate.

Table 4: Level of Growth in Micro and Medium Scale Agribusiness Enterprise

Growth rate	Frequency	Percentage
<0.20	15	30.0
0.20 – 0.40	12	24.0
0.40 – 0.60	9	18.0
0.60 – 0.80	9	18.0
0.80 – 1.00	5	10.0
Total	50	100.00

Source: field survey data, 2015.

Table 4 above shows the growth rate of the sampled micro and medium scale agribusiness enterprises in the study area. From the table above, it was analyzed that 10% of agribusiness enterprises in the study area had a growth rate ranging between 0.80-1.00, 18% of agribusiness enterprises had 18% of agribusiness enterprise had growth rate ranging between 0.60-0.80, also same percentage (18%) had a growth rate ranging between 0.40- 0.60. a growth rate of 0.20 and below was attributed to 30% of the micro and medium scale agribusiness enterprise while 240% of the sampled enterprise had a growth rate

ranging from 0.20-0.40. this result implies that majority of micro and medium scale agribusiness enterprise recorded low growth rate as evident in our findings that only 10% of the sampled enterprises records a growth rate range of 0.80-1.00 which can be said to be high.

This finding is in contradiction with the findings of Uwakwe (2012), who stated that agribusiness enterprise records exceeding growth rates when situated in rural areas.

Profitability Analysis of Micro and Medium Scale Enterprises in the Study Area

Table 5: Profitability Analysis of MMSE

Items/Operation	Value (₦)	Percentage (%)
Total Revenue	15,689,00	
Variable Cost		
Input	1632,00	
Labor	1423,00	
Transport	2656,300	
Levies	456,897	
Miscellaneous	608,500	
Rent	1,002,512	
Fuel/energy	3,178,900	
Total Variable Cost (TVC)	10,958,109.00	81.4

Fixed Cost		
Rent	689,00	
Equipment	1,564,500	
Other fixed cost	256,001	
Total Fixed Cost (TFC)	2,509,501.00	18.6
Total Cost Of Productions (TFC + TVC)	13,467,610	
Profitability Indicators		
Gross margin	4,730,891.00	
Net earning	2,221,390.00	
Return/Naira Invested	1.16	

Source: field survey data, 2016.

From Table 5, which presents the analysis of the profitability of micro and medium scale enterprises. The total variable cost of N 10,958,109 gave 81.4% of the total cost of N13,467,610 and the total fixed cost of N2,509 501 accounted for 18.6% of the total cost. The gross margin stood at N4,730,891, the return per naira invested was 1.16 indicating that per naira invested by the enterprise returns an extra N1.16. This indicates that micro and medium scale enterprises in Abia state, Nigeria are viable investments. The result is in consonance with the work of Ebiowei (2013) who revealed that micro and medium scale enterprises are highly profitable in Nigeria.

Conclusion and Recommendations

The study, evaluation of profitability and growth of micro and medium scale (MMSE) agribusiness enterprises in Abia State, specially studied the socio-economic characteristics of the respondents, determined the types of micro and medium scale agribusiness enterprises in the study area identified the major problems limiting the profitability and growth of micro and medium scale agribusiness enterprise in the study area, examined the level of growth in micro and medium scale agribusiness enterprise and analysed the profitability of micro and medium scale agribusiness enterprise in the study area. The study was carried out using a simple random sampling technique. A total number of 50 respondents (entrepreneurs) were used for this study.

The study revealed that they were more involvement of male entrepreneurs 54.0% than female entrepreneurs 46.0%. it also showed that there was more involvement of people in their active and productive age. The study also showed

that majority of the entire respondent had tertiary levels of education, while 74% of the entrepreneurs operates in the urban centres. Also, majority of the respondents (86%) had their firm's aged within 5-20 years while 70% of the respondents were married. On the types of micro and medium scale agribusiness enterprise, it shows that majority of agribusiness enterprise in the study area are poultry enterprise while snailery enterprise are least set-up in the study area.

More so, high interest rate was analysed to be an insignificant problem that limits profitability and growth of micro and medium scale agribusiness enterprise in the study area, and all other factors such as low extension service, poor infrastructural facilities, changes in technology, low quantity farm produce, etc. were analysed to significantly limit profitability and growth in MMSE. On the level of growth rate, 72% of the respondents recorded a growth rate of 0.60 and below. While most of the enterprises were analysed to be viable and profitable, the study also shows low involvement of entrepreneurs in various agribusiness enterprise such as rabbitary, piggery, coca-processing, and timber making enterprise in the study area.

The study evaluation of profitability and growth of micro and medium scale agribusiness enterprise in Abia state shows that MMSE are viable and profitable although with low growth rate. Also most of the factors limiting the growth rate of the enterprises are poor access to loan, high interest rate, harsh tax rate, poor entrepreneurial skills, etc. the study is of the opinion that if these factors are taken care of, the micro and medium scale agribusiness enterprise in the study area will thrive the more.

The following recommendations are

suggested to address the setbacks

1. Government should be made to protect MMSE from harsh tax rate
2. There should be workshops and seminars to improve entrepreneurial skills set-up by government and NGO.
3. There is also need to provide credit facilities to encourage young entrepreneurs.

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Effects of Pay Disparity on the Performance of Commercial Bank Employees in Nigeria: A Study of Union and Diamond Banks Plc

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Abstract

The study examined pay disparity on the performance of commercial bank employees in Nigeria using first and second generation banks. The survey research was used. The primary and secondary sources were the main methods for data collection. The sample size used in the study was 98 bank staff randomly selected from the two banks. Three hypotheses were tested. Data was analyzed and descriptively presented using frequency and percentage distribution tables. The test of hypotheses used chi square statistics. Variables tested were pay, pay satisfaction, job satisfaction, employee performance and reaction to pay disparity. The result showed disparity in pay and a very high level of employee dissatisfaction for pay, which reflected on the performance of the banks. The study recommends the narrowing of pay gaps within commercial banks as a panacea for improved performance.

Keyword: Pay disparity, performance, job satisfaction, commercial banks

Introduction

In the past few decades, the banking sectors all over the world experienced profound regulatory and technological changes. Advanced applications in computer and communications technology together with the introduction of new financial instruments have altered the way banks operate. Such changes significantly modified the technology of bank production. Generally, the financial system is more than just institutions that facilitate payments and extend credit. It encompasses all functions that direct real resources to their ultimate user. The banking sector occupies a vital position in the economy and must be subject to continuous reforms for it to function more efficiently. Consequently, economic reforms are undertaken to ensure that every part of the economy functions efficiently in order to ensure the achievement of macroeconomic goals of price stability, full employment, high economic growth and internal and external balances (Rasiah, 2010).

Thus, banking reform in Nigeria is an integral part of the country-wide reform program undertaken to reposition the Nigerian economy to achieve the objective of becoming one of the 20 largest economies by the year 2020. The various reform undertook in Nigeria were targeted at making the system more effective and strengthening its growth especially the bank consolidation of 2005 which brought the number of banks to 24. (Rasiah, 2010).

In recent times, banking reforms in Nigeria have resulted in strikes and adverse personnel management dynamics. These have threatened the economy of Nigeria because of the important role banks play in Nigeria. Job performance depends on relative pay. The adverse effects of unequal peer salaries on job performance in the Banking sector is a huge threat to Nigeria's economy as pay disparities have often led to industrial disputes and labour restiveness. The job performance of Bank employees is also important and challenged by non-linear relationship between pay and performance. Also, there is limited information in literature on how pay disparity affects job performance of Banks. For efficient contribution of the Banking Sector to Nigeria's economy, it is important to understand how pay disparity affect the job performance of Bank employees.

These problems therefore underscore the necessity of this research study.

Empirical Review

Volsky and Aguilar (2009) investigated the gender differences in cooperate extension. They formulated a generalized model of employee pay satisfaction and tested it for both female and male U.S Extension employees. The findings indicated that there were no differences in the antecedents of employee satisfaction between genders.

Grissom, Nicholson-Crotty and Keiser (2012) studied the pay satisfaction and turnover in public sector. Using data from a nationally representative sample of public school teachers and principals and employing a fixed effects design that implicitly compared male and female employees in the same school. The result showed important effects of gender congruence, which appear to be driven by lower pay satisfaction and greater turnover among male teachers with female principals.

Onukwube (2012) ascertained the levels of pay satisfaction amongst quantity surveyors in consulting firms in lagos, Nigeria. Biographical and job descriptive index were used to gather data. The JDI measure the pay satisfaction on five facets named pay, promotion, work, supervision and co-workers. The results showed that workers were satisfied with supervision, work and relation with co-workers. Dissatisfaction found with respect to pay and promotion.

Mehmood and Nudrat (2011) conducted this study to investigate the difference between gender (male and female teachers) and types of school (urban and rural) about pay satisfaction. Generally, teachers were less satisfied with advancement, compensation, supervision human-relation, and working conditions. Female teachers were more satisfied than their male counterparts. There was no significant difference between urban and rural teachers' job satisfaction.

Sultana and Begum (2012) measured the level of pay satisfaction of female health library professionals in Dhaka city and how the job facets affect pay satisfaction of female health library professionals. The result shows that out of twenty job facets eleven facets are highly significant for the pay satisfaction and nine facets quite insignificant for job satisfaction.

Furthermore it noticed females are less satisfied at their job.

Methodology

The study employed survey research design. The method was seen appropriate because it was a fact-finding design. The population of the study involved all the staff of Union Bank of Nigeria PLC and Diamond Bank PLC Umuahia. The staff strength of Union Bank is sixty seven (67) while the staff strength of Diamond Bank PLC Umuahia is sixty three (63). The total staff strength of the banks is one hundred and thirty (130). The population of study for this research is one hundred and thirty. The sample size was drawn from this population of study.

Sample and sampling procedure involved the use of simple random technique. The randomization was done using balloting method with repeatedly drawn papers in a basket. The sample size was ninety eight (98). Ninety eight questionnaires were administered on staff. Union Bank received fifty one (51) questionnaires while Diamond Bank received forty seven (47) questionnaires. The questionnaires were administered personally by the researcher. The questionnaires were distributed, worked through and collected the same day. The advantage of this approach is that it will not permit interaction and experimental bias among respondents.

According to Chandon *et al* (2005), instrument validity identifies the certainty, with which results from the measuring instrument can be attributed to the independent variables instead of other external sources. All variables of interest in this study such as, gender, education, performance and peer relationships were itemized and used in structuring the questionnaire. The structured questionnaire were administered on five employees of both Banks. The completed questionnaires were evaluated for content, coverage and relevance by the project supervisor and experts in Human Resource Management.

To determine the reliability of the questionnaires the test-retest method described by Aiken and West (1991) was used to ascertain the reliability of the questionnaire sample of 98. Five (5) staff of Union Bank and Diamond Bank each judged the adequacy and comprehensiveness of the questionnaire as well as clarity.

The data generated from field survey was entered using statistical package for social scientist (SPSS) software version 15. Simple frequencies, percentiles were run on summated scores for data collation and presented in table. Further data analysis involved the use of chi-square statistics (χ^2) for test of hypotheses.

Results and Discussion

Presented in this chapter are results obtained from data collected and analyzed in relation to the effects of employee pay disparity on performance of commercial banks in Nigeria: a study of Union Bank of Nigeria and Diamond Bank of Nigeria PLC. Composite presentation of the questions was adopted to make the presentation more concise and comprehensive. In other to quantify the responses more appropriately, such statistical tool as frequency tables and percentages were employed.

The last part of this chapter was devoted to testing the hypotheses which had been formulated in chapter one of this work. Percentages were employed for testing the hypotheses. The result of the testing formed the bases for rejecting or accepting the researcher's preconceived notion of the variables (hypotheses) being tested.

The data analyzed were obtained through the option of ninety eight (98) respondent who completed and returned the questionnaire out of the 98 administered. 47 came from Diamond Bank while 51 came from Union Bank which shows a return of 100%.

Characteristics of Respondents

The number of distributed and returned questionnaire is presented in table one below.

Table 4.1: Distribution and collection of questionnaire

Banks	Union Bank	Diamond Bank	Total
No distributed	51	47	98
No collected	51	47	98

Source: Research Survey 2015

Out of the ninety eight (98) questionnaires distributed, all were returned completed. Fifty one (51) questionnaire came from Union Bank of Nigeria, while forty seven (47) questionnaires came from Diamond Bank PLC.

Biodata of respondents

The biodata of respondents are presented in tables 2 and 3 below.

The gender of the respondents is shown in table 2 below.

Table 4.2: Gender of respondents

Sex	Numbers	Percentages (%)
Male	52	53.06
Female	46	46.94
Total	98	100

Source: Research Survey 2015

The male respondents comprised of 53.06% of all respondents, while 46 out of the respondents representing 46.94% were female.

the respondents in table 3, showed that 84 respondents have Bachelor's Degree only while 14 of the respondents' representing 14.29% have Post Graduate qualification.

Highest educational level of respondents

The highest achieved Educational level of

Table 4.3: Highest educational level of respondents

Educational level	Numbers	Percentages (%)
Bachelor Degree	84	85.71
Postgraduate Degree	14	14.29
Total	98	100

Source: Research Survey 2015

Determinants of Pay

Factors that determine pay in the surveyed Banks are presented in tables 4 to 7.

Respondents opinion on the influence of bank's ability to pay

Table 4 showed the responses on the influence of Bank's ability to pay on their pay Schemes.

Table 4.4: Distribution of responses on Bank's ability to pay

Options	Numbers	Percentages (%)
SA	10	10.20
A	20	20.40
N	5	5.10
DA	30	30.60
SD	33	33.70
Total	98	100

Source: Research Survey 2015

SA= Strongly Agree
 A =Agree
 N =Neutral
 DA=Disagree
 SA=Strongly Disagree

10 respondents strongly agreed that pay depends on the Bank's ability to pay. 20 respondents agreed to that assertion while 30 respondents (representing 30.60%) and 33 respondents disagreed and strongly disagreed

respectively, that pay was influenced by Bank's ability to pay.

5 out of the respondents neither agreed nor disagreed. The mean score was 2.43 which indicated that pay does not depend on Bank's ability to pay.

Influence of job evaluation on pay

The influence of job evaluation on pay is shown on the table below.

Table 4.5: Influence of job evaluation on pay

Options	Numbers	Percentages (%)
SA	30	30.61
A	40	40.82
N	0	0
DA	18	18.37
SD	10	10.20
Total	98	100

Source: Research Survey 2015

Job evaluation is the primary instruments used by organizations to fix pay of employees. Out of the 98 respondents, 30 and 40 respondents respectively strongly agreed and agreed that their Bank use Job Evaluation as a tool for pay determination. 18 respondents representing 18.37% and 10 respondents representing 10.20%

disagreed and strongly disagreed respectively.

Comparatively, more respondents (mean 3.621) understand the influences of job evaluation which could be attributed to their level of education.

Influence of education on pay

Table 4.6: The influence of level of education on pay is shown on the table below.

Options	Number	Percentages (%)
SA	30	30.61
A	12	12.24
N	11	11.23
D	10	10.20
SD	35	35.72
Total	98	100

Source: Research Survey 2015

Analysis of table 6 showed that 30.61% of the respondents strongly agreed that educational level determines pay in Banks. 12 respondents agreed also, while 35 respondents representing 35.72% strongly disagreed that their Banks use level of education in fixing salaries. 11 respondents neither agreed nor disagreed. Results indicated a kind of extreme opinions on

the use of educational level for pay. The mean score of 2.92 showed the employees filled within neutral views.

Influence of government and union pressures

Table 7 represents the responses on influence of Government policy and Unionism on employees pay structure.

Table 4.7: Influence of Government and Union Pressure

Option	Number	Percentages (%)
SA	20	20.40
A	18	18.37
N	36	36.73
D	14	14.30
SD	10	10.20
Total	98	100

Source: Research Survey 2015

Out of 98 respondents, 36 respondents neither agreed nor disagreed government policy and union pressure were that responsible for their pay, which indicated that more employees were of the view that pay was fixed by other factors different from universal government labour laws. However 20 respondents representing 20.40% strongly believed that government policies and unionism combine to determine pay in Banks. At a mean score of 3.24, the implication is that

government and unions play important roles in pay determination.

Conditions of pay

Factors that influence pay satisfaction include: unequal pay among peers, underpayment for efforts and so on. The pay satisfaction of respondents is presented on tables 8 to 12.

Table 4.8: Responses on Pay Disparity of Respondents

Options	Numbers	Percentages (%)
SA	18	18.37
A	23	23.47
N	5	5.10
D	22	22.45
SD	30	30.61
Total	98	100

Source: Research Survey 2015

Table 8 above shows that 18 respondents strongly agreed that there is no pay disparity in the Bank. Another 14 respondents agreed that there is no pay disparity while 31 respondents representing 31.63% strongly disagreed that pay disparity does not exist in the Bank. 15 respondents neither agreed nor disagreed. Table 8, further shows that more employees disagreed which showed that pay disparity does not exist in Bank. This could be attributed to the Bank reforms in Nigeria which resulted in mergers and

acquisitions

Comparable pay among peers

The responses on comparable pay among peers are represented on table 9 below. The table showed that respondents held various views on comparable pay of peers in the Banking industry. 22 and 30 respondents disagreed and strongly disagreed respectively that their pay were comparable to pay of their peers in the Banking industry.

Table 4.9: Comparable pay among peers

Options	Numbers	Percentages (%)
SA	18	18.37
A	14	14.30
N	15	15.30
D	20	20.40
SD	31	31.63
Total	98	100

Source: Research Survey 2015

While 18 respondents (18.37%) and 23 (22.47%) of the respondents strongly agreed and agreed respectively that they receive similar pay as are obtainable in the Banking industry. 5 respondents neither agreed nor disagreed. The mean score was 2.77 which indicated neutrality in opinion. It is neither agreed nor disagreed. The implication is that pay in the Banks do not compare favourably with pay of their peers in the Banking industry.

Responses on the level of pay satisfaction

The level of pay satisfaction of respondents is presented in table 10 below.

Analysis of table 10 showed that 40 respondents strongly agreed that there is pay satisfaction in the Bank. Also 20 respondents disagreed to the notion that they enjoy pay satisfaction. 12 respondents strongly agreed that there is pay satisfaction. 14 respondents also agreed while 12 respondents neither agreed nor disagreed.

Table 4.10: Pay satisfaction of employees

Options	Numbers	Percentages (%)
SA	12	12.24
A	14	14.30
N	12	12.24
D	20	20.40
SD	40	40.82
Total	98	100

Source: Research Survey 2015

Reaction to Pay Disparity

Job satisfaction from pay

The influence of pay on Job Satisfaction of Respondent is shown on Table 11

Table 4.11: Responses on Job Satisfaction of Respondent

Options	Numbers	Percentages (%)
SA	19	19.38
A	17	17.35
N	0	0
D	40	40.82
SD	22	22.45
Total	98	100

Source: Research Survey 2015

The level of job satisfaction derived from pay as shown on Table 11 portrayed on overwhelming disagreement on job satisfaction from pay. 40.82% of respondent disagreed that they have job satisfaction from pay. 22% of the respondent strongly disagree that their pay gave them job satisfaction. While 19.38% and 17.35% of the respondents disagreed that they have job

satisfaction from pay respectively.

Absenteeism due to pay

Absenteeism among workers often reflects job dissatisfaction. Level of absenteeism probably as a response to pay inequality and dissatisfaction among respondents is shown on Table 12.

Table 4.12: Response on absenteeism of respondents

Options	Numbers	Percentages (%)
SA	34	34.70
A	28	28.58
N	10	10.20
D	11	11.22
SD	15	15.30
Total	98	100

Source: Research Survey 2015

34 respondents representing 34.70% strongly agreed that level of absenteeism is a reflection of unequal and inappropriate pay for effort. 28 of the respondents agreed that pay inequality was responsible for absenteeism. 10 respondents neither agreed nor disagreed. While 15 respondents (15.30%) and 11(11.22%) respondents respectively disagreed or agreed that

unequal pay is responsible for absenteeism. Other reasons could be responsible for absenteeism as described by the mean score of 3.37.

Level of performance based on pay

The influence of pay on performance of respondents is shown in Table 13 below.

Table 4.13: Influence of pay on performance of respondents

Options	Numbers	Percentages (%)
SA	40	40.82
A	26	26.53
N	0	0
D	15	15.30
SD	17	17.35
Total	98	100

Source: Research Survey 2015

A total of 67.35% of the respondents was in agreement that they perform their jobs based on what they receive as pay. Among the 67.35%, 40.82% strongly agreed on pay based performance. These respondents see employment as input-output relations. However 17 of the respondents strongly disagreed that their performance was based on the amount of pay received by them. The mean score of the respondents was 3.58. This mean score depicts the agreement that respondents pay was

responsible for their job performance.

Employee turnover

Employees experiencing Job dissatisfaction have the tendency to leave their jobs for better paid jobs. The urge to leave current job for a better paid jobs is made strong when the work environment is unconducive for optimal productivity.

The tendency to move to new jobs by respondents is presented on table 14.

Table 4.14: Responses on moving to new jobs by respondents

Options	Numbers	Percentages (%)
SA	30	30.61
A	40	40.82
N	10	10.20
D	5	5.10
SD	13	13.27
Total	98	100

Source: Research Survey 2015

Table 14 shows that 30 respondents strongly agreed that they will leave their jobs if opportune to do so. Another 40.82% also agreed that they will leave their jobs due to pay. 10 respondents representing 10.20% neither agreed nor disagreed. 5 respondents and 13 respondents respectively disagree and strongly disagreed that they will leave their jobs at the Bank. The mean score for Table 4.14 is 3.30. While implied that employees will leave the Bank if better pay offers are received by them.

Hypotheses Testing

The following hypotheses were tested using clu-statistics for significance.

Hypotheses one

H₀: Pay disparity has no significant effects on performance of Union and Diamond banks.

H_i: Pay disparity has significant effects on performance of Union and Diamond banks.

Table 4.15: Frequency of responses on pay disparity

Organization	Frequency	SA	A	N	D	SD	Total
Union Bank	Observed.	24	10	8	4	6	52
	Expected	18.04	14.56	5.31	5.58	7.95	
Diamond Bank	Observed.	10	8	2	7	9	46
	Expected	15.96	13.14	4.70	5.16	7.04	
Total		34	28	10	11	15	98

Source: Research Survey 2015

Degree of freedom = 4 x 1 = 4

$$\begin{aligned} \text{Chi-square } (X^2) &= \sum \frac{(O-E)^2}{E} \\ &= \frac{(24-18.04)^2}{18.04} + \frac{(10-14)^2}{14} + \frac{(8-5.31)^2}{5.31} + \frac{(4-5.84)^2}{5.84} + \frac{(6-7.95)^2}{7.95} \\ &+ \frac{(10-15.96)^2}{15.96} + \frac{(8-13.14)^2}{13.14} + \frac{(2-4.70)^2}{4.70} \\ &+ \frac{(7-5.16)^2}{5.16} + \frac{(9-7.04)^2}{7.04} = 11.58 \end{aligned}$$

Calculated chi-square (11.03) is greater than tabulated chi-square x^2 (9.488) at $P < 0.05$.

Therefore accept H_0 hypotheses. Pay disparity is significant for employees' performance

Hypotheses two

H₀: There is no significant relationship between pay and employee performance

H_i: There is a significant relationship between pay and employee performance

Table 4.16: Frequency of responses on relationship between pay and performance

Organization	Frequency	SA	A	N	D	SD	Total
Union Bank	Observed.	30	13	0	5	7	55
	Expected	22.45	14.59	0	8.41	9.53	
Diamond Bank	Observed.	10	13	0	10	10	43
	Expected	17.55	11.41	0	6.58	7.46	
Total		40	26	0	15	17	98

Source: Research Survey 2015

Degree of freedom = 3 x 1 = 3 (Column Total 1 x Row Total - 1)

$$\begin{aligned} \text{Chi-square } (X^2) &= \sum (O-E)^2 \\ &= \frac{(30-22.45)^2}{22.45} + \frac{(13-14.59)^2}{14.59} + \frac{(5-8.41)^2}{8.41} + \frac{(7-9.53)^2}{9.53} \\ &+ \frac{(10-17.55)^2}{17.55} + \frac{(13-11.41)^2}{11.41} + \frac{(10-6.58)^2}{6.58} \end{aligned}$$

$$+ \frac{(10-7.46)^2}{7.46} = 10.76$$

Calculated chi-square (x^2) = 10.76 is greater than tabulated chi-square critical (x^2) = 9.488 at 3 degree of freedom. Accept H_0 which states that there is a significant relationship between pay and performance of the selected banks.

Hypotheses three

H₀: There is no significant difference in pay disparity between Union and Diamond Banks

H₁: There is a significant difference in pay disparity between Union and Diamond Banks

Table 4.17: Frequency distribution of responses on pay disparity

Organization	Frequency	SA	A	N	D	SD	Total
Union Bank	Observed.	10	7	11	13	21	62
	Expected	11.39	8.85	9.50	12.65	19.61	
Diamond Bank	Observed.	8	7	4	7	10	36
	Expected	6.61	5.14	5.51	7.35	11.39	
Total		18	14	15	20	31	98

Source: Research Survey 2015

Using

a. $E = \frac{\text{Total Column} \times \text{Row Total}}{N}$

b. Degree of freedom = (C-I) (R-I) = at $p < 0.05$

c. Chi-square (X^2) = $\sum \frac{(O-E)^2}{E}$

$$= \frac{(10-11.35)^2}{11.35} + \frac{(7-8.85)^2}{8.85} + \frac{(11-9.50)^2}{9.50} + \frac{(13-12.60)^2}{12.65} \\ + \frac{(21-19.61)^2}{19.61} + \frac{(8-6.61)^2}{6.61} + \frac{(7-5.14)^2}{5.14} + \frac{(4-5.57)^2}{5.51} \\ + \frac{(7-7.35)^2}{7.35} + \frac{(10-11.39)^2}{11.39} \\ = 2.50$$

Calculated $x^2 = 2.50$ is less than tabulate $x^2 = 9.488$

Decision

Accept the hypothesis which states that there is no significant difference in pay disparity between Union and Diamond Banks.

Discussion of Findings

Pay review in the bank is neither related to bank's ability to pay nor government regulations. There was the consensus that job evaluation is an important tool for determination of salary. Since banks' ability to pay is with the primary determination, other primordial reasons could be responsible for the pay disparity observed among the respondents. The banks use educational level of employees to fix pay. However respondents were polarized on their views about the role of education. However education is an important factor for legislation on minimum wage.

The pay satisfaction derived by respondents is low which is traceable to pay disparity among

them. More than 50% of the respondents was of the view that pay disparity exists in their banks. Similarly their pay is not comparable with the pay their peers received within the banking industry. The expected bank reforms in Nigeria placed strong banks over weak ones with acquisition and mergers. The stronger banks still offer more competitive pay packages to their original employees. A further analysis of responses on comparable pay revealed that almost equal percentage of respondents agreed and disagreed on comparable pay. Since Nigeria runs a capitalistic economy, only minimum pay in the bank industry is fixed by government. Banks are free to fix pay based on their profitability and ability to pay (Paauwe and Boselie, 2005). Job dissatisfaction, Absenteeism and low job performances are expected from respondents. These behaviors are prevalent when employees are dissatisfied with their conditions of service. 62% of respondent are not job satisfied with their job condition. Though employees' responses on absenteeism showed some disagreement, as expected absenteeism may not totally be due to pay disparity (Judge and Bono, 2001). Nevertheless is an important factor in employees' performance of pay disparity.

Hypotheses testing showed that relationships exist between pay disparity and performance of employees' and pay disparity between Union and Diamond banks.

Conclusion

The result of the study showed that pay disparity exist in commercial banks in Nigeria. The pay disparity is not solely due to bank's ability to pay or level of education or job

evaluation. However other variables not identified in the study, could be responsible. The high level of pay disparity calls management of post reform era banks to narrow the gap in pay disparity as a means of improving employees' performance.

Recommendations

The following recommendations are made:

First, Commercial Banks should use level of education to fix the pay of their employees.

Second, wide pay disparity in Commercial banks is unhealthy and should be critically addressed to discourage absenteeism and labour turnover.

Thirdly, the Federal Government of Nigeria should put in place a machinery to monitor Pay of employees following the merger and acquisition of banks. Fourthly, further research is required in area of evaluating the effects of pay disparity on the performance of banks in the urban and semi-urban locations.

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Interrogating the Strategic Relevance of Information Communication Technology (ICT) Adoption in Nigerian Banks

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Abstract

This study seeks to interrogate the strategic relevance of Information Communication Technology (ICT) on the Performance of the Nigerian Banking Sector: a study of First Bank Nigeria plc. The study explored the following objectives to: (i) ascertain the extent to which ICT applications have enhance the performance of First bank operations in Benue state, (ii) identify the specific areas in which ICT has impacted on the operations of first bank in Benue state and (iii) identify the challenges in implementing/managing the ICT applications in First Bank branches in Benue state. The study adopted the survey design due to the nature of the objectives of the study. The entire population elements comprising 186 bank staff and 100 customers of First bank branches in Benue state were exhaustively used as the sample elements due to the small size of the population (N=n=286). The major instruments used for primary data collection was the questionnaire and oral interview. The questionnaire was structured using 5-point Likert scale in line with the objectives of the study. Cronbach Alpha was used in testing the validity and the reliability of the research instrument. Alpha value of 0.98 was obtained indicating a high degree of relationship. The test of hypotheses was carried out using the Friedman Chi-square at 0.05 level of significance. The findings indicate among others that, ICT applications had significant impact on the operations of First Bank branches in Benue state $\chi^2_c = 127.167^a > \chi^2_t = 18.307$, $p < 0.05$), indicating that it accommodates the operations and processes of other sectors for profit, it enhances universal banking without borders and boundaries, gives real time access to both bank and customer information, ease fraud detection and prevention and quickens customer response time among others. On the basis of the findings, the study recommends among others that, external ICT experts/auditors should be contracted occasionally to carry out quarterly evaluation of the activities of staff and the performance of the ICT platform in general vis-avis the intended objectives of such platforms in order to make necessary adjustments as may be required to guarantee uninterrupted services by the bank in Benue state branches.

Key: Strategic relevance, banks, performance, Benue

Introduction

Today's business environment is very dynamic and undergoes rapid changes as a result of technological innovation, increase awareness and demand by customers. Business organizations especially the banking industry of the 21st century operates in a complex and competitive environment characterized by these changing conditions and highly unpredictable economic climate. Information and Communication Technology (ICT) is at the Centre of this global change curve.

In recent years, many strategic innovations have taken place in the world, but the most striking and celebrated of these is the information communication technology. It has the greatest influence on the global economy, making it possible to collect, process and transmit information at breath taking speed and declining cost thereby increasing productivity and improving quality and efficiency in all sectors in which banking sector is not an exception.

The effectiveness of the banking sector being the life wire of the financial sector of an economy, promotes and facilitates the rest of the economic activities of the country, hence the need to embrace the information communication technology as a strategic option to boost the activities and performance of this important sector.

Banking has come a long way from the time of ledger cards and other manual filing systems. Most banks today have electronic systems to handle their daily voluminous tasks of information retrieval, storage and processing. Irrespective of whether they are automated or not, banks by their nature are continually involved in all forms of information management on a continuous basis (Awe 2009 as cited in (Idiario, 2010, p.40).

The use of ICT in the banking sector became of interest to this study due to the significant role it plays in the economy. It helps in stimulating economic growth by directing funds to economic agents that need them for productive activities. This function is very vital for any economy that intends to experience meaningful strategic growth because it makes arrangements that bring borrowers and lenders of financial resources together and more efficiently too than if they had to relate directly with one another.

The banking reforms (especially the

recapitalization that specifies a minimum capital base of 25 billion naira for commercial banks), are pursued with a view to making the sector realize its objectives in advancing the economy (CBN, 2006). It is expected that the impact of these reforms will be enhanced with the use of ICT because it will create some form of competitive advantage and improve banking services through accuracy and efficiency in their transactions. In other words, it will change the nature of banks' services in terms of quality which will culminate in greater service delivery and productivity. Therefore, banks that desire to perform need to appreciate the fact that the banking sector now exists in a global village. Consequently, they must strive to provide local and global banking services using the infrastructure of the Global village (ICT).

Despite the adoption of ICT, First bank of Nigeria does not seem to be responding rapidly to customers' need at the shortest possible time as it should. Most customers today question the effectiveness of these ICT applications which to them has failed to deliver the expected benefits to both the bank and its customers. Till date, long queues, network failure, cyber frauds, poor customer responds rate, and other software failure still characterizes the operations of First bank in Nigeria. Against this backdrop therefore, this study is undertaken to ascertain whether the adoption of ICT as a strategic option have significantly enhanced the performance of First bank operations in Benue state branches of the bank. specifically, this study seeks to achieve the following objectives: to ascertain the extent to which ICT applications as a strategic option has affected the operations of first bank in Benue state; to identify the specific areas in which ICT has impacted on the operations of first bank in Benue state; to identify the challenges face by first bank Nigeria plc in implementing/managing the ICT applications in Benue state.

Information technology and it's innovations in the banking sector

According to Mejabi (2008), Information Technology is a general term that describes any technology that helps to produce, manipulate, store, communicate and/or disseminated information. Microsoft Encarta (2009) defined information technology as the processing of data

via computer: the use of technology from computing, electronics, and telecommunications to process and distribute information in digital and other forms. Information technology combines the technology of computers and communications to provide information processing services throughout the office or around the world.

Information technology is a term which generally covers the harnessing of electronic technology for the information needs of businesses at all levels (Anderson, 1990). In addition, Longley and Shain (1989), defines information technology as the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a micro-electronic based combination for computing and telecommunication. While an information system (IS) is a group of formal process that together collects, retrieve, process, store and disseminate information for the purpose of facilitating planning, control, coordination and decision making in organizations. Information technology on the other hand provides the technical solutions identified in the (IS) information system; including the networks, hardware and software (Grainger-Smith and Oppenheim, 1994). Porter and Miler (1985) conceive of information technology to broadly encompass the information that business creates and use as well as a wide spectrum of increasingly convergent and linked technologies that process the information. In addition to computers, the data recognition equipment, communication technologies, factory automation and other hardware services are involved. Traditionally, telephone, radio and television were referred to as media technology (Okunoye, 2007).

Information technology is basically an electronic device and it's based on integrated circuits or silicon chips. Okunoye, (2007) further identified two major forms of information technology, namely information technology as Telematics, meaning —Big media and Ethnotronic, meaning —Small media. Telematics are to be identified with such technologies as computers, telephone, satellites, television, radio, video and those that rely on large scale infrastructures. Ethnotronics include technologies such as typewriters, audio cassette records, fax machines, paper copies, calculators,

digital watches and other more personal types of technologies.

Information Technology (IT) in banks is the automation of processes, controls, and information production using computers, telecommunications, software and ancillary equipment such as automated teller machine and debit cards (Agboola, 2004). It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels. Innovations in information processing, telecommunications, and related technologies – known collectively as “information technology” (IT) – are often credited with helping fuel strong growth in the many economies (Coombs *et al*, 1987). IT is defined as the modern handling of information by electronic means, which involves its access, storage, processing, transportation or transfer and delivery (Ige, 1995). According to Alu (2002), IT affects financial institutions by easing enquiry, saving time, and improving service delivery. In recent decades, investment in IT by commercial banks has served to streamline operations, improve competitiveness, and increase the variety and quality of services provided.

According to Yasuharu (2003), implementation of information technology and communication networking has brought revolution in the functioning of the banks and the financial institutions. It is argued that dramatic structural changes are in store for financial services industry as a result of the Internet revolution; others see a continuation of trends already under way.

In a study conducted by Irechukwu (2000) in Nigeria, he lists some banking services that have been revolutionized through the use of ICT as including account opening, customer account mandate, and transaction processing and recording. Information and Communication Technology has provided self-service facilities (automated customer service machines) from where prospective customers can complete their account opening documents direct online. It assists customers to validate their account numbers and receive instruction on when and how to receive their cheque books, credit and debit cards (Agboola, 2004). The ICT products in use in the banking industry in many developing and developed countries include

Automated Teller Machine, Smart Cards, Telephone Banking, MICR, Electronic Funds Transfer, Electronic Data Interchange, Electronic Home and Office Banking (Agboola, 2001).

Why doesn't everybody innovate is a common question in business literature? It is widely recognized that innovation is key to the economic performance of firms. Innovative firms grow faster in terms of employment and profitability. An innovation is an idea, practice, or object that is perceived to be new by a person or adopting entity. The innovation is not seen as something periodical that happened by accident nor something that results from the action of an individual agent. Innovation is seen as the result of an interactive and non linear process between the firm and the environment. When an innovation emerges, diffusion unfolds which entails communicating or spreading of the news of the innovation to the group for which it is intended (Okunoye, 2007). Adoption however is the commitment to and continued use of the innovation. The diffusion of innovations theory provide explanations for when and how a new idea, practice or newly introduced information and communication medium is adopted or rejected over time in a given society (Okunoye, 2007).

Innovation is the generation, acceptance and implementation of new ideas, processes, products or services. This study is concerned with product innovation, i.e., new products and the organizational processes that precede their launch. What is then to be considered 'new'? When is it 'new enough' to be considered an innovation? The literature provides several frameworks to classify product newness, e.g., from incremental to radical innovations. This study, however, is concerned with product innovation as a phenomenon, rather than with product innovations with a certain degree of newness. This includes significant improvements in technical specifications, components, and materials, incorporated software, user friendliness, or other functional characteristics. Product development is used as a term for the span of innovation activities leading to, or that are intended to lead to, product innovation.

According to Agboola (2004), the application of information and communication

technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concerns to all banks and indeed a prerequisite for local and global competitiveness. ICT directly affects how managers decide, how they plan and what products and services are offered in the banking industry. It has continued to change the way banks and their corporate relationships are organized worldwide and the variety of innovative devices available to enhance the speed and quality of service delivery (Agboola, 2001, 2004).

Performance or corporate performance has been defined differently by different scholars but some of them are in agreement that corporate performance describes the attainment of set goals. To this end, Daft (2000:254) defines corporate performance as the organization's ability to attain its goals by using resources in an efficient and effective manner. Quite similar to Daft (2000:254), Richardo (2001:115) defines corporate performance as the ability of the organization to achieve its goals and objectives. Previous research had used many variables to measure corporate performance. These variables include profitability, gross profit, return on asset (ROA), return on investment (ROI), return on equity (ROE), return on sale (ROS), revenue growth, market share, stock price, sales growth, export growth, liquidity and operational efficiency (Gimenez, 2000:123). There has not been any single measure or best measure of corporate performance. Organization adopts different objectives and measurements for corporate performance. Hamel and Prahalad (1989:133) however, argue that profitability was the most common measurement used for corporate performance in business organizations. This view is supported by Nash (1993:23) who stressed that profitability was the best indicator to identify whether an organization met its objectives or not. Even though profitability is assumed as the best measure of corporate performance, the researcher uses operational efficiency as the measure of corporate performance, stressing that without operational efficiency, profitability cannot be attained in any organisation; hence the relationship between ICT and the overall performance of First bank Nigeria

Plc will be measured in terms of the quality of services delivered to customers as a result of ICT aided operational efficiency.

Review of Empirical Studies

Past researchers have evolved from mere anecdotal reports to a more empirically-based research in recent times. This includes; the extent work of Weil (1992), on the impact of information technology on management function and its structures to Willcocks (1996) conclusion that information technology has led to change in organization's work environment and the organization's core business in the market place.

The more recent ones include perception of the impact of information technology investment in organizations: A survey of hospital industry by (Bruce & Gede, 2000 as cited in Idiario, 2010 p.26); Understanding senior executives, the use of information technology and the internet and workplace redesign (Pjipers, 2002 as cited in Idiario 2010:28). The relationship between information technology and the organization is multifaceted and highly complex. In fact, there are different views on the relationship between information technology and organizational performance. A review of past literatures has shown that there are no definite generalizations of the relationship between the two key variables.

While some studies support a positive relationship, other works identified a negative relationship and even some indicated no relationship at all. For instance, a study of some selected stores in a fast food industry by Baker, et al (1990), they observed that stores with the technology and large breakfast sales performed significantly better in terms of cutting materials cost.

Bender (1986 as cited in Idiario, 2010:27) observed an optimum level of performance achieved at a range of information technology from 15% to 25% of operating cost of the firm.

On the other hand, Cron and Sobol (1983) in a measure of the relationship between computerization and performance in the warehousing industry found out that firms that relied extensively on computer have either a very strong or a weak financial performance. Ovia (2000) corroborated the earlier view by identifying a negative relationship between strategic information technology and organization performance in the values of

manufacturing industry. However, the following researches indicated cases of no-relationships between the two variables. This includes:

- a. Turner, (1985 as cited in Idiario, 2010:28) in a study of banking industry proved that, there were no relationship between organizational performance and the relative proportion of resources allocated to data processing.
- b. Stressman (1985) concluded that there were no evidence of any relationship between high performing firms and the size of information technology investment in service sector firms.
- c. Powel and Dent-Micallef (1997) found out that the sustainable performance advantages could not be linked to information technology alone.

Recognizing the complexity of the issues under consideration, some authors attempted to search out the intervening factor in the information technology investment-organizational performance relationship (Bruce & Gede (2000) as cited in Idiario 2010:28). For instance, Parthasarthy and Sethi (1993), found out how strategy and structure plays a moderating role in the investment on computer automation and firm's performance, in their study, they were able to identify flexibility of business and manufacturing strategies as well as quality of leadership as the moderating effects.

Moreover, Sohal and Ng (1998 as cited in Idiario, 2010:29) in their study of 530 Australian manufacturing companies, discovered that the greatest impediments in realizing the full potential of information technology in an organization are the misalignment of business and information technology strategies, lack of change in their historic information technology structure, lack of a full understanding of the benefits of information technology and lack of support from senior management.

Bruce and Gede (2000) also corroborated an argument for moderating factors between the information technology and employee performance variables by examining the perceptions of employee on the organizational impacts of investment in information technology. In their paper, demographic variation in employee's perception in five organization uses variables viz investment in information

technology; level of information technology usage; user satisfaction with information technology; employee performance; hotel performance and their interrelationships among them were examined. In their final analysis, based on objective data, employee perception measure was found to be a reliable indicator of the actual level of investment and hotel performance.

Research Methodology

The research design adopted for this study was a survey approach, meant to source primary

data from the field. Specifically, a 5-point Likert-scale close ended questionnaire was used to source primary data and a face-face interview with respondents complement in areas where the questionnaire couldn't address or elicits adequate data. The population of this study comprise all the staff of First bank Nigeria Plc in the three senatorial zones in Benue state and some randomly selected customers of the bank in the three senatorial zones under investigation. See details in table 1.

Table 1: Population Distribution by Senatorial Zone

Zone	Town	Number of branches	Staff strength	Selected customers	Total
A	Katsina- Ala Vandeikya	1	13	10	23
		1	17	10	27
B	Gboko Makurdi: Mkd main North bank Modern Mkt Wadata	1	23	10	33
		4	36	10	46
			27	10	37
			7	10	17
			11	10	21
C	Otukpo: Otukpo Main Otukpo Mkt Otukpa	2	29	10	39
			14	10	24
		1	9	10	19
Total			186	100	286

Source: Field Survey, 2012.

The choice of these respondents was made so as to allow the participation of all categories of stakeholders in the study. This further ensures that reliable and incisive information were sought for analysis. The entire target population elements were used as the sample size in this study. This is to say that, the sample size was thus: $n=N=286$. This approach was adopted as a result of the small size of the population as well as an effort to have a comprehensive view/knowledge of the issues under investigation. The researcher believed that giving all the population elements the opportunity to participate in the study will produce results that can be adequately generalised or perceived to be what obtains in all the branches of First bank plc in Nigeria.

In overall, 18 item questionnaire was

designed to provide both the bio-data and the research data for the three research objectives. Question 1 to 4 elicits the bio-data; 5 to 9 addresses objective one; 10 to 14 addresses objective two while questions 15 to 18 provides the data for objective three. A 6 item oral interview schedule was also used to generate incisive information from the respondents on areas that the questionnaire was not able to adequately elicit the required data. The researcher therefore used the oral interview to clarify salient issues that the questionnaire was not able to adequately cover in the course of the study.

The Cronbach's alpha coefficient determined through the Statistical Package for Social Sciences (SPSS) was also used to test for reliability. Only items that returned alpha values

of 0.9 and above showing a high degree of reliability of the instrument were used. (See appendix iii)

The raw data collected from the primary source was presented using tables and simple percentages. The hypotheses were tested using Frieman Chi-square with the aid of the Statistical Package for Social Sciences (SPSS). Decision rule: reject the null hypothesis if the $X^2_c > X^2_t$. The entire test was done at 0.05 level of significance.

Research Hypotheses

H₀₁: ICT applications do not have significant

effects on the operations of first bank in Benue state

H₀₂: ICT applications do not have significant impact on any clearly identified area of First bank operations in Benue state.

H₀₃: First bank Nigeria plc does not face significant challenges in implementing/managing ICT applications in Benue state.

Data Presentation and Analysis

The outcome of questionnaire administration is presented thus:

Table 2: Questionnaire Administration/Outcome

Questionnaire Administration	Frequency	Percentage (%)
Total number of questionnaire distributed	286	100
Total number of questionnaire returned	213	74.48
Total number of unsuccessfully filled/not returned questionnaires	73	25.52

Source: Field Survey, 2012

Table 4.1 shows that, out of the 286 copies of questionnaires distributed, 213 copies representing 74.48% of the total copies administered to the staff of First bank in Benue state were successfully filled and returned while 73 copies representing 25.52% of the total administered questionnaires were both unsuccessfully filled and not returned for

analysis. This shows that the total number of questionnaire returned for analysis (74%) is sufficient enough to produce results that can be a true representation of the total population.

Objective One: *To ascertain the extent to which ICT applications have affected the operations of first bank in Benue state*

Table 3: Effects of ICT on First bank operations in Benue

	SA	A	U	D	SD	Mean	Std. Deviation
1. Accommodate the operations and processes of other sectors for profit	112 (69.70)	50 (22.73)	28 (6.06)	23 (1.52)		4.6061	.67403
2. Universal banking without borders and boundaries	130 (83.33)	38 (13.64)		25 (3.03)		4.7727	.60014
3. Real time access to both bank and customer information	65 (34.09)	72 (39.39)	36 (11.37)	40 (15.15)		3.5606	1.31496
4. Ease of fraud detection and prevention	51 (23.48)	50 (22.73)	72 (38.64)	40 (15.15)		3.5455	1.01413
5. Quick customer response time	57 28.03	55 (26.52)	59 (29.54)	42 (15.91)		3.5909	1.13214

Source: field survey, 2012

Decision Rule

If mean < 3.0, the respondents Disagree. If 3.5 < mean ≤ 3.0, the respondents are Undecided. If mean ≥ 3.5, the respondents Agree.

In table 3, the associated sample mean of the responses for the five response items were 4.6061 with a sample standard deviation of 0.67403; 4.7727 and a sample standard deviation of

0.60014; 3.5606 and a sample standard deviation of 1.31496; 3.5455 and a sample standard deviation of 1.01412 and 3.5909 and a sample standard deviation of 1.13214 respectively. This shows that, for all the response options, majority of the respondents were in agreement that ICT accommodate the operations and processes of other sectors for profit; hence the mean was ≥ 3.5 ; it enhances universal banking without borders and boundaries; hence the mean was ≥ 3.5 ; there is real time access to both bank and customer

information hence the mean was ≥ 3.5 ; ICT application in the bank leads to ease of fraud detection and prevention; hence the mean was ≥ 3.5 and that ICT application in First bank facilitates quick customer response time; hence the mean was ≥ 3.5 respectively.

Objective Two: *To identify the specific areas in which ICT has impacted on the operations of first bank in Benue state*

Table 4: Areas of ICT impact on First bank operations

	SA	A	U	D	SD	Mean	Std. Deviation
1. Operational efficiency in terms of accurate and quick processing of transactions and other administrative functions	68 (35.61)	89 (52.27)	30 (7.57)	26 (4.55)		4.1894	.76301
2. Quick fraud detection and prevention through control check.	89 (52.27)	65 (33.33)	33 (9.85)	26 (4.55)		4.3333	.83499
3. Staff requirement, discipline, reward and training and development need identification	91 (53.79)	71 (37.87)	29 (6.82)	22 (1.52)		4.4394	.69081
4. Bank-customer relationship	86 (50.00)	76 (41.66)	25 (3.79)	26 (4.55)		4.3712	.76573
5. Accurate record keeping, reconciliation and auditing.	89 (52.27)	64 (32.58)	35 (11.36)	25 (3.79)		4.2424	.80151

Source: field survey, 2012

Table 4 show the responses to the Likert-scale question, the sample mean (\bar{x}), and the sample standard deviation (δ) score. In table 4, the associated sample mean of the responses for the five response items were 4.1894 with a sample standard deviation of 0.76301; 4.3333 and a sample standard deviation of 0.83499; 4.4394 and a sample standard deviation of 0.69081; 4.3712 and a sample standard deviation of 0.76573 and 4.2424 and a sample standard deviation of 0.80151 respectively. This shows that, for the five response options, majority of the respondents were in agreement that, ICT has improved the operational efficiency of First bank in terms of accurate and quick processing of transactions and other administrative functions; hence the mean is ≥ 3.5 ;

ICT has led to quick fraud detection and

prevention through control check in First bank; hence the mean is ≥ 3.5 ; ICT has enhanced the identification of staff requirements, discipline, reward and training and development needs of the human resource in First bank branches in Benue, hence the mean is ≥ 3.5 ; ICT application has reasonably improved bank-customer relationship in First bank branches in Benue state; hence the mean is ≥ 3.5 and that accurate record keeping, reconciliation and auditing of accounts have greatly improved as result of ICT application in First bank; hence the mean is ≥ 3.5 respectively.

Objective Three: *To identify the challenges face by first bank Nigeria plc in implementing/managing the ICT applications in Benue state*

Table 5: Challenges of implementing ICT in First bank in Benue state.

	SA	A	U	D	SD	Mean	Std. Deviation
1. Low internet connectivity	130 (83.33)	32 (9.09)	29 (6.06)	22 (1.52)		4.7424	.63752
2. Low teledensity	130 (83.33)	32 (9.09)	28 (5.31)	23 (2.27)		4.7348	.66378
3. Dearth of e-workforce	241 (91.66)	29 (6.06)	22 (1.52)	21 (0.76)		4.7652	.78982
4. Cyber insecurity	57 (28.03)	43 (17.42)	26 (4.55)	85 (48.48)	22 (1.52)	3.2197	1.34400

Source: field survey, 2012

Table 5 show the responses to the Likert-scale question, the sample mean (\bar{x}), and the sample standard deviation (δ) score. In table 5, the associated sample mean of the responses for the four response items were 4.7424 with a sample standard deviation of 0.63752; 4.7348 and a sample standard deviation of 0.66378; 4.7652 and a sample standard deviation of 0.78982 and 3.6197 and a sample standard deviation of 1.3440 respectively. This shows that, for all the response options, majority of the respondents were in agreement that the challenges of ICT implementation in First bank branches in Benue were, low internet connectivity in effectively utilizing ICT infrastructure deployed by the bank in Benue state; hence the mean is ≥ 3.5 ; low teledensity faced by both the bank staff and customers in effectively utilizing ICT infrastructure deployed by First bank in Benue state; hence the mean is ≥ 3.5 ; the current dearth of e-workforce in First bank branches in Benue state, hence the mean is ≥ 3.5 and that cyber insecurity constitute a great risk or challenge to effective utilization of ICT infrastructure deployed by First bank in Benue state; hence the mean is >3.5 respectively.

Test of Hypotheses

Ho₁: ICT applications does not have significant effects on the operations of first bank in Benue state

Test Statistics

	Ho ₁
Chi-square	127.167 ^a
Df	10
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.0.

From the above table, the $\chi^2_c = 127.167^a > \chi^2_{\alpha} = 18.307$, $p < 0.05$. Therefore, the null hypothesis should be rejected. Hence, ICT applications have significant effects on the operations of first bank in Benue state.

Ho₂: ICT applications do not have significant impact on any clearly identified area of First bank operations in Benue state.

Test Statistics

	Ho ₂
Chi-square	349.333 ^a
Df	10
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.0.

From the above table, the $\chi^2_c = 349.333^a > \chi^2_{\alpha} = 10.307$, $p < 0.05$. Therefore, the null hypothesis should be rejected. Hence, ICT applications have significant impact on certain key and clearly identifiable areas of First bank operations in Benue state.

Ho₃: First bank Nigeria plc does not face significant challenges in implementing/managing ICT applications in Benue state.

Test Statistics

	Ho ₃
Chi-square	173.606 ^a
Df	9
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.2.

From the above table, the $\chi^2_c = 173.606^a > \chi^2_t = 16.919$, $p < 0.05$). Therefore, the null hypothesis should be rejected. Hence, First bank Nigeria plc does face significant challenges in implementing/managing ICT applications in Benue state

Discussion of Results

The results of data analysis show that:

ICT have significantly impacted on the operation of First bank Plc, branches in Benue state in so many ways. Some of the areas as observed in the study include: accommodation of the operations and processes of other sectors for profit, enhances universal banking without borders and boundaries, gives real time access to both bank and customer's information, easy fraud detection and prevention and quickens customer response time. This finding was confirmed by the hypothesis result which indicates that, ($\chi^2_c = 127.167^a > \chi^2_t = 18.307$, $p < 0.05$). The result is also consistent with the findings of earlier studies by Ovia (2000), Lucey (1987), porter and miller (1985), Adeyemi (2006), Frenzel (1996), Pritam (2002), Alu (2000), Irechukwu (2000) and Agboola (2001). In all these studies, the results show the deliverables of ICT application to include but not limited to accommodation of the operations and processes of other sectors for profit, enhances universal banking without borders and boundaries, gives real time access to both bank and customer's information, easy fraud detection and prevention and quickens customer response time. It therefore means that managers that wishes to drive their organizations to achieve some of these deliverables must necessarily implement ICT architecture in their organizations and tailor it to suit the requirement of their organizational objectives.

Again, on the specific areas in which ICT has impacted on the operations of First Bank in Benue state branches, it was observed that operational efficiency in terms of accurate and quick processing of transactions and other administrative functions, Quick fraud detection and prevention through control check, Staff requirement, discipline, reward, training and development needs identification, Bank-customer relationship, accurate record keeping, reconciliation and auditing are the key clearly identifiable areas in which ICT application have impacted on the operational efficiency of First Bank branches in Benue state. This result was further validated by the Chi-square test ($\chi^2_c =$

$349.333^a > \chi^2_t = 18.307$, $p < 0.05$), indicating that, ICT applications in First Bank have significantly impacted on certain key clearly identifiable areas of the banks' operation in Benue state. These key areas were also observed in earlier empirical findings by Adeoti (2005), Sanusi (2002), Accad (2009), Woherem (2000a), Willcock (1994), Ovia (2005), Okunoye et al (2007), Woherem (2000b) and Yasuharu (2003); thus corroborating the result of this study. It therefore implies that, for managers of modern organizations especially in the banking industry to cope with the rapid change and the pressure of the turbulent globally competitive business environment, they must exercise reasonable care in aligning, adopting and adapting their ICT platform to the changes in the industry and explore other ways of differentiating their services on the basis of unique customer service quality that is driven by a unique ICT infrastructure. This will go a long way in help the bank to remain competitively relevant and consequently enables the bank to deliver on their mandate and slogan as 'Truly the First'.

Furthermore, on the challenges associated with ICT implementation in First bank branches in Benue state, the study observes that, some of the key areas that the bank have been struggling to overcome in order to deliver a hitch free ICT platform include: low internet connectivity, low teledensity, dearth of e-workforce and cyber insecurity. This finding was further confirmed by the hypothesis result which shows that, ($\chi^2_c = 173.606^a > \chi^2_t = 16.919$, $p < 0.05$), indicating that First bank Nigeria plc faces significant challenges in implementing/managing ICT applications in Benue state. Earlier studies by Ojo (2007), Gallouj (1994), (Balancing Act, 2007), Afolabi (2009), Accad (2009), Ochugudu (2011) and Ovia (2005) all corroborates the finding of this study, thus implying that, the issues observed in this study are somehow the common challenges of ICT infrastructure and must be nib on the bud if First bank wants to derive the full benefits of investing or implementing ICT in the bank.

Conclusions and Recommendations

Based on the findings of this study, the following conclusions were drawn:

ICT applications reposition's a bank to accommodate the operations and processes of other sectors for profit, enhances universal banking without borders and boundaries, gives

real time access to both bank and customer information, ease fraud detection and prevention and quickens customer response time in the banking industry.

Application of ICT platforms and infrastructure in the banking industry enhances operational efficiency of banks in terms of accurate and quick processing of transactions and other administrative functions, quickens fraud detection and prevention, control check, Staff requirement needs identification, discipline, reward, training and development, Bank-customer relationship, accurate record keeping, reconciliation and auditing.

Low internet connectivity, low teledensity, dearth of e-workforce and cyber insecurity constrains and hinders the effective application and utilization of ICT infrastructure in organisations especially in the banking industry.

Recommendations

In order to make ICT applications more effective in the operations of First Bank in Benue state in particular and Nigerian banks in general, the study recommends the following measures:

- (i) Independent private radio and satellite network should be provided in First bank branches in Benue state in order to avoid network congestion and unauthorized access to bank servers. Basic maintenance on computers and other ICT gadgets should be carried out regularly to enhance accurate and quick processing of transactions and other administrative functions.
- (ii) External ICT experts/auditors should be contracted occasionally to carry out quarterly evaluation of the activities of staff and the performance of the ICT platform in general vis-avis the intended objectives of such platforms in order to make necessary adjustments as may be required to guarantee uninterrupted service by the bank in Benue state branches. This will go a long way in helping the bank to keep pace with technological changes in the industry and also provide the opportunity for staff training and retraining on the best use of banking software in the industry.
- (iii) The Management of First Bank should recruit, train and retrain e-workforce on interval bases to cope with the modern trends in ICT, so as to enhance good service delivery.
- (iv) Government should be sensitized about the need to formulate policies and strengthens the existing regulatory agency responsible for fighting cyber crime and other related matters with the necessary legal frame work to arrest and punish on spot cyber scammers as soon as they are arrested to serve as deterrent to others.

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Effects of Microfinance Bank Credit Facility on Small and Medium Scale Enterprises (SMEs) Sales Volume in Makurdi Metropolis

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pp 63-72

Abstract

The paper investigated effects of microfinance bank credit facility on small and medium scale enterprises sales volume in Makurdi metropolis. Data was collected, through the use of structured questionnaire, from a sample size of fifty registered small and medium scale enterprises in Benue State. The research design adopted was correlational survey design. The pooled data was analyzed using ordinary least square analytical method and the validity and reliability of the instrument measure using cronbach alpha which gave results of 0.74 on sale volume. The finding revealed that micro finance bank credit facility had significant positive effect on small and medium scale enterprises sale volume. The study therefore recommends among others, that; small and medium scale enterprises to work toward increasing their liquidity, government should compel micro finance banks to be liberal on collateral as a tool for accessing micro finance bank credit facility, capacity development for management staff of small business be enhanced alongside improvement in their product quality in order to have higher patronage in the market place.

Keywords: Micro finance banks, credit facilities, sales volume, Makurdi metropolis

Introduction

The Small and Medium Scale Industries subsector of the Nigerian economy over the years has been facing problems of slow or stagnating development. This problem has continued to serve as a cog in the wheel of progress of the overall economic development in the country. This has stamped the growth of Small and Medium Enterprises (SMEs) in Nigeria thereby threatening and depriving the nation of the much needed benefits of its programmers' of poverty reduction, employment generation and wealth creation, which by implication should have set the country's ball rolling for sustainable growth and development of the Nigerian economy. One major problem, which is indisputable in all quarters, is the lack of sufficient funds to set up and run small businesses. Lack of funds and access to credit facilities are significant obstacles to the development and sustainability of micro-enterprises and these discourage those with entrepreneurial skills. Small firms seeking bank loans face considerable credit constraints in that, they receive credit much less frequently than larger ones. It is also known that many entrepreneurs would like to start up their businesses, but refrain from doing so due to the slack of credit to finance their initial or subsequent operations. For any business to grow credit is essential, lack of credit is a barrier to the development and growth of the income of house holds and SMEs. Access to credit enhances the adoption of new and more advanced technologies that will enable the rural household to expand their agricultural and nonagricultural enterprises, which in turn improve their income levels, and hence help in reducing the incidence of poverty (Abubakar, 2011).

The performance and growth of small and medium enterprises (SMEs) are major driver and indices for the level of industrialization, modernization, urbanization, gainful and meaningful employment for all those who are able and willing to work, income per capital, equitable distribution of income, and the welfare and quality of life enjoyed by the citizenry because SMEs contribute to employment growth at a higher rate than larger firms. The SME sector is globally regarded as an important force of driving the economic growth and employment creation in both developing and developed countries (Kpelai, 2009). SME sector offers

linkage development of large industries and essential for a competitive and efficient market apart from the stated contributions. SMEs have remained a harbinger of change and a pivot of economic catalysts in industrialized states as they are in the developing world. In many developed nations, more than 95% of all enterprises are within the SME sub-sector, while 80% of the total industrial labor force in Japan, 57% Germany and 46% in USA small businesses contribute nearly 39% of the country's national income (Wang, 2011). Comparable figures in many other developed countries are even higher.

In Nigeria, the Small and Medium Scale Enterprises (SMEs) are the driving force and establish an important mainstay of the Nigerian economy. A few years ago SME represented about 90 percent of the industrial sector in terms of the number of enterprises (NIPC, 2002). This sector economically, holds the key to sustainable development of the country and its importance can be put in proper aspect in relation to the structure of the Nigerian economy with many performance contributions as the source of technology innovation and new products. In spite of the exploitation of petroleum oil, SMEs provide gainful employment for about 70% of the Nigerian population. Available reports suggest that the agricultural sector accounts for close to 35% to 40% of the nation's gross domestic product (GDP). Most of the operators in the agricultural sector are small-scale self-employed individuals engaged in agro-allied processing activities such as farming, handicraft, fishing, agro forestry and livestock rearing. In achieving optimal economic development and to reduce dependency on crude oil for redistribution of economic wealth, the government seeks rescue from the SME sector by employing economic diversification.

Small and medium scale enterprises (SMEs) are seen as instruments for reducing the poverty level affecting the country and improving the economy of Nigeria. Therefore the need for SMEs growth in Nigeria is beyond question. Studies by the International Finance Corporation (IFC) show that approximately 96% of Nigerian businesses are SMEs compared to 53% in the US and 65% in Europe, but Nigerian SMEs contribute approximately 1% of GDP compared to 40% in Asian countries and 50% in the US or Europe (Oyelaran, 2007). The question

as to why the SMEs in Nigeria, are not contributing to the growth of the economy as SMEs in other countries now arises. Small and medium scale enterprises earn their funds from various sources like personal savings Commercial bank credit to various economic agents which are regarded as bank loans and advances aid in financial intermediation between deficit unit and surplus which enhanced productivity, leads to large scale and enhance backward and forward impact on economic growth. Schumpeter (1911) strongly supports financed lead growth hypothesis, which hypothesized that financial sector play a key role in channeling savings into productive investment, particularly in the formal sectors of the economy. Nzomoi and Rutto (2012) asserted that commercial bank sector is the key conduit for financial intermediation in the economy.

Nwanyanwu (2012) noted that the banking sector helps to make credit available by mobilizing surplus fund from depositor who have no immediate needs of such money and channel it in form of credit to investors who have brilliant ideals on how to create additional wealth in the economy but lack the necessary capital to execute the ideals. The study further reveals that the role of credit in an economy has been recognized as credit are obtained by economic agents to enable them meet operating expenses. For instance business firm obtained credit to buy machinery and equipment, farmers obtained credit to purchase farm input such as fertilizers, seeds, farm buildings and the government obtained credit to meant various kind of government expenditure either recurrent or capital expenditure. However, acknowledging the role of money deposit bank credit in an economy various banking reformed has been established by the monetary authority in enhancing credit.

Statement of the Problem

Financing remains one of the key managerial problems confronting SMEs performance in Makurdi Benue State and Nigeria at large because small and medium scale enterprise normally has difficulties in accessing credit facilities. However, the financial structures in the world today play a key part in the expansion and growth of the economy, although the aptitude to play this role effectively and

efficiently largely depends on the degree of development of the financial system. The financial institutions which are the main players in the financial systems of nearly every economy, have the potential to pull financial resources together to meet the credit needs of SMEs, therefore, there is still a huge gap between supply abilities of the banks and the challenging needs of SMEs. In Nigeria, the situation is even more predominant as noted by Olutunla and Obamuyi (2008).

Credit Facility is supposed to give SMEs capital to buy assets, more raw materials, paid workers and expand their operations generally. The effect of Micro Finance bank credit facility is also supposed to reflect in the performance of SMEs in term of profitability, sales volume and growth.

However there are some constraints faced by SMEs in obtaining credit facility such as inadequate collateral by SMEs operators, weak demand for their products as a result of dwindling purchasing power, lack of patronage of locally produced goods, poor management by SMEs operators, these constraints make bank credit to SMEs generally risky. In Nigeria previous researchers on SMEs financing have focus more on financial options constraints faced by SMEs, etc thereby making the present study imperative. However studies that examine the effect of Micro finance bank credit facility on SMEs performance have not received attention from Nigerian researchers. Despite the critical role of Micro finance Bank credit facility on the performance of SMEs ,Whether SMEs performance in terms of sales volume is associated with Micro finance Bank credit facility still remain empirical question yet to be answered in Nigeria .

Literature Review

Micro-finance Banks

Micro-finance Banks are licensed financial institutions meant to serve the un-served, but economically active clients in the rural and peri-urban areas by providing diversified, affordable and dependable financial services to the active poor, in a timely and competitive manner, which would enable them to undertake and develop long-term, sustainable entrepreneurial activities and mobilize savings for intermediation (CBN, 2005).Microfinance has been defined as a

development tool used to create access for the economically active poor to financial services at an affordable price (CBN, 2011). It is the provision of credit and other financial services to the low-income group and micro entrepreneurs to enable them build sustainable micro-enterprises (Otero, 2000; Nkamnebe, 2008; and Muktar, 2009). The Syngenta Foundation Discussion (SFD) is quoted by Sebeil, 2007 to view the concept from a more general perspective. SFD defined the concept to include provision of small-size financial services especially but not limited to the lower segment of the rural and urban population. These financial services are provided by formal and informal financial institutions; both small and large. Micro-finance institution (MFI) or bank (MFB) is any company licensed to carry on the business of providing micro-finance services (CBN, 2005).

Micro-finance: Microfinance denotes the provision of financial services adapted to the needs of low income people such as micro-entrepreneurs, especially the provision of small loans, acceptance of small savings deposits and simple payment services needed by micro-entrepreneurs and other poor people (USAID, 2005).

Micro-credit: Micro-credit is commonly defined in terms of loan amount as a percentage of average per capita income (USAID, 2005). In the context of Nigeria, with a GDP per capita of N42, 000 (about \$300) in 2003, loans up to N50,000 (around \$350) will be regarded as micro loans. GDP per capital (PPP US\$) in 2007 was US\$1,969 (UNDP–HD Report, 2009).

Micro savings: Micro savings are defined as savings accounts with a balance of less than N8, 400 (about \$50), that is less than 20% of the average annual income per capita.

Measures of business performance

A significant problem in the measurement of performance outcomes of entrepreneurship is to reach consensus on suitable measures of performance. In this paper, we confine our attention to performance at the level of SMEs. While a range of financial and non-financial indicators have been suggested as measures of

performance, prior research has tended to focus on variables for which information has been easy to gather (Cooper, 1995).

In addition, as Barkham (1996) pointed out, it is also the indicator favored by entrepreneurs themselves. Other arguments for using sales growth are based on the growth process being driven by demand for the firm's products and services. Increasing sales will allow growth along other dimensions such as employees and assets. Though Sales may not always be the best measure of performance. Delmar, (2003) noted that start-up and high technological firms may grow significantly in employment and assets before any significant sales are made. As a result, growth in employment and assets should also be considered as performance measures. Employment has been considered an alternative measure for performance and with the public interest in new employment there are arguments that employment growth is an important dimension to capture (Wiklund, 1999).

Chandler and Baucus (1996) also note that when using sales growth as a measure of performance, researchers often assume that faster growth is desirable. But the notion that faster growth indicates better performance than slower growth may not be universally true. Fast growing firms have excessive strains on resources which can lead to underperformance and in some cases bankruptcy. This reflects the work of Marris (1967), who considered the concept of maximizing sustainable growth as being the goal of management. The relationship between performance measures such as sales growth and profitability over time is therefore an important area of investigation.

Sales Volume

This is the quantity or number of goods or services sold in the normal operation of a company in a specific period. Breakeven sales volume is the amount of sales needed to cover total cost of production. This can be computed under a range of sales prices. Gross sales volume helps a business determine how much it needs to sell to turn a profit, and it can also have significant legal consequences. Increasing gross sales volume usually improves a company's bottom line, but sometimes a business might want to limit gross sales volume. For instance, federal law uses this measurement to determine

whether a company must follow certain federal labor laws.

Kpelai (2009) posits that some key operational variable like capital investment, turnover, employment level and relative size of a firm within an industry feature in most definitions. According to him, enterprise size classification in Nigeria is based on composite criteria or sales volume, capital or assets base and employment level. The Third National Development Plan (1975:353) for instance contends that small – scale industries are manufacturing establishments employing less

than ten people or whose investment in machinery and equipment do not exceed N600,000.00, Kpelai (2009:209).

Kpelai (2009:209) also cites an initiative by the Bankers, Committee in 2001 which put in place a scheme called small and Medium Industries and Equity Investment Scheme (SMIEIS). In this regard, a small business is defined as an establishment with a maximum assets base of 50, million excluding land and working capital and with the number of staff employed not less than 10, but not more than 100.

Table 2: Enterprise Classification and Descriptions

Type of enterprise		No of Employee	Capital requirement (#)	Description
Micro Enterprise	Survival household Enterprises		<250.000	Typically part -time income generating activities carried out by family members .Such enterprises contribute less than 50% of income to the household, along side subsistence agriculture part time formal employment or remittance
	Micro Enterprise	< 5	< 1m	Typically self employment or family enterprises in trading production .it is the main source of income for the family. Lack access to credit technical skills, security of tenure and they are created from position of limited choice of low cost entry point for self employment.
Small Missing middle	Emergent Business	6-10	1.5m-10m	Small business emerging from informal sector seeking to be registered, licensed business that conform to most legal requirements. Management team has a desire to grow the business .Lack access to credit technical skills weak records keeping procedure, and financial discipline.
	Growth Enterprise	11-100	10m-50m	Formal sector businesses with potential for growth where the constraints are shortages of business skills access to financial resource, lack of knowledge of how to obtain domestic and external markets access to suitable premises and inadequate physical infrastructure.
	Medium Enterprises	101-300	50m-200m	Generally well established formal sector business with good network both locally and overseas.
	Large Enterprises	>300	>200m	Well established sector business.

Source: Kpelai, (2009).

Small and medium scale enterprise performance contribution to Nigeria's development

A healthy and robust SME sub-sector is a *sine qua non* for inclusive and socially sustainable development (Ogboru, 2005) and one of the significant characteristics of a flourishing and growing economy is a booming and blooming small and medium enterprises SME sector. The performance and role of SMEs going forward are bound to be even greater and more pervasive with a demonstrable impact on the emerging world trading order. SME is the driving force that establishes an important mainstay of the nation's economic system. The evolution of this sector leads to poverty relief, employment creation and multiplication of potential entrepreneurs.

It offers linkage development of large industries. SME has remained a harbinger of change and a pivot of economic catalysts in industrialized states as they are in the developing world. Storey (1994), observed that the importance of SMEs varies with sectors and with the developmental stage of a country. He opined that developing characteristics such as the degree of capital allocation and requirements, management size and arrangement as well as limited market access which makes SMEs less amenable to the unsatisfying effects of growth schemes that concentrate on large, capital intensive and high import dependent industrial plants as well as failed public enterprises

Employment

Employment generation globally is one of the most significant reasons for encouraging the promotion and development of SMEs. SMEs account for well over half of the total shares of employment, sales and value added (Davis, Haltiwagner, Schuh, 2003). From the viewpoint of economic development, small businesses create almost half of new jobs in the economy, and it is assumed that they are good jobs, SMEs make the most viable and authentic vehicle for self-sustaining industrial development, as they have the capability to produce an indigenous enterprise culture to a greater extent than any other strategy. Estimates from the Small and Medium Scale Enterprises Development Agency of Nigeria (SMEDAN), show that SME employs 87.9% of the workforce in the private sector

48% of all industrial output in terms of value added (Mahmoud, 2005; SMEDAN, 2007). Scholars are of the view that enhancing the performance of small business and promoting the development of entrepreneurship would be a good strategy to contribute and promote economic development.

Poverty Alleviation

The development of SMEs is seen as the means to accelerating the achievement of wider socioeconomic goals, including poverty alleviation. Reduction of poverty through the promotion of SMEs plays a substantial role in the development process of any country. SME promotion may be one of the most effective poverty alleviation instruments. An increase in the living standards of the people is the main concern of any development process (Smith, 1985).

Income Distribution

The SMEs are often supposed to contribute to a more equal distribution of income or wealth. The SMEs managers and workers are in the lower half of the income distribution; promoting the growth of SMEs may lead to a more equitable distribution of income. SMEs contribute not just to income generation, but also income distribution which improved living standards, being close to substantial local capital formation and achieve a high degree of productivity and capability. The development of SMEs would therefore help spread income to more people. Since the majority of Nigeria SME owners is over 68 percent are living in rural areas, in narrowing the gap between urban and rural development and to monitor social inequities and rural migration promotion of the development of SMEs should continue to be a policy priority.

Transformation of Indigenous Technology

All economies have transited from household artisan industries over time to the modern industrial set-up which has witnessed phenomenal upgrading of skills, machinery and equipment, and management practices (Smith, 1985). Historical evidence indicates that most of today's giant corporations began as very small firms. These include Guinness of Dublin and Philips International of the Netherlands; as good as Sony and Honda of Japan. Developing

countries can take from the experience of these giants and create conducive environment that will enable small and medium enterprises to adapt imported technologies, modernize their process and grow to become large corporation.

Production of Intermediate Goods

SMEs produce intermediate and final consumption goods needed by larger enterprises and the Economic system as a whole. These include raw materials, machinery and equipment, spare parts and household goods. The delivery to the large corporations is done through sub-contracting, Which enables smaller enterprise to supply their needs, instead of competing with them in the Production of final consumer goods in which small enterprises are relatively deprived. The interdependence of the sector provides the backward and forward linkages which an economy needs for self-dependence and sustenance. In the advanced economies, this symbiotic relationship is so developed that the sectors extensively depend on each other for survival. In Japan, for example, close to 70 percent of the value of exports of large firms are the products of SMEs.

Methodology

The study seeks to assess the effect of Micro finance banks' credit facilities on the performance of Small and Medium Scale Enterprises in selected SMEs in Makurdi metropolis. To achieve the objective, the study adopted a correlational survey design, in order to

establish the relationship between the independent and dependent variables. At the same time, the study is cross –sectional as research data was generated all at a point in time. The use of cross sectional design was premised on the ground that performance of small scale businesses which is the focus of the study can be measured quantitatively with the use of a questionnaire. The targeted population of this study comprises of all the 50 registered Small and Medium Scale Enterprises in Makurdi, Benue State.

The collected data was edited, coded, and entered into the computer using the Statistical Package for Social Sciences (SPSS 16.0) and was then scored. The analyses involve Descriptive statistics (mean, standard deviation, frequency and percentage) and inferential statistics (correlation and regression analysis). The research hypotheses were tested using the product Pearson correlation coefficient (PPMC) the p-value $\alpha=0.05$. A p-value less than $\alpha=0.05$ indicates that we have enough statistical evidence to reject the null hypothesis, and thereby, indirectly accept the alternative hypothesis. If $p>0.05$, then we do not have adequate statistical evidence to reject the null hypothesis or accept the alternative hypothesis.

Analysis of the Extent to which Micro Finance Bank Credit affects the Growth of SMEs in Makurdi: The sub section presents data generated on the extent to which bank credit affects the growth of SMEs in Makurdi.

Table 3: Descriptive Statistics on Extent to which Micro Finance Bank Credit affects the Sales Volume of SMEs in Makurdi

Description of Item	SA	A	U	D	SD	Mean
1. I access MFB credit facilities to invest in advertisement which has significant effect on sales volume	31 (62.00%)	13 (26.00%)	0 (0.00%)	2 (4.00%)	4 (8.00%)	4.42
2. The quality of my product/services has improved as a result of MFB credit	29 (58.00%)	17 (34.00%)	0 (0.00%)	2 (4.00%)	2 (4.00%)	4.46
3. MFB credit facilities enable me enjoy discount in purchases which has increase my sales volume	31 (62.00%)	12 (24.00%)	0 (0.00%)	5 (10.00%)	2 (4.00%)	4.44
4. MFB credit has facilitated training and development which increase efficiency in order to achieve higher turnover	30 (60.00%)	13 (26.00%)	0 (0.00%)	2 (4.00%)	5 (10.00%)	4.36
5. MFB credit facilities facilitate investment in promotion which has significant effect on sales volume	25 (50.00%)	18 (36.00%)	1 (2.00%)	4 (8.00%)	2 (4.00%)	4.34
6. Able to increase distribution channels with the aid of MFB credit facilities	31 (62.00%)	10 (20.00%)	1 (2.00%)	2 (4.00%)	6 (12.00%)	4.34
Overall Mean	4.39					
Cronbach Alpha (α)	0.94					
Valid N (listwise)	50					

Source: Computation of Field data, 2015.

Decision rule:

If mean < 3.0 the respondents Disagree If $3.0 \leq \text{mean} \leq 3.5$ the respondents are Undecided If $\text{mean} \geq 3.5$ the respondents Agree.

Table 3 shows the responses to the Likert-scale questions and the sample mean (\bar{x}). For the question on whether the SMEs have access to Micro Finance bank credit facilities to invest in advertisement which has significant effect on sales volume, the responses show that 31 (62.00%) of the respondents strongly agree that SMEs have access to Micro Finance bank credit facilities to invest in advertisement which has significant effect on sales volume, 13 (26.00%) agreed, while 2 (4.00%) and 4 (8.00%) disagreed and strongly disagreed respectively that SMEs have access to Micro Finance bank credit facilities to invest in advertisement which has significant effect on sales volume. The associated sample mean of the responses is 4.42. This shows that most of the respondents agreed that, SMEs have access to Micro Finance bank credit facilities to invest in advertisement which has significant effect on sales volume; hence the

mean is ≥ 3.5 .

For the question on whether the quality of the SMEs product/services has improved as a result of Micro Finance bank credit, the responses show that 29 (58.00%) of the respondents strongly agree that the quality of the SMEs product/services has improved as a result of Micro Finance bank credit 17 (34.00%) agreed, 0 (0.00%) were undecided, while 2 (4.00%) and 2 (4.00%) disagreed and strongly disagreed respectively that the quality of the SMEs product/services has improved as a result of Micro Finance bank credit. The associated sample mean of the responses is 4.46. This shows that most of the respondents agreed that, the quality of the SMEs product/services has improved as a result of Micro Finance bank credit; hence the mean is ≥ 3.5 .

For the question on whether the Micro Finance bank credit facilities enable SMEs enjoy discount in purchases which has increase their sales volume, the responses show that 31 (62.00%) of the respondents strongly agree that Micro Finance bank credit facilities enable

SMEs enjoy discount in purchases which has increase their sales volume. 12 (24.00%) agreed, while 5 (10.00%) and 2 (4.00%) disagreed and strongly disagreed respectively that Micro Finance bank credit facilities enable SMEs enjoy discount in purchases which has increase their sales volume. The associated sample mean of the responses is 4.44. This shows that most of the respondents agreed that, Micro Finance bank credit facilities enable SMEs enjoy discount in purchases which has increase their sales volume; hence the mean is ≥ 3.5 .

For the question on whether Micro Finance bank credit has facilitated training and development which has increased efficiency in order to achieve higher Micro Finance turnover, the responses show that 30 (60.00%) of the respondents strongly agree that Micro Finance bank credit has facilitated training and development which has increased efficiency in order to achieve higher turnover. 13 (26.00%) agreed, while 2 (4.00%) and 5 (10.00%) disagreed and strongly disagreed respectively that bank credit has facilitated training and development which has increased efficiency in order to achieve higher turnover. The associated sample mean of the responses is 4.36. This shows that most of the respondents agreed that Micro Finance, bank credit has facilitated training and development which has increased efficiency in order to achieve higher turnover; hence the mean is ≥ 3.5 .

For the question on whether Micro Finance bank credit facilities facilitate investment in promotion which has significant effect on sales volume, the responses show that 25 (50.00%) of the respondents strongly agree that Micro Finance bank credit facilities facilitate investment in promotion which has significant effect on sales volume, 18 (36.00%) agreed, 1 (2.00%) were undecided, while 4 (8.00%) and 2 (4.00%) disagreed and strongly disagreed respectively that bank credit facilities facilitate investment in promotion which has significant effect on sales volume. The associated sample mean of the responses is 4.34. This shows that most of the respondents agreed that, Micro Finance bank credit facilities facilitate investment in promotion which has significant effect on sales volume; hence the mean is ≥ 3.5 .

For the question on whether the SMEs were able to increase distribution channels with the aid

of Micro Finance bank credit facilities, the responses show that 31 (62.00%) of the respondents strongly agree that the SMEs were able to increase distribution channels with the aid of Micro Finance bank credit facilities, 10 (20.00%) agreed, 1 (2.00%) were undecided, while 2 (4.00%) and 6 (12.00%) disagreed and strongly disagreed respectively that the SMEs were able to increase distribution channels with the aid of Micro Finance bank credit facilities. The associated sample mean of the responses is 4.34. This shows that most of the respondents agreed that, the SMEs were able to increase distribution channels with the aid of Micro Finance bank credit facilities; hence the mean is ≥ 3.5 .

Conclusion and Recommendations

Based on the result of this study it has been established from the data analyze as follows. The study also revealed and concludes that Micro Finance bank credit facility have significant effects on SMEs sales volume. This shows that SMEs have access to Micro Finance bank credit facilities to invest in advertisement, quality product/services improvement, enjoy discount in purchases, and facilitate training and development of employees which would increase their efficiency in order to achieve higher turnover and increase distribution channels which have significant effect on sales volume

Drawing from the finding of the study and building on existing study, it is suggested that more studies be carried out to address the following:

1. SMEs should work toward increasing their liquidity as to increase their supply chain to translate their growth;
2. SMEs should improve their product in other to have higher market value operations;
3. Government should devices measures to trip in the activities of selfish individuals who want to convert SMEs channel to banks for reimbursement to personal uses;
4. Government should strengthen bank lending policy on SMEs, Federal Government and its agencies should also formulate polices that will encourage SMEs to source funds from capital market as well as improving business conditions and environment;

5. Capacity development for the management staff of SMEs is essential. It's vital because it would help in promoting the manpower quality to manage the SMEs and sustain the business; and
6. Micro Finance banks should make more funds available to the development of SMEs in Nigeria .The Central Bank of Nigeria should introduce stern measures against any Micro Finance bank that failed or refused to follow the stipulated guidelines for the financing of small scale businesses. This implies that it is not just enough to make the policies but there should be certain forms of checks and balancing. This should be made known to the institutions.

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Effects of Cash and Material Management on the Performance of Agribusiness Enterprises in Imo State, Nigeria

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Abstract

This study was carried out to find out the effect of cash and material management on the performance of agribusiness enterprises in Imo state, Nigeria. Primary data was collected through the administration of closed-ended questionnaires in the three (3) senatorial zone. A multi-stage sampling technique was adopted for this research. Agribusiness entrepreneurs in the three (3) senatorial zones were purposely selected using twenty (20) agribusiness entrepreneurs from each senatorial zone. Thus, the sample size for the study was sixty (60) Agribusiness entrepreneurs. The primary data was collected and analyzed using simple percentage cumulative frequency, correlation and multiple regression analysis. The result shows that transaction cost, ordering quantity, location and ordering time are the factors influencing the agribusiness enterprise optimum cash requirement, given that their coefficients were significant at different levels with different signs. Proper and professional cash and material management techniques are advocated for the agribusiness enterprises.

Keywords: Cash management, material management, agribusiness performance

Introduction

Materials and cash constitute the major components of the working capital of any enterprise and remains the life blood for the success of any entrepreneurial activity. Most enterprises liquidate in less than two years of their existence because of the mismanagement of their materials and cash resources. When enterprises are not able to meet their cash and material needs, the entire production process of the firms cripples. In Imo State, Nigeria majority of the firms either use agricultural supplies for their production or produce the agricultural supplies for others hence the study of the importance of cash and material management to these enterprises.

Cash management deals with the collection of cash including measuring the level of liquidity, managing the cash balance and short-term investments (Shulman, 1985). If at any time, because of a lack of cash, a corporation does not pay an obligation when it is due, the corporation is insolvent. Insolvency is the primary reasons firms go bankrupt (Joels 1985). Obviously, the prospect of such dire consequence compels companies to manage their cash with care. Moreover, efficient cash management implies more than preventing bankruptcy. It improves the profitability and reduces the risks the firm is exposed to (Raymond, 1985).

Material management deals with controlling and regulating the flow of material in relation to changes in variables like demand, prices, availability, quality, delivery schedules. According to (Chand, 1986), material management is an important role of an organization covering various aspects of input process; it deals with raw materials, procurement of machines and other equipment necessary for the production process and spare parts for the maintenance of the plant. Thus in a production process, material management can be considered as a preliminary to transformation process. In other words of (Bethel, 1994) "its responsibility end when the correct finished product in proper condition and quality passed to the consumer. It is also concerned with market exploration for the items to be purchased to have up to date information, stores, and stock control, inspection of the material received in the enterprise, transportation and material handling operations related to materials and many other functions.

Materials management is not just a concern through the monitoring stage in which construction is taking place. Decisions about material procurement may also be required during the initial planning and scheduling stages. For examples, activities can be inserted in the projects schedule to represent purchasing of major item such as elevators for buildings. The ease of use of materials may greatly influence the schedule in projects with a fast track or very tight time schedule. Sufficient time for obtaining the indispensable materials must be allowed. In some cases, more expensive suppliers or shippers may be employed to save time.

Cash and material management comprises of a sequence of actions aimed at efficiently handling of inflow and outflow of cash and material. This principally involves diverting cash and material from where it is to where it is needed. In other words, cash and material management is the optimization of cash and material flows, balances and short term investment. The present performance of agribusiness enterprises in Imo state on their cash and material management manifest some inadequacies. An agribusiness enterprise generally operates on low profit margins, so they want to cash on every opportunity to make or save money. Hence sometimes due to low volumes and thin profit margins, they are forced to take decisions like to stock surplus raw material, which consumed regularly, when the prices are low are expected to rise in the near future.

Cash is required on daily basis i.e. for day-to-day expenses like conveyance bills, stationary, tea and snacks payments made to various governmental agencies (for obtaining license, permissions or for some other purpose), security deposits, fuel expenses for the sets, maintenance of vehicles and other assets, purchase of pretty items, making salary and wage payments etc. The cash management extremely necessary as it has high probability to fall short of demand. Therefore, there is need for agribusiness enterprise to embrace effective cash management practices in order to improve their competitiveness (Roger, 2008). Enterprises generally do not get credit from their supplier, also they are sometimes enticed by the additional cash payment discounts offered by the suppliers. This means they generally have to buy a majority

of their raw material against cash payments. Even if they enjoy some credit from the suppliers (i.e only offer a certain period of time or certain number of transactions) it is far less than what enterprises have to provide to their buyers. The central focus of the study therefore is to determine the effect of cash and material management on the performance of agribusiness enterprise in Imo state.

Methodology

The research was carried out in Imo State. Imo state is divided into twenty seven Local government areas and three senatorial zone. It lies at latitudes 4°45N and 7°15N, and Longitude 6°50E and 7°25E, with an average rainfall of 1,990mm to 2,200mm per annum and temperature of 20°C to 68.0°F. Agriculture is the major occupation of the people, especially in the rural areas where food crops such as rice, cassava, yam, plantain and among other are cultivated. The study adopted a survey design. The researcher will collect information from the respondents who are representative of the population. Thus, data for the study, which focuses on finding out effect of cash and material management on the performance of agribusiness enterprise in Imo state will be collected from a representative sample of agribusiness enterprise in the area.

A multi-stage simple random sampling technique was used in the selection of the sample that was used for the study. Agribusiness entrepreneurs in the three(3) senatorial zones was purposely selected, involving simple random selection of twenty(20) agribusiness entrepreneurs from each senatorial zone to make up a sample size of sixty(60) respondents.

Method of Data Analysis

For the data analysis, simple descriptive tools, Miller-Orr Model, Multiple regression, probity model and correlation were used.

Model Specification

The Miller-Orr model is given as:

$$Z = \frac{\sqrt[3]{3 \times TC \times V}}{4 \times r} + L$$

where;

- Z = Target Cash Balance
- TC = transaction cost of buying or selling securities
- V = variance of daily cash flows
- r = daily return on short-term investments
- L = minimum cash requirement.

The multiple regression for factors affecting target cash balance (Z) is specified as:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X_6)$$

where,

- Y = Target cash balance (₦)
- X₁ = Transaction costs of buying or selling securities (₦)
- X₂ = Variability of daily cash (incorporates uncertainty) (₦)
- X₃ = Return on short-term investments (₦)
- X₄ = Turnover (₦)
- X₅ = Government taxes and charges (₦)
- X₆ = Capital (₦).

The probit model for analyzing the factors affecting efficient material management by the enterprises is given as:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_k X_{ki} + U_i$$

And that: Y_i=1 if Y>0 Y_i=0.

The probit model specified in this study to analyse whether the firms are efficiently managing their materials or not credit can be expressed as follows:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + U_i$$

where,

- Y = Optimum cash in Naira (Efficient = 1, Otherwise = 0).
- X₁ = Ordering time (in days)
- X₂ = Delivery time (in days)
- X₃ = Quantity of order (in Kg)
- X₄ = Transportation cost (₦)
- X₅ = Interest rate (Naira)
- X₆ = Location (Rural (1) Others (0))
- U_i = Error term

Results and Discussion

Table 1: Estimation of desired level of cash by agribusiness enterprises (Objective 2)

Variables	Average (₦)
Transaction cost (TC)	100,000
Variance of daily cash flows (V)	150,000
Daily return on short term investment (r)	12,000
Minimum cash requirement (L)	180,000
Target cash balance (Z)	180,013

Source: Field Survey data, 2016.

Table 1 above shows that a firm requires N180,013 as their target cash balance. This is the cash amount required to meet the necessary

needs of the enterprise. It is derived by solving for the formular;

Table 2: Factors affecting the desired optimal cash level of the agribusiness enterprises

	B	Std Error	T	Sig
Constant	94116.378	40028.734	2.351	0.022
Ordering time	-1.285	0.059	-21.730	0.000
Delivery time	0.136	0.091	1.488	0.143
Quantity of order	1.133	0.114	9.938	0.000
Location	0.406	0.195	2.132	0.041
Transportation cost	-0.274	0.108	-2.537	0.001
Interest rate	-.052	0.075	-0.697	0.489
R ²	0.901			
F statistics	43.009			

From Table 2 which shows the factors affecting the optimum cash level gives an R² value of 0.9 indicating that 90% of changes in the available cash balance of the agribusiness enterprises were accounted for by changes in the independent variables included in the model while the remaining 10% was accounted for by error. The was statistically significant at 1% with an F statistics value of 43.009

Ordering time was statistically significant at 1% and negatively related to optimum cash requirement of the agribusiness firms. This implies that the increase in ordering time results to the decrease in optimum cash requirement. Quantity of order was statistically significant at 1% and positively related to optimum cash requirement of the agribusiness firms. This implies that the increase in quantity of order results to the increase in optimum cash requirement. The more firms place order for their raw materials needs these results to increase in the optimum cash requirement.

The location of the business was found to be statistically significant at 10% and positively affecting optimum cash requirement of the

agribusiness firms. This implies that the location of the business to the source of raw materials has a huge role to play in improving the cash requirement of the enterprise. Transportation cost was statistically significant at 5% and negatively affecting optimum cash requirement of the agribusiness firms. This implies that the persistent increase in the transportation cost of goods results to the decrease in the optimum cash requirement.

The factors affecting efficient material management by the enterprises

Ordering time was positively related to material management at 5%. This means that as ordering time increases, material management increases and vice versa. Delivery time was positively related to material management at 5%. This means that as ordering time increases, material management increases and vice-versa. Transportation cost was negatively related to material management at 1%. This means that as transportation cost increases, material management decreases and vice versa. Interest rate was negatively related to material

management at 5%. This means that as interest rate increases, material management decreases and vice versa.

Location was negatively related to material

management at 10%. This means that as location increases, material management decreases and vice versa.

Examine the relationship between effective cash management and agribusiness performance

	Cash Management	Performance
Pearson correlation	1	0.943**
Cm Sig (2-tailed)		.0000
N	60	60
Pearson Correlation	0.943**	1
PERF Sig, (2-tailed)	.000	
	60	60

The table above shows that a positive correlation ($r=0.943$) at 1% significant level exists for the relationship between cash management (measured by the target cash balance) and performance of the enterprises. This entails that as the target cash balance increases, enterprise performance increases and vice versa.

Conclusion and Recommendation

The study examined the effect of cash and material management on the performance of agribusiness enterprise in Imo state. Specifically the study determined the desired level of cash by agribusiness enterprises, analyzed the factor affecting the desired optimal cash level of the agribusiness enterprises, analyzed the factors affecting material management by the enterprises, and examined the relationship between effective cash management and agribusiness performance.

Ordering, delivery time, transportation cost, interest rate, location were the factors affecting efficient material management. There is positive but significant relationship between cash management and performance of the enterprises.

This study was carried out to find the effect of cash and material management on the performance of agribusiness enterprise in Imo state. The empirical results revealed that there is a positive and statically significant relationship between cash management and performance of the enterprise. it is therefore clear that the enterprise should go for short term investment so as to meet the target cash balance. The view of the empirical results as well as other findings made

in the course of carrying out this research, the under listed recommendations are suggested.

1. There is an urgent need for the education of the entrepreneurs in the area on modern techniques on how to manage their cash and material. This is because it will help to meet the target cash balance in the short term investment. In this regards, agricultural extension workers have a major role to play in educating the farmers and entrepreneurs on the use of new research findings and agricultural techniques that ensure the effective and efficient use of an existing enterprise.
2. The local government councils of the study area need to come up with bye-laws that will reduce the government tax rate and charges. They can do this by reducing the tax rate and charges on import and export of commodities.
3. Government should come to the assistance of the agribusiness enterprise in the area by assisting them with finance for the day to day running activities of the enterprise. Without cash and material, the agribusiness enterprise will not invest on both short term and long term investment which may lead to the liquidity of the enterprise. But the assistants of government fund, they can invest in short term investment so as to meet target cash balance.

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Effects of Staff Recruitment and Selection Models on Labour Turnover in the Media Industry: A Case of Federal Radio Corporation of Nigeria

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Abstract

This paper attempts to determine staff recruitment and selection models applied in FRCN- from 1980-2009 and from 2010-01/01/2015, its effect on labour turnover and also, seeks to proffer probable solutions to improve the current recruitment and selection process. Methodologically, the study uses both secondary and primary sources of data collection. Analysis was done using IBM SPSS 20.0. The results inferred that the rate of turnover was highest among employees hired between 1st of January 2011 and 31st December, 2014. The assertion is that the models and methods of recruitment/selection during this period were perceived to be characterised by irregularities, nepotism, ethnicity and religious bias among other reasons. Furthermore, the result posits that merit system was not adopted during the period. The study therefore recommended transparency and reliance on merit rather than sectional interest in the recruitment and selection process in FRCN.

Keywords: Recruitment, selection, labour turnover, HRM models, organisational stability

Introduction

The 21st century organisations are knowledge and information driven, as such the paradigm shift in information, communication and technology from analogue to digital has given media, information and communication industry dominance. Obviously, these triadic industries are directly connected to people by dissemination of information, communication, spreading of words, telling stories etc. (Beckett, 2008; Alejandro, 2010). Authentically, broadcasting via radio has a wider coverage because radio can be accessed through GSM (Both sophisticated and simple ones), as such, requires highly talented, knowledgeable, skilled, competent and motivated candidates to fill in vacancies in the workplace. Armstrong and Taylor (2014) posits that organisational success depends on the talents of employees, including superior performance, productivity, flexibility, innovation, and the ability to deliver high levels of customer service. Also, Boxall and Purcell (2003, 2011) stated that the most important thing a firm can do to improve individual performance is to learn to recruit and retain more effectively. Moreover, the overall aim of the recruitment and section process should be to obtain at minimum cost the number and quality of capable, suitable and self-motivated candidates required to satisfy the human resource needs of the company (Armstrong and Taylor 2014; Hassan, 2009).

Therefore, there is no gainsaying that Federal Radio Corporation of Nigeria, which is owned by the Federal Government needs to employ suitable candidates if they are to retain their lead in Audio Broadcasting. Suffice to say at this point that competition among the media industry to recruit the best potentials and talents has increased focus on innovation and productivity. In the light of the above, there is utmost need for Management decision making and members of selection panel to aim at recruiting and retaining only the best qualified candidates who would suit the organisation culture, ethics and climate and thus strengthen the organisation and reduce labour turnover. Notably, Labour turnover is detrimental to organisational growth and stability. Consequently, every ideal organisation would seek to maintain a comprehensive and dedicated workforce. However, reverse will be the case in a situation whereby the labour turnover is much

skyrocketed. The effect will be highly felt, thereby leading to instability in the workforce coupled with the problem of succession planning. Moreover, an organisation that has a good mechanism of recruitment and selection of the required manpower is unvaryingly an organised entity, and consequently, will minimise the level of labour turnover at any point in time. Therefore, this study seeks to determine: To what extent the models of recruitment and selection affects labour turnover in FRCN? Whether there is meritocracy in the method of recruitment and selection in FRCN and to what extent ethnicity, religion and nepotism influence recruitment and selection in FRCN? In other words, the objective of this study among others is: to ascertain the effect of recruitment and selection models on labour turnover; to ascertain if there is meritocracy in recruitment and selection method in FRCN and to ascertain the role of ethnicity, religion, nepotism and religion on recruitment and selection process in FRCN.

Review of Related Literature and Theoretical Framework

Recruitment and selection are fundamental areas of human resource management. They are not simply techniques for filling jobs - they are also levers for organisational change, sustaining employee commitment and achieving high performance (Price, 2011). Recruitment has become a major function from an imperative subsystem in Human Resource, particularly in the Information Technology industry (Mahapatro, 2010). Many models of employee resourcing apart from best fit model have been developed with a greater concern for personality and attitude than presumed ability. Recruits may be sought who will 'fit in' with the culture of the corporation; be content to build a career within the organisation and; absorb the goals of the organisation (Price, 2011). Armstrong & Taylor (2014) defined Recruitment as the process of finding and engaging the people the organization needs and Selection as that part of the recruitment process concerned with deciding which applicants or candidates should be appointed to jobs. Thus, Recruitment is the process of identifying the need to employ someone to fill in vacancies in the organisation. However, Hassan (2009) defines recruitment as the set of activities used by organisations to obtain sufficient number

of calibre of people for consideration to work for the progress of the organisations and for the candidate's personal and career development. Mahapatro (2010) defined Recruitment as, “a process to discover the sources of manpower to meet the requirements of the staffing schedule and to employ effective measures for attracting that manpower in adequate numbers to facilitate effective selection of an efficient workforce.” Flippo (1984) defined recruitment as “process of searching for prospective employees and stimulating them to apply for jobs in the organization.” Selection is seen as the process by which the organisation chooses from the applicants those whom they feel would best meet the job requirements (Ezigbo, 2011). Thus, once the recruitment process has attracted a pool of applicants, the next step is to select whom to hire (Griffin 2002). The selection process entails putting appropriate candidate on right job (Nzotta 2010) and matching organisational requirements with the skills and qualifications of people. The selection process involves measuring differences between the candidates who have been attracted 'to find the person who has the profile which best matches the person specification as indicated by the job profile or description' (Newell 2005). Importantly, the intent of the selection process is to gather from applicants' information that will predict their job success and then hire the candidates likely to be the most successful (Griffin 2002). Hence, the selection system is simply a prediction exercise. The process by which an organization determines the predictive value of information is called Validity, while Reliability is the ability of a selection device to measure (Griffin 2002; Hassan 2009). A selection process is said to be effective selection only when there is effective matching. By selecting best candidate for the required job, the organisation will get quality performance of employees. Managers are the most important factors in determining the continuing success of any organisation. It follows therefore that the selection of managers is one of the critical steps in the process of managing (Weihrich et al., 2008). Furthermore, organisation will save time and money, faceless of absenteeism and employee turnover problems by selecting appropriate candidate for the required job. Proper screening of candidates takes place during selection procedure and all the

potential candidates who applied for the given job are tested. Selection process starts from filling in the application blanks, then various tests and interviews (Griffin 2002) but Hassan (2009) is of the opinion that interview should come before test, asserting that conducting a test before interview is like transferring the job of the manager to others. However, organisations also use other selection techniques depending on the circumstances (Griffin 2002).

Ideally, Recruitment and selection allow management to standardise, regulate and progressively transmute the psychological characteristics, capability and competences of the workforce. Therefore Organisations seeking to recruit will have to decide where to get the appropriate candidates from (Mahapatro, 2010; Armstrong and Taylor, 2014). Another fundamental issue is to match human resources to the strategic and operational needs of the organisation and to ensure the full utilization of those resources. Employee resourcing covers employment activities that ensure the organisation has the people it needs and also deals with issues such as turnover and absenteeism (Armstrong and Taylor 2014). Employee resourcing is not just about getting and retaining the required number of staff but also with selecting and promoting people who fit the organisation culture and strategy. Holistically, the aim of recruitment and selection process according to Armstrong and Taylor (2014) should be to obtain at minimum cost: the number and quality of employees required to satisfy the human resource needs of the company. The main purpose of recruitment activities is to attract sufficient and suitable potential employees to apply for vacancies in the organisation; whereas the principal aim of selection activities is to identify the most suitable applicants and persuade them to accept a position in the organisation (Cole 2005). Assertively, Recruitment is not synonymous with selection rather recruitment precedes the selection function and it includes only finding, developing the sources of prospective employees and attracting them to apply for jobs in an organization, while selection is the process of finding out the most suitable candidate to the job out of the candidates attracted (Mahapatro, 2010). Armstrong and Taylor (2014) in agreement with the above stated that recruitment

and selection are two phases of employment process and the two must be differentiated from one another. Whereas Recruitment is considered to be a positive process as it motivates more of candidates to apply for the job and creates a pool of applicants, selection is a negative process as the inappropriate candidates are rejected here. Recruitment precedes selection in staffing process. Selection involves choosing the best candidate with best abilities, skills and knowledge for the required job (Gummadi, 2015). Armstrong and Taylor (2014) further classified recruitment and selection process viz. Defining requirements; Attracting candidates; Sifting applications; Interviewing; Testing; Assessing candidates; Obtaining references; Checking applications; Offering employment; and Following up.

Sources of Job Applicants

There are two major sources of job applicant. These are the internal and the external sources. The on-going debate among managers seeks which is preferable; internal recruitment or external recruitment.

Internal recruitment refers to filling in vacancies at different levels of management from within the organisation from existing workforce. When an organisation engages in internal recruitment, a current employee might be reassigned to the new position either by a promotion or an internal transfer; a laid off staff can be recalled etc. Internal recruitment has its merits and demerits. On the other hand, External recruitment is the assessment of an available pool of candidates, other than existing staff, to see if there are any sufficiently skilled or qualified to fill and perform existing job vacancies. It is the process of searching outside of the current employee pool to fill open positions in the organisation (Gigil, 2015).

Recruitment and Selection Models

In this section, we considered the recruitment/selection models as applicable to Federal Radio Corporation of Nigeria.

Bona fide Occupational Qualifications (BFOQs)

Hassan (2009) defines the concept as a positive discrimination recruitment policy in which candidates are given preferential

treatment during recruitment provided they have the relevant basic academic and necessary experience. The special consideration of BFOQs may due to national or regional origin, sex, physical consideration or other consideration or factors that the organisation, host community or government deems fit. In Nigeria, BFOQ is referred to as Federal Character. The Federal Character Commission accepts curriculum vitae from potential candidates and registers each of the applicants in their respective states of origin. This is presumed to maintain equity in recruitment exercise.

Realistic Job previews (RJPs)

Premack & Wanous (1985) defined Realistic Job Previews as devices used in the early stages of personnel selection to provide potential applicants with information on both positive and negative aspects of the job. It provides an applicant with the real picture of what to expect from a job, in order to make informed judgment about accepting or rejecting a job offer (Breugh et al 2008; Hassan, 2009). Issues in RJPs are job distastes and difficulties. Job distastes are aspects of a job/working conditions which may be regarded by employees as unpleasant or tedious while job difficulties are those aspects of the job that are regarded by employees as demanding.

Competency-Based Model

The use of competencies as a basis for effective recruitment and selection process metamorphosed from criticisms of the subjective nature of traditional methods used in recruitment and selection. According to Armstrong and Taylor (2014) the term 'competency' refers to an underlying characteristic of a person which results in effective or superior performance. Competency-based HRM is about using the notion of competency and the results of competency analysis to inform and improve HR processes, especially those concerned with recruitment and selection, learning and development, and performance and reward management. Competences support recruitment and selection by: providing unbiased standards against which to assess applicant competences to perform in the targeted job or role; improving the transparency of the selection process by clearly communicating the behaviours employees must

display for success in the role or job; contributing to the design of a well-articulated, efficient and effective recruitment and selection processes; creating efficiencies by providing selection tools and processes that is re-useable; providing explicit, clear and transparent criteria on which to give candidates feedback on their performance in the selection process; and providing standards for evaluating the success of the selection process - e.g., correlating the results of the selection process with competency-based on-the-job performance. The process is intended to be fairer than other recruitment processes by clearly laying down the required competencies and then testing them in such a way that the recruiter has little discretion to favour one candidate over another; the process assumes high recruiter discretion is undesirable. As a result of its perceived fairness, the process is popular in public services. This model is based on the belief that there is a set of best human resource management practices, and that by adopting them will lead to superior organisational performance (Armstrong and Taylor, 2014). Guest (1999) suggested among others, selection and careful use of selection test to identify those with potential to make a contribution; Patterson et al (1997) sophisticated selection and recruitment process and Pfeiffer (1994) selective hiring.

Data Model

Recruitment exercise entails putting up personnel requisition such as Job Title, Number of vacancies needed, Area, and other information about the position. This is related to the Job Description, Advertisement and Candidates profile. The relationship between Recruitment and Candidates is one to many, it is necessary to include several candidates in a Selection Process. The main attributes of the Job Description are: Title, Code, Responsibilities, Abilities, Experience and Job Description. The Advertisement entity includes Job Title, Location, Company Description, Contact Details, and Ideal Candidates. The Candidates entity includes Name, Last Name, CV file, E-mail (Bigazi, 2011).

Resource Based View Model

The Resource Based View model suggests that sustainable competitive advantage is

attainable when organisations have a human resource pool that cannot be imitated or substituted by rivals. Resource Based View asserts that, firms should constantly evaluate their workforce to ensure that they have the right people with the right skills in the right places to ensure sustained competitive advantage, (Barney, 2001). A major part of any organisation's strength or weakness stem from the calibre of the people employed and the quality of their working relationships. Identifying what is most valuable and protecting it with "barriers to imitation" is at the heart of resource base thinking. In relative terms, Boxall (1996, 1999) reveals that organisations which recruit and retain exceptional individuals have the capability of generating human capital advantage, but noted that a difference should be established between 'human capital advantage' and 'human process advantage'. The former, results from employing people with competitively valuable knowledge and skills, much of it tacit. The latter, however, follows from the establishment of difficult to imitate, highly evolved processes within the firm, such as cross-departmental cooperation and executive development. In which case, the use of the human resource management systems is necessary for organisations to gain a competitive advantage as also argued by Sparrow et al. (2002) that, technology and capital can be acquired by most firms any time, for a price, but it is not easy to acquire a ready pool of highly qualified and motivated employees.

Consequently, in order to be differentiated, the companies need to be very careful with the recruitment and selection process. The Company's HR practices would therefore need to emphasize "selecting highly skilled individuals". Companies should consider recruitment as a key tool to achieving the overall business goals. According to Boxall & Purcell (2008), the new employee is always active, ready to learn new things and easy to adapt to the new environment. It is better for them to find the right person directly from the recruitment process than having them trained later because training and development can be quite costly. This is one case of how the HR strategy fits with the competitive strategy. Catano et al. (2010) stress that, employers must aspire to hire applicants who possess the knowledge, skills, abilities or other

attributes (KSAOs) required to successfully performing the job most effectively. To them, recruitment, screening and selection procedures should yield the best qualified candidates within the context of agreed-upon equity programs.

Best Practices Model

Organisations having established competences profile for groups and duties can use the competences as the standards for assessing candidates throughout the screening and selection process as well as advertising and communicating the organisation's requirements to potential applicants. This model is based on the assumption that there is a set of best human resource management practices that are universal in the sense that they are best in any situation; and that by adopting them will lead to superior organisational performance (Armstrong, 2012, Armstrong and Taylor 2014). As good as the model seems to be some analysts have criticized it. Cappelli and Crocker-Hefter (1996) stated that the notion of a single set of best practices has been over stated. Also, Purcell (1999) criticised the Universalist or best practice perspective by drawing attention to the inconsistency between a belief in best practice and the resource-based view that focuses on the intangible assets, which includes Human resource that allow a firm to perform better than its competitors. He questions if the universalism of best practice could be squared with the view that only some resources and routines were important and valuable by being rare and imperfectly imitable. Despite the criticisms, knowledge of what is perceived to be best practice can be very essential to organisations when it comes to informed decision especially in recruitment and selection on the practices that are more likely to help the organisation in its people resourcing. Similarly, Becker and Gerhart (1996) assert that the notion of best practice might be more appropriate for identifying the principles underlying the choice of practices as opposed to the practices itself. From my point of view the word best presumes that the matter on ground is better than all. But in accordance to contingency approach which emphasises that what organisations do is dependent on context or situation in contest, it is intricate to accept the universality of best approach. Conversely, Armstrong and Taylor (2014) opined that perhaps it might be more

appropriate to think of good practice instead best practice.

Best Fit Model

The best fit model is based on the belief that there can be no universal prescriptions for human resource management policies and practices. It is in line with the contingency theory and it emphasizes that HR strategies should be congruent with the context and circumstances of the organisation (Armstrong and Taylor 2014). In Purcell (2003) perspective, organisations should be less concerned with best fit and best practices, and should be more sensitive to processes

Process Model of Recruitment/selection

Successful organisations are those which are able to find, attract and retain the best people in the workforce. The importance of having the best qualified employees results in an increase in productivity. Finding the best qualified people is not a stress-free task (Bigazi, 2011). Human Resources Professionals needs to perform different activities like proper human resource planning, job analysis etc, in order to find a person with the right skills, abilities, experience and knowledge to fill a vacancy. This process is usually time-consuming whereby a lot of manual work is required and it is necessary to coordinate many people in the different stages of the process. Process model deals with all the activities involved in recruitment and selection exercise from when requisition is made for filling vacancy through the final selection process.

Equity Model

Equity theory is a theory that attempts to explain relational satisfaction in terms of perceptions of fair/unfair distributions of resources within interpersonal relationships. Equity theory was first developed in 1963 by J. Stacy Adams. It was considered one of the justice theories. The belief is that people value fair treatment which causes them to be motivated to keep the [fairness](#) maintained within the relationships of their co-workers and the organisation. The structure of equity in the workplace is based on the ratio of inputs to outcomes. Inputs are the contributions made by the employee for the organisation, Gill and Stone (2010), Guerrero, Andersen, and Afifi (2007); Huseman, Hatfield, & Miles, (1987). For

companies to strive to adapt their equal opportunity policies (EOP) to their recruitment and selection programs, Straw (1989) identified three levels of equal opportunity policies which are: Equal opportunity as equal chance (non-discriminatory), Equal opportunity as equal access (fair procedures), and Equal opportunity as an equal share (outcomes and positive action. The Chartered Institute of Personnel and Development- CIPD (2011) brochure on Good Employment Practices and diversity management in the workplace posits that, organisations should ensure that recruitment and selection processes are fair and diversity friendly. It went further to assert that organisations should be careful in drafting advertisements in a manner that will avoid discrimination and stereotyping through either language or images and should aim to attract candidates from diverse backgrounds.

Labour Turnover

Labour turnover also known as employee turnover or labour wastage index in the Corporation is the analysis of the number of people who are leaving the Corporation on yearly basis. The formula below was adapted from Armstrong and Taylor (2014) and they stated that in labour analysis, it is important to analyse the number of leavers and their reason for leaving because this will indicate whether any action is required to improve retention rates. It is essential to identify reasons for leaving the organization for achievement of this study's objectives. Reasons for leaving the Corporation has been given as a result of death, resignation, abscondment, withdrawal of service, retirement due the expiration of time (thirty five years of service or sixty years of age) or voluntary retirement and/or termination of appointment by the Corporation due to cogent reasons. For the sake of this paper, we will be limited to those who resigned their appointment, absconded or withdrew their services from the Corporation.

Cost of Turnover

The cost of turnover in FRCN cannot be overemphasized. Invariably, the average cost of turnover per employee in Abuja Zonal Station ranges from sixty three thousand naira to one hundred and twenty thousand naira respectively. However, there are other costs, such as cost of

replacement, cost of training the newly employed staff, induction cost; loss of output from those leaving before their replacement, loss of output if replacement was not accessed immediately and loss of output within the period the newly employed is being tutored on how to carry out their work.

Federal Radio Corporation of Nigeria Recruitment Policy

Federal Radio Corporation of Nigeria (FRCN) is the pioneer broadcast organisation in Nigeria with a rich culture of excellence. The Corporation has evolved through different stages to become what it is today- the largest Radio Network in Africa. Back in history lane, the Nigerian Broadcasting Corporation was re-organized in 1978 to become the Federal Radio Corporation of Nigeria, FRCN with an On-the-Air identification of "Radio Nigeria". FRCN was established through decree No.8 of 1st April, 1978 (now Act of Parliament) and amended in 1988 (www.radionigeria.gov.ng). FRCN is a Federal Government Parastatal and its staff regulations are in tandem with that of the Federal Republic of Nigeria Public Service Rules. Consequently, Radio Nigeria staff regulation 21 states that "Recruitment to vacant posts in the Corporation is made on the authority of the Establishment Committee or the Director/Executive Director; No.22 states thus: "Vacancies in the Corporation from grade level 12 and below will, as often as possible, be filled by appointments from within the existing staff establishment of the Corporation; but the Establishment Committee or the Director-General/Executive as the case may be, may throw any vacancy open to competition from within and outside the Corporation, preference being given to serving members of the Corporation's staff only in the event of approximate equality of sustainability with outside candidates. No.23. To be eligible for appointment, a candidate must: (a) not be less than 18years; (b) possess such minimum educational qualifications as may be prescribed from time to time, or in special cases possess natural proven talents and/or experience. (c) except in the case of appointment to the un-established post, the staff must be certified by an approved medical officer to be in sound health and medically fit for employment in Corporation's service. (d) possess a testimonial

of good conduct from his last employer if previously employed. (e) Anybody under bond to any organization shall not be eligible for employment by the Corporation. No. 24 Appointments/promotions to the posts on Grade Levels 14 and above shall be made by the Board of Directors, 12 and 13 by the Central Management Committee and 10 and below by the Committee of Management.

Ordinarily, the Recruitment/selection process in FRCN starts with Human resource planning. The organisation maintains Staff list and nominal roll which is a comprehensive list showing details of all staff in the organisation at zonal stations, Abuja/ Lagos Operations and the Headquarters at a particular date. On monthly basis, the Officers in charge update the staff list and nominal roll by removing names of those leaving the organisation and including the names of incoming staff. Notably, both internal and external sources of recruitment are used and at one point in time or the other, and the Corporation has used one form of the models or the other mentioned above in Recruitment and Selection although they might not know the exact concept they were using. It is pertinent also to note that these models have been combined at the different recruiting periods. This will be discussed in subsequent sections. Consequently, the Human Resource unit of every Zonal Station's head office is responsible for writing reports on monthly and annual basis. Towards the end of the year an annual report which is a summary of the monthly reports is prepared. In the report includes all the activities that took place each month at different stations. These activities include termination of appointments by death, resignation, withdrawal of service, retirement due the expiration of time (thirty five years of service or sixty years of age), yearly promotions, inter or intra transfer and replacement. The staff list and nominal roll monthly/annual report will reveal vacancies that need to be filled.

Internal sources are through promotions, upgrading, proper placement, transfer, and dependent relative of a deceased staff. A staff is entitled to promotion after two, three or four years for members of staff below grade level seven, from seven to fourteen and fifteen and above respectively. For Upgrading/ Advancement/Conversion, the 2008 Public

Service Rules currently guides the Corporation on promotions and advancement of staff. Advancement/Conversion of a member of staff comes from acquisition of additional qualification (it can be professional like ICAN or ANAN takes an officer from a lower grade to grade level ten or nine respectively. Submission of BSc, B.Tech.; HND will take an officer to grade level eight and OND to grade level six, NCE to grade level seven). Career patterns which allow for automatic upgrading of staff are operated mainly for confidential secretaries and typist below grade level 07 (FRCN Corporate Plan, 2010). A dedicated or committed member of staff who has stayed in a particular position for a long period of time may receive salary upgrading but it is personal to the staff. The difference between upgrading and advancement is that advancement takes one to another substantive grade level while upgrading is only in monetary terms. Recently, upgrading is being used for both upgrading and advancement. Transfer may be from a 'sister' organisation or a state broadcasting Corporation. Deceased staff with requisite qualification: the Corporation has given some relatives of deceased staff employment. The general manager of an FM station may put up a request for employment for a deceased staff relative depending on how dedicated, committed and effective he was in the organisation. Different regimes used different models of recruitment to source applicants from outside the Corporation. Potential sources of recruitment from external sources include: new graduates from the university, polytechnics colleges of education and, internship (industrial attachment students), Models of recruitment employed before 2010 were mostly a combination of competent based, resource view base, best fit /best practice approach and Realistic Job Preview. Applicants were selected by their competencies, talent and skills. Educational qualification was not really a criterion for selecting the best fit nonetheless between 2000/2004 it was an added advantage. During this period, one of the methods used was walk in, where potential candidates are required to attend interview directly without prior application on a specified date, time and at a specified time. Another technique used then was selecting from a pool of applications. The required number of candidates from the best was

chosen after interview (first was written then the oral interview).

Actually, the labour turnover analysis, death/retirement of staff and the expected expansion taking place at that time in the organisation birthed the opening up of more Zonal stations and FM stations which led to massive employment in the year 2011 and 2013. During this period, Data Recruitment model was employed. Candidates were not interviewed before selection because majority of them were used to replace staff that left the organisation due to one reason or the other but their Curriculum Vitae (résumé) were thoroughly screened and scrutinized before the selection; and the best according to the board in charge were chosen. The other candidates employed were artistes and casual workers who had worked at least five years with the corporation. They also did go through interview. The new organisational structure opened up more opportunities for increase in staff strength. Thus, internet/e-recruitment and data models were used in recruitment/selection exercise which started in June 2014 through 1st January 2015. Arduously, this method is faster due the fact that the internet can reach to a large number of people at the same time and feedback may be immediate. Consequently, e-recruitment today has become a major source of recruitment among Government parastatals and blue chip organisations and FRCN is not exempted. In fact, the Corporation's recruitment was done online and through newspaper advertisement. Job seekers were asked to send in their credentials to one of the three e mail addresses given by the Administrative Directorate. However, the disadvantage is that it may generate many unqualified candidates and may not increase the diversity and mix of employees (Robbins and Coulter 2009). The major criteria were that a candidate comes from the North Central zone (Carved out from Abuja Zonal Station), South-south zone, and North East Zone; second is that candidate will be posted to the new Zonal stations. Thus, Selection was done using BFOQs. The selected applicants were communicated through GSM. This approach was adopted because the Corporation needed to employ staff

to man the newly established Zonal stations and FM stations. This form of recruitment and selection has saved the Corporation training cost that would have arisen due to language barrier and candidates' trying to acclimatise to the new environment since they are from that geopolitical zone. At every stage FRCN prior to 2014/2015 recruitment exercise adopts Equal Opportunity Policy in recruitment.

Methodology

For the purpose of this study, the Corporation's Recruitment/selection process was grouped into two periods (from 1980-2009 and 2010-1/1/2015). Within these periods we examined the models of recruitment and selection applied by the Corporation. Primary and secondary data were used in the study. The primary data was obtained by interviews from members of staff of Abuja Zonal Station comprising Abuja operations and North Central Zonal Station while the secondary data was gotten from FRCN Corporate Plan, the Corporate Headquarters, Abuja Operations head office, journals and other relevant documents. The interview cut across staff from Grade Level 07 and above. Members of staff whose appointments had not been confirmed by the Corporation were excluded from the interview. The interview was done on one-on-one bases to reduce bias and prejudice. Questions asked during the interview were: was merit system adopted during recruitment/selection exercise from (1980-2009)? Was merit system adopted during recruitment/selection exercise from (2010-1/1/2015)? Did ethnicity, religion and nepotism play any role in recruitment/selection exercise from (1980-2009)? Did ethnicity, religion and nepotism play any role in recruitment/selection exercise from (2010-1/1/2015)? Was the rate of turnover connected to the method of recruitment/selection exercise in the two periods under study?

Results

Table 1: FRCN Estimated Staff Strength as at 30th December 2009 and 30th December, 2014 respectively

Station	Staff strength as at 30/12/2009	Staff strength as at 30/12/2014
Head quarters	237	425
Abuja Zonal Station	483	1059
Enugu Zonal Station	520	980
Ibadan Zonal Station	594	995
Kaduna Zonal Station	696	1154
Lagos Operations	285	525

Source: FRCN Corporate plan 2010 and FRCN Corporate Headquarters 2015

From table above, it can be seen that Abuja Zonal Station now divided into Abuja Operations and North Central Zonal Station respectively had 119.3% increase in staff strength.

Table 2: Abuja Zonal Station Estimated Staff Strength and rate of labour turnover among employees that were recruited during a Particular Period

Period in years	Estimated no. of staff recruited during the period	Estimated no. of leavers due to resignation, abscondment, withdrawal of service among people recruited during this period	Labour turnover (%)	Model/concept/approach used in recruitment and selection during the period
1980-1999	138	4	2.9	Process model with a combination of competent based, resource view base, and Realistic Job Preview, walk in, EOQ, Best Approach/best Fit
2000-2009	373	13	3.5	Process model with a combination of competent based, resource view base, and Realistic Job Preview, walk in, EOQ, Best Approach/best Fit
2010- 2012	387	28	7.2	BFOQs/ data model
2013-2014	233	20	9.8	BFOQs/ data model, internet/ e Recruitment
1/1/2015	215	2 (as at 25 th March, 2015)	0.9	BFOQs/ data model, internet/ e Recruitment

Source: FRCN- Abuja Operations Head Office 2015

Table 2 indicates the level of turnover among employees who were employed within a particular period but left the organisation at a later date. Level of turnover was highest among employees recruited from 2013-2014 at a rate of 9.8%. During this period, recruitment and selection was done based on a candidate's geopolitical zone as stipulated in the candidate's Résumé. There was no formal (oral or written) interview. The recruitment and selection process described above was not followed.

From the interview conducted by the researcher, it was deduced that merit system was adopted in recruitment exercise carried out from (1980-2009) while, ethnicity, religion and nepotism characterised recruitment/selection exercise from (2010-1/1/2-15). Over 90% of those interviewed asserted that the mode of recruitment/selection adopted between (2010-1/1/2015) had effect on the rate of labour turnover in FRCN.

Issues Arising from the Different Recruitment Exercises

The use of BFOQs and internet recruitment was cheaper and faster for the Corporation. There is this belief that candidates selected by BFOQs will be more effective in ensuring the progress of their respective zones through radio broadcasting. Applicants from other geopolitical zones and those from the above mentioned geopolitical who were not selected have queried the use of *BFOQs* approach in the recent recruitment exercise. Their agitation is that corruption and nepotism played a vital role in the selection. To them you have to know somebody in power to be employed. The resultant problem here is high rate of labour turnover. Some of the respondents who resigned were interviewed told the researchers and their reason for leaving the Corporation was that they expected higher pay than what they were receiving, some believed there forced to accept the job. Since they did not labour for the job the labour turnover among those that came in between 2011- 2013 was high. Another issue raised by some of the older employees still with the Corporation (who have worked for at least five years with the Corporation) was that the set of employees who did not go through the rigor of test and interview lacked commitment to their job in addition to lack of respect for existing staff. It is perceived that they are not ready to take risk for the progress of the organisation. This paper seeks to establish that Review Job Previews (RJPs) approach to recruitment will reduce the high rate of turnover being experienced by the Corporation in recent times. In support of this Hassan (2009), stipulated that there are chances of high performance and retention of employees with full knowledge of what it takes to perform a job as proposed by RJPs approach of recruitment.

During the period competent based, resource view base, best fit and best practice approach and Realistic Job Preview were used, staff were more dedicated to their duties and did their job with utmost professionalism. Labour turnover was low. Employees who did not perform their duties well were dismissed. Corruption was low and employees were ready to lay down their lives for the good of the organisation. About 92.8% of the staff that came in through this approaches confessed that having gone through rigorous process to come into the

organisation, it will be unwise to toy with the job. When educated, competent, skilled, talented graduates at different level were employed (using these approaches), the older staff were demoralised. This is because the younger ones were taken over from them. All the old staff needed was to go to FRCN training school. But the younger generation came in with innovation as a result of their educational qualification. The older ones that were employed due to their competence had to do all to improve their educational status. This has led to all sorts of certificate being brought into the organisation.

Conclusion and Recommendations

Ideally, the employees of any organisation are its life wire. The 21st century organisations should strive to remain relevant and keep pace with advancement and changes emanating from transformation in information, communications and technology. With the dawn of this realisation upon the present day organisations, there appears to be a major shift towards ensuring that the right quality and quantity of candidates are employed for sustainability of the organisation. Hence, it is of crucial importance that employees with the most suitable qualifications be selected. This is where the method of recruitment and selection come in.

However, it is instructive to posit that the various models given in this paper forms the base on which sustainability of an organisation and reduction in the rate of labour turnover reclines. Therefore, this paper recommends that the Human Resource Unit of the Administrative Directorate be properly informed and equipped on the implication of making a wrong choice during recruitment and selection process. The Central Management Committee should also be committed to do the right thing in ensuring that will help the Corporation to make the right choice on the best approach to take, in getting the best candidates at a minimal cost. We also, recommend that a training programme on models of recruitment and selection and how it can be applied to the Corporation to ensure recruiting and selecting the right quality of people should be conducted for all members of staff involved in recruitment and selection. The Federal Radio Corporation of Nigeria should aim at and be committed to attracting and retaining highly

talented, knowledgeable, skilled, competent, aptitude and motivated people that will be committed to the progress of the organisation to remain relevant and maintain its competitive edge among many sister broadcasting firms and to their personal needs and career development. The Corporation should adopt an unbiased method of recruitment and selection that will be devoid of Ethnicity, religion and nepotism. This paper seeks to propose that the Federal Radio Corporation of Nigeria should embrace the process model with a combination of competency based, resource view base, data model and Realistic Job Previews models. Thus, this study infers that these models will be appropriate in order to attract and retain knowledgeable candidates with the right skills, aptitude, talent and competence to be able to compete favourably among many state and private Radio Broadcasting houses. Every stage of the recruitment and selection process should be examined critically to determine if there is any area where discrimination might occur and necessary preventive actions should be adopted. In conclusion, the study showed that the bedrock of having the right workforce in the FRCN reposes on appropriate recruitment and selection models adopted by the Corporation. Therefore, the knowledge and applicability of appropriate model(s) of recruitment and selection should be of paramount importance to FRCN if they are to retain their top quality personnel and maintain organisational stability by reducing the rate of turnover.

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Human rights: a historical perspective Central Virginia Leagal Aid Society Inc: what is Bonafide Occupational Qualification or BFOQ?

The Impact of On-The-Job Training on Organizational Performance, Growth and Development

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pp95-101

Abstract

Using review of related literature approach, this paper discusses on-the-job training as a method of training and posits that, because workers, especially “first level leaders” are in touch with the bulk of organizational customers, the general public, as well as understands the corporate policy and strategy, are well positioned to provide on-site training so that companies can get more out of their training activity which certainly will lead to greater productivity, growth and development of organizations.

Keywords: On-the-job training, organisational performance, growth and development

Introduction

In the year 2015 so far, the Industrial Training Fund (ITF) has visited more than thirty industrial establishments and many major government establishments nationwide to create an awareness and development activities. Over the same period under review, the apex bank, Central Bank of Nigeria (CBN) puts actual cost of training and development activities at over N3 billion.

From 2002 to 2015, a total of 1,690 programmes were implemented in 1525 organizations, well the allocation from the Ministry of Labour and Productivity amounted to N205 million monthly in 2015. These suggest that training must be a significant contributor to business and/or government objectives or it would have not received the attention it has gotten. But the crux of this paper presentation is: who were the providers of these training and development activities? Could it be outside experts? Or experienced Nigerian workforce/managers? The paper examined how training is carried out at the Industrial Training Fund and discovered that the larger budget is expended on outside training, yet organizations could harness the benefit of capturing and calculating knowledge within through on-the-job training.

Growing Your Own Human Capital

Training of personnel management concerned with making the best use of the human resources in an organization by providing them with the appropriate to acquire the necessary skills for jobs. Hence training is a process to change employees' behaviour at work through the application of learning principles. This change according to Koontz (2012) and Cole (2010), usually focus on knowledge or information skills or activities and attitudes or belief and value systems. It can be added, that training is the systematic modification of behaviour through learning which occurs as a result of education instruction, development and planned experience. Bass and Vaughan (2006) accordingly define learning as "a relatively permanent change in behaviour that occurs as a result of practice or experience".

The theoretical framework for training could be first traced to Frederick Taylor who since his major work "scientific management" in

1911 associated training of the worker with more efficient performance. From this backdrop, training is best seen as an incentive to the employee and this enhances organizational commitment and involvement, team effort, customer relation, job satisfaction and so on.

Also on a "pure" individual level, innate incentive can be related through training. For example, the right skills and knowledge can mean job transferability, job promotion, job enrichment and enlargement and greater job interest. This development caused Bass and Vaughan (2006) to argue that Abraham Maslow's concept of self-actualisation and could come through training. The main premise was that significant learning can only occur when the subject matter of training has significance to the purpose or aims of the individual. Organizations therefore, have every persuasion to be engaged in training for the individual benefits that come to the person trained so that his/her human capacities are developed. The study has shown that a relationship exists between individual benefits and the organisational performance. Although individual benefits to great extent, would emphasize the growth in human capacities through the effective use of skills and abilities at work, this in turn give greater social relevance to the nature of the job in the community at large. Accordingly the organizations also benefit in the following ways from training (Edvisson and Malone (2007):

- (i) Decentralization
- (ii) Contingency planning
- (iii) Changing organizational structures
- (iv) Dealing with problems of growth
- (v) Changing technology
- (vi) Interpretation of policy and philosophy
- (vii) Team building
- (viii) Inter-unit knowledge requirements
- (ix) Learning times are reduced
- (x) Enhanced internal capacity for decision making and planning
- (xi) Reduced absenteeism and accidents
- (xii) Altered attitude towards corporate culture
- (xiii) Retention of labour may be enhanced
- (xiv) A "cushion" against external labour market
- (xv) Increased job flexibility

Other benefits of management training include among other are: more efficient use of resources from plant to machinery; less waste

and scrap, higher performance levels, better quality goods and/or services, effective and sound customer and industrial relations and ultimately more profitability (Jackson and Schuler, 2013).

Overview of the National Veterinary Research Vom

The National Veterinary Research Institute (NVRI) Vom, though started as a veterinary laboratory in 1924 got its present name by the Agricultural Research Institute Degree 35 of 1975. NVRI's mission is "to be the foremost Veterinary Research Institute in Africa, producing quality vaccine and offering services for the identification, control and eradication of economically important livestock diseases through best practices, research excellence and applying modern technology with highly trained, experienced and motivated personnel". The mission statement captures the importance of highly trained personnel in fulfilling NVRI's mandate. There are five technical divisions and two non-technical divisions in the institute, namely: research; production, diagnostic services and extension; livestock investigation; and planning and budgeting. Administration and finance and the internal management committee constitute the non-technical divisions.

In 2015, the institute's budget for training was N15 million, although only N12 million was expended. In 2014, N10 million was expended on training. A good portion of this budget is committed to about 41 staff on various long duration courses (2-3 years) in and outside Nigeria, so in terms of importance this training consumes the larger part of training budget.

Some Notable Factors in Nigeria

In spite of the benefits listed above, Jones (1998), observes that many organizations are still not pooling or harnessing to the full, existing workforce skills and knowledge due to internal organizational reasons and external factors. This brings to the fore some notable factors in Nigeria:

Firstly, low priority on knowledge and skills a review of the training and development consulting firms revealed that there are only 947 consulting firms (gateway development org, 2006). Generally, this is stretching for a country with a workforce of over 45 million in both public and private organizations. This is in

addition to unspoken reasons employers give for not training through suggestions such as "we cannot afford the time to release employees"; we cannot afford the cost", "trained employees will be practiced by other companies". All of these indicate a low priority on the value of training and may be translated to mean that training is perceived more as a cost than an investment.

Secondly, much training taking place is wasteful and therefore ineffective as Andreas et al (1012) have observed that high quality training programmes are extremely difficult to create and maintain (in the typical 1-2 day seminars or conferences, with little or no follow-up). Outside consultants run such training often away from the site of work, whereas human resource departments could collaboratively run such programmes. In addition, traditional "off-the-peg" courses have been too theoretical and not directly related to the workforce (Jones, 2008).

Thirdly, educational performance compares poorly with competitor countries-meaning that, the quality of graduates (the source of employees) differs from Nigerian tertiary institutions has been questioned. According to the National Universities Commission (NUC), as at 2010, no Nigerian university made the list of 200 best universities in the world. Also in the wake of the reform programme of the Federal Government of Nigeria, Dr. Ngozi Okonjo Iweala also observed that 2/3 of all the staff of finance was not well qualified for jobs they held. This observation can be made in several sectors of the economy.

Fourthly, is the perception of employers not showing adequate concern for skills shortage. There seems to be a glaring commitment to training on the part of employers in the face of shortage of skills. This has led to the ITF mounting an unceasing campaign for Human Resource training. Jones (2010) makes a similar observation about Britain and quotes Hilary Clinton (1992) as observing same as the US in these words: "It is unlikely that this country will do what must be done about workers' skills unless there is a strong demand from business and industry for people with those skills". At the public level, it is sadly noted that government, the largest employer of labour has been unable to stem the tide in what is popularly called brain-drain (although the causes and solutions should be the subject of another paper), thus

demonstrating insufficient concern for skills shortage.

Jackson and Schuler (2013) have argued that the best competitors are using training and development activities to improve the ability of the workforce to implement their overall strategy. In view of all of the above mentioned factors, businesses must grow their talent as though their businesses depend on it, and actually they do. This is beneficial in:

- a. Delivery of excellent quality at low cost;
- b. Providing shared experiences that can promote understanding among employer from diverse backgrounds and speed up organization cohesiveness and employees' commitment and higher performance.
- c. Addressing employees' need for self/personal development so as to assure long term employability.

Sometimes organization even train for the customers – help their customers train and develop their workforce. Thus, the importance of growing talent in the organisations cannot be overemphasised. In a study by Nmadu (2015), major companies in Nigeria such as Cadbury Nigeria Plc, PZ, Univer Nig Plc, Nestle Nig. Plc, and major banks such as First Bank Plc and Union Bank Plc, all had training schools. The Federal Government as an incentive to promote or encourage in-house or in-plant training has offered a two percent tax concession to companies for cost of training facilities for five years (Nnanna *et al*, 2013).

A recent survey of three major manufacturers in Nigeria (Dangote Cement Company Plc, NASCO Group Nig. Ltd and grand Cereals) indicates that many organizations carry out training internally and this might constitute as much as 70 percent of training if orientation is regarded as training. Training of salesmen is best accomplished on-site in the organization according to the study, with more experienced first level managers delivering much of the programme content. The first level leaders (also known as those who manage others who do not manage others) according to Andreas *et al*, are the most responsible for company's relationship with customers bulk of employees. First level leaders are therefore critical to sustaining quality, service innovation and financial performance. Thus, first level managers

must understand their piece of the corporate strategy, drivers for its delivery and factors behind greater performance in their domain. These are the items that form the training content they deliver through a combined approach of teaching and monitoring. Significantly, in this paper, this is best accomplished on the job. In NVRI, success in annual health and production, livestock development projects and innovations are largely contingent on effective on-the-job training. According to Cohn *et al* (2014), senior executives must also be part of resource persons to deliver the content of on-the-job training. The study above indicate that manual skills are learned by job instruction (as is done in training schools), “sitting by the Nellie or off site in a training facility. Furthermore, thinking skills like case-study exercises, problem solving exercises, setting written questions and project work are best acquired on-site. All these indicate how important the more experienced staff can prove to be. They are in these areas or cases the best consultants.

Requirements for a Successful and Effective on-the-job Training

To grow an organization's capital, trainers can use several steps to ensure a successful on-the-job training, programme and effectiveness according to Byars and Rue (2008). These steps may be customized to fit the individual needs of the company, but a plan always helps to produce favourable results. This can accomplish as detained below:

1. Determining the training objectives and preparing the training area:
 - Decide what the trainee must be taught to do the job efficiently, safely, economically and intelligently\
 - Provide the right tools, equipment, supplies and materials
 - Have the workforce properly arranged just as the trainee will be expected to keep it.
2. Presenting the instruction:

Step 1: Preparation of the trainee for learning the job:

 - (a) Put the trainee at ease. Help him/her to feel the he/she is free to talk
 - (b) Find out what the trainee already knows about the job

© Get the trainee interested in and

decisions of learning the job

Step 2: Breakdown of work into components and identification of key points:

- (a) Determine the segments that make up the total job
- (b) Determine the key points or “tricks of the trade”

Step 3: Presentation of the operations and knowledge:

- (a) Tell, show, illustrate, and question to put over the new knowledge and operations
- (b) Instruct slowly, clearly, completely, and patiently, one point at a time
- (c) Go easy on argument and criticism, thus put the trainee on the defensive
- (d) Check, ask question and repeat if necessary. This encourages the trainee and shows him you are listening. It helps to develop points further as well.
- (e) Hold your temper. An angry man gets the wrong meaning from words
- (f) Make sure the trainee understands.

Step 4: Performance Tryout

- (a) Test the trainee by having him/her perform the job
- (b) Ask questions beginning with why, how, when or where
- (c) Observe performance, correct errors or mistakes and repeat instructions if necessary
- (d) Continue until the trainee is competent in the job

Step 5: Follow-up

- (a) Put the trainee on his/her own
- (b) Check frequently to be sure the trainee follow instructions
- (c) Taper off extra supervision and close follow-up until the trainee is qualified to work with normal supervision.

When clearly defined objectives are lacking, it is impossible to evaluate a program efficiently. However, sound training objectives can usually unlock the potential of the trainee by identifying skill deficiencies and developmental opportunities, making good performance better over coming skill deficits and helping the trainee or employee prepare for the future.

Who provides Training?

Identifying those who provide the training matters a lot. As earlier stated, the first level leaders are in the best position to provide on-the-job training. Steve Jobs CEO of Pixar has been cited to have said “No body wants to work for someone they cannot learn from”. In-house providers of training may be supplemented by subject experts from outside especially where (i) no one in the immediate environment has the needed knowledge and (ii) large number of persons need to be trained at once.

Still, other considerations that determine who the providers of training will be are:

- (i) Where programme is held
- (ii) Skills/competencies taught - literacy/technical competencies are best handled by immediate job supervisor, other managers, co-workers. But an internal/external expert can do a good job of impacting skills/competencies as well.
- (iii) Interpersonal, conceptual and integrative competencies – this is often provided by training, specialists, university professors, consultants for management.
- (iv) Organizational orientation – human resource developmental staff are critical in supplying the needed organizational orientation by combining techniques like-Staff-paced instruction-learning at one's pace and other on-the-job techniques. The quest for who provides training has led to the establishment of corporate universities such as Hamburger University, Rillogg's University to mention but a few.

Creating a Conclusive Learning Environment

Learning as earlier alluded in this article, involves a permanent change in behaviour for employees to acquire knowledge and skills in the training programme and apply this information in their job, the training programme needs to include specific learning principles which according to Noe et al (2008) are:

- Employees need to have opportunities for practice
- Employees need to know why they should learn
- Employees need to use their own experiences as a bases for learning
- Employees learning observing and interacting with others

Employers need the training programme to be properly coordinated and arranged

Thus, companies need to demonstrate that they are creating a learning environment by the kind of support they give to assure that a learning environment is created and nurtured.

Workplace Learning and Learning Organizations

While a formal development programme in itself will not insure the improvement of managerial talent, it will permit the various development activities to be better planned and coordinated so as to serve the needs of both the organization and the participants. So far this article shows that there is a need for all organizations to make learning an activity that occurs in many ways, everyday, throughout all parts of the organizations – and organization where this occurs, are referred to as learning organizations. Learning organizations see learning as “knowledge management” that is making sure knowledge from employees, teams and units coming into an organization is captured, remembered, stored and shared with others in organization. The implication of “knowledge management” for organization is that – technologies software etc can only work if employees are willing to share their knowledge and experiences and are willing to use ideas and knowledge of others. This is not automatic nor simple, management must provide such an environment and reward employees as earlier observed under creating the right environment. One is reminded once again, on-the-job training is a useful tool for achieving workplace learning.

In recent years, ideas and practices relating to HRD have moved beyond a narrow conception of training and development. Many organizations attempt to take a holistic view of learning at individual and organizational levels as a crucial source of competitive advantage. For instance, technology, global markets, customer expectations and competition have all contributed to making this the only strategy to cope with change. Furthermore, continuing advances in networked info technology and accelerating change have stirred interest in organizational learning and knowledge management which culminate in the development of an organization's intellectual

capital (Edvinson and Malone, 2007) and the potential for learning between organizations. A learning organization will have a learning approach to strategy, participative policy making” info mating (use of info technology to inform and empower), reward flexibility and self-development opportunities for all. Learning also in the workplace is increasingly been seen as the crucial contributor to dealing with change, coping with uncertainty and complexity in the environment and creating the opportunities for sustainable competitive advantage. The idea of a learning organization as seen by Chrudden and Sherman (2012) provide the proper development opportunities and experiences is appealing to more and more people. Bratton and Gold (1999) also see a learning organisation as an organisation which facilitates the learning of all its members and continuously transform itself. This puts the burden on internal providers of training as this paper demonstrates.

Conclusion and recommendation

This paper makes a case that: more experienced workers, especially first level leaders those who manage others who do not manage others, may be an organization's best resource for growing their human capital. Among the several reasons proffered, the best persuasion is that these providers of training can both mentor and supervise employees in a way that facilitates their effectiveness and efficiency. For organizations like NVRI Vom, on-the-job-training hold great prospects for assuring that knowledge is managed and workplace learning is occurring. The paper concluded that in an era of workplace learning, the emphasis on using internal providers of training cannot be overemphasised and highly recommended. Also, regardless of the area, training and development must be backed up by careful research.

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Impact of Inadequate Power Supply on the Performance of Small and Medium Manufacturing Enterprises in Kano Metropolis

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Abstract

The primary objective of the study was to: establish the possible impact of inadequate power supply on the performance of manufacturing SMEs in Kano stat. A survey design approach was adopted in this study. A sample of 160 Manufacturing SMEs was selected using Taro-Yamane formula from the population of 480 operators of SMEs in Kano. Data was collected using questionnaire structured in multiple choice close ended 5 point Likert-scale questions using Manufactures Association of Nigeria (MAN) and Federal Bureau of Statistics as the sources. Descriptive statistics were used in data analysis and the hypotheses were tested using Chi-square and Least Square Regression with the aid of SPSS (Statistical Package for Social Sciences). The result of the study reveals that, manufacturing industries are generally suffering from inadequate power supply for efficient and effective operation. It was also observed that competition and appropriate regulatory framework which are prerequisites for achieving better services delivery are not in place and there is no functional segmentation by separating transmission companies from existing distribution companies and hence resulted in monopoly and misconduct by the distribution company in Kano. It was therefore, recommended that, the relevant governmental authorities and agencies should urgently consider embarking on measures aimed at significantly improving the power sector for efficient and effective operations of the manufacturing small scale industries. Competition and appropriate regulatory framework which are prerequisites to achieve better services delivery must be put in place.

Keywords: Inadequate power supply, small and medium scale enterprises, manufacturing enterprise

Introduction

The role of small and medium scale enterprises in the developing and emerging economies has assumed a major significance in 21st century, particularly as the changing world economy call for more articulate policies in these countries. Most of these economies are characterized by a large number of micro, small and medium businesses mainly in the informal sector. In many economies they account for a large segment of the production population. Nigeria falls within the developing categories of economies. Small and medium enterprises in Nigeria account for about 45% of non-oil productive activity outside agriculture (Iornem, 2000). In 21st century, medium scale enterprises have emerged as strong agents of economic growth and sustainable development.

With the dismantling of trade and other barriers, the world has been transformed into a global village. Consequently small and medium scale enterprises in developing countries are struggling to survive under intense competitive environments both domestic and international. In Nigeria there is urgent need to provide the required enabling environment for the development of SMEs, so that they could adequately play the role expected of them in the economic transformation (Egbon, 2004).

The manufacturing sector of any economy which is stimulated by small scale firms plays a pivotal role in its developmental process. However, in spite of Federal Government of Nigeria's efforts to revitalize the sector, its growth has rather been on the decline; a situation that is considered worrisome and worthy of attention. There is presumption that an improved business environment would most probably ginger the existing entrepreneurs to continue to invest and grow. Therefore, a good business environment would most likely attract investment which is pertinent to economic growth and development (Sambo, 2008).

Electricity is an essential feature for economic development and its central for the optimal operation of both small scale firms and large manufacturing concerns. The reason for such necessity lies in the fact that electricity affects every sphere of a nations' economy. Bearing this in mind, both developed and developing nations aim towards establishing an efficient electricity sector. Power supply

remains an important variable for the industrial development of every nation. There is hardly any business enterprise that does not require regular power in one form or the other. One of the key indices of measuring the development status of any country is the state of power supply. This is because the power sector is the real engine of economic growth and development. Over the years, the importance of attaining a regular power supply has been at the core of developmental debate in Nigeria. Sambo (2008) has traced the history of electricity in Nigeria to 1986 when electricity was first produced in Lagos, 15 years after its introduction in England. Sambo (2008), observed that despite the fact that the emergence of electricity in Nigeria is over a century; its development has been at a slow rate. Sambo further noted that for over 20 years prior to 1999, the power sector did not witness substantial investment in infrastructural development. There were no new investments, and existing ones were at a deplorable state. In 2001, generation went down from the installed capacity of about 5, 600 MW to an average of about 1, 750 MW, as compared to a load demand of 6,000 MW. According to Sambo (2008), only nineteen out of the seventy-nine installed generating units were in operation.

Nigeria is richly endowed with various energy resources, crude oil, natural gas, coal, hydropower, solar energy, fissionable materials for nuclear energy. Despite these, Okafor (2008) observed that the country consistently suffers from energy shortage, a major impediment to industrial and technological growth. The National Electric Power Authority (NEPA) now Power Holding Company of Nigeria (PHCN), a government parastatal, has the sole responsibility for managing the generating plants as well as distribution of power nationwide. In case, what is often projected for generation is not always commensurate with demands. Consequently, individuals, organizations and industries resort to internal generating plants (Adegbamigbe, 2007). Across the various states of Nigeria, Okafor, (2008), Sambo, (2008), Adegbamigbe, (2007), and Agbo (2007), have noted that power supply has not been very regular. In Benue, only Makurdi, the state capital receives electricity supply for about five hours a day. In Delta state, some communities never had power supply for upwards of six months. In

Lagos and Kano, many residential parts of the states receives about four hours of electricity per day with cuts of short intervals, while a total black out could be recorded in some areas for up to three days or more (Akpan, 2005; Odiaka, 2006; Ogumodede, 2006). Odiaka (2006) further observed that power distribution to the industrial sector in Nigeria also remains abysmally irregular. For instance, the study observed that the average power outage in industrial sector increased from 13.3 hours in January 2006 to 14.5 hours in March, 2006 and marginal increase to date.

One of the major problems facing the Nigeria's manufacturing industry is inadequate nature of power supply. Without doubt constant power supply as well as the provision of other infrastructural facilities usually facilitates the industrial development of any economy. In Nigeria, the near absence of these has affected most manufacturing industries negatively. Kilby (2003), observed that inadequate power supply in the industries have become a major national problem. Obadina (1999), noted, that about 60% of manufacturing SMEs in Nigeria die within their first five years of existence, another smaller percentage goes into extinction between the sixth and tenth year thus, only about five to ten percent of young companies survive, thrive and grow to maturity due to irregular power supply as a major contributing factor to their failure.

According to Adeyemi (2007), the state of the manufacturing industries in Nigeria at the end of Obasanjo's administration on May 29, 2007 can be classified as; 30 percent closed down, 60 percent ailing and 10 percent operating at sustainable level, this is evidenced in the at which textile companies are closing down on a yearly basis (Obadan, 1998; Jibrin, 2002). Amongst the complaints of the companies are the issues of electricity supply and smuggling of finished products, this shows the significance of inadequate power supply, to the seeming disadvantaged position of local manufacturers in Nigeria.

Inadequate power supply is one of the problems bedeviling the real sector, and the manufacturing industry in Kano is not an exception. If anything, its situation is most probably worse with more than half not being able to cope with the dearth of inadequate power supply. For the manufacturing SMEs in Kano to

survive and operate at optimal level given this deficiency, it becomes pertinent to explore ways to overcome this obstacle to industrial growth and development. The challenges posed by, and the possible impact of inadequate power supply to manufacturing SMEs in Kano metropolis is thus the primary concern of this research work. This is because the researcher observed that manufacturing SMEs are mostly touched than large companies that can always absorbed the cost in their products or large volume of production and sales. Hence the attempt would be made in this research to assess the possible impact of the inadequacy of power supply on the manufacturing SMEs in Kano metropolis.

The main objective of this study therefore, is to investigate the impact of inadequate power supply on the performance of manufacturing SMEs in Kano metropolis, with a view of proffering solution to some of the identified effects.

Literature Review

Concept of Small and Medium Enterprises (SMEs)

In attempting to conceptualize small and medium enterprises (SMEs) in Nigeria, some points need to be stressed. First, there is no universally accepted definition of small or medium businesses because the classification of businesses into large, medium or small scale is a subjective and qualitative judgment (Ekpenyong, 1997). Secondly, small and medium businesses are generally quite responsive to their environment and environment changes fast. Changes in the environment therefore affect what constitutes a small and medium business at a particular point in time. Thirdly, what the definition aims at is to set some limits (lower and upper) that will assist in achieving the set purpose. Such limits can be in terms of level of capitalization, sales volume, number of employees, etc. A clear definition may be useful in a particular context but it may not be practical to attempt a universal definition.

An attempt is made to present some definitions of SMEs to demonstrate the divergence in definition. Lim (1992) argued that it is quite possible, for instance, that within the same sector, a business can be 'small' by capitalization and may not be deemed small by virtue of numbers of people employed. Therefore

definitions and concepts of SMEs continue to evolve according to particular scholars, environment and disciplinary backgrounds as well as their perceptions of present day realities. The working definition by International Labor Organization (ILO) and United Nations Development Programme (UNDP) for SMEs and large enterprises indicates that: employing less than 5 employees including the owner is a micro enterprise; employing 5 to 20 employees is a small enterprise; employing 21 to 99 employees is a medium enterprise; and employing above 99 employees is a large enterprise (UNDP, 2001). The International Finance Corporation (IFC) defined small scale enterprises as the enterprise employing between 10 and 15 employees and with asset base of less than US\$2.5 million. The medium scale employed between 51 and 100 (IFC, 2002) Development Finance Company (NIDFC) defined SME as a business with a capital not exceeding US\$5,000 and with employees not exceeding 16 (US\$1 = Le680) in 1991 (Rogers-Wright, 1997). In a similar manner, CBN, World Bank, Companies and Allied Matters Act (CAMA) have at specific times, defined SMEs in different ways but the definitions have as common measures fixed assets, gross output, and number of employees. In the 1979 Credit Guidelines to commercial and merchant banks, the Central Bank of Nigeria (CBN) defined small scale enterprises (excluding general commerce) as enterprises in which total investment (including land and working capital) does not exceed N500, 000. In its monetary circular No. 22 of 1988, the CBN redefined small Scale enterprises (excluding commerce) as enterprises in which total investment (including land and capital) does not exceed N500,000 and/or annual turnover does not exceed N5 million. Following the persistence depreciation of the naira, capital investment was raised to N5 million and turnover to N25 million (FRN, 1988).

In the above definitions, there was no distinction between micro, small and medium scale enterprises. The only distinction was drawn between small and large enterprises. However, in 1997, industries in Nigeria were reclassified by the National Council on Industry as cottage, small scale, medium scale and large scale: by the new classification (Iniodu and Udomesiet, 2004); a. A cottage industry is one which has a

total cost, including working capital (but excluding cost of land) of not more than N1 million with a maximum of 10 employees. b. A small scale enterprise industry is defined as a firm with capital ranging between N4 million and N7 million, and with a labor force of between 11 and 35 employees. c. A company with a total cost of over N40 million but does not exceed N 150 million, is classified as a medium scale industry. d. A company with a working capital of more than N150 million and a work force of over one hundred people is classified as a large scale enterprise. The CBN of recent puts the employment level of the small scale businesses at less than 50 and medium scale businesses as less than 100. In terms of asset-based, small scale has less than N 1 million while medium scale has less than N150 million (IFC, 2002).

Empirical Review

Most of the empirical works reviewed in this study has indicated the poor state of electricity supply in developing African countries. The poor state of this infrastructure also has a negative impact on the economic performance of developing economies. For instance Lee and Anas (1992) reported that manufacturing sub-sector in Nigeria spend on average 90% of their variable cost on infrastructure, he further conducted the same study in 2010 and find out that, there is increase in average cost to 93%, with electric power accounting for half of time share. The duo, having study 179 manufacturing firms in Nigeria also reported that the impact of electricity deficiency of all types was consistently higher in small firms. Ukpong (1973) also carried out a study on the cost of power outages to the industrial and commercial sector in Nigeria. He used the production function approach to evaluate the power outage cost between 1965 and 1966, with selected firms. From his estimate, he discovered the unsupplied electrical energy to be 130Kwh and 172Kwh between the periods. The corresponding costs of the power outage to the industrial sector in the two years were estimated at N1.68million and N2.75million respectively. The unsupplied electrical energy according to Ukpong, has a negative implication on the manufacturing productivity growth in Nigeria. A similar framework of analysis was also carried out by Uchendu (1993) on the industrial firms, in

the manufacturing areas of Lagos State, Nigeria. The study estimated several types of outage costs such as material and equipment losses and value of unproduced output, which was estimated at N1.3million, N2.01million and 2.32million in 1991, 1992 and mid 1993 respectively. The development reduced the value added of major manufacturing firms in Nigeria during these periods. World Bank (1993b) conducted a study and estimated the adaptive cost of electricity failure in Nigeria, was amounted to USD380million. Also the estimate of National Electric Power Authority (NEPA) now Power Holding Company of Nigeria (PHCN) revenue lost to unsupplied consumer energy was stated by World Bank as USD140million. However, the short term losses incurred by consumers such as raw material and equipment losses in other words the supply of electricity is unreliable from the public power supplier in Nigeria, and there

liability is known to be less than 50% by time nationwide (World Bank, 1993b). Also from the available study from World Bank (1993b), only 34% of Nigerian's population has access to the public power supply, which is always in short supply for the household sector and not to consider supply to the manufacturing subsector in Nigeria.

The theoretical work of Ndebbio (2006) that adequate and regular supply of power stimulates industrialization process, form the basis of this study. The work further expresses manufacturing productivity index as a function of megawatt of electricity generated or supplied, i.e. Manufacturing Productivity Index (MPI) = f (Electricity Generation (EGI)). And the data for all the variables stated in the above model were extracted from field survey in 2007.

Table 1: Comparative analysis of power generation and consumption worldwide

Country	Population	Power Generation	Per Capital Consumption
United States	250.00 Million	813,000MW	3.20KW
Cuba	10.54 Million	4,000MW	0.38KW
United Kingdom	57.50 Million	76,000MW	1.33KW
Ukraine	49.00 Million	54,000MW	1.33KW
Iraq	Iraq 23.60 Million	10,000MW	0.42KW
South Korea	47.00 Million	52,000MW	1.09KW
South Africa	44.30 Million	45,000MW	1.015KW
Libya	5.50 Million	4,600MW	1.015KW
Egypt	67.90 Million	18,000MW	0.265KW
Nigeria	140.00 Million	4,000MW	0.03KW

Source: Agbo A. (2007).

The Table 1 above shows a *comparative analysis of consumption of electricity worldwide*. Based on the table for instance, Libya with a population of only 5.5 million has generating capacity of 4,600 megawatts, approximately the same as Nigeria which has a population of about 140 million (Lohor and Ezeigbo 2006; Oloja and Oretade, 2006). There are plans to build seven more plants in Nigeria (Atser, 2007). All the stations are oil or gas fired and the country is selling power to other African countries such as Niger, Algeria, and Chad etc. South Africa with a population of only 44.3million has a generating capacity of 45,000 megawatts, almost eleven

times the generation capacity in Nigeria which has three times the population of South Africa (Agbo, 2007). Studies and experiences have shown that power generation in the country has been dismal and unable to compare with what obtains in smaller African countries. The recent survey on power distribution to the industrial sector in Nigeria showed that average power outage in the industrial sector increased from 13.3hours in January 2006 to 14.5 hours in March 2010. In a worsening experience, the outage increased to 16.48 hours per day in June. In other words, power distribution in the month of June, 2010 to the industrial sector, on the average, was

7.52 hours per day (Odiaka, 2010).

Research Methodology

The study made use of descriptive survey research design to collect data pertinent to the study from manufacturing SMEs establishments located in Kano metropolis. The study is concerned with empirical investigation of the impact of inadequate power supply on the performance of manufacturing SMEs in Kano metropolis. The level of power supply (frequency of supply) will be examined as an independent variable while SMEs performance (responses on firm profitability, employment rate and operating cost) is dependent.

The population of this study is made up of SMEs (manufacturing organization with the minimum of five (5) years life span) within Kano metropolis; this is because the SMEs might have adequate experience of the key challenges associated with their business and respective consequences, remarkably. All the SMEs that are functional will constitute the population for the research. This is because quite a large number of the firms have either temporarily or permanently closed down and the researcher believes that he can only have access to both survey and documentary data from functional industries. The population of this study is made up of 480 functional SMEs in Kano metropolis (with the aid of recent list prepared by Kano Chamber of Commerce, Industry, Mines and Agriculture (KACIMA) and Industrial Trust Fund (ITF).

The sample size for the study will be obtained by using Taro-Yamani (1964) formula:

$$n = N/1 + N(e)^2$$

where;

n = required sample size

N = Research population

1 = Constant

e = Tolerable error in judging the population

For the purpose of this study 5% tolerable error is allowed. Therefore, using the above formula we have;

$$n = 480/1 + 480(0.05)^2$$

$$= 480/1 + 1.2$$

$$= 280/2.2$$

$$= 218.18$$

$$= 218 \text{ (Approximately)}$$

Therefore, the sample size for the study is 218 SMEs in Kano metropolis. The sample was

randomly selected using the table of random numbers to select from the list of SMEs prepared by ITF. There were two sources of data used for this research study: primary and secondary data. The primary source provides data required directly from the respondents while the secondary data were extracted from existing documentary sources such as; journals, text books, past empirical works etc. The documentary data would be used to substantiate the primary source and get second hand information from the available documents.

For the purpose of this study, Primary sources are questionnaire designed for SMEs owners and /or key managers in case of owner's absence.

Test of Hypotheses

Hypothesis one was tested using Ordinary Least Square Regression (OLSR) while Hypothesis two was tested using Chi-Square.

Model Specification

$$ER = f(EB, ED, ERCD)$$

where: ER = Energy Required

ED = Energy Delivered

ERCD = Energy Received

EB = Energy billed

In explicit form, $ER = b_0 + b_1 EB + b_2 ED + b_3 ERCD + U$

A priori expectation

$$b_1 > 0. b_2 > 0. b_3 > 0.$$

Results and Discussions

A structured questionnaire with 17 items and a 5 point likert type rating scale with 10 items on various aspects of the subjects' matters was administrated to the owners/managers of manufacturing SMEs in Kano metropolis. The total sample size was 218 SMEs out of which only 160 SMEs responded to the questionnaire, therefore 160 SMEs was used in the study. The outcomes were as follows:

Table 1 From the appendix I shows that 12 or 7.5% of the respondents had primary school certificate, 52 or 32.% respondents had WAEC/NECO/GCE, 65 or 40.6 has Diploma/NCE, 20 or 12.5% respondents had Degree/HND and the remain 11 or 6.9% respondents acquires a post graduate degree. This indicates that, the majority of the respondents (SMEs Owners/Managers) are diploma or NCE holders and it shows that, the

respondents are capable of understanding and answering the research questions.

Table 2 From the appendix, 30 or 18.8% of the respondents are the business owners, 80 or 50.0% of the respondents are owners and managers of the business while the remaining 50 or 31% of the respondents are the managers of the

business. This shows that, since the majorities are the owners/managers of the business they will have adequate experience to give relevant and require data for the study.

Testing of Hypothesis One: Manufacturing SMEs in Kano does not

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Confidence Interval		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Partial	Tolerance	VIF	
1	(Constant)	-356107	184804		-.189	.856	-8029.994	5816.969						
	ED	44.776	20.024	.042	.140	.893	-738.290	827.842	.721	.057	.018	.192	5.222	
	ERCD	61.751	97.301	.273	.880	.413	-465.715	989.216	.768	.338	.116	.179	5.573	
	EB	.920	.220	.716	4.178	.006	.381	1.459	.916	.863	.549	.588	1.699	

a. Dependent Variable: ER

Source: Authors' computation using SPSS

Analysis for Hypothesis One

In explicit form, $ER = b_0 + b_1 EB + b_2 ED + b_3 ERCD + U$

A priori expectation

$b_1 > 0$, $b_2 > 0$, $b_3 > 0$.

$ER = -356106.5 + 0.042 ED + 0.273 ERCD + 0.716 EB$

Standard Error [1884803.6] [320.024]
[297.301] [0.220]

$R^2 = 89.6$ or 0.896

The result of the Ordinary Least Square (OLS) shows that Energy Delivered (ED) had positive effect on the energy requirement of SME's in Kano but statistically insignificant. It further means that a unit increase of ED will cause a corresponding increase of 0.042 on energy required. As shown above, Energy Received (ERCD) is positively related to Energy required, but statistically insignificant. A unit increase in ERCD will cause a corresponding increase of 0.273 on the dependent variable Energy Required (ER). Also, Energy Billed (EB) had a positive effect on energy required and

statistically significant at 0.05 level of significant. Our estimate b_1 , b_2 and b_3 are in line with our a priori expectation. The coefficient of determination R^2 is 89.6 % which indicate that about 89.6 of variation in Energy Required (ER) during the study period is explained by the model, the remaining 10.4 % could be attributed to stochastic error not included in this model.

$ER = -356106.5 + 0.042ED + 0.273ERCD + 0.716EB$

[1884803.6] [320.024] [297.301] [0.220]

$S(b_3) = 0.220$

$b_3 = 0.716$

$0.5b_3 = 0.358$

$S(b_3) < 0.5b_3$ i.e. $0.220 < 0.358$

We therefore reject the null hypothesis and thus accept that, there is inadequate power supply to Manufacturing SMEs.

Testing of Hypothesis Two: V There is no significant effect of inadequate power supply on manufacturing SMEs in Kano.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.000 ^a	9	.350
Likelihood Ratio	10.549	9	.308
Linear-by-Linear Association	3.882	1	.049
N of Valid Cases	5		

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .20.

Source: Authors' computation using SPSS

The analysis of the Pearson Chi Square shows that the null hypothesis is rejected and we accept the alternative that, there a significant negative effect of inadequate power supply on manufacturing SMEs performance. The Chi Square value of 10.00 at 9 degree of freedom is not statistically significant. Phi and Cramer's values of 1.414 and 0.816 shows a strong degree of association among the variables of the study.

Conclusion

From all indications the performance of power sector in Nigeria as represented by PHCN activities in the last ten years has been dismal and, by extension, accentuated the economic and industrial underdevelopment situation of the country and inadequate supply of power is one of the major factors responsible for business failure in Kano metropolis. It shows that Nigeria as a developing country is not even at the stage of take-off since the stage would imply that basic infrastructural facilities are in place. Considering the strategic importance of this sector in socio-economic development of the country and with the attendant problems that have characterized it, it appears that public- private partnership in virtually all aspects including generation, transmission and distribution seems to be the better option now rather than outright privatization of PHCN to improve power supply.

Recommendations

The following recommendations must be taken into consideration;

- I. Competition and appropriate regulatory framework which are prerequisites to achieve better services delivery must be put in place. Competition should be promoted by introducing functional segmentation by separating transmission companies; the establishment of a number of competing privately owned generation companies from existing PHCN generation facilities and the opening of a number of distribution and marketing companies.
- ii. Because of the strategic importance of power sector and as a result of security concerns, it will be ill advised for government to option out of the sector completely. Provision of uninterrupted power supply should be seen as part and parcel of social services provided by

government to the stakeholders. However, in advocating public-private partnership, affordability and service delivery should be the watchword. Considering that in many places people are not connected to power supply and with emphasis on a vibrant informal sector, cottage industries and manufacturing SMEs, it is obvious that much is still required to be done in the power sector to make this a reality. Therefore if their rates are not affordable, the impoverished stakeholders will continue to consume energy illegally or adjust their meter arbitrarily thereby making the parastatal to lose vital revenue required to keep its equipment in form.

- iii. Moreover, there is the need to re-orientate PHCN's personnel to work in parastatal that is commercially driven and consumer probity, productivity and efficiency and sanction reoccurring anti- customer behaviours. In addition, PHCN is one of the hotbeds of corruption in Nigeria, hence the need to establish anti-corruption and transparency units in the parastatal so that the activities of corrupt officials will be reduced to the barest minimum. Also members of the public should be sensitized to desist from offering bribes/ inducement to the PHCN staff as a way of securing favours or accelerated service.

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Appendix I
SPSS ANALYSIS OUTPUT
Hypothesis One
Statistics

		ER	ED	ERcd	EB
N	Valid	10	10	10	10
	Missing	0	0	0	0
Mean		1.2E+07	12185.90	11407.50	9202490
Std. Error of Mean		519672.6	488.0534	542.7277	404538.6
Median		1.2E+07 ^a	12651.50 ^a	11610.50 ^a	9314927 ^a
Mode		9312675 ^b	8994.00 ^b	8716.00 ^b	8692820
Std. Deviation		1643349	1543.3604	1716.2557	1279263
Variance		2.7E+12	2381961	2945534	1.6E+12
Range		4643624	4877.00	4852.00	3978640
Minimum		9312675	8994.00	8716.00	7147120
Maximum		1.4E+07	13871.00	13568.00	1.1E+07
Sum		1.2E+08	121859.00	114075.00	9.2E+07

a. Calculated from grouped data.

b. Multiple modes exist. The smallest value is shown

Descriptive Statistics

	Mean	Std. Deviation	N
ER	1.2E+07	1643349.1966	10
ED	12185.90	1543.3604	10
ERCD	11407.50	1716.2557	10
EB	9202490	1279263.3868	10

Correlations

		ER	ED	ERCD	EB
Pearson Correlation	ER	1.000	.721	.768	.916
	ED	.721	1.000	.898	.605
	ERCD	.768	.898	1.000	.637
	EB	.916	.605	.637	1.000
Sig. (1-tailed)	ER	.	.009	.005	.000
	ED	.009	.	.000	.032
	ERCD	.005	.000	.	.024
	EB	.000	.032	.024	.
N	ER	10	10	10	10
	ED	10	10	10	10
	ERCD	10	10	10	10
	EB	10	10	10	10

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	EB, ED, ERCD	.	Enter

a. All requested variables entered.

b. Dependent Variable: ER

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.947 ^a	.896	.844	648435.4708	.896	17.268	3	6	.002	1.537

a. Predictors: (Constant), EB, ED, ERCD

b. Dependent Variable: ER

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.18E+13	3	7.261E+12	17.268	.002 ^a
	Residual	2.52E+12	6	4.205E+11		
	Total	2.43E+13	9			

a. Predictors: (Constant), EB, ED, ERCD

b. Dependent Variable: ER

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	-386107	1884804		-.189	.866	-4968029.994	4258816.969						
	ED	44.776	320.024	.042	.140	.893	-738.290	827.842	.721	.057	.018	.192	5.222	
	ERCD	261.751	297.301	.273	.880	.413	-466.715	989.216	.768	.338	.116	.179	5.573	
	EB	.920	.220	.716	4.178	.006	.381	1.459	.916	.863	.549	.588	1.699	

a. Dependent Variable: ER

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	ED	ERCD	EB
1	1	3.980	1.000	.00	.00	.00	.00
	2	1.110E-02	18.937	.68	.02	.09	.00
	3	7.608E-03	22.871	.13	.04	.03	.99
	4	1.644E-03	49.196	.19	.94	.88	.01

a. Dependent Variable: ER

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	9133253	1.4E+07	1.2E+07	1555726.2641	10
Residual	-570696	1293957	7.451E-10	529445.3448	10
Std. Predicted Value	-1.613	1.310	.000	1.000	10
Std. Residual	-.880	1.996	.000	.816	10

a. Dependent Variable: ER

Directional Measures

	Value
Nominal by Interval Eta INADQPWR Dependent	.999
HGHPRDCT Dependent	.999

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.000 ^a	9	.350
Likelihood Ratio	10.549	9	.308
Linear-by-Linear Association	3.882	1	.049
N of Valid Cases	5		

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .20.

Symmetric Measures

		Value	Approx. Sig.
Nominal by	Phi	1.414	.350
Nominal	Cramer's V	.816	.350
	Contingency Coefficient	.816	.350
N of Valid Cases		5	

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.

Determinants of Customers Satisfaction in the Fast Food Industry in Eastern Part of Nigeria

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pp 116-126

Abstract

The study is aimed at examining the determinants of customer satisfaction in the fast food industry in Eastern part of Nigeria. Data was collected from a sample of 300 customers of the five selected fast food restaurant in Eastern part of Nigeria. Survey research design was adopted, and the statistical tool used comprises of correlation and regression analysis. Data was collected with the aid of a structured questionnaire with items measured in Likert scale. Data analysis was done using descriptive and inferential statistical tools. The Hypotheses tested were done using regression model. The findings show that there is significant positive relationship between food quality and customer's satisfaction. The study recommends that managers of restaurants should ensure that their offerings are of high qualities so as to ensure customer's satisfaction, and should ensure they create good environment, maintain good services, nice taste, freshness, menu item, variety, and appealing presentation, in other to influences customer satisfaction.

Key words: Customer satisfaction, food quality, service quality, physical environment

Introduction

Fast food restaurants are becoming more important in Nigeria because they provide services to people away from home in the form of food. The fast food industry is now considered one of the most prominent and comprehensive industries. This is because visiting a fast food restaurant has become a lifestyle globally. The pattern of food consumption varies from culture to culture, from society to society, and from country to country. However, as in other parts of the world, eating habits of a majority of Nigerians have changed towards fast food consumption. Thus, a dietary pattern that used to be uniquely foreign has gradually become part of the lifestyle of people in Nigeria, especially those in urban dwellers (Akinbile, 2008).

This has led to a huge spread of the restaurant industry in the world. The fast food industry in Nigeria is growing at a very fast pace, due to the busy life style of people which has led many to eating out of home. For this reason, in many cities across Nigeria, one can find numerous fast food restaurants where most of the foods sold are usually snacks, burgers, fries, chicken, cola drinks, ice cream, fruit drinks and other foods that are high in fat, sodium and sugar (Ajala, 2006; Aladelokun, 2006). Customer satisfaction is considered to be an important factor in the success of any organization because, it gives an edge to firms in the marketplace. The most important consideration is that studies show that increased customer satisfaction results in improved loyalty to the brand which in turn creates a broad impact on the overall business results for the organization.

Previous studies conducted on fast food industry have claimed that food quality, service quality, physical environment and promotion are factors that influence customer satisfaction in the fast food industry. This study seeks to examine these factors to see if these factors can actually impact on customer satisfaction in Eastern part of Nigeria. Studies carried out on the fast food industry in Nigeria are conducted in the area of service quality, customer satisfaction, consumer perception, and so on, but none has been carried out on the determinants of customer satisfaction in the fast food industry of Nigeria, and this subject of the determinants customer satisfaction has not been given much attention.

Fast food restaurants are still faced with the

challenge of providing long term satisfaction to their customers due to the stiff competition in the fast food industry in Eastern part of Nigeria since customer preferences are changing frequently. Thus, in order to remain relevance in the industry, it becomes very important for fast food restaurants to understand and pursue business strategies that will make them achieve customer satisfaction. The main objective of this study is to examine the determinants of customer satisfaction in the fast food industry in Eastern part of Nigeria. The work, therefore, specifically sought to: access the impact of food quality on customer satisfaction of fast food industry; ascertain the effect of service quality on customer satisfaction of fast food industry; and determine the effect of physical environment on customer satisfaction of fast food industry.

Review of Literature

The Concept of Customer Satisfaction

Customer satisfaction can be means meeting the expectations of the customers parameters associated with satisfaction. Faullant, Matzler and Fuller, (2008) also saw customer satisfaction as evaluative judgments by customers regarding the products and services after their consumption, while Snoj, (2007) opines that customer satisfaction reflects the judgments of the customers which are usually based on the pre-purchase expectations and after consumption experience. Also, Khan and Afsheen, (2012) are of the opinion that the quality of the brand characteristics offered by a company determine the level of customer satisfaction. In the food services context, tangibles refer to a restaurant's physical design, appearance of staff and cleanliness. The following parameters such as food quality, service quality and physical environment are very important to achieving customer satisfaction, which are tangible aspects that can be measured objectively.

Customer Satisfaction in the Fast Food Industry

Customer satisfaction is important for all companies operating in different industries, but it is one of the most important considerations for organizations operating in the fast food industry (Anderson, Fornell & Lehmann, 1994). The primary objective of fast food restaurants should

be creating customer satisfaction because, according to Anderson and Mittal, (2000) studies have shown that when customers of the fast food restaurants are satisfied, their profitability is more likely to be increased. In addition, creating customer satisfaction is also essential because customer satisfaction significantly affects the consumers buying behavior (Chen & Hitt, 2002). The food industry has become highly aggressive as customers have become more demanding, due to having sufficient knowledge and information about the different trends in restaurants.

Lasser and Winsor, (2000) posited that customer satisfaction, contentment, retention, quality and excellence are global matters that influence all organizations. Hence fast food restaurant operators are now paying attention to studying, assessing, and implementing marketing strategies with the aim of gaining maximum market share of customer's and improving customer satisfaction and retention in order to improve profitability for their organizations because satisfied customers are central to optimal performance and financial returns. Placing a high priority on customer satisfaction is critical to improved organizational performance in a global marketplace, due to the fact that business is likely to lose market shares, customers and investors if it fails to satisfy customers as effectively and efficiently as its competitors are doing. For customer's satisfaction to be ensured, it is essential for the fast food companies to ensure that the customer's perceive that the price they are paying for the product and services is less than the value they are getting for those product (Faullant, Matzler & Fuller, 2008).

Service quality is equally important because most companies in the fast food industry are selling similar products to their target customers, therefore, it is essential for them to provide high service quality to the customers because, this is one of the method through which they can differentiate themselves from the competition (Sirdeshmukh, Singh & Sabol, 2002).

Food Quality

A good chef makes a great restaurant. It is not enough to have a big and a huge outlet, rather fast food restaurants strive to provide standard and tasty cuisines which should be a combination

of local and continental dishes, pastries, confectioneries, cold drinks and water. The degree of customer satisfaction provided by the goods and/or services of the restaurant is measured by the number of repeated customers. Customer satisfaction is one of the most vital aspects of a restaurant business (Leon and Leslie, 2006). Lim (2010) explained that there is a significant correlation between taste and customer satisfaction within the fast food industry. Hence, it is suggested that restaurant owners should focus on the taste of the foods in order to increase customer satisfaction. This is because the taste of food leads to a positive attitude towards products, thus increasing the level of satisfaction of the customers, which could lead to a re-purchase attitude.

Service Quality

Service quality is a comparison of expectations with performance. Ultimate consumers of service judge quality by comparing their expectation with their perception of what they receive (service experience). The better the service quality you give as per customer requirement or need, the greater will be the level of satisfaction and vice versa. Saeed, Javed and Lodhi, (2013) affirms that there is a direct positive relationship between service quality and customer satisfaction. However, service quality is not an easy task to quantify, due to the way services are produced, consumed and evaluated (Saeed et al., 2013). Service quality is a comparison of expectations with performance. Ultimate consumers of service judge quality by comparing their expectation with their perception of what they receive (service experience). A business with high service quality will meet customer needs while remaining economically competitive. Improved service quality may increase economic competitiveness. High service quality leads to favorable buying intentions, while low-service quality tends to cause unfavorable buying intentions. Providing quality service enhances fast food restaurant competitiveness, improves fast food restaurant reputation and increases customer repurchase desire. Burton, Sheather and Roberts, (2003) suggested that customer experience associated with behavioral intentions.

Keng, Huang, Zheng, and Hsu, (2007) found that service excellence has an effect on

behavioral intention. Research has indicated that service quality has been increasingly recognized as a critical factor in the success of any business. Chaoprasert and Elsey (2004) have argued that customers can perceive differences in the quality of service they get. The study revealed that the dimension of tangibility which include the range of products served and the cleanliness of the environment affect customer perceptions about the service quality of a fast food restaurant. The implication here is that fast food restaurants should incorporate local menu in order to provide customers a broad spectrum to choose from.

Tangibles: The concept of tangibles explores the physical facilities/ environment of the provider, the tools and equipment used to provide the service and the appearance of the vendor/ personnel rendering the services. Zeithaml, Bitner and Gremler, (2006) tangibles are used by firms to convey image and signal quality. Reliability measures the consistency and dependability of the performance of the service.

Reliability: Reliability is the ability to perform the promised service accurately and dependably, which means to deliver as promised. Some questions that the service provider must answer if he must achieve reliability of a service are: (1) does the firm honor its promise? (2) Does the firm perform the service right at the first time? Reliability also includes accuracy in billing of services, proper record keeping and performing the service at the designated time.

Responsiveness: Responsiveness is concerned with dealing with the customer's requests, questions and their complaints promptly and attentively. Zeithaml *et al.*, (2006) suggest that in order for firms to be successful, they should look at responsiveness from the view point of the customer and not from the company's perspective. Hence, responsive organizations are organizations that listens to its customers and communicates to them how long it will take to get their complaints resolved.

Assurance: Assurance involves the knowledge and courtesy of service providers and their ability to convey trust and confidence to the customers, assurance also includes competence, credibility, and security. According to Andaleeb and

Conway, (2006) is of the opinion that assurance may not be so important relative to other industries where the risk is higher and the outcome of using the service is uncertain.

Empathy: Empathy involves the provision of individualized attention to customers by service personnel of the firm Zeithaml *et al.*, (2006). This makes the customer to have the feelings of being special and unique. Service personnel to know customers by their names, their needs and preferences and deal with them accordingly.

Physical environment

Environmental dimensions of the service scope shapes the way customers and service providers interact and behave and determine how satisfied they become Zeithaml *et al.*, (2006). Physical surroundings or environment has significant influence to choose or purchase a product or service from a business. As an example, Lim (2010) mentioned that the settings and decoration of the restaurant that are termed as physical environment helps to create positive image about the business among the customers and thus help to influence their behaviour during the purchase. Lim (2010) also mentioned that there is significant influence of physical environment within restaurants whereas lighting, furnishing, sent, music and different other environmental factors among them influence on customer satisfaction.

Empirical Studies

In the study "Determinants of Customer Satisfaction in the Nigerian Telecommunication Industry: An Empirical Evidence" conducted by Apollon, Stephen and Joseph, (2013) The study exploited primary data which were obtained through the administration of structured questionnaire on respondents in order to assess their level of satisfaction with the services of GSM operators in Nigeria based on certain factors. Purposive sampling was used in selecting respondents. Data was analyzed using ordinary least squares regression technique. For the purpose of this study, the customer satisfaction model based on SERVQUAL Model of service delivery by Parasuraman *et al.* (1988) was adopted. The 22 item SERVQUAL instrument covering tangible, assurance, responsiveness, reliability and empathy was

modified to suit peculiar environment of telecommunication industry in Nigeria. It has been established that SERVQUAL with additional dimensions is a reliable instrument for measurement of service quality dimensions in telecommunication industry in Pakistan (Muhammad 2010). Based on the value of Beta Co-efficient, it was established that courtesy ($\beta = .292$) and coverage area (188) were the major determinants of customer satisfaction in the mobile telecommunication industry in Nigeria.

Methods

A total of 350 questionnaire was sent out to the various respondents, out which a total of 311 was successfully retrieved, and 300 (86%) was subsequently found to be appropriate for the purpose of analysis. Survey research method was adopted using a self-administered questionnaire prepared for this study on five point Likert scale. The required data was collected by means drop and collect method, which was developed for this purpose. The questionnaire consists of five sections: Section 1 deals with the demographic characteristics of the respondents. Section 2 examines food quality impact and customer satisfaction, 3 Service quality and customer satisfaction, section 4 Physical environment and customer satisfaction. While the last section deals with measures of Customer's satisfaction.

The Questionnaire was distributed among different experts in the field of management and marketing to ensure content validity is maintained. The sampling frame for the study was created from the 20 selected fast food outlets of sizzlers and Mr Biggs in selected cities in Eastern part of Nigeria (Asaba, Onitsha, Enugu, and Aba). The total number of the customers of

the 20 selected fast food restaurant in Eastern part of Nigeria is not known because the fast food restaurants do not have data of the number of their customers. Hence, convenience sampling was adopted by the researcher comprising of 350 customers of the twenty (20) selected fast food outlets of sizzlers and Mr Biggs.

Research Hypotheses

- Ho₁:** There is no significant positive relationship between food quality and customer satisfaction.
- Ho₂:** There is no significant positive relationship between service quality and customer satisfaction.
- Ho₃:** There is no significant positive relationship between physical environment and customer satisfaction.

Results

A total of 168 of the respondents were males representing 56%, of the respondents while the females' respondents were 132 representing 44% of the sampled population. On the age range of the respondents, 140 of the respondents representing 46.7% of those sampled were below 30 years of age, 100 order respondents representing 33.3% fell in within the age range of 31-40, and 60 respondents representing 20% of the sample used were above 40 years. 175 of the respondents being 58.3% of the sample population used were single, while 125 being 41.7% were married. A total of 145 of the being 48.3% were O\N holders; 45 being 15% were diploma holders; 32.7% being 98 respondents were degree holders of sort and lastly, 12 representing a mere 4% were post graduate degree holders.

Table 1:Correlation Matrix

		1	2	3	4
Physical Environment	Pearson correlation				
	Sig. (2-tailed)				
	N	300			
Service Quality	Pearson correlation	.686**	1		
	Sig. (2-tailed)	.000			
	N	300	300		
Food quality	Pearson correlation	.984**	.490**	1	
	Sig. (2-tailed)	.000	.000		
	N	300	300	300	
Customer satisfaction	Pearson correlation	.863**	.281**	.796**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	300	300	300	300

**Correlation is significant at the 0.01 level (2-tailed).

Source: Author's computations from field survey, 2016

As evidenced in the group correlation matrix in Table 1, the studied variable0 are all positively correlated.

Research Question One: To what extent does food quality impact on customer satisfaction in the fast food industry?

Table 2: Food quality and customer satisfaction

S/N	ITEMS STATEMENT.	1	2	3	4	5	Mean	Std. Dev.
9	Freshness and Safety of Food	88	144	39	29	-	4.16	0.78
10	Quantity of Food	146	39	41	48	26	3.75	0.93
11	Taste of Food	89	155	19	27	10	3.94	0.79
12	Variety of Food	94	117	49	20	20	4.09	0.98

Source: Author's computations from field survey, 2016

A total of 232 of the respondents agree that Freshness and Safety of Food improve influence customer satisfaction 39 were undecided, while a respondents totaling 29 disagree. To the question to what extent does “Quantity of Food” impact on customer satisfaction in the fast food industry, 185 of the respondents agree, 41 of the respondents were undecided, while 74 of the

respondents disagreed. 244 of the respondents agree that “Taste of Food” impact on customer satisfaction in the fast food industry, 19 of the respondents were undecided, while 37 disagree to the statement. 211 agree that their colleagues support organizational change efforts, 49 were undecided, while 40 of the respondents disagree.

Table 3: Regression analysis for Food quality and customer satisfaction
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficient	T	Sig
	B	Std. Error	Beta		
(constant)	-20.555	.774		-26.557	.065
Food quality	.707	.034	.944	49.476	.000

Source: Author's computations from field survey, 2016

The regression analysis result indicated in Table 3 shows that that Food quality exhibited a

positive relationship with Customer satisfaction; given the Beta value ($= .944, P < 0.001$).

Table 4: Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	.944 ^a	.891	.871	1.47856	2.01

Source: Author's computations from field survey, 2016

On the question - What is the effect of service quality on customer satisfaction in the fast food industry? A total of 194 of the respondents agree that Prompt Delivery influence customer satisfaction, 41 were undecided, while respondents totaling 65 disagree. Concerning "Neatness of Employees" 204 of the respondents agree, 39 of the

respondents were undecided, while 57 disagree to the statement. 184 of the respondents agree that "Response to Complaints" influences customer satisfaction, 39 of the respondents were undecided, while 77 disagree. With regard to Personalized Attention 211 agree while 89 of the respondents disagree.

Table 5: Regression analysis for Service quality on customer satisfaction
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficient	T	Sig
	B	Std. Error	Beta		
(constant)	1.778	.327		55.432	.043
Service quality	.823	.017	.945	49.759	.000

Source: Author's computations from field survey, 2016

In Table 5 showing the regression analysis result for Service quality, it indicated that Service quality and Customer satisfaction are positively

related given the beta value as exhibited in the regression table ($= .945, P < 0.01$)

Table 6: Model Summary.

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin Watson
1	.945 ^a	.893	.893	1.47107	2.01

Source: Author's computations from field survey, 2016

Table 6 reveals the extent to which Service quality accounted for change in Customer satisfaction as indicated by the adjusted R^2 , which shows that 89.3% (.893) of the change in Customer satisfaction is brought about by

Service quality.

Research Question Three: What is the effect of physical environment on customer satisfaction in the fast food industry?

Table 7: Physical environment and customer satisfaction

S/n	Physical environment	1	2	3	4	5	Mean	Std. Dev.
21	Location of Restaurant	128	144	19	9	-	3.16	0.88
22	Landscape and ambient condition	146	79	41	8	26	3.25	0.73
23	Atmosphere of restaurant	109	145	39	7	-	3.94	0.79
24	Parking space	134	117	19	30	10	4.11	0.92

Source: Author's computations from field survey, 2016

Respondents were asked “What is the effect of physical environment on customer satisfaction in the fast food industry?” A total of 272 of the respondents agree Location of Restaurant affects customers satisfaction, 19 were undecided, while respondents totaling 9 disagree. To the question “Landscape and ambient condition” 225 of the respondents agree, 41 of the respondents were undecided, while 34

disagree to the statement. 254 of the respondents agree to the question “Atmosphere of restaurant influence customer satisfaction”, 39 of the respondents were undecided, while 7 disagree to the statement. 251 agree to the question “Parking space influence customer satisfaction”, 19 of the respondents were undecided, while 40 of the respondents disagree.

Table 8: Regression analysis for Physical environment on customer satisfaction

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficient	T	Sig
	B	Std. Error	Beta		
(constant)	-8.161	.358		-22.815	.023
Physical environment	.264	.017	.973	72.778	.000

Source: Author's computations from field survey, 2016

The Table 8: shows that the regression analysis result for Physical environment and customer satisfaction indicated that there is a

positive relationship with both variables, giving the Beta value (.973, P<0.01).

Table 9: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.973 ^a	.947	.921	1.03585	2.01

Source: Author's computations from field survey, 2016

In the model summary table 9: it shows that Price accounted for 92.1% of the change in

customer satisfaction given the adjusted R² findings (.921) as shown on the table.

Table 10: Customer's satisfaction

S/n	Customer satisfaction	1	2	3	4	5	Mean	Std. Dev.
25	Dining choice	108	144	8	40	-	3.16	0.73
26	Dining Mood	106	79	41	48	26	3.25	0.89
27	Dining Experience	59	145	31	45	20	3.94	0.81
28	Overall Dining Experience	114	107	49	30	10	4.11	0.983

Source: Author's computations from field survey, 2016

A total of 252 of the respondents agree Dining choice influence 8 were undecided, while a respondent totaling 40 disagree. 185 of the respondents agree that Dining Mood influence their satisfaction, 41 of the respondents were undecided, while 74 disagree to the statement. 204 of the respondents agree that Dining Mood

influence their satisfaction, 31 of the respondents were undecided, while 65 disagree to the statement. 221 of the respondents agree that Dining Experience influence their satisfaction, 49 of the respondents were undecided, while 30 of the respondents disagree.

Test of Hypotheses

H₀: There is no significant positive relationship between food quality and customer satisfaction.

The table 4.2 above indicated that the exact level of significance calculated (.000) is less than the probability of committing a type error (0.05). Given the result, the null hypothesis would be rejected in favour of an alternate and giving the Beta value (= .944, $P < 0.01$). More so, the model summary (table 4.3) shows that 89.1% (.891) of the change in customer satisfaction is brought about by Food quality.

However, the result of the tested hypothesis 1, indicates that there is significant positive relationship between food quality and **customer's satisfaction**. The above finding is in accordance with the assertion of Lim (2010) that there is a significant correlation between taste and customer satisfaction within the fast food industry. This is further supported by Jang and Namkung (2009) who noted that quality of product has an effect on positive emotion which brings about satisfaction. This implies that food that is not of high quality will dissatisfy customers.

H₀: There is no significant relationship between Service quality and customer satisfaction.

Table 4.5 shows that the exact level of significance (.000) is less than the probability of committing a type one error (0.05). There is the need therefore to reject the null hypothesis stating that there is a no significant relationship accepting the alternate that stated otherwise. **Service quality exhibited a positive relationship with customer's satisfaction, giving the Beta value** (= .945, $P < 0.01$). More so, the result in the model summary in Table 6 shows that 89.2% (.892) of the change in Customer satisfaction is brought about by Service quality. However, the result of the tested hypothesis in two (4.4.3) indicates that there is significant positive relationship between **customer's satisfaction** and Service quality.

The above finding is in consonance with Parasuraman, Zeithaml and Berry, (1988) and (Saeed, Javed and Lodhi, 2013). Who found that there is a direct positive relationship between service quality and customer satisfaction.

H₀: There is no significant relationship between physical environment and customer satisfaction.

The Table 8 indicated that the null hypothesis which was earlier stated would be rejected in favour of an alternate hypothesis given that the exact level of significance calculated (.000) is less than the probability of committing a type one error (0.05). Giving the Beta value (.973, $P < 0.01$). In the model summary Table 9 shows that Physical environment accounted for 94.7% of the change in customer satisfaction given the adjusted R^2 findings (.947).

This finding is in consonant with Zeithaml, et al., (2006) Environmental dimensions of the service scape shapes the way customers and service providers interact and behave and determine how satisfied they become. **This is further supported by Lim (2010)** that physical surroundings or environment has significant influence to choose or purchase a product or service from a business. As an example, Lim (2010) mentioned that the settings and decoration of the restaurant that are termed as physical environment helps to create positive image about the business among the customers and thus help to influence their behaviour during the purchase. He also mentioned that there is significant influence of physical environment within restaurants, whereas lightening, furnishing, sent, music and different other environmental factors among them influence on customer satisfaction.

Conclusions

Organizations are facing new challenges regarding qualitative service and ensuring their customers satisfaction. No organization can perform at peak levels unless they satisfied their customers so as to achieve organizations objectives. The study also indicates that there is significant positive relationship between **customer's satisfaction** and Service quality. Service quality is a comparison of expectations with performance. Ultimate consumers of service judge quality by comparing their expectation with their perception of what they receive (service experience), quality is such an important characteristic or feature of something that make some differentiation in your product and stands you out as being remarkable in terms

of competitive advantage. The better the service quality you give as per customer requirement or need, the greater will be the level of satisfaction and vice versa.

More so, Physical environment shows a significant relationship with customer satisfaction, Physical environment leads to an extrinsic comfort that has a positive relation with customer's satisfaction, this is because good physical environment and good service qualities and competitive Price is a very important competitive platform in the fast food business, hence restaurants strive to offer affordable food and drinks to their customers, in order for their menu to be affordable nationwide while maintaining their core goal of quality assurance so as to ensure customer satisfaction.

Recommendations

Following the findings and conclusion of the study, the following recommendations were made.

1. Owners of fast food restaurants ought to be careful in pricing their products because the competition in the fast food business is very stiff. Restaurants should strive to offer affordable food and drinks to their customers.
2. Restaurants should ensure that their offerings are of high qualities so as to ensure customer's satisfaction.
3. The managers of restaurants should ensure they create good environment, maintain good services, nice taste, freshness, menu item, variety, and appealing presentation, in other to influences customer satisfaction.

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Perfecting a Marketing Plan for Small Scale Business Enterprises in Nigeria

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Abstract

Small Scale Business Enterprises are ubiquitous in Nigeria. The fact however remains that the managers of these organizations at one point or the other have to contend with issue of preparing marketing plan that is workably inclusive and effective. Using literature review approach, this paper attempts to emphasize the key features or elements that must be included in a marketing plan with the hope that it will proffer solution to the challenges faced by managers of small scale business in this regard. This is because previous studies have shown that most managers of small scale business enterprises in Nigeria lack the skills required to prepare effective marketing plans and their firms suffer set back as a result of faulty marketing plans. This paper hopes to sharpen the skills, focus and capacity of managers of small scale businesses in the preparation of marketing plans which will in turn improve the success of these firms for the overall development of the economy of Nigeria.

Keywords: Marketing plan, small scale business, Nigeria

Introduction

For any business organization, big or small, to function profitably, it must have an effective marketing plan to work with. The importance of a marketing plan to a firm cannot be over emphasized. This write up addresses the main focus or features that must be contained in a marketing plan of a small scale business enterprise in Nigeria. In the considered opinion of Kpelai (2009:206) small scale businesses play an important role in a country's economy and in fact, it provides the base for industrial development and sustained economic growth of any society'. In view of this, it has become clear that small scale businesses are indispensable in a country that desires economic development such as Nigeria.

It has become pertinent therefore to insist that small scale businesses prepare their marketing plans that contain the essential features. There are observable evidences that small scale businesses operate with marketing plans that are vague, ambiguous or without sharp focus. In worse case scenario, some firms operate without any marketing plan! Such firms have no direction at all and fold up sooner than later. Even though there is no uniform content of a marketing plan, certain features are obligatory (Onah and Thomas 2004:439). These are time schedule, budget and targets to be realized. The contents of a marketing plan may vary from one firm to another depending on the product or service, or the prevailing circumstance or situation.

Conceptual Framework

A marketing plan, according to Kotler (1980) in Onah and Thomas (2004:436) is defined as a written document that spells out the goals, strategies and tactics that will be used to gain and maintain the competitive position and results that the firm is seeking. It is a blueprint for marketing operations. It is indeed a programme of action which specifies market goals and describes the means of attaining them in terms of time, space and effort.

It is important to clearly distinguish a marketing plan from marketing planning. While a marketing plan is a document, marketing planning is systematic process that has to do with the assessment of marketing opportunities and resources, the determination of marketing objectives, the development of long

range programmes, implementation and control. In the view of Onah and Thomas (2004) marketing planning can be defined as the management function dealing with the mapping or programming of a course of action with regard to the activities of an organization.

Mathur (2008) cautions that to be entirely market proactive, the plan should be kept flexible to enable firms to alter them to dovetail the changing market environment. Nnabuko (1998) laments that some organizations spend more time on daily operations and little on long range planning. Nwokoye (1996) sums up the major elements of a marketing plan as (a) situation analysis (b) Objective (c) Strategy (d) programme (e) Control (f) supporting marketing and financial exhibits.

The situation analysis answers the question where are we now and includes a review of the current market situation for the product. The product sales trend, competitor's position, the product challenges and opportunities.

The objective answers the question where do we want to go? And usually includes quantitative target such as sales, market share, profits etc, although they may be stated in general qualitative terms. The marketing objectives are then translated into specific objectives for the four controllable variables otherwise referred to as the 4ps-product, price, place and promotion.

The strategy according to Nwokoye is usually a single statement indicating the general route to the achievement of the objective. The overall strategy is further broken down into sub-strategies for some or all of the four variables of the marketing mix.

Action programmes reveal the actual steps to be taken in plan execution. Here responsibilities are assigned to individuals, budgets are allocated, task priorities are set and time schedules for completing the various activities are established.

The control section of the plan indicates how the plan execution will be monitored by showing what variables will be looked at, when and by whom, and also what may be done if results vary from planned target levels. It indicates when a complete plan will be reviewed. Variables to be monitored include sales, market share, costs profits consumer awareness etc.

Supporting marketing and financial exhibits are part of a good marketing plan. The

number of such exhibits may vary, but typically includes a pro-forma profit and loss statement and an advertising media schedule (Nwokoye 1996:252)

Any marketing plan devoid of a sound strategic foundation is valueless or worthless. A marketing plan for a small business include a clear description of competitors, including the level of demand for the product as well as the strengths and weaknesses of competitors. It should typically include marketing budget, precise description of the business location, pricing, market segmentation amongst others.

The main contents of a marketing plan are as follows:

1. Executive summary
2. Situation analysis
3. Opportunities/issues analysis, SWOT analysis
4. Objectives
5. Strategy
6. Action program (the operational market plan itself for the period)
7. Financial forecast
8. Controls

Use of a Marketing Plan

A written marketing plan is absolutely essential in that it provides a reference point for activities throughout the planning period. Perhaps the most important benefit is the fact that the planning process offers an opportunity for all the managers involved. They collect quality information which they utilize in discussing the way forward for the firm.

It must be stressed that a marketing plan must be clear. Quantified and focused. It must also be realistic and generally agreed upon by those saddled with the responsibility of implementing it. The resulting plan should become a working document which will guide the campaigns taking place throughout the organization over the period of the plan. One would quickly add that a marketing plan may be part of an overall business plan of an organization.

Small Scale Business

The definition of a small scale business may differ from one economy to another but the underlying concept remains essentially the same. A small scale enterprise is a privately owned and

operated business characterized by a small number of employees and low turnover. One would like to point out categorically that a small enterprise usually only shares a tiny segment of the market it operates in.

Even though small, the impact of small scale business enterprise on a country's economy can be enormous. What constitutes a small business may be defined by several measures including annual turnover, assets value, net profit, number of employees, and balance sheet totals. The most important measure in defining small scale enterprise is the number of people employed by the business. In African countries, a business is considered to be small scale if it employs 5 to 50 people, in Asian countries, it is between 30 and 100, while in the United State, it is any number below 500.

Small scale businesses are found to operate in several sectors of an economy. Common types are guest houses, law firms, accounting firms, convenience stores, bakeries as well as small manufacturing firms. Others are hairdressers, restaurants, photographers etc.

A small business is one that is privately owned and operated with a small number of employees and relatively low volume of sales. What accounts for the popularity of small scale business is the fact that they can be set up with a minimum amount and can be managed on part time basis. Freedom of independent operations is yet another impetus. On the reverse side of the coin, small scale business owners face the challenge of undercapitalization. Another headache is lack of business management skills which include the lack of skills in preparing a sound marketing plan which this paper seeks to address.

Ogunleye (2000:28) laments that small scale business in Nigeria are further characterized by difficulty in attracting funds for expansion as a result of which majority of them now rely heavily on personal sources. Kpelai (2009:208) submits that the National Council on Industries meeting (NCI-13) held in July, 2002 in Makurdi, Benue State, defined a small industry as an establishment with total capital of over N1.5million, but not more than N50 million, excluding the cost of land and a labour size of between 10 and 100 workers. Small scale industries or enterprises refer to manufacturing establishments employing less than ten people or

where investment in machinery and equipment do not exceed N600,000 (third National Development Plan, 1975) In the opinion of Oshagbemi (1983:3) a small scale business is one whose scale of operations is less than the average for the industry.

According to Kpelai (2009:215) there are two types of small businesses (1) Traditional small business, and (2) High growth small business. The traditional small business has little growth potentials. They are the common types of small businesses found in Nigeria, most especially in the rural areas. The owner/manager runs the business as part time from a home office and, he/she is supported by family members. Examples are barbing shops, shoe repair shop, small farm holders using traditional implements, block/brick making, animal husbandry, poultry and so on. The high growth type of small business employs advanced technology in their production processes in order to remain competitive in the market and are ran by management experts. They grow into medium and large scale business in a short period of time. Examples are fast foods industries, telecom accessories, computer and information technology related enterprise.

Small businesses in Nigeria are characterized by one individual/family often holding ownership and management with often subjective decisions, the manager/proprietor hardly separate his private funds from that of the company. Most small scale businesses operate labour intensive production, the rate of business instability is high and except for its marketing functions, the small business operations are geographically localized (Kpelai 2009:213-214). It is sad to note that small scale business operations are further characterized by high failure rate.

Conclusion

As a developing country, Nigeria must continue to encourage the promotion of small scale business. Even the developed countries like USA, UK, Canada etc still actively promulgate policies that encourage small scale businesses. However, for such firms to operate profitably, there is the need to encourage them to draft their marketing plans in such a way that will facilitate their success. This paper details out the key features of a workable marketing plan that can be

practiced by small business firms operating in the Nigerian business environment.

What is required now is the patience and the willingness on the part of the managers of these firms to learn, practice and perfect to improve their skills in the preparation of a marketing plan. An effective marketing plan helps in developing the overall marketing strategies of a firm into detailed plans and programmes that will serve as a reference point for activities throughout the planning period.

Recommendations

It is pertinent at this juncture to make the following recommendations:

1. Managers of small scale enterprises in Nigeria should realize the huge importance of a marketing plan and the key role it plays in the survival of their business ventures.
2. Managers of small scale businesses should create time to learn the skills required to craft a marketing plan.
3. In a situation where a marketing plan cannot be developed in-house due to lack of capacity, management should hire people who possess the skills to handle it for them for a fee
4. Investors should appreciate the fact that funds expended on a marketing plan is not a waste considering the key role that a marketing plan plays in the life of a business.
5. Every profit seeking firm should develop a marketing plan for use in the operations of the firm. It makes no sense to expect a company that operates without a marketing plan to succeed. Such a company has no direction and will sooner or later fold up.

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Determinants of Capital Structure Decisions of Nigerian Listed Manufacturing Firms

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Abstract

The study investigated the determinants of capital structure of Nigerian listed manufacturing companies for a period of five years from 2010 to 2015 using firm's turnover, total assets, profit after tax, tax and interest on the leverage as dimensions. Secondary data was collected from the annual reports of listed Nigerian manufacturing companies and was analyzed using pooled least square. The results revealed that turnover, total assets, profit after tax, tax, and interest are strong determinants of capital structure of the Nigerian manufacturing firms. Therefore, it was recommended that in carrying out their debt equity mix, the financial managers of Nigerian listed firms should ensure proper monitoring of the following variables: turnover, total assets, profit before tax, tax and interest of the firms in order to have an optimum financing mix for their firms.

Keywords: Capital structure, debt, equity, tax, interest, turnover, profitability.

Introduction

Capital structure is the mix of various sources of funds that a firm uses to finance its operation. It is the combination of debt and equity that attains certain managerial goals, that is, the maximization of the firm's market value. It could also be seen to be the combination of debt and equity that minimizes the firm's overall cost of capital.

"How do firms choose their capital structures?" Again, the answer is, "We don't know." This was the question and answer posed by Myers (1984). The various theories of capital structure attempt to provide justification for how a firm determines its capital structure. The basic theory in capital structure is the theory proposed by Modigliani & Miller (1958). In this theory they demonstrated that in a frictionless world, financial leverage is unrelated to firm value (capital structure irrelevance), but in a world with tax-deductible interest payments, firm value and capital structure are positively related (capital structure relevance). Modigliani & Miller (1968) made two propositions under a perfect capital market condition. Their first proposition is that the value of a firm is independent of its capital structure. Their second proposition states that the cost of equity for a levered firm is equal to the cost of equity for an unlevered firm plus an added premium for financial risk.

However, other theories such as the trade – off theory (Myers, 1984), pecking order theory (Myers & Majluf, 1984) and agency cost theory (Jensen & Meckling, 1976) posited imperfection which exist in the real world can be adduce to the relevance of capital structure decision. Such imperfections are bankruptcy costs (Baxter, 1967, Kraus & Litzenberger & Ramaswamy 1982; and Kim, 1998), agency cost (Jensen & Meckling, 1976), gains from leverage-induced tax shields (De Angelo & Masulis, 1980) and information asymmetry (Myers, 1984). Capital structure decision is seen from the perspective of the firm's value i.e. the market value of a firm. Firms seek to maximize their share value by ensuring an optimal capital structure. Considering the relevance- irrelevance argument of capital structure decision in determining the value of the firm by different authors, this paper examined the determinants of capital structure in firms listed in the Nigeria stock exchange.

Many developing countries have

experienced firm problems requiring major reforms to address weak supervision and inadequate capital. The effect of capital structure decisions on company profitability has been the focus of considerable amount of empirical research for many years. One of the main objectives of any firm is to maximize the profit, but, maintaining the liquidity of the firm also is an important objective. The problem is that the trade-off between liquidity and profitability can result in serious problems to firm. Thus, the strategy adopted by firms must be a balance between these two objectives of the firm. Because profitability and liquidity are equally important, one objective should not be at the cost of the other. If a firm ignores profit, the firm cannot survive for a long period also if a firm does not care about liquidity, it may face the problem of insolvency and bankruptcy. However the factors that determine the capital structure of the manufacturing firms listed on the Nigerian stock exchange have not been clearly established. In the light of this, this paper seeks to investigate the determinants of capital structure of listed manufacturing firms in Nigeria. Specifically, the study sought to:

- i. To determine the effect of liquidity and turnover on the capital structure decisions of listed manufacturing firms in Nigeria.
- ii. To examine whether taxes and interest charges significantly impact on capital structure decisions of listed manufacturing firms in Nigeria.

Empirical Review

Antwi, Atta-Mills & Zhao (2012) found that in an emerging economy like Ghana, equity capital as a component of capital structure is relevant to the value of a firm, and long-term-debt was also found to be a major determinant of a firm's value. Ross (1977) developed the incentive-signalling model relating activity choice and incentive schedule in a perfect market and applying it to instances where manager face production problem as well as a financial decision and choose an optimal activity from a given production set according to an endogenously determined investment criterion. Myers contrasts two ways of thinking about capital structure as: static trade-off framework, in which the firm is viewed as setting a target debt-to-value ratio and gradually moving towards a

target payout ratio; and an old fashion pecking order framework, in which the firm prefers internal to external financing, and debt to equity if it issues securities. Several researchers have tested the effects of profitability on firm leverage. Kester (1986) concluded that there is a significantly negative relation between profitability and debt/asset ratios. Rajan & Zingales (1995) found a significantly negative relation between profitability and debt/asset ratios for the USA, the UK and Japan. In a study conducted by Abor (2008), found out that there is no significant relationship between capital structure of publicly quoted firms and large unquoted firms in Ghana, the results revealed that short-term debt constitutes a relatively high proportion of total debt of all the sample groups examined and it also indicated that age of the firm, size of the firm, asset structure, profitability, risk and managerial ownership are important in influencing the capital structure decisions of Ghanaian firms. Maxwell & Kehinde (2012) undertook a study in Nigeria and found out that long-term debt impact positively on firm's value, while equity capital does not impact positively. In a Study by Abdul, Geetha, Mohidin, Abdul, Sang, & Ch'ng (2013), they found out that profitability, tangibility and liquidity had significant negative relationship with leverage while firm size is positively related with leverage in large capitalized firms in Malaysia.

Research Methodology

Statement of Hypotheses

The following hypotheses stated in the null form were tested in the study:

H₀₁: Liquidity and turnover do not significantly affect the capital structure decisions of listed manufacturing firms in Nigeria.

H₀₂: Taxes and interest charges do not significantly impact on capital structure decisions of listed manufacturing firms in Nigeria.

This section discusses the method and procedures that were employed in carrying out the research. They include research design, study population, sample size, sampling technique, types and sources of data, instruments for data collection, techniques of data processing and analysis. This study used panel data generated

from secondary sources. The data were extracted from the annual reports and accounts of the sampled companies published by the Nigeria Stock Exchange. Study population was two hundred and sixteen (216) firms listed on the Nigerian Stock Exchange as at 31st December, 2014. 15 firms were drawn as sample from the population using convenience sampling technique. The companies were chosen based on accessibility and availability of financial statements. The total sample size used for this research was made up of 15 manufacturing companies namely: Cadbury Nigeria plc, Unilever Nigeria Plc, Nestle Plc, 7up Bottling company Plc, Lafarge Cement PLC, Berger Nigeria Plc, Costain Nigeria Plc, Dangote cement Plc, Dangote flour Plc, Dangote sugar Plc, PZ Nigeria Plc, Okomu oil Plc, UAC Nigeria plc, Presco Nigeria Plc, AG leventis plc.

The dependent variable is Capital Structure (combination of debt and equity) while the independent variables are interest charges, profit after tax, tax and turnover (sales). Pooled Least Square regression was employed to estimate the parameters of each of the variables in the model with the use of Econometric View Software 3.1. The statistical method is considered appropriate given the objective of the study and its consistent with most previous empirical studies. The pooled least square has been used because of the panel nature of the variables used in the study for flexibility, powerful, and optimal results in predicting the explaining the set objectives from the specified model.

Model specification

The model is specified as follows:

$$CPS = f(EP, INT, PAT, TAX, TVR.)$$

Below in equation 1 is the econometric equation for the capital structure model.

$$CPS_{it} = \alpha_0 + \beta_1 CPS_{it} + \beta_2 EPS_{it} + \beta_3 INT_{it} + \beta_4 PAT_{it} + \beta_5 TAX_{it} + \beta_6 TVR_{it} + \varepsilon_{it} \text{---(1)}$$

where:

CPS (Capital Structure Component) = it measures the combination of debt and equity for the firms under investigation. It shows the mix of debt and equity. This was derived by adding the long-term liabilities and equity.

EPS (Earnings Per Share) = it measures the earnings power underlying each share of stock.

INT (Interest charges) = it measures the interest burden on the firm resulting from borrowing.

TAX (Tax) = it measures the incentives for more debt.

PAT (Profit after Tax) = it measures the profitability of the firm

TVR (Turnover) = it measures the business activities within the firm which accounts for the reason why the firm uses certain sources of finance.

α_0 = Constant or intercept.

β_{1-6} = Coefficients of explanatory Variable.

ϵ_t = Error term representing other explanatory variables that were not captured by the model.

Results and Discussions

This section focuses on the empirical presentation of data and interpretation of the various regression results from tests carried out

on the panel data for investigating the objectives of the study. The analysis started by a presentation of the descriptive statistics for the study followed by the pooled regression and a correlation matrix.

For the data used in the study see appendix I of the paper. These data cover the variables used in the study which are as follows:

CPS = Capital Structure Component

EPS = Earnings per Share

INT = Interest charges

TAX = Tax

PAT = Profit after Tax

TVR = Turnover.

Where CPS is the capital structure component and the other variable are the independent variables which are proxy for the determinants.

Table 1: Descriptive Statistics for the Capital Structure

	CPS	EPS	INT	PAT	TAX	TVR
Mean	4.87E+10	0.165358	8.90E+08	1.07E+10	1.79E+09	7.36E+10
Median	1.84E+10	0.089200	206000.0	9.09E+08	22686500	3.38E+10
Maximum	5.96E+11	1.960000	1.33E+10	1.60E+11	3.30E+10	9.00E+11
Minimum	-1.46E+10	-0.412000	-2.15E+08	-2.97E+09	-3.66E+08	87081663
Std. Dev.	1.06E+11	0.365948	2.33E+09	3.16E+10	4.99E+09	1.45E+11
Skewness	4.018452	2.687309	3.712894	4.195768	5.339834	4.341015
Kurtosis	19.25714	13.53031	18.25208	19.41201	33.36929	23.99011
Jarque-Bera	3782.193	1607.399	3309.334	3907.379	11918.02	5933.566
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Observations	276	276	276	276	276	276
Cross sections	6	6	6	6	6	6

Source: Authors' computation using Econometric View Software (Eview) 3.1

The probability value of the Jarque-Bera statistic which is a test of normality shows that the data are normally distributed. The values indicate high statistical significant of the variable in the specified regression model. The outliers in the model are minimized as depicted by the minima values of the standard deviation as reflected in

Table 1 showing the descriptive statistic for the model. This reflects consistency of the explanatory power of the model in explaining the relationships between the variables in the study.

The regression result is as presented below in Table 2.

Table 2: Relationship between capital structure and its determinants

Dependent Variable: CPS				
Method: Pooled Least Squares				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.92E+10	2.44E+09	7.870065	0.0000
EPS	-2.27E+10	6.10E+09	-3.725445	0.0002
INT	-5.177181	1.662664	-3.113788	0.0020
PAT	3.218181	0.164700	19.53967	0.0000
TAX	2.354582	0.707440	3.328311	0.0010
TVR	-0.008639	0.016039	-0.538620	0.5906
R-squared	0.903412	F-statistic	505.0767	
Adjusted R-squared	0.901624	Prob.(F-statistic)	0.000000	
Durbin-Watson stat	2.028806			

Source: Authors' computation using Econometric View Software (Eview) 3.1

The regression results are obtained using the pooled regression method that is suitable for panel data to avoid spurious regression results and ensure that the model efficiently explain variation in the dependent variable and sufficiently utilize the information provided for analysis.

The results revealed that the model for the study was able to explain approximately 90% of the systematic variation in the composition of capital structure of the firms understudied. By implication, this means that the independent variables namely; EPS, INT, PAT, TAX, and TVR account for 90% of the total adjusted systematic variations in the composition of a company capital structure. In relation to statistical significance of the independent variables in explaining the dependent variables, only TVR was not statistically significant at 5% level of significance (95% confidence level). The other variables were statistically significant at 5% level of significance. Subjecting all the independent variables to 10% level of significance revealed that all the variables were statistically significant (see Table 2). Using 1% significant level also revealed that all the independent variables except TVR were also significant. The signs of the regression results show that EPS, INT and TVR are negatively

related to the capital structure of the manufacturing firm in Nigeria.

The coefficients show that the explanatory variables influenced greatly the explained variables. For example, a unit change in INT will result in about 517% change in the composition of the capital structure. So also, a unit change in PAT will result in 321% change in the composition of the capital structure.

For the overall model, the F-Statistic of 505.0767 shows a high goodness of fit of the model which supports the high value of the R-squared and Adjusted R-squared. The Durbin-Watson stat shows that there is no presence of serial correlation. This is good for the model, implying that there is no correlation between the independent variables and the error term that could lead to a multi colinearity problem.

The model from the pooled regression results is as specified as follows:

$$\begin{aligned} \text{CPS} = & 1.917576237\text{e}+10 - \\ & 2.272077324\text{e}+10*\text{EPS} - \\ & 5.177181254*\text{INT} + 3.21818087*\text{PAT} + \\ & 2.354581898*\text{TAX} - \\ & 0.008639081751*\text{TVR} \text{-----} 1 \end{aligned}$$

Presentation of Correlation Results and Analysis

Table 3: Correlation Results for Capital Structure and its Determinants

	_CPS	_EPS	_INT	_PAT	_TAX	_TVR
_CPS	1.000000	1.000000	1.000000	1.000000	1.000000	0.996116
_EPS	1.000000	1.000000	1.000000	1.000000	1.000000	0.996116
_INT	1.000000	1.000000	1.000000	1.000000	1.000000	0.996116
_PAT	1.000000	1.000000	1.000000	1.000000	1.000000	0.996116
_TAX	1.000000	1.000000	1.000000	1.000000	1.000000	0.996116
_TVR	0.996116	0.996116	0.996116	0.996116	0.996116	1.000000

Source: Authors' computation using Econometric View Software (Eview) 3.1

The correlation matrix above indicates the existence of a relationship between the examined variables and implying that the independent variables influence the dependent variables to a great extent.

Conclusion and Recommendation

The following are the findings of the study:

1. That there is a significant negative relationship between a firm's capital structure and the earning capacity of the firm using only equity.
2. It also revealed a negative relationship but not significant between firms' turnover and its capital structure composition. This shows that the liquidity of a firm does not have much impact in determining its capital structure decision.
3. Changes in interest charges were found to significantly affect capital structure decisions.

Some firm level characteristic that affect the capital structure of firms are: turnover, net total asset, profit after tax, tax and interest charges. Hence capital structure is relevant in determining the value of the firm at a particular point in time giving certain market conditions and environmental specific factors of a particular industry in a particular economy. The study concludes that the profitability of the firm and interest charges are major determinants of firm capital structure in Nigeria.

Recommendations

Following the findings of the study, the following recommendations are made:

1. The firms should strive to control and minimize its interest expenses.
2. Since profitability is a major determinant of capital structure decision, the firm should invest on only viable projects that will

ensure quick return for the shareholders.

3. Managers should ensure that in carrying out their operations, the firm should maintain sufficient liquidity so as to avoid a liquidity crisis which will hinder the firm from carrying out its daily business operations, because such a crisis can affect the sales volume and ultimately profitability of the firm.

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APPENDIX 1
FINANCIAL DATA OF SOME MANUFACTURING COMPANIES LISTED ON
THE NIGERIAN STOCK EXCHANGE

CADBURY	2014	2013	2012	2011	2010
Turnover	30,518,586,000	35,760,753,000	33,550,501,000	34,110,547,000	29,170,000,000
Net Assets	1,705,922,000	11,844,687,000	9,258,931,000	6,356,741,000	2,100,000,000
profit after tax	1,512,687,000	6,023,219,000	3,454,991,000	3,670,555,000	1,168,000,000
Liabilities	0	0	0	0	0
Equity	11,542,026,000	23,994,931,000	20,039,356,000	16,589,171,000	13,015,000,000
Tax	45,373,000	139,258,000	2,056,527,000	1,382,467,000	784,392,000
Interest	0	693,334,000	14,366,000	0	0
BERGER	2014	2013	2012	2011	2010
Turnover	3,082,930,000	2,708,448,000	2,513,000,000	2,574,359,000	2,756,608,000
Net Assets	3,640,145,000	3,536,641,000	2,906,000,000	2,675,035,000	2,605,446,000
Profit after tax	148,808,000	251,348,000	192,009,000	227,816,000	442,43,000
Liabilities	121,491,000,00	0	237,672,000,00	0	130,247,000,00
Equity	2,459,830,000	2,435,702,000	11,772,000,000	1,721,450,000	1,678,532,000
Tax	-100,045,000	104,750,000	(92456000	141,509,000	777,434,000
Interest	-78733000	32,748,000	0	1,433,865,000	290,305,691
Costain	2014	2013	2012	2011	2010
Turnover	7,392,139,000	9,195,545,000	9,547,000,000	6,247,000,000	3,814,900,000
Net Assets	12,837,391,000	14,253,000,000	14,253,000,000	13,875,448,000	4,774,420,000
Profit after tax	-1,928,098,000	-1,247,256,000	97,936,000	-615,124,000	353,217,000
Liabilities	610,000,000,00	0	4,487,000,000,00	3,820,000,000	0
Equity	4,679,703,000	6,608,218,000	7,910,000,000	8,692,000,000	-932,380,000
Tax	0	-366434000	-19,871,000	-40,337,000	0
interest	236,230,000	158,014,000	0	0	338,995,000
Dangote Cement PLC	2014	2013	2012	2011	2010
Turnover	391,639,060,000	386,177,220,000	298,454,068,000	235,914,970,000	67,600,954,000
Net Assets	984,720,531,000	843,203,275,000	673,666,223,000	534,580,879,000	70,225,348,000
profit after tax	159,501,493,000	201,198,088,000	151,933,213,000	-125,909,831,000	2,722,575,000
liabilities	0	0	0	0	0
Equity	591,886,155,000	550,093,270,000	420,001,891,000	304,538,206,000	27,146,875,000
Tax	251,877,434,000	0	0	0	0
interest	690,928,000	-3146412000	0	0	0
Dangote flour PLC	2014	2013	2012	2011	2010
Turnover	8,364,193,000	58,675,337,000	66,281,326,000	67,600,954,000	61,388,064,000
Net Assets	55,524,333,000	77,449,018,000	86,642,682,000	70,225,348,000	63,824,718,000
Profit after tax	-2,974,533,000	-2,263,336,000	649,074,000	2,722,575,000	5,561,080,000
Liabilities	0	0	0.00	0	0

Equity	12,911,904,000	25,325,526,000	27,148,875,000	27,148,875,000	28,422,74,000
Tax	-99,366,000	1,737,015,000	109,668,000	2,189,310,000	187,024,000
interest	690,928,000	412,000	0	0	0
Dangote sugar PLC	2,014	2,013	2012	2,011	2,010
Turnover	94,855,203,000	103,153,735,000	106,868,054,000	107,218,642,000	899,804,999,000
Net Assets	92,801,302,000	83,159,877,000	83,051,450,000	72,814,642,000	62,293,982,000
Profit after tax	11,635,779,000	10,845,932,000	10,796,416,000	7,403,597,000	11,282,240,000
Liabilities	0	0	0	0	0
Equity	51,413,720,000	44,977,941,000	46,269,159,000	39,133,709,000	40,895,037,000
Tax	3,637,373,000	5,419,227,000	5,535,263,000	3,517,632,000	486,490,000
Interest	106,443,000	-67164000	0	0	1,946,000
Larfage Cement PLC	2014	2013	2012	2011	2010
Turnover	97,174,505	98,798,452	87,965,224	87,091,634	87,081,663
Net Assets	36,688,153	161,081,711	151,948,633	24,290,353	22,280,355
Profit after tax	14,722	14,611	14,712	10,349	8,655
Liabilities	-8,043	-7,557	-7,353	-7,229	-7,226
Equity	15,255,358	14,255,644	13,845,905	13,845,905	13,840,805
Tax	0	0	0	0	0
Interest	470,114,000	377,774,000	0	0	0
AG Leventis PLC	2014	2013	2012	2011	2010
Turnover	1,341,051,000	881,875,000	212,023,000	1,578,902,000	1,694,213,000
Net Assets	13,344,907,000	13,565,144,000	14,334,696,000	12,283,308,000	11,435,275,000
profit after tax	183,206,000	508,600,000	223,015,000	126,292,000	281,920,000
Equity	9,750,380,000	10,229,030,000	9,360,899,000	8,971,695,000	9,370,505,000
liabilities	0	514,539,000,00	130,137,000,000	128,33,000,000	164,372,000,000
Tax	0	0	0	0	0
interest	47,014,000	377,774,000	0	0	0
7UP Bottling Company PLC	2014	2013	2012	2011	2010
Turnover	82,450,505,000	77,888,548,000	64,088,879,000	59,864,385,000	51,098,232,000
Net Assets	67,686,839,000	55,863,209,000	51,370,170,000	48,485,662,000	40,231,991,000
Profit after tax	7,125,788,000	6,434,01,000	2,856,504,000	1,678,471,000	2,277,544,000
liabilities	4,433,469,000,00	1,433,49,000,00	4,997,584,000,0	2,313,776,000,00	(14,740,037,000,00)
Equity	51,261,632,000	47,162,040,000	49,514,245,000	19,047,155,000	16,146,,282,000
Tax	0	0	0	0	0
interest	229,531,000	0	0	0	0
NESTLE PLC	2014	2013	2012	2011	2010
Turnover	143,328,982,000	133,084,076,000	116,707,394,000	97,961,280,000	82,726,229,000
Net Asset	106,062,067,000	108,207,480,000	88,963,218,000	76,945,793,000	60,347,062,000

Liabilities	18,385,879,000	0	29,598,012,000	8,372,414,000,0	26,026,410,000,0
Equity	35,939,643,000	40,594,801,000	30,185,562,000	23,492,887,000	14,865,353,000
Tax	2,210,338,000	5,419,227,000	5,535,263,000	3,517,632,000	4,864,690,000
Interest	5,305,837,000	-214669700	5,535,263,000	3,517,632,000	4,864,690,000
UnileverNigeria Plc	2,014	2,013	2,012	2,011	2,010
Turnover	55,754,309,000	600,004,119,201	55,647,797,896	54,724,749,000	46,807,000,000
Net Asset	45,736,255,000	43,754,114,227	36,497,624,059	32,249,926,262	8,335,000,000
profit after tax	2,412,343,000	4,808,907,383	5,597,613,329	5,515,212,597	4,180,000,000
Liabilities	12,060,749,000,00				
Equity	0	782,073,524,00	0	0	10,008,000,000
Tax	7,478,808,000	9,639,695,298	10,043,523,514	9,634,648,320	8,335,000,000
Interest	0	0	0	0	405,097,000
UAC Nigeria PLC	0	3,707,533,000	1,335,505,000	972,027,000	0
Turnover	2,014	2,013	2,012	2,011	2,010
Turnover	11,700,506,000	11,298,899,000	12,039,603,000	10,754,451,000	8,194,000,000
Net Asset	68,087,621,000	66,551,713,000	69,016,389,000	65,369,873,000	69,531,311,000
Equity	36,052,766,00	33,426,273,000	29,961,869	30,193,733,000	29,889,711,000
profit after tax	3,589,075,000	3,155,419,000	2,180,310,000	1,999,301,000	2,278,026,000
Liabilities	7,501,530,000,00	0	0	0	10,961,000,000,0
Tax	0	3,707,533,000	1,335,505,000	972,027,000	0
interest	0	3,707,533,000	1,335,505,000	972,027,000	0
PZ Nigeria PLC	2014	2,013	2,012	2,011	2,010
Turnover	71,343,088,000	72,154,601,000	65,877,984,000	62,667,910,000	63,800,733,000
Net Asset	72,296,420,000	64,406,797,000	68,926,529,000	58,968,077,000	54,896,209,000
Equity	24,370,445,000	42,868,042,000	41,193,341,000	38,707,544,000	35,565,450,000
profit after tax	5,321,187,000	2,538,846,000	5,697,066,000	5,584,642,000	5,330,900,000
liabilities	0	0	0	0	0
Tax	2,329,078,000	1,768,017,000	-23,282,000,000	2,366,806,000	-2,340,187,000
interest	229,531,000	0	0	0	0
OKOMUOIL PLC	2,014	2,013	2,012	2,011	2,010
Turnover	10,146,164,000	11,121,011,000	6,087,836,000	4,741,217,000	4,734,193,000
Net Asset	31,054,673,000	12,051,224,000	8,668,128,000	8,676,223,000	7,668,859,000
Equity	25,530,751,000	8,836,256,000	5,866,408,000	4,353,494,000	4,734,193,000
Profit after tax	3,590,763,000	392,376,000	1,629,456,000	54,952,424,000	1,207,460,000
Liabilities	0	16,613,600,000	1,822,416,000,00	0	0
Tax	547,865,000	-734,681,000	-34,180,600	-112,217,000	-32,578,000
interest	0	25,966,000	91,459,000	0	0

APPENDIX II
INFORMATION FOR ECONOMETRIC ANALYSIS USING EVIEW

CPS	EPS	INT	PAT	TAX	TVR
1.15E+10	0.131000	0.000000	1.51E+09	45373000	3.05E+10
2.40E+10	0.251000	6.93E+08	6.02E+09	1.39E+08	3.58E+10
2.00E+10	0.173000	14366000	3.45E+09	2.06E+09	3.36E+10
1.66E+10	0.221000	0.000000	3.67E+09	1.38E+09	3.41E+10
1.30E+10	0.090000	0.000000	1.17E+09	7.84E+08	2.92E+10
2.58E+09	0.060600	-78733000	1.49E+08	-1.00E+08	3.08E+09
2.44E+09	0.103000	32748000	2.51E+08	1.05E+08	2.71E+08
1.20E+10	0.016300	0.000000	1.92E+08	NA	2.51E+09
1.72E+09	0.133000	1.43E+09	2.28E+08	1.42E+08	2.57E+09
1.81E+09	0.026300	2.90E+08	44243000	7.77E+08	2.76E+09
5.29E+09	-0.412000	2.36E+08	-1.93E+09	0.000000	7.39E+09
6.61E+09	-0.189000	1.58E+08	-1.25E+09	-3.66E+08	9.20E+09
1.24E+10	0.012400	0.000000	97936000	-19871000	9.55E+09
1.25E+10	-0.070800	0.000000	-6.15E+08	-40337000	6.25E+09
2.89E+09	-0.379000	3.39E+08	3.53E+08	0.000000	3.81E+09
5.96E+11	0.270000	3.30E+09	1.60E+11	3.30E+10	3.92E+11
5.54E+11	0.365000	NA	2.01E+11	NA	3.86E+11
4.24E+11	0.362000	1.33E+10	1.52E+11	0.000000	2.98E+11
3.08E+11	-0.413000	NA	-1.26E+11	0.000000	2.36E+11
3.10E+10	0.100000	NA	2.72E+09	0.000000	6.76E+10
1.67E+10	-0.230000	6.91E+08	-2.97E+09	-99366000	8.36E+09
2.91E+10	-0.089300	412000.0	-2.26E+09	1.74E+09	5.87E+10
3.10E+10	0.023900	0.000000	6.49E+08	1.10E+08	6.63E+10
3.10E+10	0.100000	0.000000	2.72E+09	2.19E+09	6.76E+10
3.85E+09	1.960000	0.000000	5.56E+09	1.87E+08	6.14E+10
5.52E+10	0.226000	1.06E+08	1.16E+10	3.64E+09	9.49E+10
4.88E+10	0.240000	-67164000	1.08E+10	5.42E+09	1.03E+11
5.01E+10	0.233000	0.000000	1.08E+10	5.54E+09	1.07E+11
4.30E+10	0.189000	0.000000	7.40E+09	3.52E+09	1.07E+11
4.47E+10	0.276000	1946000.	1.13E+10	4.86E+08	9.00E+11
15247315	0.000965	4.70E+08	14722.00	0.000000	97174505
14248087	0.001020	3.78E+08	14611.00	0.000000	98798452
13838552	0.001060	0.000000	14712.00	0.000000	87965224
13838676	0.000747	0.000000	10349.00	0.000000	87091634
13833579	0.000625	0.000000	8655.000	0.000000	87081663
9.75E+09	0.000000	47014000	1.83E+08	0.000000	1.34E+09
1.07E+10	0.009880	3.78E+08	5.09E+08	0.000000	8.82E+08
1.39E+11	0.001720	0.000000	2.23E+08	0.000000	2.12E+08
9.10E+09	0.009840	0.000000	1.26E+08	0.000000	1.58E+09
1.74E+11	0.001720	0.000000	2.82E+08	0.000000	1.69E+09
5.57E+10	0.139000	2.30E+08	7.13E+09	0.000000	8.25E+10

4.86E+10	0.013600	0.000000	6.43E+08	0.000000	7.79E+10
5.45E+10	0.057800	0.000000	2.86E+09	0.000000	6.41E+10
2.14E+10	0.088400	0.000000	1.68E+09	0.000000	5.99E+10
-1.46E+10	0.142000	0.000000	2.28E+09	0.000000	5.11E+10
5.43E+10	0.618000	5.31E+09	2.22E+10	2.21E+09	1.43E+11
4.06E+10	0.549000	-2.15E+08	2.23E+10	5.42E+09	1.33E+11
5.98E+10	0.699000	5.54E+09	2.11E+10	5.54E+09	1.17E+11
3.19E+10	0.715000	3.52E+09	1.68E+10	3.52E+09	9.80E+10
4.09E+10	0.846000	4.86E+09	1.26E+10	4.86E+09	8.27E+10
NA	0.322000	0.000000	2.41E+09	0.000000	5.58E+10
NA	0.499000	3.71E+09	4.81E+09	0.000000	6.00E+11
NA	0.560000	1.34E+09	5.60E+09	0.000000	5.56E+10
NA	0.573000	9.72E+08	5.52E+09	0.000000	5.47E+10
NA	0.501000	0.000000	4.18E+09	4.05E+08	4.68E+10
NA	0.004810	0.000000	3.61E+09	0.000000	1.17E+10
NA	0.000000	3.71E+09	3.34E+10	0.000000	1.13E+10
NA	0.000000	1.34E+09	29961869	0.000000	1.20E+10
NA	0.000000	9.72E+08	3.02E+10	0.000000	1.08E+10
NA	0.027200	0.000000	2.99E+10	4.05E+08	8.19E+09
NA	0.000000	2.30E+08	2.44E+10	2.33E+09	7.13E+10
NA	0.000000	0.000000	4.29E+10	1.77E+09	7.22E+10
NA	0.000000	0.000000	4.12E+10	-2.33E+10	6.59E+10
NA	0.000000	0.000000	3.87E+10	2.37E+09	6.27E+10
NA	0.000000	0.000000	3.56E+10	-2.34E+09	6.38E+10
NA	0.000000	0.000000	2.55E+10	5.48E+08	1.01E+10
NA	0.533000	25966000	8.84E+09	-7.35E+08	1.11E+10
NA	0.003230	91459000	5.87E+09	-34180600	6.09E+09
NA	0.000000	0.000000	4.35E+09	-1.12E+08	4.74E+09
NA	NA	NA	NA	NA	NA

Determinants of Financial Performance of Listed Agricultural Firms in Nigeria

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Abstract

This study examined determinants of financial performance of listed agricultural firms in Nigeria. Correlational research design was applied in a sample of 5 firms for a period of 10 years (2005-2014). Panel regression technique of data analysis using FGLS was used in the analysis and the study found that firm size and leverage are significant determinants of financial performance of listed agricultural firms in Nigeria during the period under review. Specifically, the study found a significant positive relationship between debt financing and financial performance; and also found that firm size has significant positive effect on the financial performance of listed agricultural firms in Nigeria. On the other hand, the study found that assets tangibility and growth has an insignificant effect on the financial performance of listed agricultural firms in Nigeria during the period covered by the study. The study therefore recommends that managers of the listed agricultural firms in Nigeria should strive for an optimal debt ratio in their capital structure and proper assets position. Also, that policy makers in Nigerian listed agricultural firms should focus more on financing strategies and the acquisition of necessary assets for the firms.

Key word: Agriculture firms, financing options, performance

Introduction

The historical trend of Africa shows that the dominant business activities of a common African man is farming and hunting. Agricultural activities in the developing and even the developed countries have been the driver of economic growth and development. Agricultural firms play a crucial role in providing foods to the populace and raw materials as well as market for agricultural produce and manufacturing sector of the economy. The sector specializes in production, processing, and marketing of agricultural produce, thereby facilitating sustainable growth and development. However, while agriculture is the main stay of African economy, the sector has erratically fluctuated widely with a declining trend recently (Mwatsuma, Henry, Noel, & Adam, 2012).

For example, Barry and Ellinger (2012) describe agricultural sector with low profitability which is being induced by low net profit margins that is specific for agricultural production. They further state that the sector has higher assets tangibility (proportion of fixed assets in total assets), and hold capital intensive strategy for making profit without a market-oriented strategy to meet the market demand. These have been part of the reasons that led to liquidity risk problems in the agricultural sector. Thus, debt financing is largely preferred over equity in the agricultural firms confirming the proposition of the M&M's theory.

Consequently, many experts and scholars in the field of accounting and financial management pay more attention on the financial performance and the factors that determine financial performance. It has also been the main concern of business practitioners in all types of organizations since financial performance has implications to organization's health and ultimately its survival (Mou & Wanrapee 2014), as high performance entails management effectiveness and efficiency in the use of firm's resources.

It is against this background that this study intends to examine the determinants of financial performance of agricultural firms listed on the floor of Nigerian Stock Exchange Market. The contribution of agricultural sector to the national economic life of Nigeria, and the importance of listed agricultural firms to the Nigerian stock market, make it necessary to study the factors

affecting the financial performance of agricultural firms. For instance, Qin et al. (2011) provide evidence that agricultural firms are essential on the sustainable development of agriculture. However, there is no empirical evidence on the factors affecting the financial performance of agricultural firms in Nigeria, which has prompted the research question of the possible determinants of financial performance of the agricultural firms in Nigeria. That is, while agricultural sector is an essential sector to the Nigerian economy little is known about the financial performance of the firms in the sector.

The main objective of this study is to examine the determinants of financial performance of listed agricultural firms in Nigeria. Specifically, the study set out to: determine the effect of leverage on the financial performance of listed agricultural firms in Nigeria; evaluate the effect of growth on the financial performance of listed agricultural firms in Nigeria; assess the effect of tangibility on the financial performance of listed agricultural firms in Nigeria; and determine the effect of firm size on the financial performance of listed agricultural firms in Nigeria.

Empirical Review

Firm financial performance is usually measured through profitability, solvency and liquidity (Mwatsuma et al., 2012). According to them firm's profitability indicates the extent to which a firm generates profit from its factors of production. Zenios et al. (1999) states that profitability analysis focuses on the relationship between revenues and expenses and on the level of profits relative to the size of investment in the business through the use of profitability ratios like Returns on Assets (ROA). On the other hand, liquidity entails firm's ability to meet its financial obligations as and when they mature without disrupting the normal operations of the business. Solvency measures give an indication of a firm's ability to repay all its indebtedness by selling all of its assets. Several empirical studies were conducted to establish factors affecting the firm's financial performance.

Maleya and Willy (2013) study the factors affecting the financial performance of listed companies at Nairobi Securities Exchange in Kenya. Their findings showed that leverage had a significant negative effect on financial

performance, while liquidity, firm size and firm age had a significant positive effect on financial performance. They provides evidence that leverage, liquidity, company size and company age play an important role in improving company's financial performance. This findings support the findings of previous studies in like Simerly and Li (2000) who showed that company size can predict the future stock price, and Hvide and These (2007) that provide evidence that larger firms have better performance. It is also in line with the Almajali et al (2012) that argued that the size of the firm can affect its financial performance. However, it contradicts Yuqi (2007) who argued that firms that become exceptionally large, the effect of size could be negative due to bureaucratic and other reasons.

Stierwald (2009) examined the determinants of financial performance by considering a case of large firms in Australia. The study found that the financial performance of a firm is influenced by a number of variables which include lagged profit, productivity level and size. It was also found that the degree of concentration in a given sector influences firm behaviour and financial performance. A study of agro-based firms in Nigeria between 2005 and 2010 by Basse, Aniekan, Ikpe and Udo (2013) found that the firm size was one of the major determinants of short-term debt ratio for the firms under study. In contrast, Amarjitet. al (2010) found no significant relationship between firm size and gross operating profit ratio.

Kamau and Bosire (2015) assessed factors influencing financial performance of animal feeds' manufacturing firms in Nakuru town, Kenya. It examined the influence of working capital, firm size, and capital structure on financial performance of these firms. It was established that the three elements positively and significantly influenced financial performance of the firms. The study concluded that the three elements were crucial to financial performance of these firms. Ishaya and Abduljeleel (2014) analyzed the capital structure and financial performance of Nigerian listed firms. They found that both equity and debt ratio impacted on a firm's financial performance. The debt ratio was found to negate the financial performance while equity enhances a firm's financial performance. In a case of capital structure and performance of manufacturing firms in Nigeria, it is noted that

capital structure measures relate negatively with the performance of the firm.

Mou and Wanrapee (2014) examined the impacts of factors, including liquidity, asset utilization, leverage and firm size on financial performance of firms listed on Shanghai Stock Exchange. The study finds that asset utilization and leverage are factors that affect financial performance of listed firms. For both types of firm performance measurement (ROA and ROE), the results show a positive and significant relationship between assets utilization and firm performance and a negative and significant relationship between leverage and firm performance.

Mwatsuma *et al.*, (2012) investigated various factors influencing agricultural companies in Coast province Kenya. The study found a negative relationship between board size, number of meetings and organizational performance. They also found that performance targeting similarly had a negative relationship with organization sales or expansion, but it had a positive relationship with employees' retention in an organization.

Zeitun and Tian (2007) consider growth, financial business indicators such as size, tax and tangibility to explain the firm's performance. Khan (2012) study indicates a significantly negative relationship between the firm's performance measured by the return on assets, gross profit margin and Tobin's Q, while a negative but not statistical significant relationship between financial leverage and firm performance measured by the return on equity. Wei (2012) examined the effect of liquidity, asset utilization, leverage, economic prosperity and agricultural products price index on financial performance of agricultural firms listed on Shanghai Stock Exchange (SSE) from 2006 until 2010. The study found that the factors that affect financial performance of agricultural firms listed on SSE are asset utilization, leverage and agricultural products price index.

Uwalomwa and Uadiale (2012) studied the relationship between capital structure and the financial performance of listed firms in Nigeria. The study found that two of the explanatory variables in the study (short-term debt and shareholders' funds) have a significant positive impact on the financial performance of listed firms in Nigeria. In addition, the study indicated

that long-term debt has a significant negative impact on the financial performance of firms. The study concludes that employing high proportion of long-term debt in firms' capital structure will invariably result in a low financial performance of a firm.

Catherine (2013) examined the relationship between capital structure and financial performance of agricultural firms listed at the NSE. The findings shows that there was variation of financial performance of agricultural firms listed in the NSE due to variations in Short term long term debt and revenue. The study also found that capital structure influence the financial performance of agricultural firms listed on the NSE.

Research Methodology

This study employed correlational research design in assessing the determinants of financial

performance of listed agricultural firms in Nigeria. The population and sample of the study comprises of all the 5 firms listed on the floor of the Nigerian Stock Exchange (NSE) Market as at 31st December, 2014. The study used secondary data from the financial statements of the sampled firms for the period of 10 years (2005-2014). Therefore, our database consists of 50 firm-year observations, that is, 5 firms for 10 years.

Moreover, panel regression technique of data analysis is employed, and other robustness tests are conducted to check the problem of heteroscedasticity, multicollinearity and normality of the data used for the study. The analysis is conducted using Statistics/Data Analysis Software (STATA 11.02).

The measurements of the variables used in the study are presented in Table 1;

Table 1: Variables Measurements

Variables	Definition/Measurements
Financial Performance	Is defined as return on assets and measured by the ratio of profit after tax to total assets at the end of accounting period.
Leverage	Is defined as total short and long term liabilities, and measured by the ratio of total liabilities to total assets at the end of accounting period.
Growth	Is defined as the revenue growth and measured by the difference between sales revenue in current year minus sales revenue in the previous year.
Tangibility	Is measured by the ratio of tangible fixed assets to total assets at the end of accounting period.
Firm size	Is defined as the total assets and measured by the logarithm of the total assets.

Model Specification

To estimate the effect of the determinants on the financial performance of listed agricultural firms in Nigeria, the following econometric model is estimated;

$$ROA_{it} = \gamma_0 + \beta_1 LEV_{it} + \beta_2 GRW_{it} + \beta_3 TAN_{it} + \beta_4 FSZ_{it} + \mu_{it} \quad (1)$$

Where ROA_{it} is the return on assets of firm i in year t ; LEV_{it} is the leverage of firm in year t ; GRW_{it} is the growth of firm k i in year t ; TAN_{it} is

the assets tangibility of firm i in year t ; FSZ_{it} is the size of firm i in year t . And γ_0 is the intercept, while γ_1 to γ_4 , are the coefficients/estimators and μ_{it} is the residuals.

Results and Discussions

This section presents the analysis of results obtained from the data collected for the study. The section begins with the analysis of the descriptive statistics of the data collected for the

Table 2: Descriptive Statistics

Variables	Mean	SD	Min	Max	N
ROA	0.0527	0.0939	-0.0925	0.4203	50
LEV	0.4163	0.1763	0.0671	0.7585	50
GRW	-0.1055	0.2953	-1.3216	0.4930	50
TAN	0.7190	0.2365	0.1005	0.9915	50
FSZ	6.5313	0.6143	5.3239	7.5434	50

Source: Authors' computation from STATA.

The descriptive statistics in Table 2 shows that the measure of financial performance (ROA) in the listed agricultural firms has an average value of 0.0537 (5.37%) with standard deviation of 0.0939 and minimum and maximum ROA of -0.0925 (-9.25%) and 0.4203 (42.03%) respectively. The results suggest that there is a wide dispersion among the financial performances from the mean value as the standard deviation is higher than the mean. Table 2 also shows that leverage (LEV) in the listed agricultural firms has an average value of 0.4163 (41.63%) with standard deviation of 0.1763 and minimum and maximum value of leverage of 0.0672 (6.72%) and 0.7585 (75.85%) respectively. The results imply that the leverage of the firms is not widely dispersed from the mean value as the standard deviation is relatively smaller than the mean.

Table 2 indicated that the average value of firm growth (GRW) of the listed agricultural firms is -0.1055 with standard deviation of

0.2953 and minimum and maximum value of -1.3216 and 0.4930 respectively. The results suggest that there is a wide dispersion of the data on growth from the mean value as the standard deviation is higher than the mean. Moreover, Table 2 shows that the assets tangibility (TAN) in the listed agricultural firms has an average value of 0.7190 (71.90%) with standard deviation of 0.2365 and minimum and maximum value of 0.1005 (10.05%) and 0.9915 (99.15%) respectively. The results suggest that the data from tangibility is not widely dispersed from the average. Lastly, the table shows that the firm size (FSZ) of the listed agricultural firms has an average value of 6.5313(log of total assets) with standard deviation of 0.6143 and minimum and maximum FSZ of 5.3239 and 7.5434 respectively. The results suggest that there is no wide dispersion among the firms from the mean value as the standard deviation is smaller than the mean value.

Table 3: Normal Data Test

Variables	W	V	Z	Prob	N
ROA	0.2909	33.349	7.479	0.0000	50
LEV	0.4340	26.617	6.998	0.0000	50
GRW	0.4247	27.059	7.033	0.0000	50
TAN	0.8765	5.811	3.753	0.0001	50
FSZ	0.9558	2.077	1.559	0.0596	50

Source: Authors' computation from STATA.

From the analysis of the descriptive statistics of the data collected for the study suggested that the data is not normally distributed as pointed by the higher values of standard deviation; the study applied Shapiro Test for Normal Data. The technique test the null hypothesis (that the data is normal), that is, the variable came from a normally distributed population. The results in table 3 indicate that only the data from firm size (FSZ) come follows the normal distribution, because the P-values is not significant at alpha level (5%) level of

significance. On the other hand, the data from ROA, LEV, TAN and GRW are not normally distributed because they are statistically significant at alpha level. Thus, the null hypothesis (that, the data is normally distributed) is rejected. This may have an effect on the OLS estimators.

Therefore, the inferential statistics of the data is analyze in the following section; it begins with the summary of the Pearson correlation Coefficients of the variables of the study as presented in Table 4;

Table 4: Correlation Matrix

Var.	ROA	LEV	GRW	TAN	FSZ
ROA	1.0000				
LEV	0.6372*	1.0000			
GRW	-0.1444	0.0605	1.0000		
TAN	-0.0234	0.1076	0.0008	1.0000	
FSZ	-0.1782	-0.4755*	0.2894*	-0.0717	1.0000

*correlation is significant at the 1% level (2-tailed)

Source: Authors' computation from STATA.

The correlation results from Table 4 show that there is a significant positive relationship between financial performances (ROA) and leverage (LEV) of listed agricultural firms in Nigeria, from the correlation coefficient of 0.6372, which is statistically significant at 1% level of significance. This implies that as the debt composition in the capital structure increases, financial performance increases. The result from the table also indicates that there is a negative association between firm growth (GRW) and financial performance of listed agricultural firms in Nigeria, from the correlation coefficient of -0.1444, which is not statistically significant at all levels of significance. This implies an inverse relationship between GRW and ROA. Moreover,

the table 4 shows a negative relationship between assets tangibility (TAN) and ROA from the correlation coefficient of -0.0234, which is not statistically significant at all levels of significance. This also suggests an indirect association between TAN and ROA. Lastly, the results from table 4 indicates an insignificant negative relationship between ROA and firm size (FSZ) of listed agricultural firms in Nigeria. Implying and indirect but insignificant relation.

Regression Results and Hypotheses Testing

In this section, the hypotheses formulated for the study are tested; the section begins with the discussion of the regression model summary.

Table 5: GLS Regression Results

Variables	Coefficients	P-Value
LEV	0.3272	0.000
GRW	-0.1357	0.012
TAN	-0.1267	0.389
FSZ	0.1513	0.027
CONSTANT	-1.0305	0.033
R Square	49.70	
Wald Chi2	49.40	0.0000
Hetttest: Chi2	332.54	0.0000
Mean VIF	1.26	
Hman:Chi2	2.17	0.7037
RE: Chibar2	0.00	1.0000

Source: Authors' computation from STATA.

To ensure reliability and validity of our results, we conducted some robustness tests due to the uncertainty as to the conformity with the classical assumptions of and in line with the panel nature of the data used. For instance, some of the classical assumption of OLS regression model assumed that the error terms are normally distributed and independence (that is the error terms are uncorrelated); the explanatory variables are not perfectly correlated (absence of multicollinearity); the variance of the error terms is constant (Homoskedastic). When these assumption are not been met, the estimators are biased and cannot be use in drawing any inference. The results from table 5 provide evidence of the absence of perfect multicollinearity among the independent variables, because the mean Varince Inflation Factor (VIF) is 1.26. The rule of thumb for the

VIF is that, a value of 10 and above is an indication of perfect multicollinearity. Similarly, evidence from Breuch Pagan/Cook-Weisberg coefficient of 332.54 with p-value of 0.0000 confirms the presence of the effects of heteroskedasticity, that is, there is no constant variance (heteroskedastic) in the residuals.

The table also shows that both the Hausman specification test (Chi2 of 2.17 with p-value of 0.7037) and the Breusch and Pagan Lagrangian Multiplier Test for Random Effects, indicated that there is no statistical significant different among the Units of the panel (Chibar2 of 0.00 with p-value of 1.0000), and therefore, OLS regression model can be used in the study. However, the OLS model was not fit; hence we employed GLS to fit the model.

The results from table 5 indicate that the explanatory variables explained 49.70% of the

total variations in the dependent variable (financial performance) of the listed agricultural firms in Nigeria during the period of the study, from the R^2 value of 0.4970. The table also shows that the model is fit as evident by the Wald Chi2 of 49.40 which is at 99% significance level (as indicated by the P-value of 0.0000). Therefore, the hypotheses formulated are tested in the following section.

Test of the Research Hypotheses

Table 5 shows that leverage (LEV) of the sampled firms has a significant positive effect on the financial performance of the listed agricultural firms, from the coefficients of 0.3272 which is statistically significant at 1% level of significance (p-value of 0.000). This implies a direct relationship between debt financing and financial performance (ROA) that is, as debt financing increases; the financial performance increases significantly. Based on this, we reject the null hypothesis one (H_{01}), which states that leverage has no significant effect on the financial performance of listed agricultural firms in Nigeria. The study infer that the debt component in the capital structure of listed agricultural firms in Nigeria is a significant determinant of financial performance during the period covered by the study.

The table also indicated that firm growth (GRW) of the listed agricultural firms in Nigeria has a significant negative effect on the financial performance of the firms, from the coefficients of -0.1357 which is statistically significant at 5% level of significance (p-value of 0.012). This result suggests that growth is inversely related with financial performance (ROA) significantly. Based on this, we reject the null hypothesis two (H_{02}), which states that growth has no significant effect on the financial performance of listed agricultural firms in Nigeria. The study infer that the growth in the listed agricultural firms in Nigeria is a significant determinant of financial performance during the period of the study. Moreover, table 5 indicated that asset tangibility (TAN) of the listed agricultural firms in Nigeria has an insignificant negative effect on the financial performance of the firms, from the coefficients of -0.1267 which is not statistically significant at all levels of significance (p-value of 0.389). This result suggests that tangibility of assets inversely related with financial

performance (ROA), but is not significant. Based on this, we failed to reject the null hypothesis three (H_{03}), which states that tangibility has no significant effect on the financial performance of listed agricultural firms in Nigeria. The study infer that the tangibility of assets in the listed agricultural firms in Nigeria did not significant determine financial performance during the period of the study.

Lastly, the table shows that firm size (FSZ) of the listed agricultural firms in Nigeria has a significant positive effect on the financial performance of the firms, from the coefficients of 0.1513 which is statistically significant at 5% level of significance (p-value of 0.033). This result suggests that growth is directly related with financial performance (ROA) significantly. Based on this, we reject the null hypothesis four (H_{04}), which states that firm size has no significant effect on the financial performance of listed agricultural firms in Nigeria. The study infers that the size of a firm in terms of total assets in the listed agricultural firms in Nigeria is a significant determinant of financial performance during the period of the study.

These findings implied that if listed agricultural firms in Nigeria could achieve an optimal debt ratio in their capital structure and proper assets, their financial performance could be enhanced. It also implied that policy makers in the Nigerian listed agricultural firms should focus more on policies towards financing strategies and the acquisition of necessary assets for the listed agricultural firms.

Conclusions and Recommendations

Emanating from the findings of this study, we study concludes that firm size and leverage are a significant determinants of financial performance of listed agricultural firms in Nigeria during the period under review. Specifically, the study concludes a significant positive relationship between debt financing and financial performance of agricultural firms in Nigeria. Similarly, the study concludes that firm size has significant positive effect on the financial performance of listed agricultural firms in Nigeria. On the other hand, the study concludes that assets tangibility and growth has an insignificant effect on the financial performance of listed agricultural firms in Nigeria during the period covered by the study.

That is, the growth in revenue and tangible fixed assets did not significantly determine financial performance of listed agricultural firms in Nigeria during the period covered by the study.

We therefore recommend that the managers of the listed agricultural firms in Nigeria should strive for an optimal debt ratio in their capital structure and proper assets position. We also recommend that policy makers in the Nigerian listed agricultural firms should focus more on policies towards financing strategies and the acquisition of necessary assets for the firms.

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Appendices

```
. xtset id year, yearly
      panel variable   id (strongly balanced)
      time variable   year, 2005 to 2014
      delta 1 year
```

```
. xtsum roa lev grw tan fsz
```

Variable		Mean	Std. Dev.	Min	Max	Observations
roa	overall	.0537062	.0938949	-.092491	.4202826	N = 50
	between		.0616754	-.0120932	.119529	n = 5
	within		.0755716	-.0516769	.3672429	T = 10
lev	overall	.4163225	.1762986	.0671635	.7584928	N = 50
	between		.0995458	.2610623	.535689	n = 5
	within		.1516308	.0684344	.7597637	T = 10
grw	overall	-.1054889	.2953218	-1.321577	.4930209	N = 50
	between		.1593134	-.3862784	-.008286	n = 5
	within		.2578682	-1.040788	.7738104	T = 10
tan	overall	.7190166	.23652	.1004706	.9915438	N = 50
	between		.1361343	.5758953	.9102243	n = 5
	within		.2020226	.2045337	1.134665	T = 10
fsz	overall	6.531342	.6142872	5.323974	7.543387	N = 50
	between		.5778983	5.916759	7.127879	n = 5
	within		.3236096	5.938557	7.374461	T = 10

```
. swilk roa lev grw tan fsz
```

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	Z	Prob>z
roa	50	0.29090	33.349	7.479	0.00000
lev	50	0.43403	26.617	6.998	0.00000
grw	50	0.42465	27.059	7.033	0.00000
tan	50	0.87645	5.811	3.753	0.00009
fsz	50	0.95584	2.077	1.559	0.05955

```
. pwcorr roa lev grw tan fsz, star (0.05) sig
```

	roa	lev	grw	tan	fsz
roa	1.0000				
lev	0.6372*	1.0000			
grw	-0.1444	0.0605	1.0000		
tan	-0.0234	0.1076	0.0083	1.0000	
fsz	-0.1782	-0.4755*	0.2894*	-0.0717	1.0000
	0.2156	0.0005	0.0415	0.6208	

. reg roa lev grw tan fsz

Source	SS	df	MS			
Model	2.89171925	4	.722929811	Number of obs =	50	
Residual	2.92658275	45	.065035172	F(4, 45) =	11.12	
Total	5.81830199	49	.118740857	Prob > F =	0.0000	
				R-squared =	0.4970	
				Adj R-squared =	0.4523	
				Root MSE =	.25502	

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lev	.3271718	.0512945	6.38	0.000	.2238593	.4304843
grw	-.1357337	.0572145	-2.37	0.022	-.2509696	-.0204978
tan	-.1267144	.1549831	-0.82	0.418	-.4388665	.1854376
fsz	.1513458	.0723572	2.09	0.042	.005611	.2970806
_cons	-1.030496	.509372	-2.02	0.049	-2.056424	-.0045679

. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance
 Variables: fitted values of roa

chi2(1) = 332.54
 Prob > chi2 = 0.0000

. vif

Variable	VIF	1/VIF
fsz	1.49	0.671809
lev	1.38	0.726472
grw	1.16	0.865392
tan	1.01	0.987751
Mean VIF	1.26	

. xtreg roa lev grw tan fsz, fe

Fixed-effects (within) regression
 Group variable: id

R-sq: within = 0.4688
 between = 0.8696
 overall = 0.4801

Number of obs = 50
 Number of groups = 5

Obs per group: min = 10
 avg = 10.0
 max = 10

corr(u_i, Xb) = -0.5981
 F(4, 41) = 9.05
 Prob > F = 0.0000

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
lev	.374218	.0658913	5.68	0.000	.2411479	.5072881
grw	-.1830382	.0718084	-2.55	0.015	-.3280582	-.0380183
tan	-.3025002	.2023994	-1.49	0.143	-.7112541	.1062537
fsz	.1160394	.1313137	0.88	0.382	-.149154	.3812328
_cons	-.7112747	.8933356	-0.80	0.431	-2.515402	1.092853
sigma_u	.10765458					
sigma_e	.25789984					
rho	.14838972	(fraction of variance due to u_i)				

F test that all u_i=0: F(4, 41) = 0.75 Prob > F = 0.5637

. est store fixed

. xtreg roa lev grw tan fsz, re

Random-effects GLS regression
 Group variable: id
 R-sq: within = 0.4566
 between = 0.9089
 overall = 0.4970
 corr(u_i, X) = 0 (assumed)

Number of obs = 50
 Number of groups = 5
 Obs per group: min = 10
 avg = 10.0
 max = 10
 Wald chi2(4) = 44.46
 Prob > chi2 = 0.0000

roa	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
lev	.3271718	.0512945	6.38	0.000	.2266364	.4277072
grw	-.1357337	.0572145	-2.37	0.018	-.2478721	-.0235954
tan	-.1267144	.1549831	-0.82	0.414	-.4304758	.1770469
fsz	.1513458	.0723572	2.09	0.036	.0095284	.2931633
_cons	-1.030496	.509372	-2.02	0.043	-2.028847	-.032145
sigma_u	0					
sigma_e	.25789984					
rho	0	(fraction of variance due to u_i)				

. est store random

. hausman fixed random

	— Coefficients —		(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
	(b) fixed	(B) random		
lev	.374218	.3271718	.0470462	.0413585
grw	-.1830382	-.1357337	-.0473045	.0433929
tan	-.3025002	-.1267144	-.1757857	.1301759
fsz	.1160394	.1513458	-.0353064	.1095798

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(4) &= (b-B)'[(V_b-V_B)^{-1}](b-B) \\ &= 2.17 \\ \text{Prob}>\text{chi2} &= 0.7037 \end{aligned}$$

. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

$$\text{roa}[\text{id},t] = \text{xb} + u[\text{id}] + e[\text{id},t]$$

Estimated results:

	Var	sd = sqrt(Var)
roa	.1187409	.344588
e	.0665123	.2578998
u	0	0

Test: Var(u) = 0

$$\begin{aligned} \text{chibar2}(01) &= 0.00 \\ \text{Prob} > \text{chibar2} &= 1.0000 \end{aligned}$$

```
. reg roa lev grw tan fsz, robust
```

Linear regression

```
Number of obs =    50
F( 4, 45) =    1.95
Prob > F      =    0.1179
R-squared    =    0.4970
Root MSE    =    .25502
```

roa	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]
lev	.3271718	.1990028	1.64	0.107	-.0736404 .727984
grw	-.1357337	.0610028	-2.23	0.031	-.2585996 -.0128679
tan	-.1267144	.1182269	-1.07	0.290	-.3648356 .1114067
fsz	.1513458	.0582864	2.60	0.013	.033951 .2687406
_cons	-1.030496	.4398858	-2.35	0.023	-1.915464 -.145274

```
. xtgls roa lev grw tan fsz
```

Cross-sectional time-series FGLS regression

```
Coefficients: generalized least squares
Panels:       homoskedastic
Correlation:  no autocorrelation
```

```
Estimated covariances =    1      Number of obs      =    50
Estimated autocorrelations =    0      Number of groups   =    5
Estimated coefficients =    5      Time periods       =   10
Log likelihood          = .0077623      Wald chi2(4)      =   49.40
                          Prob > chi2      =    0.0000
```

roa	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
lev	.3271718	.0486623	6.72	0.000	.2317955 .4225481
grw	-.1357337	.0542784	-2.50	0.012	-.2421175 -.02935
tan	-.1267144	.1470299	-0.86	0.389	-.4148877 .1614588
fsz	.1513458	.068644	2.20	0.027	.016806 .2858857
_cons	-1.030496	.4832327	-2.13	0.033	-1.977615 -.0833771

Enhancing Accountability through Budget Monitoring and Evaluation at the Local Government Setting in Nigeria.

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Abstract

The paper qualitatively discusses budget monitoring and evaluation at the local government setting in Nigeria by reviewing relevant literature in this area. The main objectives of budget monitoring and evaluation are to ensure accountability and budgetary control. Budget monitoring, evaluation and control at the local governments may take the patterns of: Executive Based Monitoring, Legislative Based Monitoring and Monitoring through the use of Vote Book/Authority to Incur Expenditure. There are several factors that hinder budget monitoring and evaluation at the local government level in Nigeria and these are: Lack of Political will by Chief Executives; Inadequate Legal Framework for Budget Monitoring and Evaluation; Lack of Clarity of Roles and Responsibilities; and Public Availability of Information. The paper recommends that to improve budget monitoring and evaluation at the local government level in Nigeria, the political leadership represented by the Chairman and the Supervisory Councilors as well as the legislative council of local governments have to recognize the need for budget discipline and the importance of the budget as a fiscal tool that can aid them in implementing development programmes; there is also the need to reform the legal framework for public budgeting in Nigeria through the enactment of a comprehensive, over-arching budget law to replace obsolete laws and decrees and the provision of information with respect to budget implementation should be made a routine function of government.

Key words: Budget Process, Budget Monitoring, Budget Evaluation, Local Government.

Introduction

The failure of government at all levels in Nigeria; particularly at the third tier to deliver good governance has often been blamed on the inability to implement outlined development programmes. This non implementation of developmental programmes is often the result of non adherence to or non execution of approved budgets which is the consequence of lacking budget monitoring and evaluation. The result of this has been the near absence of infrastructural facilities such as roads, safe water, primary education and so on and a very high level of poverty in our local government areas where the vast majority of the Nigerian population resides despite huge allocation of funds to this tier of government.

Budget monitoring refers to the process of budgetary control which ensures that an entity's operations and activities are carried out in line with the approved budget, while budget evaluation is an assessment that attempts to ascertain the extent to which the approved budget is implemented. Budget monitoring and budget evaluation are in tandem with each other and is a function of both the executive and legislative arms of government and the public as stakeholders can also be involved through the organized civil societies.

When a good system of budget monitoring and evaluation is in place it can help promote transparency and accountability in governance and it can also help a willing government to deliver the dividends of democracy to its citizenry by ensuring human and sustainable development and the fulfillment of the yearnings of the people. The absence of budget monitoring and evaluation on the other hand results in haphazard development, lack of good governance, a non responsive service delivery, corruption and mass poverty which is the situation Nigeria finds herself in today.

It is with the aforementioned background in mind that this paper seeks to examine budget monitoring and evaluation at the local government setting in Nigeria. The rest of the paper is presented in various sections seriatim: Budget process; Budget monitoring and evaluation; Hindrances to budget monitoring and evaluation; Recommendations and Conclusion.

Budget Process

Budget process refers to the totality of the steps and procedures undertaken in the preparation, execution, monitoring, control and review of a budget.

DFID (2001) has pointed out that the budget process differs between countries, however most budget processes have six generic interactive stages namely: Policy review, strategic planning; budget preparation; budget execution; accounting and monitoring of expenditures and revenue; and finally reporting and audit.

Policy review is an annual evaluation of the results of public expenditure to inform the updating of policies and plans and may take the form of an annual public expenditure review or a legislative process involving reports to the legislature or it may be done on adhoc basis, such as what is referred to as accountability briefings where local government chairmen in Nigeria brief the public about their stewardship and get reactions from their audience which assists them in updating their policies and plans.

Strategic Planning involves setting long and medium term expenditure targets on the basis of macro economic projections within this framework policy targets and expenditure priorities are specified. Budget preparation has to do with the submission of expenditure bids within budget guidelines and expenditure limits circulated by the ministry of finance. This culminates in the preparation of the budget by ministry of finance and legislative review and approval.

Budget execution takes place when budget appropriations are approved, resources disbursed to the spending agencies to implement expenditure programmes.

Accounting and monitoring of expenditures and revenues is the tracking of the composition and level of revenues and expenditure over the year and monitoring of the outputs of expenditure.

Reporting and audit is carried out by the Auditor General who reviews compliance with the budget, reporting in details to the public Accounts Committee which advises the legislature and initiates corrective action if necessary.

Budget monitoring and evaluation falls within the fifth and sixth stages of the budget process which is accounting and monitoring of

expenditures and revenues; and reporting and audit.

The budget process in Nigeria

Nigeria's 1999 constitution as well as other laws and regulations, provide a frame work for budget planning, enactment, implementation and monitoring. The constitution gives authority to the National Assembly to determine government expenditure at the Federal level, the State houses of assembly at the state level and the Legislative council at the local government level (oshuwa 2006).

The budget process at the state level in Nigeria has been outlined by Hassan (2001) as consisting of the following five phases:

- i. The budget conception and preparation phase. This involves the issuance of the call circular inviting ministries/departments to submit their proposals for the coming year with instructions on the procedures for presentation usually from the budget department. Collation of the responses to these call circular and the screening of these responses to ensure compliance with the principles and guidelines set out in the production of draft estimates.
- ii. The ministerial phase. Here, the ministry of finance screens the draft measuring the estimates against projected available resources and determines their conformity with government policy.
- iii. The executive council phase. This phase comprises the Chief Executive (President/Governor) and his cabinet (Ministers/Commissioners) to deliberate on the draft estimates, ascertaining their compliance with general goals of government in the financial year. When this estimates are ratified by the Executive council, they become an appropriation bill.
- iv. The Assembly phase. The bill earlier ratified by the executive is forwarded to the parliament as an appropriation bill for approval in accordance with the 1999 constitution.
- v. The appropriation Act phase. This is phase at which the budget is finally given approval by the Assembly. The approved budget is returned to the Chief Executive for assent. If it is signed, it becomes the appropriation act for the year. Budget

execution, monitoring and evaluation follows the enactment of the appropriation act and concludes the process.

The budget process at the local government level follows essentially a procedure that is similar to the budget process at the state level. The planning department of each local government is supposed to prepare the draft estimates for the coming year after receiving inputs from the other departments. These drafts are forwarded to the chairman who deliberates with the supervisory councilors in a council meeting and ratifies these draft estimates. The ratified estimates are then forwarded to the legislative council for approval. When approved, they become the budget of the local government. Budget implementation, monitoring and evaluation then follows.

Budget Monitoring and Evaluation

The main objectives of budget monitoring and evaluation are to ensure accountability and budgetary control.

Akpa (1997) defined accountability as a precept requiring that government's action be reported, explained and justified to the people from time to time on a consistent basis under the understanding that governance is a social contract between the ruler and the ruled.

Accountability is commonly referred to as answerability for one's actions or behaviour in an organization or state of affairs. The concept involves the development of objective criteria of evaluation by which the performance of duties by individuals or groups in an organization or state are measured. Its crucial elements are clear definition of responsibility, reporting mechanisms and a system of review, reward, and sanctions (Agada 2005).

A government that practices full accountability using budget as a tool may enjoy legitimacy and credibility, loyalty and patriotism, enhanced use of power and authority and above all an egalitarian society. Accountability is quite essential for efficient operation of any organization whether public or private. It is particularly important in the area of governmental organizations whose responsibility is to provide essential services to meet the needs of all citizenry.

Budgetary control on the other hand, refers

to actions necessary to ensure that the objectives, plan, policies and standards outlined in the budget as attained.

Budget monitoring, evaluation and control at the local governments may take understated patterns:

- i. **Executive Based Monitoring**
This is a system of budget monitoring and control which can be carried out by the respective departments of the local government through their supervisory councilors who are the political and executive heads of their departments and are in turn responsible to the chairman. Civil servants working under them are expected to be loyal and accountable to them. Through codes of conduct, merit systems, discipline, hierarchy and inspection, the civil servant are expected to carry out government directives, based on existing procedures, rules, regulations and approved budgets. This creates the enabling environment for the fulfillment of governmental objectives as enunciated in the budget.
- ii. **Legislative Based Monitoring**
The legislative council has a variety of powers to monitor budget implementation. They have powers first to authorize the use of funds by scrutinizing and approving the budget. They have powers to investigate budget implementation and they may initiate grievance ventilation should the executive breach the objective of the budget.
- iii. **Monitoring through the use of Vote Book/Authority to Incur Expenditure**
The vote book is a memorandum Ledger or subhead of a department's recurrent and capital expenditure which has been duly authorized to be appropriated by legislation. It is a fiscal accountability tool for watching and controlling the vote. It is designed to show amount appropriated by law in the annual estimates, additional provision by warrant and virement (Agada 2005 b).

Each subhead account begins with the amount voted as per the year's budget and is drawn down by actual payment and commitments (issuance of local purchase orders,

job orders, contracts or indents). At the end of the month, departments are expected to extract balances to produce returns on recurrent expenditure and capital expenditure.

The objective of using the vote book as a fiscal tool for budget monitoring includes:

- a) To ensure that the vote is not over spent.
- b) To allow for effective expenditure control.
- c) To ensure that the vote is utilized for the purposes for which it is budgeted.
- d) To indicate clearly uncommitted balances.
- e) To reveal the total liabilities at any point in time.
- f) To show amount authorized and spent for each head/subhead.
- g) Budget monitoring and evaluation via variance analysis.

A variance is the difference between the estimated and the actual expenditure for the budget period.

Variance analysis can be employed as a tool for budget evaluation. It is post mortem arrangement to assess the effectiveness and efficiency of fund application along side service delivery as contained in the budget (Agada 2005c).

A surplus variance may not necessarily mean effective service delivery; therefore there may be a need for investigation. Variance analysis reports are good controls and inputs for future budgets.

Schick (2004) posits that Budget Monitoring can take the form of expenditure control which has three stages namely external control, internal control and managerial accountability.

External control is exercised by an external supervisory body or other central agencies such as the finance ministry, office of the Auditor General for local government or the house of assembly through its committee in charge of local governments or the state bureau for local government and chieftaincy affairs. Specific inputs such as items of expenditure, purchases or projects are the target of control and the mode of accountability is to ensure compliance with line budget, civil service rules and other rules.

Internal control is exercised by the

spending departments. Here major expenditure items such as total salaries, supplies, equipments and so on are controlled and the mode of accountability is to audit the system so as to assure that internal controls meet government standards.

Managerial accountability is exercised by the spending or responsibility unit and what is controlled here are the global operating budgeted running costs and outputs, while the mode of accountability is reports and audits of outputs costs, quality and other results.

Hindrances to Budget Monitoring and Evaluation

There are several factors that hinder budget monitoring and evaluation at the local government level and indeed in entire public sector of Nigeria. These factors are outlined underneath:

- I. **Lack of Political will by Chief Executives**
Budgetary accountability is also referred to as financial accountability and it obligates all public officers handling public funds to account for the allocation, custody and use of such entrusted resources in accordance with established rules, policies and practices. The performance of public servants in position of trust must be monitored and controlled and in end adjudged on the dimensions of performance quality or inefficiencies and abuse of office. To be able to meet these standards there is a need to put in place a sound financial management system, a robust accounting and auditing system as well as penalties for attempts to overturn the system via sharp practices (Akpa 2008)

As argued by Akpa (2008) above, budget monitoring which is a prerequisite of budgetary accountability, requires very high standards which many a chief executive of local government are unwilling to subject themselves to. They would rather operate according to their whims and caprices which are largely dictated by political considerations that often negate budgetary consideration and sound financial management practices.

The import of this is that the lack of political

will by chief executives hinders budget monitoring and evaluation at the local government level.

- ii. **Inadequate Legal Framework for Budget Monitoring and Evaluation.**

Nigeria's 1999 constitution as well as other laws and regulations provide a framework for budget planning, enactment, implementation and monitoring, however, the existing frame work is inadequate and it includes contradictory and ambiguous provisions.

The constitution gives authority to the legislature to determine government expenditure yet it does not call for parliamentary approval of government revenue or financing plans. The constitution is also silent on the amendment powers of the legislature and on appropriate time frames for budget debate and approval. There is no law that specifies what documents are to accompany the budget or how and when budget information is to be disseminated. Similarly, there is no requirement to release information on actual spending, procurement, public assets and liabilities in year. The legal framework does not provide for public participation in the budget process (Oshuwa 2006 b)

- iii. **Lack of Clarity of Roles and Responsibilities**

Even though the constitution defines roles and responsibilities in the budget process, these are not clear in practice. Multiple institutions have similar and over lapping responsibilities over budget preparation, management and monitoring. There is duplication of budget related responsibilities within the executives and amongst the three tiers of government. The demarcation of authority between the executive and the legislature over government budgeting is not clearly defined and the constitutional provisions are subject to different interpretation often leading to friction (Oshuwa 2006 c).

- iv. **Public Availability of Information**

Available budget information is not

comprehensive or user friendly. Information on actual spending by government is generally irregular, incoherent and inadequate. The reliability of budget information is questionable, marked by significant discrepancies between projected and actual expenditure. Poor access to and quality of budget information undermines the ability of civil society and the media to research and monitor government budgeting.

Conclusion

Budget monitoring and evaluation as part of the budget process is no doubt an essential financial tool that can aid in the promotion of transparency, accountability and good governance. It can aid in the attainment of enunciated government objectives and development programmes. The absence of budget monitoring has often been responsible for financial recklessness and corruption. Despite the recognition of this, budget monitoring and evaluation at the third tier of government has not been given the necessary attention that it deserves from the political leadership that is supposed to set the pace for the civil servants to follow. There is the need for budget reforms so as to give budget monitoring the attention that it deserves so that the populace can benefit from this fiscal tool of financial accountability.

Recommendations

To improve budget monitoring and evaluation at the local government level, the political leadership represented by the Chairman and the Supervisory Councilors as well as the legislative council have to recognize the need for budget discipline and the importance of the budget as a fiscal tool that can aid them in implementing development programmes for their respective local governments. There has to be a paradigm shift in the perception and the thought process of the leadership. Where political leadership perceives its position as an avenue for self aggrandizement, then budgeting as whole will be an exercise in futility, because the leadership will not give any support to budget monitoring because it will be at variance with their personal goals. This calls for value reorientation.

It is hereby recommended that before

elected officials at the local government take office, workshops and seminars on budgeting which emphasize the essence of budgetary control should be organized for them. Such a workshop apart from inculcating into the leadership the basic precepts of budgeting will also make them appreciate the necessity for budget monitoring and evaluation.

Secondly, there is the need to reform the legal framework for public budgeting in Nigeria; there is a need for a comprehensive, over-arching budget law to replace obsolete laws and decrees. The new law should emphasize budget monitoring and evaluation as part of the oversight function of the legislature. The new law should also clearly clarify the roles of the three tiers of government in budget monitoring and where there are duplications and overlapping these should be removed so that each arm of government will know exactly what is expected of it.

Thirdly, provision of information with respect to budget implementation should be made a routine function of government, such that the Legislature, electorate, the civil society and other interrelated stakeholders can monitor and evaluated budget implementation.

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Effect of Liquidity Management on Corporate Profitability of Listed Industrial Goods Firms in Nigeria.

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Abstract

This study is concerned with finding the effect of liquidity management on corporate profitability of listed industrial goods firms in Nigeria. Using a multiple regression model on data obtained from the annual reports and accounts of 10 sampled listed industrial goods firms for a period of 10 years from 2003 to 2012. Return on Asset (ROA) was used to proxy for profitability and Debtor's Collection Period (DCP), Creditor's Payment Period (CPP) and Inventories Conversion Period (ICP) as proxies for liquidity management. The results of the analysis shows that Debtor's Collection Period (DCP), and Inventories Conversion Period (ICP) have significant effect on profitability while, Creditor's Payment Period (CPP) does not affect profitability of industrial goods firms in Nigeria. The study therefore recommends that managers should monitor Inventories Conversion Period (ICP) and Debtor's Collection Period (DCP) in order to prevent wastages and remain liquid for possible continuous operation.

Keywords: Liquidity management, Profitability, Return on Asset, Industrial Goods Firm.

Introduction

Working capital management is a very important factor in financial affairs of companies, which has a direct positive effect on profitability as well as liquidity of the company. Liquidity and profitability are both the two different sides of same coin. Optimum level of liquidity guarantees a firm to meet their short term debts and the proper management of flow can be promised by a profitable business. Liquidity shows the ability of company in responding to short-term obligations. A firm ought to optimize its liquidity and profitability while conducting its daily business operations.

Working Capital Management contains proportional balance of working capital components which include: debtors, inventory and payables and the use of cash effectively for daily business operations. Proper optimization of working capital balance means minimizing the working capital requirement and realizing maximum possible revenues (Ganesan, 2007). There seems to be a strong linear relationship between profitability of the firm and its working capital efficiency. Thus, profitability can be used as a measure of the financial performance of a company.

Proper Liquidity Management ensures that the company increased its profitability. Effective liquidity management is very important due to its significant effect on profitability of company and thus the existence of a company in the market. If a firm minimizes its investment in current assets, the resulting funds can be invested in value creating profitable projects, so it can increase the firm's growth opportunities and shareholders return. However, management can also face liquidity problems due to underinvestment in working capital. The ability of financial managers to effectively and efficiently manage their receivables, inventories, and payables has since remained a puzzle to be fixed and how the financial managers manages their receivables, inventories, and payables to have a significant effect on the success of the business as well as on profitability demands attention. Therefore, this study objective is to determine the effect of liquidity management as it relates to Debtor's Collection Period (DCP), Creditor's Payment Period (CPP) and Inventories Conversion Period (ICP) on the profitability of listed industrial goods companies in Nigeria. Consequently, the

study is a modest attempt to enhance the extant knowledge on how well Industrial goods companies manage their liquidity in order to increase profitability. The subsequent sections of the paper discusses: conceptual issues; theoretical framework; review of related empirical literature; methodology; data analysis and results; conclusion and recommendations.

Liquidity Management

Liquidity management is necessary for all businesses, small, medium or large. Because, it is about collecting cash from customers in time to ensure no difficulty in paying short term debts. Therefore, when a business does not manage its liquidity well, it will have cash shortage and will result in difficulty in paying obligation (Pandy, 2005).

An asset is liquid if it can be converted into cash immediately or reasonably soon without a loss in value. Low liquidity leads to the inability of a company to pay its creditors on time and honor its maturing obligation to suppliers of credit, services and goods. This could result in losses on account of non-availability of supplies and lead to possible insolvency. Also, the inability to meet the short term liability could affect the company's operations and in many cases it may affect its reputation as well. Inadequate cash or liquid assets on hand may force a company to miss the incentives given by the suppliers of credit, services, and goods as well. Loss of such incentive may result in higher cost of goods which in turn affects the profitability of the business. Every stakeholder has interest in the liquidity position of a company. Suppliers of goods will check the liquidity of the company before selling goods on credit. Employees should also be concerned about the company's liquidity to know whether the company can meet its employee related obligations in terms of salary, pension and provident fund. Thus, a company needs to maintain adequate liquidity.

Measures of Corporate Liquidity Management

The liquidity of a company is measured with the use of some ratios refers to as liquidity ratios. These groups of ratios measure the ability of the firms to meet its current obligations (Kamath, Khaksari & Hylton, 2000). The most

common ratios, which indicate the extent of liquidity or lack of it, are as follows:

Debtors Collection Period (DCP) This ratio shows number of days it takes an organization to recover its credit sales. The shorter the period, the better for the organization. Account receivables with longer recoverable period possess the risk of bad debt for the company and also affect liquidity in the short run (Parthan & Skuly, 2011). The Debtor Collection Period (DCP) ratio is calculated by dividing Trade debtors by Turnover multiplied by 365

$$\text{DCP} = (\text{Average Trade Debtors} / \text{Turnover}) \times (365 \text{ days})$$

Creditor Payment Period (CPP) This ratio shows the number of days the company is required to settle its short term obligations. The longer the period, the better for the company as it gives the company levers to recover its receivables. Where the period is shorter than the debtors collection period, it exacts pressure on the liquidity of the company (Angahar & Agbo, 2014). CPP ratio is calculated by dividing Average Trade Creditors by Cost of Goods Sold multiplied by 365.

$$\text{CPP} = (\text{Average Trade Creditors} / \text{Cost of Goods Sold}) \times (365 \text{ days})$$

Inventory Conversion Period (ICP) Inventory Conversion Period (ICP) is the sum of raw material conversion period (RMCP), work-in-process conversion period (WIPCP) and finished goods conversion period (FGCP).

$$\text{ICP} = \text{RMCP} + \text{WIPCP} + \text{FGCP}$$

The raw material conversion period is the average time period to convert materials into work-in-process. Work-in-process conversion period is the average time taken to complete the semi-finished or work-in-process. Finished goods conversion period is the average time taken to sell the finished goods (Parthan & Skuly, 2011).

The Concept of Profitability

Profitability is a measure of the amount by which a company's revenue exceeds its relevant expenses. Profitability ratios are used to evaluate the management ability to create earnings from revenue – generating bases within the organization. It also indicates how much room a

company has to withstand a downturn, fend off competition and mistakes. Profitability is the relationship of income to some balance sheet measure which indicates the relative abilities to earn income on assets. It measures management efficiency in the use of organizational resources in adding value to the business.

Profitability is very important because it is a cheapest source of fund (Aburime, 2007). Potential investors are interested in profitability ratios because, only a profitable organization can provide a return on their investment. Managers, on the other hand, are interested in measuring the operating performance in terms of profitability. Hence, a low profit indication would suggest ineffective management and investors would be hesitant to invest in the company. Irrespective of the fact that profitability is an important aspect of business, it may be faced with some weakness such as window dressing of the financial transactions and the use of different accounting principles yet, a company must earn profit to survive and grow over a long period of time.

The profitability ratios are usually used to measure the operating efficiency of the company. Emphatically, it measures how efficiently management can make profit from sales (Davydenko, 2011). The profitability ratio employed for this study as a profitability measure is Return on Asset (ROA). Return on Assets expresses the net income earned by a company as a percentage of the total assets available for use by that company. Higher ROA suggests that the company is more efficient in the use of its resources (Wen, 2010). Companies with higher amounts of assets should be able to earn higher levels of income. ROA measures management's ability to earn a return on the firm's assets. The income amount used in this computation is income before any distribution to those who provided funds to the company. ROA is computed by dividing net income plus interest expense by the company's average investment in asset during the year.

$$\text{ROA} = (\text{Net Income after Tax} + \text{Interest}) / (\text{Average Total Assets during the Year})$$

Review of Related Empirical Studies

Kulkanya (2012) reviewed the impact of working capital management on profitability. The primary objective of this research was to test the effects of working capital management on

profitability. The regression analysis was calculated on a panel sample of 255 companies listed on the Stock Exchange of Thailand from 2007 to 2009. Therefore, the results showed an inverse relationship between the operating profits and inventory conversion period and the receivables collection period. However, there are no effects on profitability by extending the payables deferral period. The findings also demonstrated that industry characteristics have an impact on gross operating profits.

Malik, Wasem and Kifayat (2012) empirically tested that effective liquidity management is very important for the success of a business because it has a direct positive impact on the profitability of the business. For this purpose, secondary data were collected from listed firms in Karachi stock exchange for the period of 2001-2006 with an attempt to examine the relationship between profitability, and working capital management criteria. The population of the study is Pakistan textile industry, and the findings of the study demonstrate that there is a strong positive relationship between profitability and cash, accounts receivable and inventory; but there is a negative relationship between profitability and accounts payable. Therefore, this indicates that increase in cash, inventory and credit sales will result in an increase in the profitability of firm.

Mobeen and Naveed (2013) empirically examine the effects of liquidity management on the profitability of Pakistan cement industry. Secondary Data was collected from Annual Reports and the sample size is 10 consisting of Pakistan cement Companies listed in KSE from 2003-2008. The relationship between working capital management and profitability is examined using statistical tools. The result accepts the hypothesis that there is a positive relationship between working capital management and profitability on the cement sector of Pakistan.

The study on the relationship between liquidity management and profitability was conducted by Sarbapria (2011), according to this study, there is a positive relationship between liquidity management and profitability of the company; hence for this purpose, the author took sample of 311 Indian manufacturing firms of 14 years from 1996-2010 and studied the impacts of working capital management on profitability,

and including the debtors turnover ratio, inventory turnover ratio, debt ratio and many other ratios for measuring the working capital and return on assets and others for measuring profitability of Indian manufacturing firms. After analyzing the results, it was proved that there is a significant relation between liquidity management and corporate profitability firms.

Zygmunt (2013) recognize the liquidity impact on profitability using population study including all polish listed companies for 9 years (2003 – 2011) using Pearson's correlation coefficient and OLS regression model. They find that, the empirical research over the liquidity impact on profitability prove the existence of statistically significant relationship between liquidity and profitability. The study concluded that the empirical study provides the basis to conclude about existence of liquidity impact on profitability.

Niresh (2012) while conducting a study on trade-off between liquidity and profitability using correlation analysis and descriptive statistics. The study cover 31 manufacturing firm out of 39 listed in the Colombo stock exchange (CSE). They find that, there is no significant relationship between liquidity and profitability and concluded that manufacturing firms should concentrate on maximizing profit while preserving liquidity. Therefore in our frame work manufacturing firms should maintain some degree of liquidity so that profit would be maximized.

A study by Moss and Stine (2012) on retails firms reveals that firm's size is a factor in the length of its cash conversion cycle, and that a significant positive relationship exists between the cycle and the current and quick ratios. Other studies that empirically examined the relationship between profitability and liquidity showed that there exists a significant and negative relation between profitability and cash conversion cycle (Eljelly, 2004). A study conducted over 22,000 public companies by Hutchison et al. (2007) indicated a direct correlation between shorter conversion cycle and higher profitability for 75% of industries.

In a study to measure the effect of working capital management on the net operating profitability and liquidity, Raheman and Nasr (2007) selected a sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of

6 years, and there is a strong positive relationship between variables of working capital management and profitability of the firms. The study also shows a significant positive relationship between liquidity and profitability. Variable used in their analysis included average collection period, inventory turnover in days, average payment period, cash conversion cycle, current ratio, debt ratio, size of the firm and financial assets to total assets ratio.

In the light of the above empirical reviews, this study seeks to evaluate the effects of liquidity management on corporate profitability of industrial goods firms in Nigeria in order to establish whether or not liquidity management has any effect on corporate profitability of industrial goods firms listed on the floor of the Nigerian Stock Market.

Methodology

This study is set to ascertain the effects of liquidity management on corporate profitability of industrial goods firms quoted on the NSE. To achieve this objective, secondary data obtained from the Annual Reports and Accounts of the sampled industrial goods firms quoted on the floor of the Nigeria Stock Exchange (NSE) are used. A multiple regression analysis technique is used to analyze data. The multiple regression analysis was used to investigate the relationship between the dependent and independent variables (Akpa, 2011). The choice of this technique is because of its ability to account for several predictive variables simultaneously, thus modeling the property of interest with more accuracy (Petrocelli, 2003). The t-statistic is used to test the research hypotheses. The critical t-value for a 5% level of significance is $t_{\pm \alpha/2}$, that is, $t_{\pm 0.05/2} = \pm 1.96$. Based on this, the decision rule for testing the hypotheses is to accept (or reject) the null hypothesis if the critical t-value is greater (or less) than the calculated t-value (Agburu, 2001).

The population of this study consists of all Thirteen (13) industrial goods industries in the manufacturing sector of Nigeria economy that are quoted in the Nigerian Stock Exchange (NSE) as at 31st December, 2012. A sample of ten (10) industrial goods firms are used in the study. The sampled firms are: Ashaka Cement Plc., Berger Paints Plc., Cement Co. of Northern Nigeria Plc., Dangote Cement Plc., First Aluminium Nigeria Plc., Portland Paints and Products Nigeria Plc., Lafarge Africa Plc., Avon Crown Caps and Containers Plc., Beta Glass Co. Plc., and CAP Plc.

The choice of these ten (10) industrial goods firms is used because they have the relevant data for all the years of the study (2002 to 2012). The sample selection was purposive to exclude: Cap Plc., ND Meyer Plc. and IPWA Plc., because they have no performance report for the period of study.

This study uses Return on Assets (ROA) as a measure of profitability the dependent variable and liquidity management (the independent variable) is measured using Inventories Conversion Period (ICP), Debtor's Collection Period (DCP), and Creditor's Payment Period (CPP). The study adopts and modifies the models of Parthan and Skuly (2011) in determining the impact of liquidity management and corporate profitability in Nigerian manufacturing firms. The model is presented below:

$$ROA = \beta_0 + \beta_1 DCP + \beta_2 CPP + \beta_3 ICP + e_i$$

where:

ROA	=	Return on Assets
β_0	=	Constant of the model
$\beta_1 - \beta_3$	=	Coefficients of the model
DCP	=	Debtor's Collection Period
CPP	=	Creditor's Payment Period
ICP	=	Inventory Conversion Period
e_i	=	Random error term representing factors other than those specified in the model.

Table 1: Summary of Variable Definition

Variables	Variable Discription	Variable Type	Definition
ROA	Return on Assets	Dependent	EBITt/total asset
DCP	Debtor's Collection Period	Independent	(Average Trade Debtors /Turnover) X (365 days)
CPP	Creditor's Payment Period	Independent	(Average Trade Creditors /Cost of Goods Sold) X (365 days)
ICP	Inventory Conversion Period	Independent	RMCP + WIPCP + FGCP

Where:

RMCP = raw material conversion period

WIPCP = work-in-process conversion period and

FGCP = finished goods conversion period

RMCP = Raw Material Inventory X 360 days/Raw material consumed

WIPCP = Work in Process Inventory X 360

days / Cost of production

FGCP = Finished Goods Inventory X 360 days / Cost of goods Sold

Results and Discussions

This section is concern with the presentation and analyses of data.

Table 2: Result of Regression Coefficient for the Study Model

Variables	Coefficient	Std. Error	T Statistics	Prob.
DCP	0.256	.042	2.561	.811
CPP	-0.841	.043	-0.251	.000
ICP	0.351	.058	3.441	.068
CONSTANT	0.47	.056	.825	.413

Prob (F. Statistics) = 24.009

R – Squared = 0.659

Adj. R = Squared = 0.645

Dependent Variable: ROA

Independent Variable: DCP, CPP, ICP

Source: SPSS output file.

The result from the regression equation is shown in the table above. From the regression equation table above, the coefficient of determination (R^2) indicates that about 66% of change in return on assets is accounted for by the explanatory variables while the adjusted R – square of 64.5% further justifies this effect.

Test of Hypotheses

H_{01} : *There is no significant impact of Debtor's Collection Period (DCP) on Corporate Profitability in Industrial Goods Firms in Nigeria.*

In the first hypothesis, it was assumed that there is no significant effect of DCP on corporate profitability. Table 4.3 provides results for the testing of this null hypothesis (H_{01}) above. The result shows that the calculated value of t for DCP

is 2.561. Therefore the critical value (1.96) is less than the calculated value of t for DCP as shown in Table 2. Thus the null hypothesis is rejected and it is concluded that the DCP has a significant effect on corporate profitability of industrial goods firms in Nigeria. This position is confirmed when the level of significance for this study (0.05) is compared with the significant level (sig) of DCP (0.811) as shown in Table 2.

H_{02} : *There is no significant impact of Creditor's Payment Period on Corporate Profitability in the Industrial Goods firms in Nigeria*

Again Table 2 provides result for testing the above formulated null hypothesis. The result shows that the calculated value of t for CPP is -0.251. Therefore, the critical value (1.96) is greater than the calculated value of t for CPP as shown in Table 2 on page 62. Thus the null hypothesis (H_{02}) above is accepted and the conclusion is that the profitability of industrial goods firms in Nigeria is not significantly influenced by CPP. This position is also confirmed when the level of significance for this study (0.05) is compared with the calculated significant level (sig) for CPP (0.00) as shown in

Table 2.

Ho₃: There is no significant impact of Inventory Conversion Period on Corporate Profitability of Industrial Goods Firms in Nigeria.

In the third hypothesis, it was assumed that there is no significant effect of ICP on corporate profitability. Table 2 provides results for the testing of the hypothesis above. The result shows that the calculated value of t for ICP is 3.441. Therefore the critical value (1.96) is less than the calculated value of t for ICP as shown in Table 2. Thus, the null hypothesis (Ho₃) is rejected leading to the conclusion that the profitability of the industrial goods firms in Nigeria during the period under review is significantly influenced by the ICP. This position is also confirmed when the level of significance for the study (0.05) is compared with the calculated significance level (sig) for ICP (.066) as shown in Table 2.

The results from the regression coefficients for the study shown on table 4:3 and the test of the research hypothesis on the effect of liquidity management on corporate profitability of industrial goods firms in Nigeria are interpreted as follows:- The effect of the regression coefficient indicates the DCP has an insignificant (0.811) positive (0.256) relationship with corporate profitability (measured by ROA) of the sampled industrial goods firms for the period under review. The positive relationship for the present study is consistent with previous empirical studies such as Malik, Wasem and Kifayat (2012), Pathan and Skuly (2011) who also found an insignificant positive relationship between DCP. The insignificant positive relationship between DCP and corporate profitability of industrial goods firms in Nigeria implies that the profitability of these industrial goods firms will be impacted negatively if the number of days it takes debtors to settle their accounts is increased and vice versa.

The result of regression coefficient also revealed that CPP has significant (.000) negative (-0.841) relationship with corporate profitability (measured by ROA) of the sampled industrial goods firms for the period under investigation. This negative relationship for the present study is consistent with previous empirical studies such as Malik, Wasem and Kifayat (2012) who also found a significant negative relationship between

CPP and corporate profitability and differs with the studies of Moss and Stine (2012); Raheman and Naser (2007). The negative relationship between CPP and corporate profitability implies that the profitability of industrial goods firms can be enhanced if firms have a longer CPP and vice-versa.

The result of regression coefficient revealed that ICP has a significant (.066) positive (0.351) relationship with corporate profitability (proxy by ROA) of the industrial goods firms in Nigeria during the period under review. This implies that when inventories stay longer in stores before they are sold, it lead to tie down of cash and increase in costs of storage, insurance, spoilage and obsolescence. These costs have adverse effect on corporate profitability of industrial goods firms in Nigeria. This is consistent with the works of Mobeen and Rehman (2013), Raheman and Naser (2007) and Sarbapria (2011)

Conclusion and Recommendation

Based on the findings above, the study concludes that Debtor's Collection Period (DCP) and Inventory Conversion Period (ICP) have significant effect on corporate profitability of industrial goods firms quoted on NSE during the period under review. The creditor's payment period (CPP) does not significantly affect profitability of industrial goods firms in Nigeria.

The study therefore, recommends that the managers of industrial goods firms in Nigeria should continuously monitor their inventory levels with a view to reducing the number of days inventory are held in store before they are sold. This will not only enhance their profitability and liquidity positions but will also maximize returns to shareholders and firm value in general.

Again, managers of industrial goods firms in Nigeria should reduce the period of time inventories stay in their stores before they are sold, this will reduce the cost of storage, insurance, spoilage and obsolesce.

In addition, the debtor's collection period should be repositioned in order to reduce the cash conversion cycle. This will improve the liquidity position of industrial goods firms in Nigeria and also reduce their over dependence on high interest loans for financing of their day to day operations which can affect profitability negative.

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Cost Benefit Analysis and Measuring Private Returns to Investment on Medical Doctor's Education and Training in Nigeria

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Abstract

This study seeks to examine the cost benefit analysis and measuring private returns on investment of medical doctor's education and training in Nigeria. The study adopts Ex-post factor research design and simple numeric analysis-percentage method; averages, cash flow payback period and cost benefit analysis in evaluating cost outlays with returns and minimum breakeven period. The study used both primary and secondary data collected on the tuition fees, other educational costs, and post registration earnings of the sampled Nigerian medical doctors. The study found out that a minimum of N24 million on averages (least cost method) is invested in the academics and professional training of doctors with a private rate of return on investment on medical education in Nigeria to the tune of 14 percent, which is slightly higher than the African regions 10.5 percent rate of return. In conclusion, medical education is heavily subsidized in other climes but averagely in the case of Nigeria. The study recommends that the cost and returns to medical education should be factored in whilst fixing the labour price/compensation packages and conditions of services of medical experts.

Keywords: Cost analysis, Return on Investment, Medical Training and Cost outlays

Introduction

The world health organisation (2000) World health report 2000 reviewed the state of health system of sovereign countries using various health indicators placed Nigeria in 187th position among 191 countries. Some published reports on the state of health systems in Nigeria reviewed that Nigerian health system, after many years of neglect and underfunding faced a great challenge of effectively basic health services for the majority of the population, particularly the poor (NHS DP, ABSHSDP II). These reports further stated that smooth operations of the health sector is hampered due to lack of in all areas including budgets, expenditure management; and that information on resource allocation towards it is crucial for enhancing equity in provision of healthy services, in planning process, facilitating resource mobilization and promoting efficiency. There are also other official reports from international agencies, the UNICEF and UNDP human development index (HDI) depicting pitiable state of education and low rate of human capital development in Nigeria.

The supply gap trend is also threatening achievement of health related millennium development goals in the African region. Based on these premises, the study considers about four pertinent problems with direct linkages or impact on medical education and costs of investing in the intellectual capital of doctors; insufficient number of doctors produced in Nigeria and supply gap, poor remunerations for medical doctors and incessant strike actions, lack of reliable data/information on average or unit cost of producing medical doctors alongside ascertainment of the amount of government subsidy in support of medical training and lastly, the problem of lack of information on private rate of return on investment to medical education against the back drop of prohibitive cost of medical education in other developing African countries and developed countries in USA resulting in accumulation of huge debt with repayment spreading late into some doctors active service years (Kiriga et al, 2006). It is common knowledge that academic education, professional training and man power development of the physicians is capital intensive globally and establishment of realistic estimates of the cost and earnings remain the

most appropriate step to health policy formulation (Chen, 2012).

In a related development, empirical literatures on the cost of producing medical doctors and medical specialist in many developed and developing countries are in abundance but such study is yet to be fully established in Nigeria. Against this backdrop incessant issues like; lack of data/information on the cost of training medical doctors, strike actions, shortage of doctors and lack of reliable financial reporting on utilization of health sector budgets in the three tiers of Nigerian government has led to the need for this study to be carried out on which the result and findings of this study will help in bridging the gap identified above.

The study therefore sought to achieve the following specific objectives include:

1. To determine the cost of education on a medical doctor in Nigeria.
2. To ascertain the benefit accruing to training a medical doctor in Nigeria.
3. To determine the pay-back period on medical practitioners trained in Nigeria.

Literature Review

Conceptual Framework

The concept of human capital is situated in the domains of macroeconomic development theory (Becker, 1993). Becker (1993), considered as the magnum opium on human capital and education as the vehicle for human capital development. (ground-breaking research or pacesetter in human capital research) entitled Human Capital: A theoretical and Empirical Analysis with special reference to education illustrates this domain. (Marimuthur, Arolassamu & Ismail (2009). Becker (1993) argued that there are different kinds of capital and that includes schooling, computer training and expenditure on health systems and medical services of which the education and training of the physicians forms part thereof (Roth, 2012).

It has been documented that expenditures and activities on education and medical care contribute to improve health conditions of the society, raise persons income and or earnings, and also add to a person's appreciation in knowledge, expertise, and literacy over a lifetime (Becker, 1993, 2008; Psacharopoulos, 2008, Marimuthur *et al*). Contextually, the actuarial monetary worth of qualified medical

practitioners can be imputed through measurement of private return to education (Roth (2012), Scheffler (2008), Kiriga, (2006)). Consequently, it is in keeping fully with the capital concept as traditionally defined or traditional definition that expenditures in education, training, human health-care systems and medical services are investments in human capital (Kiriga (2006), Franzini & Grassman (2007), Roth, (2012)). The resources committed into human capital development are not simply costs, but they are worth much more than that, but investments with valuable returns that can be calculated and measurable (Becker et al, Marimuthur, Arokessamu & Ismail (2009))

Fiamholtz (1961, 1980, 2002) in his pioneering contributions to the conceptual framework on human capital from accounting perspective, elucidated that human resources costs are recorded and treated in financial accounting records as recurrent expenses which reduce net income of enterprise as opposed to investment expenditures, that produce current and future benefits to the firms. Fiamholtz, Bullen & Hua (2002), further explained that the net benefits or earnings are just the only aspect of recurrent spending on human capital investment and benefits being reported or reflected in corporate financial reports (the balance sheet of companies). Similarly, expenditures on education, training and related costs are treated recurrent expenditure in public sector accounting / health accounts (Kiriga, 2007, Scheffler, 2008 and Psacharopoulos 1994).

Expenditures commonly incurred on education and training programmes are classified broadly into private and public costs. Psacharopoulos (1994), Becker (1975), Scheffler (2008) explained that private costs are those costs incurred by private investors in the production of a commodity, while public costs are those cost borne the state when good and services are produced. Private and public costs in education he incurred either by direct monetary expense or through an imputed cost (*Becker et al*); while social costs arise from the negative spill-over effect of a particular productive activity including education (Psacharopoulos, *et al*). There are other social benefits that are often derived from the operation of private project as a result of education and training.

Schultz, Becker, Scheffler and

Psacharopoulos explained that people who attained higher education receive higher salary or income that those with lower or non formal training. Schultz, Becker, Kwon (2009) posited that, in certain cases, the earnings of people who attained tertiary education can vary from profession to profession. A comparative analysis of the total cost of investment to education and the total estimated earnings over the expected active working life of a person yields the total return on investment (ROI) (Roth, 2012). It is in the same vein that the ROI is adoption of the ROI in a sensitivity analysis of the investment outlay applied in measuring and determination of the rate of returns (RORE) in the human capital measurement models. Different species of return to investment on education abound in the literature of human capital / human capital development accounting. These include; private returns, social returns and fiscal returns.

Private returns are based on the cost and benefits (earnings) to education as those realised by an individual participant, that is, how much was actually committed for his attainment of higher level of education in relation to what he gets back in terms of enhanced earnings (Psacharopoulos, *et al*). Private rate of returns are used to explain the behaviour of persons regarding the demand for education or equity effects of government subsidy to education. Similarly, social returns are based on cost and benefits (earnings) of education realisable the state or society as a whole. The costs are all inclusive and refer to what education really costs the average graduate or participant. The social returns to education are used to assess the efficiency of public spending on education as a guide on whether to expand or contract a particular tertiary or faculty.

Return on Education Investment: Return on Investment can be defined as a measure of returns on investment (ROI) is a measure of the monetary benefit obtained by an individual or household and or organisation in education and training programme over a specified time period in return for a given investment in education and training (Mincer, 1974, 1998, Psacharopoulos, 1994). In other words, the ROI measures the extent to which benefits (revenue income inflows or output) from investment in education or training exceeds the costs (resource input). Under method of analysis; to calculate the ROI,

analysts must first make estimates or other measurements of the costs and benefits associated with the relevant education and training programmes. Other concepts employed in CBA analysis on investment to education and human capital development include the pay-back period within which the initial capital investment outlay for education programmes or the internal rate of returns (IRR), discounted cash flow rules, net present value (NPV) of the investment outlay and income revenue earnings (in-flows) (Saharawati (2008).

Evolution and Development of Medical Education and Training in Nigeria

The practice of orthodox medicine and provision of medicine services in Nigeria started around 1860, about 150 years ago, when Dr. Baike administered 'Quinine' as medication for the cure of malaria. Thus, the foundation of medical services in Nigeria was introduced by the European explorers and deepened by the religious missionaries, who combined medical services as part of their evangelism work. The Catholic Church missionaries were in the forefront of medical evangelism, as the Catholic Mission established many hospitals and health-care facilities in many part of Nigeria; the first was Sacred Heart Hospital, Abeokuta. The Presbyterians Church Mission, Anglican Church, Seventh Day Adventist (SDA) Church and the Muslim missionaries followed in establishment of hospitals in parts of Nigeria.

Dr. (Sir) Benjamin Manuwa was the first Nigerian qualified medical doctor from the University of Liverpool in 1932. The earlier cohorts of Nigerian medical practitioners obtained their medical education and professional clinical training in the western countries. Medical education started from the University College Hospital (UCH), Ibadan in or about 1950 with the establishment of the University of Ibadan in 1948. However, those categories of trained doctors completed their professional training with the medical schools in the United Kingdom (UK). The Medical and Dental Council of Nigeria (MDCN), a primary regulatory professional body in Nigeria was established long time ago but the Act of Parliament empowering it to regulate the medical education and practice was passed in 2004 (MDCN, Act 2004). On the other hand, the

Nigerian Medical Association (NMA) was formally established in 1962.

The mode of medical education and training of the physicians in Nigeria is inherited or diffused from Nigeria's colonial administration—the British / the United Kingdom's pattern of medical education, certification, licensing and registration. In Nigeria as it is the practice in the UK, and Kenya, admits mint secondary school graduates with requisite passes in core science subjects into the undergraduate programmes in medicines, which normally runs for six straight and un-broken academic sessions culminating to the award of dual MB BS professional first degree in medicine. This is intertwined with additional one-year internship in clinical practice and health care delivery management.

Modalities for medical education in the United States and the countries that adopting the USA system is substantially different. Under the US medical training, prospective medical students are required to possess a good first degree in life sciences for enrolment into the medical school programmes which last for at least four years (minimum) and as long as 12 years for the most challenging specialisations. Cost of medical education in the USA is substantially more expensive and capital-intensive and financially prohibitive than what obtains in Nigeria. There is also a remarkable difference in the areas of education financing – that is, in terms of availability of students' loans by the state and financial institutions and in terms of repayment. Medical students in the US amass huge debt in the course of the medical training whereas the costs in Nigeria is mild with little credit facilities.

Current Developments in Nigeria's Medical Education and Health System

The health and medical care system in Nigeria is undergoing experiencing some revolutions restructuring and modernization. With the passage of the National Health Insurance Act of 1999, the employers in the public and private sector are required by law to register their workers and dependants to the scheme. A channel for registration for the self employed persons with the private to enrol in the NHIS scheme is also provided. The tertiary education system has equally introduced

'Tertiary Health Insurance scheme. In essence, the scope of health care system in Nigeria has expanded. These developments are traceable to the various health development programmes and the MDG.

Empirical Review

Three empirical studies conducted in developed and developing countries including Kenya in the African region and United States representing developed nations were reviewed. The selected empirical literature dwelt on estimation of costs of investment in medical education and training, with earnings (cash inflows) in CBA analysis and measurement of private and social returns to the investment medical doctors' education for those that trained in the focal countries were considered here are: Kiriga, Akpa, Lenity, Nyoni and Seddoh (2006), Blewett, Smith and Caldis (2001); Franzini & Berry (1999) and McCormick and White (2013).

Kiriga, Akpa, Lenity, Nyoni and Seddoh (2006) empirically evaluated investment in education of medical doctors in Kenya, a low-income developing country in Africa. The primary objectives were to empirically estimate total cost of education and training health professionals medical doctors and nurses, from primary school, secondary and university—medical schools in Kenya; with view to determine financial losses suffered by the government arising from emigration of Kenyan health professionals to the United Kingdom, USA and OECD countries; proportion of costs of public investments – subsidization and also private cost that was lost in due to brain drain to the Kenyan State. Data sets from secondary sources that covered estimated total costs for schooling starting from primary, secondary, medical and nursing schools for those that qualified in 2005 were employed.

Imputed costs incurred by the State through emigration were computed by compounding cost of educating a medical doctor and nurse over the period between the average age of doctor at emigration was 30 years and 62 for retirement age in the destination countries. Cost–benefit analysis (CBA), Net Present Value and the Discounted Cash Flow (DCF) technique were the analytical method employed in the study. Results showed that the total cost of educating a single medical doctor from primary school to university

level in Kenya around 2005 is US\$66000, equivalent to N10 million; and for every doctor who emigrates, Kenya lost about US\$518,000 or N78 million worth of returns from education investment. The study concluded that developed countries deprive Kenya of millions of dollars worth of investments of her health sector's human resources

McCormick and White (2013) conducted empirical study on public subsidy to medical education and vocational training of physician in the United Kingdom and a comparative survey of 10 other European Countries including France, Denmark and Germany. The objective of the report is to examine the government expenditure on subsidy of medical doctors training, and effect on health budget, wage-price effect and their impact on health care services. The study adopted secondary and primary data and also content analysis in its methodology and analysis. The study established that government incurred huge recurrent expenses for the purpose and substantial capital investment in academic education and training of doctors on one angle. It observed that the expenditure in medical education in some European countries are being recovered from the providers employment levy – levy imposed on the private sector employers of medical practitioners. This measure is being contemplated for adoption in the UK as policy measure to generating and conserving funds to enhanced the production of clinicians in that country.

Blewett, Smith and Caldis's (2001) estimated of direct cost of graduate medical education sponsored by Minnesota State's Department of Health, U.S.A., with the objective of study to determine average cost of medical education of physicians trained from medical schools in that state in 2005. The study covered eight sponsors of 117 accredited medical education programmes in the affected Hospitals / health facilities that involved 2084 full-time equivalent trainees. Secondary data extracted from the 1997 annual financial reports of the sponsored health institutions and health accounting reports, including self-reported cost accounting data were analyzed. Resource costing based on the average costs of clinical training and were calculated, for residents, faculty, and administrative costs were computed and the operating costs allocation showing average costs

by type of training programmes, and compared cost components for surgery, primary care and REAP. The authors applied absorption costing of resources consumed and activity-based costing systems for cost construction of graduate medical education for the period covered in the study which also served as technique of the analysis.

Results showed that direct cost of clinical training in 1997 financial year per medical doctor's clinical training was US\$130,843, equivalent of N13 million. Primary care programmes average costs were lower than those of surgery and REAP. The authors concluded health policy makers should endeavour to assess / ascertain government subsidies on graduate medical education, and that more detailed data will be required in order to achieve it. It confirmed that self-reported data are cost effective and efficient than the more detailed and costly time-and-motion studies.

The study by Franzini' & Berry (1999) entitled "A Cost Construction Model to Assess the Total Cost of an Anaesthesiology Residency in the University of Texas – Medical School in 1997", empirically estimated total expenditure incurred for education of physicians. Its objective is to determine average cost of graduate medical education in the Medical School of the University of Texas, through the cost construction model and describe the total costs associated with the medical residency training programmes in the Department of Anaesthesiology during the 1996 / 1997 academic year. Following this process, the authors empirically estimated and measured cost of a four-year undergraduate medical education at University of Texas – Medical School, USA, from 1993 / 1994 to 1997.

It adopted a mixed research design system, comprising collation of secondary data from tertiary medical institutions and augmented with primary data obtained through field study and research instruments. Cost construction methodology was applied and captured cost of teaching, from the information on programme description, residency enrolment, faculty and residents' salaries and benefits; operating costs and the associated administrative charges using the combination of absorption costing of resources and the activity-based costing (ABC). Faculty members and residents were interviewed

for primary data related to approximate time spent in teaching activities, access to institutional and departmental financial records obtained and used in quantifying costs associated with undergraduate education and training. The model was developed and examined for a range of assumptions concerning residency, productivity, replacement costs and allocation of costs of activities that were utilized jointly in producing clinical care practice and education.

The results revealed that the cost of residency training (cost of didactic teaching, directive clinical supervision, teaching-related preparations and administration, plus, the support of the teaching programme) was estimated at US\$75,070 per year for each carrying student. This cost is less than the estimated replacement value of the teaching and clinical services provided residents, worth US\$103,436 per resident fellow per year. Sensitivity analysis with different assumptions regarding resident replacement cost reimbursement rates varied with the cost estimates, but generally identified the anaesthesiology residency programme as a financial asset. In conclusion, the authors claimed that in most scenarios, the value of teaching and clinical services provided by the residents exceeded the cost of resources used in the educational programmes.

Empirical studies reviewed above are quite scintillating and appropriate to the current study in several dimensions because the provided evidence and useful guides to studies on estimation of costs, earnings and measurement of rate of returns to medical education and training conducted in other countries, but apparently none for Nigeria. These studies demonstrated that CBA sensitivity analysis on investment in medical education is necessary in health policy formulation, planning and financing of health care programmes and for the operations and management of universities medical schools / teaching hospital complexes in Nigeria as in other countries. Result of finding drawn from Franzini' & Berry (1999)'s study very useful for assessment of the level of subsidization of medical education comparative to Nigeria. The University of Texas's UT-Medical School / Teaching Hospital model's estimation process and resource costing can be replicated in Nigeria, in cost ascertainment and assessment of doctors'

earnings in Nigeria – and in the present paper with Nigeria as focal study. Finally, analysis, evaluation and measurement of returns to investment on medical education and human capital development is an invaluable information for the development and improvement of health sector accounting and national health accounts including health insurance in Nigeria.

Methodology

The research design employed in this study is the mixed research method of ex-post 'facto' and a field study approach involving direct contact/interactive fact-gathering. This facilitated the extraction of data sets needed for construction of comprehensive costs of total expenditures of the relevant medical training programme. It is also the appropriate method to source basic data for estimation of income-earnings of medical practitioners in government services particularly in the Teaching Hospitals / Medical Schools. On the premise of this research design, data derived from primary data and secondary sources will be utilized for the study. However, data from secondary sources were predominantly employed for analysis in the study (Scheffler, 2008; Rotth 2012).

The study employed both the primary and secondary data. The primary data were collected through field studies and consultations with the students, sponsors and officials of training agencies. The survey technique used was mainly the oral interview of the respondents and documentation of the interviews. The secondary data were sourced from the public university's teaching hospitals/medical schools with valid accreditation by the Medical and Dental council on Nigeria (MDCN) and the Nigerian University Commission (NUC). The study uses the simple numerical analysis, percentages method, averages and cash flow payback period, financial analysis methods, cash flow payback period analysis, cost benefit analysis and the net present value method which is used in measurement, evaluation and determination of the net terminal value of the medical doctors career income earnings at the end of professional practice cycle at 60 and effective 35 years of active service. The key assumption used in the development of data sets used in the analysis are the private or individual and government expenditures comprising of direct and indirect costs,

opportunity and implicit cost-put together make up the total costs of education on the out-flows.

Model Specification

Estimated total medical education expenditure and life-cycle income earnings are the main variables utilized for the analyses. To establish the correspondence between the estimated total up-front costs of investment to medical education and doctors' earnings, the "elaborate method" as suggested by Psacharopolous (1993) is followed and are stated as:

$$1) \sum^n = [(R_{n1} + R_{n2} + R_{n3} + \dots R_{n-n}) - (C_{n1}, + C_{n2} + C_{n3} + C_{n-n})] = O, \text{ or } < 1, > 1 \dots n \dots (3.1)$$

$$2) \sum^n = [(R_{n1} + R_{n2} + R_{n3} + \dots R_{n-n}) - (C_{sn0}, + C_{sn1} + C_{sn3} + C_{sn-n})] = O, \text{ or } < 1, > 1 \dots n \dots (3.2)$$

$$3) \sum^n = [(R_{n1} + R_{n2} + R_{n3} + \dots R_{n-n}) - (C_{n1}, + C_{n2} + C_{n3} + C_{n-n})] = x \text{ (Years)} \dots \dots (3.3)$$

(a) where: $R_{n1}, R_{n2}, R_{n3} \dots R_{n-n}$ = represent the career income earnings for the relevant years; then, $C_{n0}, C_{n1}, C_{n2} \dots C_{3n} - C_n$ represents the streams of outflows for costs incurred from Year 0, 1, n for Model I system equation. For Model equation 2, $R_{n1}, R_{n2}, R_{n3} \dots R_{n-n}$ as earlier stated equation model one and $= C_{sn0}, C_{sn1}, C_{sn2} \dots C_{sn3} - C_{sn-n}$ represents streams of government subsidy spending enjoyed by medical student in the course of their programmes to capture total outflows for the costs incurred from Year 0, up-to completion period and the spread of doctors earnings to fully recovery of the investment outlay; and 'x' Years represents the pay-back period in years.

Basic Assumptions

Key assumptions incorporated into the data sets used analyses:

- 1) The total cost of outlay of the basic medicine is 7 years.
- 2) The opportunity cost of the housemanship 1-year is N1.8 million
- 3) Stipend for Youth Service and extra income of doctors in service year is disregarded.
- 4) Average age of medical students at entry is between 17 / 18; average doctor's age is 25
- 5) A standard retirement age put at 60 with a maximum of 35 years of acytive service.
- 6) Cost of funds is 4%; annual salary increment is 5% and also 5% on net savings.

Analyses and Result

1. Test 1 Result: N24.00 Million < N25.20 million; H_0 is adopted and H_a is rejected.
2. Test 2 Result: N25.2 million > N12 million. H_0 is rejected and H_a is adopted
3. Test 3 or Model 3 Results: (i) 7 years > 7 years (approx). Therefore H_0 is adopted

The result implies that the gestation period will spread to the long run, unless clinicians' remuneration is reviewed upwards. The cost of training medical doctors is fairly low compared to the cost of training in the US and UK, but slightly higher than what obtains in Kenya. It confirms that medical doctors training is capital intensive, intellectually demanding and time consuming. The result of second analysis and test reveals demonstrated that there is in fact some element of education subsidy benefits accorded medical students in Nigeria during their training. However, the current public expenditure and the overall costs of education and man-power development in Nigeria during the period covered in this study is significantly lower than the average cost of investment in the study of medicine in the US, Britain, Kenya and Uganda (Mills *et al*, Kiriga *et al*, Franzini, Low and Proll (19970). The lowest pay-back period or break-even level (in years) for full recovery of the initial total cost of investment on the basis of gross private returns (income-earnings) (without cost of funds and annual increment in earnings) for Nigerian trained doctor is approximately 7 years for doctors on a start-up salary of N3.6 million per annum.

Summary

1. The results indicate that N24 million (average least cost method) is invested to produce a physician, while total gross earnings for seven years' post-registration is N25.20; thus, inflow equates outflow within equal duration.
2. Second, a doctor's gross earnings for about three and half years fully replenish current medical education subsidy amounting to only N12 million; which signifies that the current subsidy is insufficient.
3. Pay-back period or break-even point of up-front outlays and fund inflows is approximately seven years, indicative of a sub-optimal remuneration for doctors

Conclusion

The paper concludes that an investment to education and training of medical doctors in Nigeria is financially and economically viable. However, remuneration system of the medical doctors is inequitable when compared to resources committed into the training, provision of subsidy to medical students and under-funding impact negatively to Nigeria's health system development.

Recommendations

The paper recommends that:

- i. Stakeholders in the tertiary education system, accounting professional and accountants interfacing in the education and health sector, government agencies responsible for health, education, labour market and leadership of the medical profession to produce accurate data on health budgets, costs invested in health academic education in fixing the salaries and for career decisions.
- ii. Nigeria's health authorities is advised to award remuneration packages equitable to investment to education and commensurate with intellectual rigour, prohibitive investment outlay and long duration of study programme in medicine.
- iii. Student Loan Scheme should be revived, while banks and financial institutions should make credit facilities available to students to enable them pursue studies in medicine.

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Youth unemployment in Nigeria: Study of Makurdi metropolis Benue State

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Abstract

This study investigates the needs of youths within Makurdi metropolis to determine their preference for either government driven entrepreneurship policies or private and self-employment. The primary data for the study was obtained using a structured questionnaire which were distributed to 186 sampled participants aged between 18-65 years, in the study area. Results showed that lack of job opportunities was one of the major causes of unemployment within Makurdi metropolis. Also, youths within the metropolis were unwilling to invest in agriculture or farming ventures. estment, Medical Training and Cost outlays

Introduction

The International labour organisation (ILO, 2012) considers unemployment as one of the biggest threats to social stability in the world. It puts the global figure at 201 million people worldwide with an expected increase of three million in 2015. The actual rate of unemployment in Nigeria is debatable. For instance the Nigerian Bureau of Statistics (NBS) in 2013 put the figure of the unemployed at 23.9% of the population while the Minister of Finance puts the figure at 37%. According to NBS (2015) unemployment rate increased to 8.20% in the second quarter of 2015 from 7.50% in the first quarter. The rate averaged 11.59 percent from 2006 until 2015, reaching an all-time high of 23.90 percent in the fourth quarter of 2011 and a record low of 5.30 percent in the fourth quarter of 2006.

Nigeria is the most populated country in Africa and the eighth in the world with a population of over 140 million according to the 2006 census. With a nominal GDP of \$207.11 billion and per capita income of \$1,401 it has the second largest economy in Africa, Salami (2011). As impressive as the above figures may appear, a high level of youth unemployment is considered amongst others as one of the key socio-economic problems facing Nigeria. While the labour force grows with an increasing proportion of youth, employment growth is inadequate to absorb labour market entrants. Adawo *et al* (2012) suggests that labour force in Nigeria grew at an approximate rate of 0.3% every year while GDP growth rate at 1984 factor cost grew at 3.5% over a period of 33 years which implies that Nigeria experiences a jobless growth. As a result, youth are especially affected by unemployment. Akanda and Okuwa (2009) suggest that 40-60% of those unemployed in Nigeria are aged between 15-25 years while Rotimi (2011) puts the ages between 18 and 45 years.

There have been several intervention schemes by the Federal Government of Nigeria such as National Directorate of Employment (NDE) and its skills acquisition programmes, National Poverty Eradication Programme (NAPEP), Poverty Alleviation program (PAP), the Subsidy Re-investment Program (SURE-P), Youth Enterprise with Invention in Nigeria (YOUWIN). These intervention programs were aimed at ensuring economic growth with job

creation opportunities. However, unemployment and poverty in Nigeria has continued to grow unabated. The population living below the \$1 a day threshold is 46 per cent higher today than in the last three decades. This study will critically analyze the perceptions of youth within Makurdi metropolis to determine their preference for either government driven entrepreneurship policies or private and self-employment policies.

Concept of Unemployment

Unemployment can be described as the proportion of the population available for work but are not working. According to International Labour Organisation (2007), unemployed workers are those who are currently not working but are willing and able to work for a salary and those currently available to work and have actively searched for work. The population of every economy may be categorised into two; the economically active and the economically inactive. The economically active population (labour force) or working population refers to the population that is willing and able to work, including those actively engaged in the production of goods and services and those who are unemployed Njoku and Okezie (2011). The economically inactive population refers to the segment of the population who are neither working nor looking for jobs and they include, full time housewives, full time students, invalids, those below the legal working age, old and retired persons. Thus the total labour force in Nigeria is made up of all persons aged 15-64 years excluding students, home keepers, retired persons and those who are not interested in work. According to NBS (2012), the population of youths (15 – 35 years) in Nigeria is estimated to be 64 million.

Concept of Poverty

Aiyedogbon and Ohwofasa (2012) suggest a strong relationship between unemployment and poverty. They suggest that it is possible for one to be employed and still be poor, this is a case of underemployment. The perception of what constitutes poverty has changed historically over time and varies across borders in scope and magnitude. Due to this, universally accepted definitions have become very difficult to arrive at. Thus, there are many definitions of the concept. Despite this, there are universally

accepted indicators of what constitutes poverty and these indicators categorize and explain the concept. These indicators categorize poverty into absolute poverty, relative poverty and material poverty. Absolute poverty refers to the inability of a person or group to provide the material (food, clothing, shelter, water, health services, basic education, transportation, and work) needs for physical subsistence and protection of human dignity. Relative poverty on the other hand is the inability of certain sections of the society to satisfy their basic needs as well as other needs; while material poverty is the absence of ownership control of physical assets as lands, and all other resources that land produces or that subsists on land as birds and animals and mineral resources.

Unemployment in the Theory of Effective Demand

Veblen (1904:195) suggests that the level of aggregate demand will provide the necessary increase in revenues only if the cost of production declines. Decline in the cost of production according to Veblen includes among others the use of technology in reducing the cost of inputs in the production process, decrease in wages, cut in taxes and cut in interest rates. The decrease in costs leads to increased revenues and profits which will enable businesses to expand and employ more workers. This will eventually lead to a decline in unemployment.

Keynes (1936) in support of this theory considers unemployment as an involuntary phenomenon. Capitalists hire workers and invest to produce output when the expectations about the economy and profits are favourable. If expectations about the future are supported by realities, investments and employment continue to rise until an equilibrium is reached. This equilibrium is achieved by the intersection of the aggregate demand and supply. The point of the effective demand may be less than the full employment equilibrium. If however, expectations about the future of the economy are not favourable, capitalists invest less and employ less number of workers. Hence, an equilibrium is achieved where cyclical unemployment exists. This unemployment is due to the deficiency of the aggregate demand, particularly investment expenditures. Keynesian economics emphasizes the cyclical nature of unemployment and

recommend government interventions in the economy that will reduce unemployment during recessions.

The General Theory of Employment, Interest and Money

The central argument of The General Theory is that the level of employment is determined not by the price of labour, as in neoclassical economics, but by the spending of money (aggregate demand). The General Theory of Employment, Interest and Money is based on the decisions of employers to hire labour and of employees to offer their services. Keynes argues that the general theory is necessary to explain how unemployment can arise from a lack of aggregate demand. The general theory takes 'the skill and quantity of available labour' as one of its initial conditions and does not consider the question of why a wage-dependent labour force exists. The distinction between entrepreneurs (employers) and workers (employees) is essential, but taken as given. Entrepreneurs alone, and not workers, sell to product markets and decide what, and how, to produce. Entrepreneurs and workers necessarily bargain over money-wages and not real wages. The idea of real wage bargain is based on the self-employment model, and for it to be generally valid, all firms would have to be producer co-operatives, in which labour is paid according to the sales value of its output.

The General Theory of Employment, Interest and Money of models also recommends government interventions designed to increase demand for workers; these can include financial stimuli, publicly funded job creation, and expansionist monetary policies. In agreement with both the Theory of Effective Demand and The General Theory of Employment, Interest and Money, the Nigerian government has over the years introduced several policies and structured programs to curb youth unemployment.

Unemployment in Nigeria

One of the greatest challenges facing the Nigeria economy today is unemployment which has maintained a rising trend over the years. Official figures from the Bureau of Statistics put the figure of unemployed in Nigeria at 19.70 per cent, which represents about 30 million Nigerians, but this figure still does not include

about 40 million other Nigerian youths captured in World Bank statistics in 2009. If this is taken into consideration, then Njoku and Okezie (2011) suggest that 50 percent of Nigerians are unemployed.

Currently, Unemployment Rate in Nigeria according to NBS is 8.20 percent in the second quarter of 2015 which is an increase from 7.50 percent in the first quarter of 2015. Totally, unemployment Rate in Nigeria averaged 11.59 percent from 2006 until 2015, reaching an all-time high of 23.90 percent in the fourth quarter of 2011 and a record low of 5.30 percent in the fourth quarter of 2006.

According to Okafor (2011) unemployment in Nigeria comes with attendant social, economic, political and psychological consequences. One of its social consequences on the Nigerian youths is the high level of youth unemployment. A phenomenon which encourages the development of street youths and urban urchins (Niger Delta Militants and Boko Haram) that grow up in a culture that encourages Terrorism and criminal behaviour. Unemployment has also contributed to increasing feminization of poverty among which has encouraged prostitution as a means of survival which then leads to trafficking of young women across international borders with transnational security implications.

Government Intervention Programmes

Generally, youth policies in Nigeria are concerned with overall policy guidance for youth development. They treat a myriad of youth initiatives such as training and credit schemes. In a bid to overcome the scourge of unemployment, the Nigerian government initiated different policies and structural programmes over the years. These programmes include: Better Life Programme (BLP), National Directorate of Employment (NDE); People' Bank of Nigeria (PBN); Community Bank (CB); Family Support Programme (FSP); Family Economic Advancement Programme (FEAP); Poverty Eradication Programme (PEP); National Poverty Eradication Programme (NAPEP); and National Economic Empowerment Development Strategy (NEEDS). Their aims were to ameliorate the suffering of the people by providing them employment opportunities and access to credit facilities to enable them establish their own

businesses. However, despite the fact that each programme attempts to identify a target group, there is overlap of target and intervention strategies, lack of strategy in delivering these schemes, acute corruption and in most cases the schemes don't consider the very people (unemployed) they are meant for Arogundade *et al.* (2011). Most of these policies are based on older people and senior civil servants' perceptions of youth concerns and needs. This assertion is taken into context because youth in Nigeria are in most cases not involved in the formulation of these schemes and programmes aimed at putting them in employment.

Unemployment and Poverty in Benue State

Benue is tagged the Nigeria's "food basket" State because of its rich and diverse agricultural products such as beans, cassava, potatoes, soybeans, sorghum, yam, rice, millet and soybean. Nevertheless, the State has a high rate of unemployment. The State produces over 70% of Soya-bean consumed and exported in Nigeria. The Benue River runs through the state creating opportunities for fishing, dry season farming through irrigation and tourism. It is also possible to generate electricity and improved transportation through the waterway.

Benue State also has reserves of solid minerals such as limestone, gypsum, anhydrite, kaolin, salt, lead and zinc, calcite, gemstones, clay, coal, and magnetite. Some sites in the state that could be of interest to tourists include the Ushongo Hills, Ikwe Holiday Resort, Enemabia Warm Springs, Dajo Pottery, Tiv Anger Weavers and many traditional festivals including Igede Agba New Yam festival. According to the NBS poverty profile 2012, Benue's poverty incidence is high at 36%, which means that more than one out of every three persons is poor compared to one in seven for Lagos and more than half (58%) in Yobe State. Benue's unemployed population is 25.4% or one in every four working age persons is unemployed, as opposed to a neighbouring Plateau State 14% and the Federal Capital Territory's 13%. Benue State unemployed population is above the national average of 21.1%.

Methodology

The study was carried out in Makurdi Metropolis which is also the capital of Benue

State, Nigeria. The Metropolis lies between longitudes $8^{\circ}20''$ and 9° and latitudes $7^{\circ}20''$ and 8° North. Primary and secondary data were used for this research. However, for the primary data a questionnaire was used to solicit responses from the respondents. It has been objectively structured, taking into consideration time lag and its relative advantage in minimizing costs. The questionnaire was administered among job seekers, students, self-employed and civil servants.

The stratified sampling method was adopted for this research. This is because the method groups the population into some definite characteristics (strata) which is suitable for the purpose of this research as it makes it possible for our random selection to be done among the residents of Makurdi metropolis. In the study conducted a total of 186 respondents were administered questionnaires out of which 59% were males and 41% were females. In addition, the educational qualifications of respondents showed that 59 respondents (69%) were holders of bachelor's Degree, 20% applicants had 10% had diploma/NCE, and only 1% had post graduate degree. The occupational status of the respondents showed that students had the highest number of respondents with 50%, civil servants followed with 23%, applicants followed with 15%, and self-employed represented 12% within Makurdi metropolis, Benue State.

Findings

When the respondents were asked what they believed was the cause of unemployment, most respondents representing 42.9% suggested that the major cause was the lack of job opportunities. Lack of proper educational qualifications 23.4%, poverty 16.8%, lack of farmland 10.4% and ethnic discrimination was 6.5%. Indicating that the lack of job opportunities was thought of as a major cause of unemployment.

With regards to the best way to create employment, 32.6% of the respondents believed that the best way to create employment was to provide entrepreneurship development. While 26.7% of the respondents believe that government interventions are the best way to create employment. Government employment was another area 25.6% of the respondents believed employment can be created. Private

sector employment had the least number of responses with 15.1%. This result shows that most respondents believe that government interventions by way of entrepreneurship driven programmes will go a long way in reducing unemployment.

When respondents were asked what they expected in terms of assistance, 52.3% of the respondents suggested that provision of loans for start-ups would be most helpful. While 47.7% of respondents preferred assistance by way of employment. For the 52.3% who preferred the provision of loans, only a few wanted to go into farming while the rest representing 71.1% preferred to start any other kind of business. The results here show that even though about half of the respondents preferred assistance by way of start-up loans, just a very small portion representing 18.9% were willing to invest in agriculture.

When the respondents were asked how much they needed for start-up capital, 33.3% of the respondents required between N30000-N100000, 24.6% of the respondents required above N500000, 22.2% required N100000-N200000, 13.3% required between 400000-500000, 4.4% required N200000- N300000, 2.2% of the respondents required between N300000-N400000.

Conclusion

The study examined youth unemployment within Makurdi metropolis with emphasis on the perceptions and expectations of youth to the type of intervention programs expected from the government and the private sector. The following conclusions were made.

One of the major causes of unemployment within the Makurdi metropolis was the lack of job opportunities. As such there is a need for intervention initiated and driven by both the federal and Benue state Governments with the support of the private sector. The involvement of youths in the conceptualization, and implementation of projects or programmes to identify the exact projects required to create employment and raise their standard of living should not be ignored by government.

Though it was unexpected that most youths who required capital for start-ups were unwilling to invest in agriculture. Government's agricultural programmes should be supported

with comprehensive public enlightenment programme within the metropolis to the programmes attractive to youths. Unemployment programmes should be packaged to cater for particular vocations within the metropolis for instance, since Makurdi is a riverine and semi-arid area, unemployment intervention programmes could be designed to enhance irrigation farming activities.

Finally, it is important for the Federal and Benue State government to implement a well-planned and concerted policy framework, projects and programmes towards youth unemployment reduction. Government should initiate a comprehensive method of sustaining the programmes over a specified period of time.

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Assessing the Nexus between Triple Bottom Line Reporting and Sustainability Reporting and Social Impacts of Organizations

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Abstract

The main thrust of this paper is to see from the critical review of accounting literature the interplay of factors responsible for ascertainment of measures and frameworks of sustainability and triple bottom line reporting to assess the social impact of organizations. The notion of triple bottom line (TBL), which is a tripartite reporting approach that hinges on economic, environmental and social dimensions of organizations, is fast becoming recognized as a business requirement. The absence of established standards or guidelines of assessing the social impact of organizations, unfortunately, has made social reporting to be described as a public relations exercise with limited accountability, consistency or comparability. The methodology used for the study is the eclectic desk research approach which relies chiefly on secondary sources of data to accomplish this task. From the descriptive analysis, it is established that the development of a comprehensive quantifiable indicator for the social dimension of TBL would enable the measurement and comparison of social impacts, thereby facilitating the acceptance, comprehension and validity of social reporting in the business world. This discovery is consistent with the previous studies undertaken by other people. In conclusion therefore, the social impact assessment framework demonstrates that it is possible and desirable to quantify the social dimension of TBL.

Keywords: TBL reporting, sustainability reporting, social impact, economic dimension, environmental dimension

Introduction

Traditionally, businesses were solely operated to generate revenues, maximize cash flows, distribute dividends, and produce profits. It was all about the bottom line and the bottom line was about profits. With the advent of social entrepreneurship and Corporate Social Responsibility (CSR), there has been a paradigm shift in measuring business success. This is popularly known as the Triple Bottom Line. It measures the success of a business, not only by profits but also by social and environmental capital. The idea of Triple Bottom Line (TBL) was developed by Elkington (1997) who created a new framework to measure both financial and nonfinancial performance during the mid-1990s (Slaper, 2011). Elkington first coined the term TBL to reflect that organizations have economic, environmental and social impacts, consequences and responsibilities. The framework of TBL focuses on the interrelated dimensions of profit, people and the planet as three key dimensions of sustainable development. The "Profit bottom line" is the ability of an enterprise to create economic surpluses. Without profits, enterprises would be unsustainable. The "People bottom line" (human capital) pertains to fair and beneficial business practices toward employees and the community. The "Planet bottom line" (natural capital) refers to sustainable environmental practices. Sustainability and global warming are real and critical issues that global businesses must deal with. These forced corporations to widen their circle of responsibility and focus, for the first time, "not just on the economic value that they add, but also on the environmental and social value they add or destroy" (Elkington, 2004: 3). The TBL captures the essence of sustainability by measuring the impact of an organization's activities on the world including both its profitability and shareholder values and its social, human and environmental capital. In Nigeria, TBL reporting is a new phenomenon that is aimed at assessing and enhancing corporate performance with regards to sustainability. Here, the scope of traditional reporting which emphasizes financial profitability is widened to include the contributions of a corporate organization towards the environmental and social sustainability thereby giving more attention to stakeholders than shareholders. Sustainability

reporting is a broad term generally used to describe a company's reporting on its economic, environmental and social performance. It can be synonymous with TBL reporting, corporate responsibility reporting and sustainable development reporting, but increasingly these terms are becoming more specific in meaning and therefore subsets of sustainability reporting (KPMG, 2008).

Nevertheless, during the same time that embracing the philosophy of TBL and corporate social responsibility (CSR) is becoming viewed as standard business practice, issues of documenting, reporting, and monitoring organizational progress on environmental and social issues have been neglected. In the words of McKenzie (2004), attention has for now been focused on defining, measuring and monitoring the most neglected element of TBL, the social aspect. Blowfield (1999) posited that the social element has been neglected simply because it is much more difficult to conceptualize, quantify and measure social impacts than the economic and environmental dimensions. Henderson (2001) equally lamented that lack of a universal measure for an organization's social impact, combined with inherent difficulties in understanding and defining what is social, has meant that organizations are currently able to emphasize the elements and aspects of 'social' which best suit them. The obvious danger that arises from businesses self-selecting social indicators is the apparent lack of comparison within or across organizations and industries. If businesses do not measure social issues in a consistent, frequent or objective manner, there can be no external or comparative judgments about progress, and hence, no accountability. In the words of Norman and Donald (2003), one of the more enduring clichés of modern management is that "if you can't measure it, you can't manage it". If we believe that ethical business practices and social responsibility are important functions of corporate governance and management, then we should welcome attempts to develop tools or measures that make more transparent to managers, shareholders and other stakeholders just how well a firm is doing in this regard.

Conceptual framework

Triple Bottom Line Reporting

Triple bottom line reporting, developed by Elkington (1997) and has fast become an international commonplace to describe the mode of corporate reporting, involves incorporating economic, environmental and social performance indicators into an entity's management, measurement and reporting processes. At its narrowest, triple bottom line reporting involves measuring and reporting economic, environmental and social performance objectives that are pursued simultaneously. A broader view, however, suggests that triple bottom line reporting involves assessing an entity's values, strategies and practices and how these can be utilized to achieve economic, environmental and social objectives (Sustainability, 2003). The term also seems to be used at times as a synonym for "sustainability", and in part because of Sustainability's reference to the relationship between the three aspects of the triple bottom line: The three lines represent society, the economy and the environment. Society depends on the economy and the economy depends on the global ecosystem, whose health represents the ultimate bottom line.

Slapper and Hall (2011) define TBL as an accounting framework that incorporates three dimensions of performance: social, environmental and financial. This differs from traditional reporting frameworks as it includes ecological (or environmental) and social measures that can be difficult to assign appropriate means of measurement. The TBL dimensions are also commonly called the three Ps: people, planet and profits.

Key to sustainability, the concept of the TBL means that business success is no longer defined only by monetary gain but also by the impact an organization's activities have on society as a whole. The TBL is a framework that incorporates three dimensions of performance: social, environmental and financial. This differs from traditional reporting frameworks as it includes ecological (or environmental) and social measures that can be difficult to assign appropriate means of measurement. The TBL dimensions are also commonly called the three Ps: people, planet and profits. Over the years, the concept has been embraced by many large

corporations as guiding principles for the way they strategize and conduct their businesses. The concept of TBL demands that an organization's responsibility is to all its stakeholders rather than only shareholders. Anyone who is influenced, either directly or indirectly, by the actions of the organization is a stakeholder and the organization's primary objective should be to address stakeholder interests instead of a narrow focus on maximizing shareholder profits (Akanksha, 2014).

Sustainability Reporting

Sustainability reporting is a broad term generally used to describe a company's tripartite reporting on its economic, environmental and social performance. It can be synonymous with triple bottom line reporting, corporate responsibility reporting and sustainable development reporting, but increasingly these terms are becoming more specific in meaning and therefore subsets of Sustainability reporting (KPMG, 2008). Jasch and Stasiskiene (2005) cited in Schaltegger (2004) defines Sustainability Reporting as a subset of accounting and reporting that deals with activities, methods and systems to record, analyze and report, firstly, environmentally and socially induced financial impacts and secondly, ecological and social impacts of a defined economic system (e.g. a company, production site, nation etc.). Thirdly, Sustainability reporting deals with the measurement, analysis and communication of interactions and links between social, environmental and economic issues constituting the three dimensions of sustainability. The Sustainability Integrated Guidelines for Management (SIGMA) Project (2003:7) defines sustainability accounting as "the generation, analysis and use of monetarized environmental and socially related information in order to improve corporate environmental, social and economic performance". Sustainability reporting is becoming more prevalent, driven by a growing recognition that sustainability related issues can materially affect a company's performance, demands from various stakeholder groups for increased levels of transparency and disclosure and the need for companies, and the business community more generally, to appropriately respond to issues of sustainable development (KPMG 2008; Ivan,

2009). According to Parliament of Australia (2010), Sustainability reporting involves companies and organizations demonstrating their corporate responsibility through measuring and publicly reporting on their economic, social and environmental performance and impacts.

The Global Reporting Initiative (GRI) (2011) looks Sustainability reporting as the practice of measuring, disclosing and being accountable to internal and external stakeholders for organizational performance towards the goals of sustainable development. In the words of Arndt, Isenmann, Brosowski, Thiessen and Marx-Gomez (2006), sustainability reporting has its roots in environmental or non-financial reporting respectively. It describes a development path towards a concept of balanced reporting of an organization, often communicating the three pillars of environmental, social and economic performance and its mutual interrelations, what in business terms is called the triple bottom line reporting, or corporate social responsibility reporting respectively.

Framework and measures of sustainability and TBL reporting

The process of developing appropriate measures and frameworks to assess the social impact of an organization or industry is a difficult undertaking. Nevertheless, as the key criticisms of existing social indicators revolve round issues of validity, comparability and benchmarking, utilizing pre-existing international and national measures, although they may not have been developed specifically for the purpose of social TBL assessment, provides a strong conceptual and practical foundation (Miller, Buys and Summerville, 2007 cited in Norman and MacDonald, 2004). They emphasized on building on the pre-existing measures so that the following key advantages would accrue:

- a. They serve as benchmark and future targets and social goals.
- b. Comparisons to national or international standards and norms will ensure easy and early identification of certain problems or issues as they arise.
- c. There would be an understanding where the organization or industry might be producing negative impacts that need to be addressed and mitigated or positive impacts

that need to be explored further (Miller, Buys and Summerville, 2007).

At world scene, several universal standards and guidelines designed to measure the social dimension of TBL have been devised. An outline of the four most popular global sustainability frameworks for social indicators and guidelines have been provided by Labuschagne, Brent and van Erck (2005) as follows:

- a. Global Reporting Initiative (GRI) which considers economic, environmental and social indicators.
- b. The United Nations Commission on Sustainable Development Framework (UNCSD).
- c. Sustainability Metrics of the Institution of Chemical Engineers (economic, environmental and social; with strong focus on environmental).
- d. Wuppertal Sustainability Indicators, which like the UNCSD approach, develops a Corporate Development Index (CDI) based on quality of industrial relations and labor conditions, maintenance of human capital (through education), and income.

Nevertheless as noted by Miller, Buys and Summerville (2007), whilst these global sustainability frameworks provide some broad direction in the type of issues relevant for the social dimension, they provide little practical guidance about how organizations should define or measure social issues. The lack of a simple and feasible tool with which to measure social impact, and without an agreed set of quantifiable standards and targets, the reality is that the social component of TBL may prove to constitute little more than “good old-fashioned Single Bottom Line plus Vague Commitments to Social and Environmental Concerns” (Norman and MacDonald, 2004: 256).

In spite of the absence of a defined and generally accepted quantifiable measure of assessing the social impact of organizations, hope is still not lost. Miller, Buys and Summerville (2007) reiterated that improving transparency, consistency and comparability of TBL reporting, particularly in terms of developing a widely accepted measure for social dimension, is this millennium's challenge. They pointed out that, as the man who first coined the

term TBL, argued: “to refuse the challenge implied by the triple bottom line is to risk extinction... To accept the challenge is to embark on a process which is likely to be both intensely taxing and, potentially, highly rewarding” (Elkington, 1998:2). In the light of the above, Atu (2013) and Akanksha (2014) provide an outline of traditional sustainability measures or indicators that will serve as guide to corporate organizations in calculating their TBL under economic, environmental and social dimensions as represented below:

1. *Economic Indicators*: Economic variables are variables that deal with the bottom line and the flow of money. It pinpoints factors like income, expenditures, taxes, business climate factors, employment, and business diversity factors. Specific examples include:
 - a. Personal income
 - b. Cost of underemployment
 - c. Establishment churn
 - d. Establishment sizes
 - e. Job growth
 - f. Employment distribution by sector
 - g. Percentage of firms in each sector
 - h. Revenue by sector contributing to gross state product
2. *Environmental Indicators*: Environmental variables represent measurements of natural resources and reflect potential influences to its viability.

It incorporates air and water quality, energy consumption, natural resources, solid and toxic waste, and land use/land cover. Ideally, having long-range trends available for each of the environmental variables would help organizations identify the impacts a project or policy would have on the area. Specific examples include:

- a. Sulfur dioxide concentration
- b. Concentration of nitrogen oxides
- c. Selected priority pollutants
- d. Excessive nutrients
- e. Electricity consumption
- f. Fossil fuel consumption
- g. Solid waste management
- h. Hazardous waste management
- i. Change in land use/land cover

3. *Social Indicators*: Social variables refer to social dimensions of a community or region and include measurements of education, equity and access to social resources, health and well-being, quality of life, and social capital. The examples listed below are a small snippet of potential variables:
 - a. Unemployment rate
 - b. Female labor force participation rate
 - c. Median household income
 - d. Relative poverty
 - e. Percentage of population with a post-secondary degree or certificate
 - f. Average commute time
 - g. Violent crimes per capita
 - h. Health-adjusted life expectancy

Further to the above, Miller, Buys and Summerville (2007) stated that there are a minimum of two social impact levels, which are internal, comprising employees and suppliers; and external, comprising customers and community. The difference between the levels provides a simple way to conceptualize how social practices impact on key stakeholders, emphasizing the dual responsibilities organizations have not only to employees and suppliers but also to local communities and consumers affected by corporate practice.

Theoretical framework

There are several theories that could be employed to explain the motivation for TBL reporting and sustainability reporting. These include: stakeholder, legitimacy, accountability and political economy theory.

Stakeholder Theory

This theory encapsulates the notion that companies with proactive social and environmental programs tend to be more competitive than companies that are less active socially and environmentally. The theory is premised on the idea that stakeholders expect companies to be socially and environmentally responsible so that there is a market premium in improved social and environmental performance (Suttipun, 2012).

At the height of stakeholder theory is the firm which is seen as a nexus of implicit and explicit contracts among participants such as owners, employees, managers, and other

suppliers of capital and so on (Jensen and Meckling, 1976; Fama and Jensen, 1983) and that it would be inappropriate to single out one party above others (Tsegba, 2011 cited in Kay and Silberston, 1995). Gray, Collision and Bebbington (1998); Llana, Monera and Hernandez (2007); and Roberts (1992) too shared the view that the theory is also concerned with the ways companies manage their stakeholder relationships. Stakeholders are also defined by the Stanford Research Institute as “those groups without whose support the organization would cease to exist” (Freeman, 1984:31).

Hill and Jones (1992) dwelt on the work of Jensen and Meckling (1976) to recognize the implicit and contractual relationships in a firm to develop the stakeholder-agency theory. According to Cheng and Fan (2010) and Freeman, Harrison and Wick (2007), this theory is concerned with how relationships with stakeholders are managed by companies in terms of the acknowledgement of stakeholder accountability. As stakeholder influences become crucial for corporate image and comparative advantage, companies manage their stakeholder relationships by providing information often in the form of voluntary disclosures in their annual reports or on their websites (Suttipun, 2012).

The stakeholder theory seeks to provide the voice and ownership-like incentives to critical stakeholders by encouraging long-term employee ownership, and board representation by significant customers, suppliers, financial advisers, employees and community representatives to the board of directors (Porter, 1992; Blair, 1995). According to Deegan (2001), the power of stakeholders and their expectations can change over time, so that companies have to continually adapt their operating and reporting behaviors. Suttipun (2012) cited in Ratanajongkol, Davey and Low (2006) said in summary, that stakeholders' theory views corporations as part of a social system while focusing on the various stakeholder groups within society.

According to Freeman, Wicks, and Parmar (2004) stakeholder theory begins with the assumption that values are necessarily and explicitly a part of doing business. It asks managers to articulate the shared sense of the value they create, and what brings its core

stakeholders together. It also pushes managers to be clear about how they want to do business, specifically what kinds of relationships they want and need to create with their stakeholders to deliver on their purpose. Thus, Popa, Blidisel and Bogdan (2009) maintain that stakeholder theory is based on the premise that the stronger the companies' relationships are with other interest parties, the easier it will be to meet its business objectives. Stakeholder theory contributes to the corporate sustainability concept by bringing supplementary business arguments as to why companies should work toward sustainable development. Also, Perrini and Tencati (2006) state that the sustainability of a firm depends on the sustainability of its stakeholder relationships; a company must consider and engage not only shareholders, employees and clients, but also suppliers, public authorities, local (or national according to a firm's size) community and civil society in general, financial partners etc. nowadays and more and more in the future, the quality, that is the sustainability, of stakeholder relationships must be the guiding principle for the managerial decision making process and the pillar of a more comprehensive corporate strategy.

Legitimacy Theory

In organization's perspective legitimacy has been defined by Deegan (2007) cited in Lindblom (1994) as a condition or status which exists when an entity's system is congruent with the value system of the larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity's legitimacy. Legitimacy theory is derived from political economy theory (Kent and Stewart, 2008 cited in Gray et al, 1996) and relies on the idea that the legitimacy of a company to operate in society depends on an implicit social contract between the company and society. Managers continually attempt to ensure that their company complies with its social contract by operating within society's expectations. This suggests that managers have incentives to disclose information that indicates that the company is not in breach of the norms and expectations of society (Kent and Stewart, 2008 cited in Deegan and Blomquist, 2006).

Organizational legitimacy is summarized

by Mathews and Perera (1996) cited in Lindblom (1983) in the following terms:

- a. Legitimacy is not synonymous with economic success or legality.
- b. Legitimacy is determined to exist when the organization goals, output, and methods of operation are in conformance with societal norms and values.
- c. Legitimacy challenges are related to size of the organization and to the amount of social and political support it receives with the more visible being most likely to be challenged.
- d. Legitimacy challenges may involve legal, political or social sanctions.

Guthrie and Parker (1989), and Patten (1992) opine that legitimacy theory takes the view that business operates in society via a social contract. In order that a company may ultimately survive it must legitimize its existence in the eyes of the society. Legitimacy theory like the stakeholders theory, also reflects the view that companies with proactive social and environmental programs gain a competitive advantage over less socially and environmentally active companies by sharing their social and environmental activities with stakeholder groups (Suttipun, 2012).

Tijjani (2011) cited in Preston and Post (1975) perceives the existence of a public policy arena where issues are raised and analyzed by society and if deemed necessary enacted into law. Patten (1992) exploits this connection between social concern and public policy in advocating a legitimacy theory to explain environmental disclosure in annual reports. Abbott and Monson (1979) and Patten (1992) emphasize that disclosure is an attempt to retain legitimacy by projecting an image of the company as socially aware. Naser, Al-Hussaini, Al-Kwari and Nuseibeh, (2006) cited in Guthrie & Parker (1989) emphasize that under legitimacy theory, therefore, the company attempts to maintain its survival and continuity by voluntarily disclosing detailed information to society to prove it is a good citizen.

Accountability Theory

Accountability is an important concept that entails responsibilities for action or inaction and an account of those actions by individuals and

corporate organizations. It means the ethical responsibility to provide an account or reckoning of the actions for which one is held responsible (Popa, Blidisel and Bogdan, 2009; and Wilson, 2003). An organization's accountability is fulfilled by being transparent, being responsive and by its compliance with appropriate rules; and by engaging with and accounting to stakeholders for its performance in these respects (SIGMA Project, 2003).

Gray, Owen and Maunders (1987) emphasized that accountability is an ideological framework most useful for analyzing accounting information transmission in general and social disclosure in particular. They define accountability as the duty to provide an account, by no means necessarily a financial account, or reckoning of those actions for which one is held responsible. If stakeholder and legitimacy theories represent the twin tests that an organization must meet then their demonstration to society may be discharged through accountability.

Wilson (2003) maintains that in the corporate world, there are many different accountability relationships, but the relevant one in this context is the relationship between corporate management and shareholders. This relationship is based on the fiduciary model, which in turn is based on agency theory and agency law, wherein corporate management is the agent and the shareholders the principal. This relationship can be viewed as a contract in which the principal entrusts the agent with capital and the agent is responsible for using the capital in the principal's best interest. The agent is also held accountable by the principal for how that capital is used and the return on the investment. Explaining further the contribution of corporate accountability theory to corporate sustainability reporting Wilson (2003) maintains that corporate accountability need not be restricted to the traditional fiduciary model, nor only to the relationship between corporate management and shareholders. Companies enter into contracts (both explicit and implicit) with other stakeholders as a matter of everyday business, and those contractual arrangements can serve as the basis for accountability relationships. For example, companies that receive environmental permits and approvals from regulators to operate facilities are often held accountable by the

regulators for whether the terms of the approval are being met. Similarly proponents of social contract theory often argue that corporations are given a license to operate by society in exchange for good behavior, and as such the corporations should be accountable to society for their performance.

Political Economy Theory

The political economy has been defined by Deegan (2007) cited in Gray et al. (1996) as the social, political and economic framework within which human life takes place. Political economy theory explicitly recognizes the power conflict that exist within society and the various struggles that occur between various groups within the society. The perspective embraced in political economy theory is that society, politics and economics are inseparable and economic issues cannot meaningfully be investigated in the absence of considerations about the political, social and institutional framework in which the economic activity takes place. It is argued that by considering the political economy a researcher is better able to consider broader (society) issues which impact on how an organization operates, and what information it elects to disclose.

Following from the above point, Deegan (2007) cited in Guthrie and Parker (1990) explain the relevance of accounting within a political economy perspective. They state that the political economy perspective perceives accounting report as social, political and economic documents. They serve as a tool for constructing, sustaining, and legitimizing economic and political arrangements, institutions and ideological themes which contribute to the corporation's private interests. Political economy theory relies on the concept that society, politics and economics are indivisible and economic events cannot be studied in comprehensive manner without reference to political, social and institutional framework in which the event occurs. A study of political economy allows researchers to contemplate broader issues about the information companies elect to disclose in their annual reports (Kent and Stewart, 2008 cited in Guthrie and Parker, 1990).

Review of Empirical literature

Suttipun (2012) investigated narrative TBL reporting in the annual reports of top 50 largest companies listed on the stock exchange of Thailand (SET) and tested whether there is a relationship between a variety of factors and the TBL reporting score. The initial findings show that companies listed on the SET undertook more economic reporting in their annual reports than social and environmental reporting. The implication of these findings according to Suttipun (2012) cited in Ho and Taylor (2007) is that stakeholders in developing countries (e.g. Thailand) exert less pressure on companies to undertake TBL reporting, than do stakeholders in developed countries. Consequently, stakeholder theory may not be applicable in developing countries.

Adaramola and Oluwagbuyi (2013) investigated whether TBL reporting contributes significantly to sustainability of banking firms in Nigeria. Their findings revealed that TBL reporting will enhance the sustainability of the banking industry since it will affect all the stakeholders positively rather than the current traditional reporting which hinged more on financial reporting. Miller, Buys and Rich (2006) in their study, 'defining the social dimension of TBL for the Australian Dairy Industry', concluded that the social impact assessment framework and survey demonstrates that it is possible and desirable to quantify the social dimension of TBL. They reiterated that, "with society increasingly demanding that organizations and industries identify their social impact and address any issues, taking a proactive approach to the social dimension of TBL is an intelligent, forward thinking and pragmatic action". They also stated that if community issues or concerns are addressed, the actual process of conducting a social TBL may actually raise awareness about the value of the industry to the local community.

Deepak, Arun and Vikash (2013) in their study, critically examined whether TBL is key to sustainability. They emphasized that despite the increased trend towards TBL reporting, the extent to which this change is being reflected in decision making process is questionable. They therefore concluded that the concept lacks universal practicability as they could not establish a balance between the three Ps (i.e. profit, people and planet). It seems that a business

genuinely wishing to become green and sustainable is caught between a rock and a hard place.

Mitchell, Curtis and Davidson (2007) evaluated the usefulness of the TBL concept drawing on experience with Murrumbidge Irrigation and a review of other case studies in the literature. They argued that TBL reporting can enable organizations to better manage their response to the sustainability challenge when TBL reporting is approached as an iterative learning curve. They emphasized that by implementing an iterative learning curve, organizational planning can build on collaborative reflections of changes observed after actions undertaken by the organization in the past. Ekwueme, Egbunike and Onyali (2013) explored in their empirical paper the relationship between sustainability reporting practices and corporate performance from a stakeholder perspective. Their study established the nexus between sustainability reporting and corporate performance through the following findings:

- a. Consumers consider product content and other vital information pertaining to a product before purchase and would generally consume more of products that meet their health and safety needs.
- b. Consumers were also particular about the nature of investment companies are involved in, and would generally buy the products of companies that contribute a substantial amount to society's wellbeing.
- c. Investors perceived that green corporations were less likely to feel the impact of a market crash and their stocks inclined to future growth more than non-sustainable ones.
- d. Managers opined that while business turbulence caused by negative societal reaction could distort profit margin, sustainability reports significantly reduces stakeholder's pressure and negative reactions from host communities (as was the case in the Niger Delta region).
- e. Employees as part of the society agreed that satisfying their individual needs could ultimately satisfy corporate needs and society needs, thus, were also willing to contribute part of their pay for social welfare.

Miller, Buys and Summerville (2007) outlined the development of a generic TBL social impact framework and questionnaire designed to quantify an organization's social impact. Their main aim is to stimulate informed debate and discussion about current organizational social impact reporting, whilst providing organizations with a tool which enables the identification, quantification, and comparability of social impact reporting. Their conclusion however, painted a gloomy picture. That, although TBL is an acknowledgment of organization's ripple effect (Miller, Buys and Summerville, 2007 cited in Masden and Andriof, 1998), to date, the standard of TBL reporting is "rather poor" (Miller, Buys and Summerville, 2007 cited in Chapman and Milne, 2004, p246) with little agreement about how to assess the social dimension. In spite of the gloomy picture painted, they signaled some ray of that success is not elusive for TBL reporting on social dimension. They stressed that as the key criticisms of existing social indicators border on issues of validity, comparability and benchmarking, they believe that the development of objective and comparable standards is a *sin qua non* if the social dimension is to be advanced and have the same credibility as economic and environmental dimensions.

Ijeoma (2014) set out to determine whether TBL reporting contribute to the problem of corporate sustainability by focusing on the environmental performance of the company and also, to ascertain whether TBL disclosures in a company's financial statement improves employee motivation with a view to reduce labor turnover in Nigeria. The study observed that TBL reporting contributes negatively on the problem of corporate sustainability by focusing on the environmental performance in Nigeria. Nevertheless, the study revealed that TBL disclosures in a company's financial statement improve employee motivation with a view to reduce labor turnover in Nigeria.

Methodology

The study adopts a descriptive methodology which made use of eclectic desk research approach which relies chiefly on secondary sources of data to explore the development of a framework and measures of sustainability and TBL reporting to assess the

social impact of organizations. These data are mainly from textbooks, journals and internet.

Conclusion

This paper explored the extent to which sustainability and TBL social impact frameworks and measures could objectively quantify an organization's social impact. In order to enable the measurement and comparison of organizations social impacts, this paper described the development of social framework indicators alongside economic and environmental measures. TBL as a tripartite reporting approach which enables corporate organizations to be conscious of their economic, environmental and social responsibilities is increasingly being viewed as a business requirement. In the main, corporate organizations as entities cannot live in isolation. They have to be fully aware that they affect their environment in one way or the other.

Recommendations

1. At the moment, there are different standards and reporting frameworks. The need for harmonization of sustainability/TBL reporting standards and guidelines is therefore recommended.
2. Sustainability/TBL reporting for now is not mandatory in Nigeria. It is therefore, recommended that the regulatory authorities like the Financial Reporting Council of Nigeria (FRCN) should come out with a standard to make this mandatory.
3. All stakeholders including the host community where these companies operate should as a matter of necessity always demand for sustainability/TBL reports.

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Effect of Treasury Single Account on Budget Implementation in Nigeria: Content Analysis Perspective.

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Abstract

This paper, investigated the effect of Treasury Single Account (TSA) on budget implementation in Nigeria. The paper relied on secondary data and uses content analyses methodology to effectively examine the fiscal impact of TSA policy on budget implementation in Nigeria. Amidst the dwindling oil price and the superiority of Dollar against the Naira, the paper suggests better ways of making the policy effective. Hence, the study revealed that the consolidation of cash resources through a TSA helps to avoid both internal and external borrowing to finance the budget implementation in Nigeria, and also avoid paying additional interest charges to finance the expenditures of some agencies while other government agencies keep idle balances in their various bank accounts. The study therefore concluded that TSA policy is essential in the nation's revenue drive, transparency, fight against corruption and most importantly, budget implementation in Nigeria.

Key words: Treasury Single Account, Budget Implementation, Treasury Single Account & Budget Implementation, MDAs, Revenue Leakages, Nigeria.

Introduction

The survival and growth of domestic and international economic system relies fundamentally on effective financial management for it to stand a test of time (Akande, 2015). Failure to have such financial management, ministries, departments, agencies and other related institutions will lead to bankruptcy, financial corruption may prevail and the entire system may subsequently paralyze as a result of inadequate or poor financial discipline, monitoring, transparency and accountability (Tari, Myatafadi and Kibikiwa, 2016). The introduction of Treasury Single Account is as a result of numerous corrupt practices that exist in the Country's public accounting system, lack of transparency and accountability.

The Treasury Single Account (TSA), a single pool for harvesting revenue inflows of all the Ministries, Departments and Agencies (MDAs) was not Buhari's idea. It was conceived by the immediate past administration of President Goodluck Jonathan, but it remained a mere policy on paper due to lack of political will on the part of past administration to enforce it. President Goodluck Jonathan directed all the Ministries, Departments and Agencies (MDAs) to close all their accounts domiciled in the commercial banks and transfer them to the federation account in January with February 28, 2015 as the deadline but he was ignored by the agencies and he didn't sanction them (Eme, Chukwurahs & Iheanacho, 2015). The Central Bank of Nigeria (CBN) circular in Jonathan's administration read:

“In a circular to all deposit money banks, the Central Banks of Nigeria announced the commencement of Federal Government Independent Revenue e-Collection Scheme. The scheme will automate revenue collection of all Ministries, Departments and Agencies (MDAs) directly into the Consolidated Revenue Fund Account at the CBN. Consequently, all deposit money banks have been directed to install the approved technology, the Remita e-Collection Platform

and Other Electronic Payment Channels across their branches and sensitized their staff on the scheme” (Akande, 2015).

Bankers had pressurized the former government of Goodluck Jonathan, which had initiated the policy in December 2014, to soft pedal on the implementation which was originally scheduled for February 2015, on the reasons of a likely negative impact on the economy. But with Buhari on board as president, the enforcement has become a compulsory policy that all revenue generating MDAs must comply with. They have been mandated to channel their earning into a single account to be domiciled with the Central Bank of Nigeria (CBN).

Federal Government's seriousness about enforcing TSA was conveyed in a circular entitled, “Re: Introduction of Treasury Single Account (TSA) (e-Collection of Government Receipts)” by Head of the Civil Service of the Federation, Danladi, I. Kifasi. The circular dated August 7, 2015 made it known that president Buhari:

has approved the establishment and operation of Treasury Single Account for e-Collection of Government Receipts for all Federal MDAs with effect from the date of this circular. Specifically, the circular was to aid transparency and facilitates compliance with Section 80 and 162 of the constitution of the Federal Republic of Nigeria 1999 (as amended). Consequently, he said all receipts due to the Federal Government or any of her agencies shall be paid into the TSA as follows: Account Name: Accountant General (Federal Sub-Treasury), Account No.: 3000002095 maintained in the Central Bank of Nigeria (CBN), except otherwise expressly approved (Vanguard Editorial, 2015:18).

The Accountant General of the Federation

(AGF) Mr. Jonah Otunla, posits that “The New Electronic Revenue Collection (ERC) platform is aimed at improving internally generated revenue in the face of declining oil prices”. This, he said, was in line with a series of treasury reforms, which began in 2012, aimed at ensuring transparency and accountability in the management of the nation's finances (Tari, Myatafadi and Kibikiwa, 2016). It is expected that the implementation of TSA will help tame the tide of corruption. Parts of other reforms that were aimed at improving the quality of the nation's Public Financial Management (PFM) Systems are Government Integrated Financial Management Information System (GIFMIS); Automated Accounting Transaction Recording and Reporting System (ATRRS); Integrated Payroll and Personnel Information System (IPPIS); International Public Sector Accounting Standard (IPSAS) and many others.

The objective of this paper therefore is to find out the influence of TSA on the budget implementation in Nigeria.

Literature Review

Concept of Treasury Single Account

TSA is seen as a system of Aggregative Financial Inclusion, being a nationally organized and particular way of connecting all and divergent federating units on 3-by-3 matrix, Federal–State–Local governments and their respective Ministries, Departments and Agencies (MDAs), to account for all their incomes and revenues via TSA Designated bank accounts with Deposit Money Banks (DMBs) and channeling and consolidating same to Consolidating Single Account with Central Bank of Nigeria (Iroegbu, 2015). As a public accounting system, the primary aim of TSA is to ensure accountability of government revenue, enhance transparency and avoid misapplication of public funds (Obinna, 2015). It is to ensure that transparency on unspent budgetary allocations is carried forward automatically to another year. According to Otunla in Eme, Chukwurah and Iheanacho (2015) who explained that TSA was online and in real time, meaning that it could be done from anywhere in the world. Once fully operational, transactions can be completed within 30 minutes, even if the individuals responsible are scattered across the globe. He said:

The cardinal objective of TSA is to facilitate implementation of the Federal government's Cash Management Policy, and to achieve greater accountability for public expenditure. This would ensure that sufficient cash was available as and when needed to meet commitments. He said it would control aggregate cash flow, improve the management of government domestic borrowing programme, enhance efficiency and enable investment of idle or excess cash. (Eme, Chukwurah and Iheanacho, 2015)

In an interview granted to the lead Director of Centre for Social Justice, a unit society group based in Abuja by The Guardian 16 August, 2015; Onyekpere defined TSA as a process and tool for effective management of government's finances, banking and cash position. In accordance with the name, it pools and unifies all government accounts through a single treasury account (Tari, Myatafadi and Kibikiwa, 2016). According to them, he further posited that, the consolidation into a TSA paves way for the timely capture and payment of all due revenues into government coffers without the intermediation of multiple banking arrangements.

TSA is arguably a new concept of cash management in the entire civil system in Nigeria. Even though, it is boldly contained in sections 80 and 162 of the 1999 constitution of the Federal Republic of Nigeria, it remained a mere policy on paper apparently due to lack of political will on the part of the previous administrations to enforce it. But with the immediate assumption of President Muhammadu Buhari, he directed on-board the enforcement of a constitutional provisions for a central treasury techniques. This was immediately followed by a circular dated August 7th, 2015 to ensure a swift compliance with the directive (Tari, Myatafadi and Kibikiwa, 2016).

According to Kanu (2016), Treasury Single Account (TSA) is one of the financial policies implemented by the federal government of Nigeria to consolidate all the revenue from all the ministries, departments, and agencies (MDAs) in

the country by way of deposit into Commercial banks traceable into a single account at the Central Bank of the country. The policy was introduced to reduce the proliferation of bank accounts operated by MDAs and also to promote transparency and accountability among all organs of the government. Taiwo (2015) as cited at Kanu (2016), said that TSA is “the Federal Government independent Revenue e-collection initiative that will automate Revenue Collections of Ministries, Departments, and Agencies (MDAs) directly into the Federal Government Consolidated Revenue Fund (CFR) account at the CBN through the Remita e-collection platform and other electronic payment channels”.

Budget Implementation

The Federal Government had taken bold steps since July 2003, to begin the tackling of the deep-seated risks to macroeconomic and fiscal stability and also to address key sources of economic inefficiency. As such, it is implementing policies to strengthen economic management and to deal with weak governance and corruption. The budget function has been consolidated in a strengthened Budget Office and greater transparency has been introduced to public expenditure management through regular publication of allocations of federation revenues to all tiers of governments, and through widespread dissemination of information on budget allocations and execution.

Sanusi, the Emir of Kano, in his remark as special guest of honour at the post budget symposium organized by the governing council of Institute of Chartered Accountants of Nigeria (ICAN) in 2015 observed that the issue of review of budgetary process was something that had been talked about in the last five years without any feasible approach to tackle it. In his opinion, the Federal Government needed to work on its revenue generation process. According to him,

No matter how good your budget is, if you cannot do simple things like track your oil revenue, you can't meet the basic government obligation to the citizens. Before the government goes borrowing, they need to find out why revenue is so low given that our GDP is

supposed to be so high On his part, Samuel Olufemi Deru, president, ICAN, said the nation's economy need surgical and drastic reforms beyond cosmetic privatization of government companies, urging the government to plug all revenue leakages, revisit and redefine her priorities as a nation (Sun Editorial,2015:17)

Greater financial controls have been put in place through the creation of a Cash Management Committee chaired by the Minister of Finance, thus limiting the extent of deviation between budget and actual expenditure and the accumulation of new expenditure arrears.

The Government recognizes nevertheless that additional challenges remain and that public expenditure management needs to be further strengthened to:

- i. Build an integrated budget based on programs that are clearly linked to key development objectives.
- ii. Ensure greater accountability from budget holders.
- iii. Allow greater emphasis on budget outcomes and impact.
- iv. Identify and address remaining sources of leakage in budget execution in order to strengthen efficiency of public expenditures.

This will require in addition to changes in policies and regulations, considerable modernization and automation of current budget and financial management and procurement practices.

Treasury Single Account and Budget Implementation

According to Onyekpere (2015) a TSA is a unified structure of government bank accounts enabling consolidation and optimal utilization of government cash resources. It is a bank account or a set of linked bank accounts through which the government transacts all its receipts and payments and gets a consolidated view of its cash position at any given time. This presidential directive would end the previous public accounting situation of several fragmented

accounts for government revenues, incomes and receipts, which in the recent past has meant the loss or leakages of legitimate income meant for the federation account. The TSA is a process and tool for effective management of government's finances, banking and cash position.

The implementation of the TSA will have a positive effect on the national economic planning, swift & full budgetary implementation; reduce leakages and other irregularities in the MDAs, aid appropriate planning, data collection, analysis and timely aggregation of Federal Government Revenue. Realization of the government revenue on time causes its effective allocation (Kanu, 2016).

The primary benefit of a Treasury Single Account, as stated in Kanu (2016), is to provide for proper monitoring of government receipts and expenditure. In the Nigerian case, it will help to block most, if not all, the leakages that have been the bane of the economy. We have a situation where some Ministries, Departments, and Agencies manage their finances like independent empires and remit limited revenue to government treasury.

Empirical Review

The following works of various authors are reviewed in order to ascertain the effect of TSA on budgetary implementation in Nigeria.

Yusuf Bashir (2016) carried out a research to examine the effect of treasury single account policy on the public financial management in Nigeria. With a broad objective to examine the extent to which Treasury Single Account can block financial leakages, promotes transparency and accountability in the public financial management. Both primary and secondary data had been employed. The populations of this study are Ministries, Department and Agencies (MDAs) within Bauchi metropolis using a sample of 72 respondents through judgment sampling. The data were analyzed using the Pearson Correlation techniques. The result of this research shows that adoption of a Treasury Single Account (TSA) is capable of plugging financial loopholes, promoting transparency and accountability in the public Financial System. Thus, the researchers recommend that for the success of this policy government should promulgate more legislation to make it mandatory for all the three tiers of government in

Nigeria

Ahmed Adamu (2016) Carried out a study to analyze the conceptual meaning of the TSA and also gives its expected benefits to the economy of Nigeria such as enhance system of financial management and control, unification of various Accounts of government, reduction of the costs of government borrowing and ensuring of optimum utilization of government financial resources. He also made analyses on the objectives of the TSA systems and its various Accounts such as TSA main account, Subsidiary Account, ZBAs, Transit and Impress Account among others. He finally discusses the prospects of the TSA system and its challenges and concludes that the system requires political will, honesty and determination so as to overcome the various challenges identified in the paper in order to achieve the expected benefits of the system.

Eme, Chukwurah and Iheanacho (2015) analyzed the objectives, pros and cons of a Treasury Single Account recently introduced by the Buhari administration. According to them, the adoption of a Treasury Single Account (TSA) by the federal and some state governments is seen by many as aimed at plugging loopholes in the Nigerian Financial System. A TSA is a unified structure of government bank accounts enabling consolidation and optimal utilization of government cash resources. It is a bank account or a set of linked bank accounts through which the government transacts all its receipts and payments and gets a consolidated view of its cash position at any given time. This presidential directive would end the previous public accounting situation of several fragmented accounts for government revenues, incomes and receipts, which in the recent past has meant the loss or leakages of legitimate income meant for the federation account. The paper explores the various gamut of TSA and concludes by positing that for an administration that has unwritten social contract signed with Nigerians in terms of service delivery; it has the obligation to aggregating states' resources to provide services and amenities promised to the people. Any step taking in the direction aimed at plugging leakages in revenue generating agencies should be seen as a step in the right direction.

Tari, Myatafadi and Kibikiwa (2016), attempts to look at the contributions of reviving the Treasury Single Account. The paper relied on

secondary methodology to effectively examine the fiscal impact of reviving the TSA policy and anchored on incremental model as a framework of analysis. The paper suggests better ways of making the policy effective amidst the dwindling oil price and the superiority of Dollar against the Naira. Hence, the paper concludes that except proper monitoring of government account is carried out, in all government institutions and strong punitive measure applied against defaulters and corrupt officers, that TSA will be a failure in Nigeria. The paper recommends that, the financial institutions and their supervisors, that is, Central Bank of Nigeria, should be proactive and instate measures to ensure full compliance to TSA and correct any lapses or negative impact of the policy on the affected financial institutions among others. According to them, in public policy making and analysis, incremental model is a collective effort of various scholars like Lindblom & Woodhouse (1993), Baumgartner & Jones (1993), Robert Dahl (1967), Mathias, Chijioke, Temiloluwa, & Ogah (2015) and Simon (1997). These groups of intellectuals are generally referred to as the incremental thinkers. Dlakwa (2014) wrote that due to lack of time, scarce resources, intellectual ability and cost implication, policy makers are likely to face in generating every person's opinion on every given issue, nor are they policy maker not opportune to identify all available alternative ways of solving problems before they could choose the best way out. In respect of the above subject matter, if the present administration of President Muhammadu Buhari insists on subscribing to the rational comprehensive model, they are likely to end up in wasting time and resources, without addressing developmental issues. Incrementalism is a theory developed out of the realization that truly rational decision making is practically impossible given the complexity of the policy environment. That is not to say that policy actors do not have the intent to be rational: their decisions are goal orientated and there are processes followed to achieve those goals. But there are many factors that work against scientific rationalism (Howlett, & Ramesh, 2003).

Clementina Kanu (20116) Assesses the positive effect of implementation of TSA on the Economy, the public accounting system and the

undesired consequences on the liquidity base and performance of banking sector in Nigeria. Questionnaires were administered to the Management staff of the ten banks selected for the study. she employed Chi-square as a statistical tool for analysis of the data. The results obtained confirmed that the implementation of Treasury Single Account in the public accounting system impacted negatively on the liquidity base and the performance of banking sector in Nigeria. she, therefore recommends that CBN and the Government should come up with an arrangement to address the issue of TSA considering the impact of the activities as the important factor for efficient management, control of government's cash resources as well as sustainability of banks. CBN should go beyond the guidelines and put in place measures to correct any lapses or negative impact of the policy both in the banking sector and the economy at large. The implication of the study is that banks should avoid armchair activities and go to other source of funds in the economy. Many people that are denied access to credit facilities, investments and savings opportunity should be encouraged as this will improve the economy and result in sustainable banking sector in the country.

Udoma (2016) as cited in Kanu (2016) opines that maintenance of TSA will enhance funding government budget rather than depend on Federal allocation. In any economy where the budget is fully funded, the aim certainly will be accomplished. The consequence should be; improved economic system, political and social development. GIFMIS will also be used to support the government in all aspects of budget preparation, execution and management of government financial resources. The system will cover all spending units financed from the government budget, and will process and manage all expenditure transactions (including interfaces) pertaining to these units. All steps in the expenditure cycle including, budget appropriations, financing limits, commitments, verification and payment transactions will be recorded by and managed through the system.

Conclusion and Recommendations

The study investigates the impact of TSA on the budget implementation in Nigeria. The study concluded base on the literature review and

content analysis that, in the nation's revenue drive, transparency, fight against corruption and budget implementation, the Treasury Single Account (TSA) policy is very much needed. In Nigeria, the public perception of the effect of TSA policy on the nation's revenue drive, transparency, fight against corruption and budget implementation and also the likely effects on TSA policy adoption on banks' liquidity and employment were analyzed. The result revealed that the consolidation of cash resources through a TSA helps to avoid both internal and external borrowing to finance the budget implementation in Nigeria, and also avoid paying additional interest charges to finance/fund the expenditures of some agencies while other government agencies keep idle balances in their various bank accounts. The study therefore concluded that TSA policy is essential in the nation's revenue drive, transparency, fight against corruption and most importantly, budget implementation. It is also concluded that TSA is comprehensive, encompassing all government cash, both budgetary and extra budgetary.

Based on the conclusion above, the study made the following recommendations.

- To encompassing all government cash resources, the coverage of the TSA should be comprehensive.
- To make the TSA a stable feature of treasury management, the Vote Book in Treasury Accounting should be maintained, strengthened and made more effective with balances extracted on daily bases as this will help ensure sound budgetary control/effective budget-monitoring to boost the new policy of TSA.

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Taxation and its Contribution to Economic Growth of Nigeria: A Time Series Analysis

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Abstract

This study empirically examined the contributions of taxation (proxied by petroleum profit tax, company income tax, custom exercise duty and value added tax) to the economic growth of Nigeria (proxied by the gross domestic product). The study adopts the ex-post facto research design in the investigation. Descriptive statistics and regression analysis were used in the analysis of data. The study found an insignificant contribution of Petroleum profit tax (PPT), company income tax, custom exercise duty (CED) and value added tax (VAT) to the gross domestic product (GDP) of Nigeria. The study recommends amongst others the need for the government to create all necessary modalities that will enhance the effective collection of taxable revenue accruable from all revenue sources most especially the oil industry to improve the total tax accruable to the pocket of the federal government of Nigeria.

Keywords: Taxation, economic growth, time series, Nigeria

Introduction

Every modern state requires lot of revenue to provide and maintain essential services for her citizens. This makes the state consider and explore many ways and means of generating enough revenue to undertake and discharge her responsibilities and in doing so, Taxation is always considered as a beneficially available option which can easily be explored and tapped. To this, Taxation has always proven to be a ready means of revenue generation to the government which accounts for why Governments from time immemorial have always depended on taxes to fund their activities. Thus the imposition of taxes by Governments isn't a new phenomenon but a long old tradition which has continued over centuries and today, there is hardly any government that does not rely on taxation to fund their activities. However, in modern times, the reason for the imposition of taxes is not only for the generation of revenue for the state but also has become an avenue for the redistribution of wealth and re-adjustment of the economy (Ojo, 2008)

According to Appah (2004), tax is a compulsory levy imposed on a subject or upon his property by the government to provide security, social amenities and create conditions for the economic well-being of the society. Also Anyanwu (1997) and Anyanfo (1996) stated that tax are imposed to regulate the production of certain goods and services, protection of infant industries, control business and curb inflation, reduce income inequalities etc. On the other hand, Tosun & Abizadeh (2005) acknowledge that taxes are used as proxy for fiscal policy. They outlined five possible mechanisms by which taxes can affect economic growth. First, taxes can inhibit investment rate through such taxes as corporate and personal income, capital gain taxes. Second, taxes can slow down growth in labour supply by disposing labour leisure choice in favour of leisure. Third, tax policy can effect on research and development expenditure. Fourth, taxes can lead to a flow of resources to other sectors that may have lower productivity. Finally, high taxes on labour supply can distort the efficient use of human capital high tax burdens even though they have high social productivity.

In advanced and developed countries of the world, taxation has proven to be an indispensable

source of revenue to their Governments and as such, the revenue derived by these governments from the various forms of taxes help in boosting their overall revenue base which is used in the execution of developmental and social welfare projects for the good of the citizenry.

In Nigeria, successive Governments have not given taxation the desired attention due to their over dependence on oil resources and as such, not much revenue is derived from taxation. Similarly, they have failed to create an enabling environment that will boost the volume of revenue generated from the various sources of taxes like company income tax, petroleum profit tax, value added tax and custom exercise duties etc., which has resulted to low revenue generation from taxation. This scenario has made many to question the rationale behind the continuous and substantial neglect of such a viable source of revenue to the government while the economy is in dire need of funds for infrastructural development, social and economic growth. This makes one wonder whether the Government is aware of the substantial contribution of taxes to economic development and growth or not. This problem has further been escalated by the absence of consensus agreement among researchers on existing literature regarding the extent to which taxation has contributed to the economic growth of Nigeria. Against this background therefore, this study is carried out to empirically investigate the extent to which taxation impacts on the economic growth of Nigeria from 2000 to 2014 and to do this, the study sought to examine the extent to which: petroleum profit tax (PPT) contributes to the gross domestic product (GDP); companies income tax (CIT) contributes to the gross domestic product (GDP); custom and excise duties (CED) contributes to the gross domestic product (GDP); and value added tax (VAT) contributes to the gross domestic product (GDP).

Literature Review

The Concept of Taxation

According to Ochiogu, (1994) tax is a levy imposed by the government against the income, profit or wealth of the individual, partnership and corporate organizations. On the other hand, Ojo (1982) define tax as:

A compulsory levy imposed by the government on individuals and business firms and paid by them to the government. It is compulsory and benefit for payment do not necessarily correspond (in magnitude) to the amount of tax paid.

Similarly in *United States V. Butter*, Chief Justice Roberts of the United States of America Supreme Court said that, tax is “an exaction for the support of government” He debunked the continued conception of tax as the Expropriation of money from one group for the benefit of another. The foregoing definitions try as much as possible to capture the concept of taxation. They all give and highlight the idea of necessity, compulsion, legality, object and purpose, as well as who pays the tax. Also the various authors concluded that it is possible for tax payers not to receive anything identifiable for their contribution but that they have the benefit of living in a relatively better, healthier and safer society.

Concept of Economic Growth

Economic growth is defined as “the process whereby the real per capital income of a country increases over a long period of time”. Economic growth is measured by the stock of capital and the net investment. Economic development on the other hand is the process of increasing real per capital income and engineering substantial positive transformation (structural) in the various sectors of improvements in the area of economic activities leading to increased economic welfare of the citizens. It connotes qualitative change in economic want, goods incentives, productive institutions and knowledge. The truth is that economic growth leads to economic development but not as arule.

Accordingly, economic growth is the process by which productive capacities of an economy increases over a period time leading to a rise in the level of the national income. They emphasized that economic growth shows in the form of increased income levels, expansion of the labour force and an increase in the capital stock of the country's volume of trade and consumption. Thus, economic growth refers to increase in quantitative output per unit of input

while economic development refers to the qualitative changes in economic wants due to the structural and technical arrangement of improved goods and services in the economy. This then implies that economic growth must occur before economic development can take place.

Similarly, economic growth occurs when there is substantial increase in the actual output of goods and services per head which refers to a situation where the real output in terms of goods and services increases at a faster rate than the rate of the population, since output can only increase with a reasonable stock of capital in the economy.

The Role of Taxation in Economic Development

In a developing economy, the role of taxation as a source of substantial revenue and as an economic stabilization factor cannot be over emphasized and even for developed economies, taxation is still considered to be the most viable and sustainable source of revenue to most governments since it accounts for about ninety percent (90%) or more of their income in some cases (Adegbe & Fakile, 2010). According to Adegbe & Fakile, (2010), taxation plays several important roles in any economy which includes:

Serving as a bond of engagement between citizens and the government, strengthening democracy and demanding accountability and helping to reflate the public sector when appropriated in the domain of fiscal credit, The re-distribution of wealth and the promotion of economic equity within the society through the taxing of individuals and sectors that are better off and transferring the resources to those that is not well-off.

Control of the economy by regulating the rate of taxes: For example, if a country is experiencing inflation, the government may increase taxes so that disposable income will be lower which will also result to lower aggregate demand and on the other hand, if an economy is experiencing a recession, the government may lower taxes so that disposal income will increase

which will also result to higher or increased aggregate demand for goods and services.

Imposing Taxes to discourage the consumption of certain goods and services: For example, imposing higher import duties on heavy cars will discourage their importation and increasing the rate of Value Added Taxes (VAT) on alcohol may discourage its consumption.

Imposing Taxes to stimulate domestic production of certain goods and services, since high import duties on imported goods will discourage the importation of such goods and thus promote and encourage infant industries at home.

Finally, Taxes may be imposed to correct Balance of Payment (BOP) deficit. A tax on imports will reduce imports and consequently bring exports to equality. From the foregoing, it is pertinent that taxation plays several important roles in any economy.

Be that as it may, the role of taxation in economic development is complex and controversial. Since it provides income for the government which may use it to invest in public services or distribute it as money transfers on one hand and at the same time acting as a constraint against consumption and productive behaviour. Taxes are also distortionary and have the attribute of changing people's attitude and behaviour. Similarly, income tax inhibits productive behaviour and thereby growth. This claim is based on the theoretical assumption that the supply of labour is a positive function of the real wage after tax. As a result the empirical evidence on this claim is rather ambiguous.

Empirical Review

Edame & Okoi, (2014) examines the impact of taxation on investment and economic growth in Nigeria from 1980-2010 using the ordinary least square method of multiple regression analysis to analyze the data which were sourced from the Central Bank of Nigeria statistical bulletin. The result of the analysis were in conformity to our prior expectation because the parameter estimates of corporate income tax (CIT) and personal income tax (PIT) appeared with negative signs, meaning that an inverse relationship exist between taxation and investment. The economic implication of the result is that a one percent (1%) increase in CIT will result in decrease in the level of investment

in Nigeria. Consequently, an increase in PIT will result in decrease in the level of investment. Finally, the result therefore showed that taxation is negatively related to the level of investment and the output of goods and services (GDP) and is positively related to government expenditure in Nigeria. The study also observed that taxation statistically is a significant factor influencing investment, GDP and government expenditure in Nigeria.

Abata, (2014) studied the impact of tax revenue on Nigeria economy using the descriptive survey design and used the Chi-square to analysis the data so collected. The study found that; tax revenue significantly impact on Federal Government Budget implementation in Nigeria, Tax administrative system significantly affected the revenue generated in Nigeria, Tax evasion significantly affected government revenue in Nigeria, and Lack of training on the part of tax officers significantly affected the generation of government revenue in Nigeria.

Ihenyen, & Ebipanipre, (2014) examines taxation as an instrument of economic growth in Nigeria. Using annual time series data sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin between 1980 to 2013. A linear model of Corporate Income Tax (CIT), Value Added Tax (VAT) and Economic Growth (GDP) were estimated by using the Ordinary Least Square (OLS) technique. The empirical result suggests that the hypothesized link among corporate income tax, value added tax and economic growth indeed exist in the Nigerian context. Thus the result offer tantalizing evidence that taxation is an instrument of economic growth in Nigeria. This conclusion points to the need for additional measures by government in ensuring that taxpayers do not avoid and evade tax so that income can be properly generated there from it. In addition, regulatory authorities charged with the sole responsibility of collecting tax should further be strengthened to enforce compliance by taxpayers. Above all, the tax collected should be properly distributed so that economic growth can be properly harnessed.

Okafor (2008) investigated "tax revenue generation and Nigerian economic growth" proxied by the gross domestic product (GDP). The ordinary least square (OLS) regression analysis was adopted to examine the relationship

between the GDP (the dependent variable) and a set of federal government income tax revenue heads over the period 1981-2007. A simple hypothesis was formulated in the null form which states that there is no significant relationship between federally collected tax revenue and the GDP in Nigeria. The regression result indicated a very positive and significant relationship. However actual tax revenue generated in most years fell below the expected level.

Methodology

This study adopts an ex-post facto research design. The choice of the ex-post facto research design for this study is borne out of its strengths as one of the most appropriate design for studies that use secondary data involving dependent and independent variables.

This research design is also adopted for this study because of its strengths as the most appropriate design to use when it is impossible to select, control and manipulate all or any of the independent variables or when laboratory control will be impracticable, costly or ethically questionable (Akpa and Angahar, 1999).

The major source of data for this study was secondary data that were extracted from the central bank of Nigeria (CBN) annual statistical bulletin in respect to the period under study (2000-2014). Also, relevant literature on taxes as a source of revenue generation was extracted from periodicals and journals. In order to achieve this objective, several data analytical techniques were deployed. The study uses descriptive statistics to summarize the collected data in a

clear and understandable way using numerical approach (Nsude, 2005). The study further employed the use of ordinary least square (OLS) multiple regressions to determine the effect of the independent variable on the dependent variable.

Model Specification

The following multiple regression model has been formulated to guide the researcher in the investigation.

$$GDP = f(\text{Taxation})$$

$$GDP = f(\text{CIT, PPT, VAT, CED})$$

$$GDP = \alpha + \beta_1 \text{BCIT} + \beta_2 \text{PPT} + \beta_3 \text{VAT} + \beta_4 \text{CED} + u$$

Where, GDP = Gross domestic product, CIT = Company income tax, PPT = Petroleum profit tax, VAT = Value added tax, CED = Custom exercise duty

' α ' = alpha, represent the model constant

$\beta_1 - \beta_4$ = Beta, representing the coefficients of variables used in the model.

u = is the stochastic variable representing the error term in the model. It is usually estimated at 5% (0.05) level of significance.

Results and Discussions

Table 1.1 presents data on gross domestic product (GDP), petroleum profit tax (PPT), company income tax (CIT), custom exercise duty (CED) and value added tax (VAT) from the period 2000 to 2014. To improve the linearity of the functions, the natural anti log of all variables were taken (see appendices). The data were imputed into e-view to compute regression results. The output are hereby presented and interpreted below.

Table 1.1: Descriptive Statistics

	GDP	PPT	CIT	CED	VAT
Mean	8501336.	2.57E+12	4.01E+11	3.31E+11	4.36E+11
Median	80092.56	1.90E+12	3.27E+11	2.41E+11	4.05E+11
Maximum	84870382	7.46E+12	9.54E+11	8.87E+11	9.99E+11
Minimum	18564.59	2.45E+11	1.43E+10	1.12E+11	9.63E+10
Std. Dev.	21634274	2.34E+12	3.31E+11	2.21E+11	2.94E+11
Skewness	3.213488	1.073462	0.351680	1.363148	0.408713
Kurtosis	11.89995	2.813795	1.603503	3.808511	1.875731
Jarque-Bera	75.32198	2.902470	1.528075	5.053988	1.207603
Probability	0.000000	0.234281	0.465782	0.079899	0.546729
Sum	1.28E+08	3.85E+13	6.01E+12	4.97E+12	6.55E+12
Sum Sq. Dev.	6.55E+15	7.69E+25	1.53E+24	6.85E+23	1.21E+24
Observations	15	15	15	15	15

Source: Researcher's computation using E-view, version 9

Table 1.1 shows that all the series display a high level of consistency as their mean and median values are perpetually within the maximum and minimum values of these series. Besides, the standard deviation revealed that actual data in the series are not really different from their mean value. The skewness and kurtosis statistics provide useful information about the symmetry of the probability distribution of various data series as well as the thickness of the tails of these distributions respectively. These two statistics are particularly of great importance since they are used in the computations of Jarque-Bera statistic, which is used in testing for the normality or asymptotic property of a particular series.

As a basic assumption usually made in econometric modeling, testing for the normality or asymptotic property of data series becomes necessary since most probability distribution and other test statistics, such as t, F and χ^2 are based on this assumption. From Table 4.2, all data are normally distributed at either 1% or 5% level of significance. The normality assumption is further buttressed by the nearness of the mean and median values for these series. The closer the mean and median values of a data series, the greater the probability that such series will be

normally distributed.

Unit Root Test

It is not unusual to discover that most time-series variables are non-stationary in their levels and several of these variables are therefore, represented in their first difference. These time-series are therefore said to be integrated of order one and are denoted by I(1). The level of some variables can be so large or small that they do not revert to their mean as expected, hence the need for stationarity test which is also known as unit root test. In view of the fact that the stationarity of a time series affects the consistency of the estimates of the error correction model, it becomes necessary to examine the order of integration of data employed in the study. In testing for the stationarity of variables, the Augmented Dickey-Fuller(ADF) unit root test was adopted. The Augmented Dickey-Fuller test adopted lag 1.

A satisfactory result is obtained using ADF test of stationarity at 1%, 5% 10% critical value. Gross domestic product (GDP) was found to be stationary at level 1 while Gross domestic product per capita (GDPPC), and total revenue (TR) are found to be non-stationary at level 1. This result is presented below.

Table 1.2: Summary Result of ADF Test

Variables	ADF Test	Mackinnon 1%Critical Values	Mackinnon 5%Critical Values	Mackinnon 10 % Critical Values	Order of Stationarity	Remark
GDP	-103.3251	-4.200056	-3.175352	-2.728985	1(1)	Stationary
PPT	0.666312	-4.004425	-3.098896	-2.690439	I (1)	Non-stationary
CIT	0.706983	-4.004425	-3.098896	-2.690439	1(1)	Non-stationary
CED	3.329346	-4.121990	-3.144920	-2.713751	1(I)	Non-stationary
VAT	-2.719893	-4.057910	-3.119910	-2.701103	I (1)	Non-stationary

Source: Researcher's Computation Using E-view, Version 9.

Regression Result of the Estimated Models

This section of the chapter presents and interprets the regression result in respect to the three models of the study.

Model 1

$$GDP = \beta_0 + \beta_1 BCIT + \beta_2 PPT + \beta_3 VAT + \beta_4 CED + u$$

Table 4.3: Ordinary Least Square (OLS) Result.

Dependent Variable: GDP

Method: Least Squares

Date: 03/29/16 Time: 08:27

Sample: 2000 2014

Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PPT	-6.61E-06	1.02E-05	-0.645076	0.5334
CED	9.34E-05	0.000125	0.748245	0.4715
CIT	-3.70E-05	4.35E-05	-0.851116	0.4146
VAT	-1.26E-05	2.31E-05	-0.546596	0.5966
C	14874658	18054157	0.823891	0.4292
R-squared	0.252162	Mean dependent var		8501336.
Adjusted R-squared	-0.046973	S.D. dependent var		21634274
S.E. of regression	22136559	Akaike info criterion		36.92456
Sum squared resid	4.90E+15	Schwarz criterion		37.16058
Log likelihood	-271.9342	Hannan-Quinn criter.		36.92205
F-statistic	0.842970	Durbin-Watson stat		2.472451
Prob(F-statistic)	0.528813			

Source: Researcher's Computation Using E-view, Version 9.

The regression line as shown in the result above reveals an intercept of 14874658. This simply implies that when all the other variables are not considered, GDP will be estimated by 14874658 occasioned by factors not incorporated in this study.

However, the estimated model reveals a negative coefficient of -6.61E-06 in respect to petroleum profit tax (PPT) indicating a negative impacts on the gross domestic product (GDP) of Nigeria. This implies that, a unit change in value of the petroleum profit tax (PPT) will lead to a significant decrease in the gross domestic product per capita by -6.61E-06.

More so, company income tax (CIT) has a coefficient of 9.34E-05. This implies that, a unit change in company income tax (CIT) will lead to a significant variation in the gross domestic product per capita by 9.34E-05.

In addition, custom exercise duties (CED) has beta coefficient of -3.70E-05 indicating that a unit change in custom exercise duties (CED) will lead to a significant negative variation in the gross domestic product per capita by 3.70E-05.

Finally, the estimated model reveals a

positive coefficient of -1.26E-05 in respect to value added tax (VAT) indicating a negative impacts on the gross domestic product (GDP) of Nigeria. This implies that, a unit change in value added tax (VAT) will lead to a significant decrease in the gross domestic product per capita by 1.26E-05

On the ground of apriori expectation, negative relationship between the slope coefficients of PPT (β_1), CIT (β_2) and VAT (β_4) defiles our apriori expectation while the positive relationship between the slope coefficients of CED (β_3) goes in line with apriori expectation. The intercept (β_0) has a positive relationship with the real gross domestic product which is also in line with our apriori expectation.

The implication is that, PPT, CIT and VAT negatively influence the economic growth of Nigeria proxied by gross domestic product.

The coefficient of determination (R^2) is estimated at 0.252162. This suggests that 25.2% of the variation in GDP can be explained by the explanatory variables (PPT, CIT and VAT) while the remaining 74.8% can be explained by other variables not included in the model.

Our indicator of generalizability is the adjusted R Square value, which is adjusted for the number of variables included in the regression equation. This is used to estimate the expected shrinkage in R Square that would not generalize to the population because our solution is over-fitted to the data set (Gujarati & Sangeetha, 2007). If the adjusted R Square value is much lower than the R Square value, it is an indication that our regression equation may be over-fitted to the sample, and of limited generalizability. For the problem we are analyzing, R Square = -0.252 or -25.2% and the Adjusted R Square = -0.046 or -4.6%. These values are not too close to each other, thus anticipating moderate shrinkage based on this indicator (Gujarati & Sangeetha, 2007).

Also, the F-statistics which is used to test for stability in the regression parameter estimate when sample size increases, as well as the overall significance of the estimated regression model is estimated at 0.842970. This indicates that the predictor variable was as a whole contributing to the variation in the dependent variable and that there exist a statistically insignificant relationship at 0.53 (see prob f-stat in table 4.3) between the gross domestic product and the predictor variables (PPT, CIT, CED and VAT). This indicates that the overall equation is significant at 0.5% which is below the 5% generally acceptable level of significant in social sciences. This further indicates that the econometric model is fit at 5%.

Finally, the Durbin-Watson statistics is estimated at 2 approximately. This indicates that the assumption of independent error is not tenable for this study since this figure is approximately 2. This shows that the model is not suffering from incidence of autocorrelation so there is no possibility of spurious regression (Durbin & Watson, 1951).

Test of Research Hypotheses

The research hypotheses were tested by using the beta coefficients and their level of significance. The level of significance or insignificance of each beta coefficient in respect to each hypothesis were tested to enable a decision to be made as to whether to accept or reject the study's formulated null hypotheses. The result of this study (see Table 1.3) provides absolute evidence for the acceptance of all the

null hypothesis of the study. The researcher therefore concludes that: Petroleum profit tax (PPT), Company income tax (CIT), Custom Exercise duty (CED) and Value added tax (VAT) does not significantly contribute to the gross domestic product (GDP) of Nigeria.

Discussion and Interpretation of Results

The study's first objective was concerned with examining the extent to which petroleum profit tax (PPT) contributes to the gross domestic product (GDP) of Nigeria. A null hypothesis was formulated in line with this objective and was tested using the t-test statistics at 5% level of significance for a two tail test. Findings from this test reveal that petroleum profit tax insignificantly contributes to the gross domestic product (GDP) of Nigeria. The insignificant contribution of petroleum profit tax (PPT) could be attributed to high incidence of corruption that has besieged the petroleum sector and thus inhibits proper remittance of revenue accruable to government. This finding is inconsistent with findings of Okafor (2012) who found a significant impact of petroleum profit tax (PPT) on the gross domestic product (GDP).

Also considering the second objectives of this study which was interested in examining the extent to which company income tax (CIT) contributes to the gross domestic product (GDP) of Nigeria. Consequently, the null hypothesis was also formulated in line with this objective and was tested using the t-test statistics at 5% level of significance for a two tail test. Findings from this test reveal that company income tax (CIT) insignificantly contribute to the GDP of Nigeria. The insignificant contribution of company income tax could be due to the act of companies using loopholes in the tax laws to evade and avoid tax. This finding is consistent with findings of Adegbe & Fakile, (2010) who found an insignificant relationship between company income tax and Nigerian economic development.

More so in the test of the third hypothesis of the study seek to examine the extent to which custom exercise duty (CED) contributes to the gross domestic product (GDP) of Nigeria. Consequently, the null hypothesis was also formulated in line with this objective and was tested using the t-test statistics at 5% level of significance for a two tail test. Findings from this

test reveal that custom exercise duty (CED) insignificantly contributes to the GDP of Nigeria. The insignificant contribution of custom exercise duties (CED) could be attributed to high incidence of corruption that turn to inhibits proper remittance of revenue accruable to government.

Finally, in respect of the study's fourth objective which was interested in investigating the extent to which value added tax (VAT) contributes to the gross domestic product (GDP) of Nigeria. In consonance with this objective, the null hypothesis was also formulated and was tested using the t-test statistics at 5% level of significant for a two tail test. Findings from this test reveal that value added tax (VAT) do not significantly contribute to the GDP of Nigeria. The insignificant contribution of value added tax (VAT) could be attributed to the payment of subsidy on most of the imported goods and service by the federal government. These findings are consistent with finding of Unegbu and Irefin (2011) who found an insignificant impact of VAT on gross domestic product (GDP) of Nigeria.

Conclusions

In line with the above findings, the following conclusions were made in respect to each hypothesis:

1. Petroleum profit tax (PPT) insignificantly contributes to the gross domestic product (GDP) of Nigeria. That is change in PPT will lead to an insignificant change in the gross domestic product (GDP) of Nigeria.
2. Company income tax (CIT) does not significantly contribute to the gross domestic product (GDP) of Nigeria. Thus company income tax does not bring about an increase in the total revenue of the federal government of Nigeria.
3. Custom exercise duty (CED) does not significantly contribute to the gross domestic product (GDP) of Nigeria. The study therefore concludes that, custom exercise duties do not bring about a significant increase in the gross domestic product (GDP) of Nigeria.
4. Value added tax (VAT) does not significantly contribute to the total revenue generation of the Federal Government of Nigeria. The study therefore concludes

that, value added tax brings about an insignificant increase in the gross domestic product (GDP) of Nigeria.

Recommendations

In line with this study's findings, the following recommendations have been made.

1. The federal government of Nigeria should put in place modalities that will enhance the effective collection of the total revenue accruable from all sources of revenue especially the oil industry. Such measure should include a speedy passage and implementation of the petroleum bill and curbing of corruption inherent in the petroleum industry.
2. The federal Inland Revenue should sit up in their duties of assessing and collecting taxes from companies operating in the country. This will help the government derive more revenue from these companies in form of taxes.
3. The Federal Government should put in place a mechanism that will ensure that all Income taxes derived from custom exercise duties are remitted to the coffers of the federal government which will serve as a boast to the total revenue of the federal government.
4. Government should reduce the extent to which it subsidizes consumable goods imported into the country since this will help to increase the income accruable from value added taxes (VAT).

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Effects of Accounting Ethics on Audit Quality: A Literature Review

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Abstract

The debate on effects of ethics on professionalism is ongoing and this literature review seeks to identify issues that have been raised by scholars in relation to ethics and the audit firm and ways of minimizing the risk of unethical behaviour of auditors. Scholars identified the quest for profits and growth of the audit firm as the major impediment to true professionalism. It is on this commercial pressure for profits that results into conflict of interest which is the bane of ethical behavior. Other factors identified include non-adherence to audit firm culture, the pressure on audit staff to keep to time and costs budget of audit engagement, and traditional practice of delegating powers to directors to fix auditors remuneration. Scholars generally agree that inculcation of ethics culture through adoption of separate ethics course in pre and post qualifying examination for accountants can help improve the ethical behaviour of audit-staff and all accountants in general.

Keywords: Accounting ethics, audit quality, audit staff

Introduction

External audit has been recognized as adding credibility to financial statements of audited entities (Habbash, 2010, Bashiruddin, 2011). This stems from the fact that the external auditor carries out detailed checks and tests in the process of verifying the financial statements to ensure that the financial reports accurately reflect the true position of the organization. Believing that the auditors are professionals and unbiased, their reports are taken by stakeholders to be truthful (Arter, 2003).

However, the collapses of companies such as Enron, Worldcom, Global Crossing, BCCL in USA, Parmalat in Italy, HIH Insurance and One Tel in Australia, Yukkos in Russia, scandals in African petroleum and Cadbury Nig. Ltd in Nigeria have all drastically reduced public confidence in audited financial reports. This has further raised concerns about the ethical behaviour of auditors in their professional judgments and opinions as failures and scandals of the companies were linked to unethical practices (Luftig and Quellette, 2009). General commentators and other users of financial statements are questioning if the value systems of professional accountants are strong enough to withstand pressures from within and outside client companies of auditors (Jeckling, Cooper, Leung & Dellaportas, 2006).

Scholars such as Adeyeye, Adeyemi and Otusanya (2010) argue that ethical behaviour of auditors is influenced by family background, religious belief, economic issues, familiarity issues, monitoring and regulatory issues and wonder if the auditor's report can be truly qualitative. The quality of audit itself is dependent mainly on both the technical and personal ethical skills of the auditor. While it is generally believed that the technical skills of the auditor are measurable and trackable, the ethical skills are of the state of mind and hidden and therefore unobservable and can only be assessed from the personal character and conduct of the auditor in the discharge of his work.

Ethics is generally difficult to define but can be regarded as well-founded standards of right and wrong that prescribes what humans ought to do, usually in terms of rights, obligation, benefits to society or specific virtues. It is a discipline in which matters of right and wrong, good or evil, virtue or vice are systemically

examined (Brinkmann, 2002; Bromell, 2004).

In the context of accounting profession, accountants and auditors are expected to exhibit high integrity, objectivity, competence and due care, confidentiality and true professional behaviour and be able to resist pressures from clients or pressures for personal gains so as to instill public trust in their reports. The question that continues to agitate the minds of the general public is whether the auditor is truly able to resist these pressures and remain impartial in his work and report. In other words, stakeholders want to be assured that auditors are ethically sensitive on issues that confront them while carrying out their audit duties and that the integrity of information provided is not in doubt.

This paper therefore reviews the literature on accounting ethics and quality of report issued by the audit firm so as to identify matters that have been raised by scholars in relation to ethics and the quality of audit report with a view to improving the auditors' ethical behaviour. The paper is divided into five sections. After this introduction which is section one, Section 2 discusses professional ethics and ethical codes of conduct for auditors, section 3, concept of Audit quality section 4, Accounting ethics and audit quality and section 5 provides conclusion of the paper.

Accounting ethics and ethical code of conduct of Auditors

Auditors are expected to be guided in their behaviour by the ethics of their profession but ethics itself has proved difficult to have a single generally acceptable definition. Ethics has been defined as conducts which are regarded as good or bad, right or wrong, virtue or vice and so on. No one clear definition can be ascribed to ethics or ethical behavior (Ahachiat and Mackie, 1993; Brinkmann, 2002; Bromell, 2004; Nwagboso, 2008).

Hayes, Schilder, Sassen and Wallage (1999) define ethics as set of moral principles, rules of conduct or values and argue that ethics apply in process of decision making where various alternatives regarding moral principles are involved. Each profession has its own ethics but as Pierce (2007) notes, there is no unique professional ethics and "that professionals involved in transactions warrant broader social constraints on behaviour. The acceptance of

these constraints is necessary in order to gain social recognition as a profession". The essence of professional ethics therefore is to encourage a sense of social responsibility in the professional member. Professional ethics therefore are sets of standards of behaviour expected of members of the profession for which the profession is known. The Accounting profession which the auditor belongs has its own accounting ethics which guides the conducts of accountants. Nwagboso (2008) states the advantages of accounting ethics as helping the accountant to determine the prosperity of his conduct in his professional relationship; it gives the clients and potential clients a basis of feeling confident that the accountant places higher interest on service to all rather than self-interest. It assures clients that standards of competence, independence and integrity are the main focus of the accountant and above all that clients and public interest is protected. Since the Accountancy profession has accepted responsibility to act in public interest, the auditors need to comply with codes of conduct issued by the profession.

Codes of ethics for Professional Accountants

The issues of ethical behaviour have been on the discourse for long with emphasis on morality, character, honesty, reliability, virtue and duty of the individual accountant. The first US code of ethics was in 1917 and has been developed and changed from time to time (Pierce, 2007). The public criticisms following financial scandals led UK and the Irish Accountancy profession to delegate responsibility for ethical guidance to the independent Auditing practices Board (APB) which is an arm of the Financial Reporting Council. On the global level, the International Federation of Accountants (IFAC) delegated the responsibility for issuing ethical Standards for Accountants to the International Ethics Standards Board for Accountants (IESBA).

In Nigeria both the Institute of Chartered Accountants of Nigeria (ICAN) and Association of National Accountants of Nigeria (ANAN) have codes of conducts for their members. These codes are generally in tandem with the code issued by IFAC.

Since the accounting profession has accepted the responsibility to act in public interest, ethics have become a major

consideration both in the planning stage and the conduct of audit. Auditors therefore need to follow the established rules. The fundamental principles or rules of independence according to IESBA (2013) are based on integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. These rules have been in existence but are modified from time to time depending on changing circumstances. It essentially means that the auditor must not only be independent both in mind and appearance, but must be seen to be so by others in his ethical dealings with clients.

ICAN (2000); Nwagboso (2008); IESBA (2013) all provide the fundamental principles of ethics applicable to all accountants and auditors- the principles are:

Integrity- members should be honest and straight forward in their professional and business relationships.

Objectivity- This imposes a duty on professional accountants to be fair and should not allow bias, conflict of interest or undue influence of others to override professional or business judgments.

Professional competence and due care- To maintain professional knowledge and skill at the level required to ensure that a client or employer receives competent professional services based on current development in the practice, legislation and techniques and act diligently and in accordance with applicable technical and professional standards.

Confidentiality- to respect that confidentiality of information acquired as a result of professional and business relationships and therefore not to disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, or use the information for personal advantage of professional accountant or third parties.

Professional behaviour entails to comply with relevant laws and regulations and avoid any action that discredits the profession.

The above rules of independence enjoin the auditor to have a state of mind that allows him to issue his opinion without any pressures or influences that compromise his professional judgment. He must also have an independence of appearance and as Adeniyi (2005) puts it "the auditor must avoid facts and circumstances that

are so significant that a reasonable and informed third party, having knowledge of all relevant information including safeguards applied would reasonably conclude a firm's or a member of the assurance team's integrity, objectivity or professional skepticism had been compromised".

IFAC code states that the audit firm and members should be able to identify threats to independence, evaluate whether the threats are significant or not. If threats are significant, appropriate safeguards be identified and applied to minimize risk or reduce risk to acceptable level. Where no safeguards are available, the interest or activities causing the threat be eliminated and that the engagement be declined or discontinued (IESBA,2013). These provisions have been made to ensure that the report of the auditor is qualitative.

Conceptual clarification of audit quality

Audit quality has been ascribed various definitions as there is no single generally accepted definition nor a single generally accepted measure (Kilgore, 2007; Al-Ajmi, 2009) DeAngelo (1981) defines audit quality as the market assessed joint probability that a given auditor will both (a) discover a breach in client's accounting system and (b) report. Watts and Zimmerman (1986) see audit quality from the perspective of the qualities that the auditor must possess to discharge his duties well which include expertise, integrity and independence. Others agree that auditors whose attributes are associated with professionalism, conservativeness, large size, experience with clients' possession of wide range of skills, independence and industry expertise are those whose audit quality is high. (Schockly & Holt, 1983; Carcello, Hermanson and Mcgrath, 1992; Eicheneschler and Shield, 1993; Al-Ajmi, 2009; Adeyemi & Akuniyi, 2010).

Francis (2004) looks at audit quality as a continuum from very low to very high quality and believes that audit failure which is a product of deficient values falls in the lower end of the continuum. Auditors who observe breach in the clients' accounting system and despite pressures are able to report are regarded as producing high quality audit report. Several proxies have been used by scholars to identify auditors whose report can be perceived as qualitative since audit quality

is unobservable. These include international audit firms that are large in size (DeAngelo, 1981), auditors that specialize in a particular industry (Krishnan, 2003; Francis, 2004), auditors that are well paid (Simunic, 1980; Palmrose, 1986), and auditors that have not stayed for too long with a particular client (Watts, 1994; Beck et al, 1998).

Though scholars have different views about these attributes, they point to the fact that the members of the audit firm carrying out the audit need to possess these attributes to withstand different pressures that might result in issuing wrong audit opinion.

In the context of this literature review on the effects of accounting ethics on audit quality, audit quality is perceived as high if auditors keep to the general principles or rule of independence, objectivity, integrity and professionalism. The audit quality is assumed to be low if the audit team's conduct show signs of unethical behaviour such as cutting corners, focusing on self interest, rather than public interest, refusal to align with audit firm ethical culture, involving in tax fraud, engaging in creative accounting, failure of duty of care towards shareholders and the public etc.

Accounting ethics and Audit quality

IFAC (2005) and its subsequent amendments provide code of ethics for auditors. The Nigerian Companies and Allied matters Act 1990 (as amended) particularly sections 358-363 also make provisions that could enable an auditor to avoid relationships that result in undue pressures or conflict of interest so that his report can be taken as being of high quality. Empirical studies show that faithful compliance with codes of ethics increases the quality of audit report (Jackling, 2007; Ogbonna and Ebimobwei, 2011; Adeyemi and Fagbemi, 2011; Syamsuddi et al, 2014).

Jackling (2007) survey professional accounting bodies perception of ethical issues, causes of ethical failures and ethics education in Australia and found that conflicts of interest, is the main ethical issues that face accountants in practice and concluded that ethics education is necessary for both qualifying and qualified members of the accounting profession. Uwuigbo and Ovia (2011) documents similar evidence that ethical standards application is low among

Nigerian auditor and there is a need for separate ethics education to be included in accounting courses in Nigerian universities.

Obgonna and Ebimobowei (2012) examine the effect of ethical accounting standards on quality of financial reports of banks in Nigeria through a survey research design and find that ethics has a significant effect on the quality of financial reports. The study concludes that ethical accounting standards are fundamentally necessary and should be complied with for the production of a high quality financial report.

Akadakpo and Enofe (2013) in examining the impact of accounting ethics on the practice of accounting profession in Nigeria through a survey design find that while it is very necessary for accountants to pay attention to good ethical conduct, religion was not found to influence the ethical behaviour of accountants in Nigeria.

Syamsuddin *et al* (2014) examine the influence of ethics independence and competence on the quality of audit in Indonesia through a survey research and find that the compliance with code of ethics has a direct positive influence on the audit quality with the auditor using professional skepticism as a mediator.

Scholars are however, not agreed on neither the extent to which the auditors abide by the ethical code nor the reasons for non-compliance. Several threats have been identified as having audit quality reduction effects. These threats according to APB (2004) include self-review, familiarity, advocacy, management, self-interest and advocacy threats which the auditor may face in the course of his audit work.

Factors responsible for unethical behaviour of Auditors

The major area of the ethical behaviour of auditors that have been criticized so much is the existence and impact of conflict of interest on professional behaviour (Pierce, 2007). Ethical conflict occurs when people perceive that their duties towards one group are inconsistent with their duties and responsibilities toward some other group or one's self. It may also be seen from a situation in which a person has a private or personal interest sufficient to appear to influence the objective exercise of his or her official duties while Abdel-Kalik (2002) argues that auditors have usually been criticized for pleasing

management at the expense of investors. The major and possible area of conflict of interest is that auditors have focused on profit and growth of the audit firm and throw away ethical standards. Scholars have documented studies on the relatively high level of non-audit fees from client for non-audit services (Weil and Tannenbaum, 2000).

In performance of non-audit services the auditor is faced by some of the threats identified by APB (2004). Habbash (2010) identifies four types of threat that could occur as a result of provision of non-audit services to a company. First is the threat arising from auditor's self interest since the revenue from that source may be very significant and so the auditor is economically dependent on the client. This situation could make the auditor look the other way on accounting breaches committed by the company. The auditor may issue a clear opinion when actually the circumstances demand otherwise. The second threat is the fear of losing a substantial part of the income which could arise from management intimidation of the auditor. In auditor-client relationships, it is possible that there could be disagreement and management may threaten to sack the auditor, the fear of losing the non-audit job could make the auditor not to raise any negative opinion against management. The third is the self-review threat in which the auditor is faced with reviewing what he has done such as provision of accountancy services which he may find difficult to condemn. Finally the auditor is faced with the familiarity threat for carrying out other services. The auditor may become too familiar with the client company that he may not be inclined to carry out extensive tests on the strength that he has trust on the company being audited. All these will compromise the auditor's independence and his ethical conduct.

Many researchers have, however, documented evidence that the provision of non-audit services is not harmful to the auditor's independence rather it places the auditor in a better position to understand the client's business which enhances the quality of audit report (Peel and O'Donnell, 1995; Craswell, Stakes and Laughton, 2002; Qucek & Warming-Rasmussen, 2005). Even if there is no actual evidence of compromising independence, in the wake of the Enron crisis and the passing of Sarbanes-Oxley Act 2002, SEC in USA banned the provisions of

some non-audit services as policy makers and regulators perceive the provision of non-audit services as compromising the integrity of the audit report even if it is not actually compromised. The financial reporting principles developed for US public companies also recommend auditing firms to focus on providing high-quality audit and assurance services and perform no consulting for audit clients. It further recommends that audit firm personnel should be selected, evaluated, compensated and promoted primarily based on technical competence and not on their ability to generate new business. If the audit firms remove the commercial pressures to get profit and growth for the firm, they will be sufficiently independent to provide high quality audit.

A second factor identified by researchers as affecting ethical conduct, is the audit firm's culture/environment of the audit. The traditional focus of professionalism as the greatest selling point of audit firms is being eroded. Professionalism places emphasis on competence, display of trust, honesty and decency. Under this, audit firms are known to stand up against clients where such clients fail to comply with a particular principle on accounting transaction. The professional ethics are regarded as part of the culture of the firm and each audit staff must comply. Where the audit firm has zero tolerance for unethical behaviour, the conduct of the audit team must align with the ethical policy of the firm. It has been found that with the interest of the firm focusing more on commercial activities with a view to boosting revenue base of the firm, the firm culture is changing and becomes fatal to auditor's professional behaviour (Zeff, 2003). The behaviour of top management of the firm sets tone for lower-level employees (subordinates) and failure to keep ethical standards leads to ethical failure of the firm Jackling et al (2007). Another factor identified as audit quality reduction behaviour is time pressure on audit staff to beat deadlines and keep to budgets which are used to control cost of each audit assignment. Such budget is usually seen to be tight and audit staff tends to reduce sample sizes of transactions to be examined, signing of tests without completing the work or change the sampling technique by biasing the sample selection. This behaviour of the audit staff has the effect of negatively reducing the audit quality

(Pierce & Swenny, 2003).

From these studies, it is evident that the auditors have a lot of ethical challenges which need to be addressed. Some other issues linked to the unethical behaviour of the audit firm which this study has not addressed is the action of the client itself. One major concern relating to the impairment of the auditors independence is the institutional tradition of delegating the powers to fix auditors remuneration on the directors of the company by the shareholders. The directors are statutorily responsible for the preparation of financial statements which are to be audited.

The power given to directors on auditors' remuneration automatically makes the auditor economically dependent on the director whose work is examined by the auditor. In that circumstance, can the auditor be truly independent by opposing the view of management where necessary and still be paid his fees? Certainly, he who pays the piper dictates the tune.

Conclusion

Auditors have been criticized for unethical behaviour in their conduct in most of the financial scandals of some companies around the globe. Scholars have examined and identified reasons for such behaviour and the major concern is the focus on profit and growth of the audit firm. The tendency to yield to commercial pressures has made the audit firms to lose focus on professionalism and face conflict of interest. Scholars are consistent in their views that a re-orientation and adherence to the core ethical standards prescribed by the code of professional ethics for accountants in the surest way of resolving the issue of conflict of interest. This can be done by continuously educating prospective and qualified accountants, that honourable behaviour even at the expense of self-interest is the true key to professionalism.

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Determinants of Corporate Social Responsibility of Nigerian Listed Non-Financial Firms

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Abstract

The paper examined the determinants of corporate social responsibility (CSR) of 35 Nigerian listed non-financial firms for the period 2005-2014. Panel data regression analysis was employed and simple pooled Ordinary Least Squares model was used as estimation technique. Result reveals that profitability, firm size, managerial share ownership and leverage are significant factors that affect CSR activities of the sampled firms during the period of the study. It is recommended that profitability, size, managerial share ownership and leverage should be considered by companies' management when formulating their CSR policies. The study, however, could not provide empirical evidence in support of dividend pay-out, growth opportunity and age as significant determinants of CSR of the selected firms. The outcome of the study lends support for social impact, slack resource, hypotheses and legitimacy theory of CSR.

Key words: Corporate social responsibility, determinants, profitability, stakeholders, social contract

Introduction

The phrase Corporate Social Responsibility (CSR) was coined in 1953 by Bowen, H.R, when he published his classical book on CSR. In his book, he posed a salient question, “what responsibilities to society can business people be reasonably expected to assume? (Bowen, 1953 cited in Uadiale and Fagbemi, 2012). Up to this moment a universally acceptable answer to this question is yet to be provided.

The European Commission (2001) defined CSR as a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.

In the last few years, attention of researchers and societies has been drawn to studies of CSR activities (Adams and Frost 2006; Gulyas 2009; and Young and Thyil 2009). Particular attention have been on relationship between CSR and firm performance (Fauzi, 2009; Okafor and Oshodin, 2012; Babalola, 2012 and Samra, Shahid and Farzana, 2015 and Alshammari, 2015) and CSR and corporate reputation (Fukukawa, Balmer and Gray, 2007; Holder-Webb, Coren, Nath and Wood, 2009 and Murphy and Tibbs, 2010).

Many firms (both multi-national and domestic) in Nigeria have seen reason in incorporating social activities in their operations. The reasons for this are not far-fetched. The local communities where these companies are cited believe that as a matter of right, companies operating within their domains should give back to the society from profits made. They submit that majority of these companies involved in activities that adversely affected their environment, hence embarking on CSR activities will, to certain extent, provide succor to them.

Dwindling government revenue is seen as another reason why companies should involve in CSR activities as government cannot provide all the amenities and welfare packages which the citizens required.

Other reasons identified to persuade companies to implement CSR are popularity (Fernando 2007), business strategy (Dentehev 2004) and stakeholder pressures (McWilliams and Siegel 2001).

Some earlier economists and professionals were not in support of companies' involvement in

CSR activities. For instance, Friedman (1970) argues that the social responsibility of a corporation is to increase its profit and not to do things that will reduce it. Providing social amenities to the community is seen as profit-reduction strategy. This may sound plausible but in reality, the complex socioeconomic systems within which companies operate made ignoring social responsibility pressures a difficult task.

CSR policies of corporations differ. While some involve in community development activities like education, health, rural development, human resource development, environmental protection activities, support for charities; others may decide to involve strictly on philanthropic contributions (shown as donations in company's financial statements).

The issue of the moment is, “what are the factors that tend to influence an organisation in its CSR expenditure (or decision)?” In spite of considerable research into CSR in developed countries, little agreement exists about the determinants of CSR. Attempt will be made to answer this salient question by considering the determinants of CSR using Nigerian business environment as a case study. The primary objective of this study is to examine the determinants of corporate social responsibility of 35 listed non-financial companies in Nigeria. The specific objects are to:

Empirical studies

Few studies exist in the empirical literature on determinants of CSR in both developed and developing countries. The most common in the literature is the study of the relationship between CSR and firm performance.

Chin, Chin and Chen (2010) undertake a thorough examination of the theory postulated by Campbell (2007), in which an attempt is made to specify the conditions under which corporations may or may not act in socially responsible ways. Empirical study was made on 520 financial firms in 34 countries for the period 2003-2005. Findings reveal that firms with larger size are more CSR minded, while there is no relationship between financial performance and CSR. Furthermore, firms in countries with stronger shareholder rights tend to engage in less CSR activities.

Lu, Abeysekera and Cortese (2010) investigate the determinants of CSR and

environmental disclosure practices of 100 socially responsible Chinese listed firms identified by the Social Responsibility ranking list. Findings reveal that corporate social and environmental disclosure have significant, positive associations with size, profitability and industry classification. The roles of various stakeholders in influencing corporate social and environmental disclosure, however, are found to be generally weak, except that shareholders have influenced disclosure relating to economic performance and creditors have influenced disclosure relating to environmental performance.

Cheruiyot (2010) utilizes data of 47 listed firms in Nairobi Stock Exchange to carry out a cross-sectional study on the relationship between CSR index and firm performance proxies (return on assets, return on equity and return on sales). Result reveals a statistically significant relationship between CSR and financial performance.

Uwuigbe (2011) investigates the association between firms' characteristics and the level of corporate social disclosures in the Nigerian financial sector. Using a sample of 31 listed firms and content analysis method of eliciting data, a scoring scheme was used for measuring the extent of corporate social disclosure in the annual report. The study reveals a positive association between a firm's characteristics (firm size and profitability) and the level of corporate social disclosure.

Faris, Abeddalfattah and Marwan (2012) seek to identify the determinants of CSR in Jordan with the use of annual reports of 60 industrial companies listed on the Amman Stock Exchange for a period from 2006 to 2010. Results of the analysis imply that companies that are expected to be large in size, age of firm, maintaining growth and are highly levered are more likely to voluntarily disclose social responsibility information.

Musa and Shehu (2013) investigate the determinants (financial and non-financial) of CSR of 13 listed deposit money banks in Nigeria for the period 2005-2011. Using multiple regression technique, the study reveals that dividend paid, institutional ownership, firm growth and leverage is positively, strongly and significantly influencing the CSR practice of the listed deposit money banks, while the economic

profit and firm size have weak positive impact.

Mwangi and Oyenje (2013) study the relationship between CSR practices and financial performance of 10 firms in the manufacturing, construction and allied sector of the Nairobi Stock Exchange for the period 2007-2011. Results indicate an insignificant positive relationship between corporate social responsibility practice and financial performance. Using individual measures of corporate social responsibility practice, the study provides additional result of a significant and inverse relationship between financial performance and manufacturing efficiency.

Duke and Kankpang (2013) use an inferential research design to perform a cross-sectional study to test the effect of CSR measures (represented by waste management, pollution abatement, social action and fines and penalties) on financial performance of a sample of 275 Nigerian firms. These firms were selected from 883 firms (both listed and unlisted) who were found to be consistently render and file annual returns with the Nigerian Corporate Affairs Commission over the previous ten years. Findings reveal a mixed result. Specifically, it reveals that waste management and pollution abatement are both significantly and positively associated with firm performance, while social action and fines and penalties are strongly but negatively related.

Byung and Pervez (2014) investigate key drivers motivating CSR practices by small and medium sized foreign subsidiaries. Using stakeholder theory and regression analysis, findings reveal that consumers, internal managers and employees, competitors and non-governmental organizations are primary determinants considerably influencing corporate citizenship behaviour particularly in emerging markets.

Alshammari (2015) uses the propositions of institutional theory, stakeholder perspective and ownership framework on CSR to explore the relationship between firm social performance and the financial performance of the firm. It explores the moderating effect of both corporate reputation as a proxy for firm social activities' publicly and the institutional investors in the firm. The study suggests that corporate ownership structure, as well as corporate consistent reputation will have influence on the

extent to which a firm may benefit from its CSR activities and firm performance.

Methodology

Data required for this study were obtained from the published annual reports and accounts of the 35 companies for the period 2005-2014 and the Nigerian Stock Exchange Fact Books for the relevant years. The population of the study consists of 183 firms that were listed on the floor of the Nigerian Stock Exchange as at the beginning of 2005. The sample size of 35 companies (covering 15 sectors) was selected from the population through a method of stratified sampling. However, financial firms were excluded from the sample because of their specific behaviour. This is because they operate in highly regularized environment and their decisions are affected by exogeneous factors. Information on the companies used in the study is as presented in Appendix I.

Corporate social responsibility (CSR) is the only dependent variable. It is measured by the logarithm of amount spent on corporate social responsibility activities by each of the companies for the relevant study period.

Independent variables

Profitability: This is considered as the most important variable that determines the contribution of a business to its immediate environment. It can be argued that a firm with huge profit should be expected to spend more on social activities than a similar firm with less or no profit (Wu, 2006; Ho and Taylor, 2007; Donker, Poff and Zahir, 2008; Lu et al, 2010; Uaddale and Fagbemi, 2012; Hull and Tang, 2012; Flammer, 2013; Musa and Shehu, 2013, Mubeen and Arooj, 2014 and Samra, Shahid and Farzana, 2015). Empirically, a positive relationship is expected between profitability and CSR. Thus, the following null hypothesis is formulated:

H₀₁: There is no significant relationship between CSR and profitability.

Firm size: Theoretically, a firm size has capacity to influence the amount of money incurred on social responsibility activities by a firm. Legitimacy theory suggests that larger companies are scrutinized more by the public as compared to small companies; hence larger firms try to obtain legitimacy for their actions and existence by projecting themselves to be socially

responsible by spending more than the small firms. Some prior empirical studies (Gao, Hervia and Xiao, 2005; Naser, Al-Hussaini, Duha and Nuseibeh, 2006; Ho and Taylor, 2007; Garcia-Sanchez, 2008; Reverte, 2009; Faris, et al, 2012; and Musa and Shehu, 2013) have confirmed positive relationship between CSR and firm size. The following null hypothesis is postulated:

H₀₂: There is no significant relationship between CSR and firm size.

Managerial share ownership: Following the prediction of Managerial opportunism hypothesis, managers and directors of a company may use expenditure on corporate social activities to pursue their own interest at the expense of other stakeholders. They incurred CSR expenses based on the profitability of the company. Empirically, Faris, et al (2012) found no relationship between CSR and ownership structure, while Musa and Shehu (2013) found positive relationship. The following null hypothesis is hereby proposed:

H₀₃: There is no significant relationship between CSR and managerial share ownership.

Dividend payout: Section 379 of Companies and Allied Matters Act 2004 (as amended) specifically states that dividends are payable out of distributable profits of the company. It can be argued that companies that have huge profits would pay high dividends. Since, social activities costs are part of expenses recognized by the tax authorities in the determination of profits; then it can be further argued that company with high dividend payout would also have high CSR expenditure. Empirically, Musa and Shehu (2013) have positive relationship between CSR and dividend payout in their studies. However, Faris, et al (2012) found no relationship between the two variables in their own studies. The following null hypothesis is hereby proposed:

H₀₄: There is no significant relationship between CSR and dividend payout.

Growth opportunity: Musa and Shehu (2013) argue that bank (companies) that have recorded growth consistently over the years may want to maintain that through the practice of CSR as this may serve as a good signal for investors and potential investors. Faris, et al (2012) also confirmed this assertion. Thus, a positive relationship is expected between CSR and growth opportunity. The following null

hypothesis is formulated:

H₀₅: There is no significant relationship between CSR and growth opportunity.

Leverage: The composition of a company's debt to its total asset is one of the most researched determinants of CSR especially in the developed countries. Using debt in firm's capital structure attracts payment of interest to the debt holders. It is argued that if the debt is judiciously utilized thereby generating more income than interest expenses, then amount incurred on CSR will increase. The reverse is the case if the debt is not utilized efficiently. Thus, the expected relationship between leverage and CSR depends on the usage of the debt. Empirically, Ahmad, Hassan and Mohammed (2003), Faris et al (2012) and Musa and Shehu (2013) found positive relationship between CSR and leverage in their various studies. On the other hand, Belkaoui and Karpik (1989) and Ho and Taylor (2007) found negative relationship between the two variables in their studies. The following null hypothesis is formulated:

H₀₆: There is no significant relationship between CSR and leverage.

Age: There are no sufficient materials in the literature regarding the relationship between CSR expenditure and firm age. However one can argue that older firms would have gathered reputation over time and this will even assist the organisation in raising funds from the financial markets. In order for them to still continue to be relevant within their immediate environment, it is expected that they contribute more in social activities than younger firms that are still trying to find their feet in the corporate world. Empirically, a positive relationship is expected between CSR and firm age. Faris, et al (2012) found a positive relationship between the two variables in their studies. The following null hypothesis is formulated:

H₀₇: There is no significant relationship between CSR and firm age.

Table 1 presents the measurement of the study's dependent and independent variables.

Table 1: Measurement of variables

Variable	Abbreviation	Description
Corporate social responsibility	CSR	Natural log of amount incurred on CSR activities
Profitability	PROF	<u>Profit after tax</u>
		Total asset
Firm size	SIZ	Natural log of total assets
Managerial share ownership	OWN	<u>Number of shares owned by directors</u>
		Total number of shares in issue
Dividend payout	DIV	<u>Dividend paid</u>
		Profit after tax
Growth opportunity	GRW	Change in the natural log of total assets
Leverage	LEV	<u>Total debts</u>
		Total asset
Age	AGE	Natural log of firm age

Source: Empirical literature with authors' modification (2015)

Model specification

The study adopts a panel data (which combines simultaneously time series with cross-sectional data). Specifically, the model used in the study is as stated in equation 3.1:

$$CSR_{it} = \beta_0 + \beta_1 PROF_{it} + \beta_2 SIZ_{it} + \beta_3 OWN_{it} + \beta_4 DIV_{it}$$

$$+ \beta_5 GRW_{it} + \beta_6 LEV_{it} + \beta_7 AGE_{it} + e_{it} \quad (3.1)$$

Results and Discussion

Descriptive statistics

Table 2 presents the descriptive statistics of all the variables used in the study.

Table 2: Descriptive statistics

	Mean	Minimum	Maximum	Standard deviation	Skewness	Kurtosis
CSR	4.5059	0.0000	8.3180	2.9067	-0.776	-1.120
PROF	0.0493	-3.0259	0.5080	0.1921	-12.066	189.538
SIZ	9.8165	8.0200	11.4990	0.7676	-0.346	0.662
OWN	0.1093	0.0000	0.7610	0.1903	1.960	2.729
DIV	0.7224	-2.2410	95.7050	5.2723	17.041	304.739
GRW	0.0680	-0.9273	1.1563	0.1219	0.781	30.537
LEV	0.2060	0.0000	3.0908	0.2748	5.019	42.575
AGE	1.5839	1.2040	1.7850	0.1220	-0.660	-0.352

Source: Authors' computation with the use of E- Views 7.0

From Table 2, the average expenditure incurred by the sampled firms during the period of study is less than N50,000 (log inverse 4.5059). While some firms did not contribute in some specific periods, some firms did not disclose the CSR value in their financial statements. That provides the reason for 0.0000 in the Minimum column of CSR. The maximum value incurred was about N210 million. The average profitability was about 4.93%. The average managerial share ownership was about 10.93%. This shows that on the average, the percentage of shares owned by the directors of the sampled firms during the period of study is about 11%. The average leverage was 0.2060. It shows that the sampled firms usage of total debt in their capital structure was about 20% of the total asset, although few of the firms could be categorized as highly geared firms as shown by the maximum value of 3.0908.

Colinearity test

In order to make valid inferences from the regression analysis, we test for the level of

multicollinearity using three methods. We first observe the correlation between variables. Gujarati (2003), Kim (2005) and Rumsey (2007) submit that correlation coefficient (sig value) of 0.8 and above indicate existence of high multicollinearity problem between it and the other variable. Secondly, Tolerance values for the variables were computed. Rumsey (2007) suggests that a Tolerance value of more than 1.0 shows a high multicollinearity. Finally, Variance Inflation Value (VIF) was derived. While Hair, Babin, Money and Samouel (2003) argue that 5.0 is the maximum acceptable VIF value, Gujarati (2003) proposes a maximum value of 10.0.

In this study, as shown in Tables 3 and 4, multicollinearity is not a problem because none of the variables has a correlation value of 0.8 and above; no variable has Tolerance value of 1.0 and the highest VIF value of 1.441 (less than 5 or 10).

Table 4 further reveals that the F-statistic value of 19.40 is significant at 1% level. It indicates that the model as a whole is fit. The Durbin-Watson value of 1.999 also confirmed less serial autocorrelation among the variables.

Correlation matrix

Table 3: Pearson's correlation matrix of the variables

	CSR	PROF	SIZ	OWN	DIV	GRW	LEV	AGE
CSR	1							
PROF	0.207*** (0.000)	1						
SIZ	0.374*** (0.000)	0.069 (0.200)	1					
OWN	-0.451*** (0.000)	-0.072 (0.181)	-0.427 (0.000)	1				
DIV	0.077 (0.153)	-0.017 (0.753)	0.088* (0.099)	-0.061 (0.252)	1			
GRW	0.118** (0.027)	0.152*** (0.004)	0.148*** (0.005)	-0.072 (0.180)	0.014 (0.789)	1		
LEV	-0.150*** (0.005)	-0.520*** (0.000)	0.108** (0.044)	0.065 (0.227)	-0.018 (0.785)	-0.017 (0.753)	1	
AGE	0.143*** (0.008)	0.084 (0.115)	0.362*** (0.000)	0.362*** (0.000)	0.071 (0.187)	-0.003 (0.749)	-0.025 (0.641)	1

*, **, *** indicate significant at 10%, 5% and 1% levels, respectively

Sig-values are shown in parentheses

Source: Authors' computation with the use of E- Views 7.0

Table 3 reveals a positive association between CSR and profitability at 1% level. It also shows a positive association between CSR and firm size at 1% level; negative association between CSR and ownership characteristic (managerial share ownership) at 1% level; positive association between CSR and growth opportunity at 5% level; negative association between CSR and leverage at 1% level. It further reveals a positive association between CSR and firm age at 1% level.

Correlation matrix only shows association between variables and not the strength of the relationship; hence its outcomes cannot be used to make valid inferences in a cause-and effect relationship. The simple pooled Ordinary Least Squares (OLS) regression is the most common analysis strategy for this type of study.

Regression results

Table 4 exhibits the result of the simple pooled OLS regression analysis of the model. The relationship between CSR and profitability is positive and significant at 5% level. This is in line with theoretical prediction of both social impact and slack resources hypotheses and empirically supported by the studies of Donker et al (2008), Lu et al (2010), Uwuigbe (2011), Uadiale and Fagbemi (2012), Amole, Adebisi and Awolaja (2012), Akinpelu, Ogunbi, Olaniran and Ogunseye (2013), Flammer (2013), Musa and Shehu (2013), Nadeem, Naveed, Naqvi, Skindar, and Wania, (2014), Mubeen and Arooj (2014) and Samra, et al (2015). It shows that profitability is an important determinant of CSR. The null hypothesis 1 is hereby rejected. Thus, there is a significant relationship between profitability and CSR.

Table 4: Simple pooled OLS results

Variable	Coefficient	t-stat	prob	Collinearity	Statistics
				Tolerance	VIF
Constant	-0.875	-0.363	0.717		
PROF	1.774	2.136**	0.033	0.694	1.441
SIZ	0.923	4.518***	0.000	0.719	1.390
OWN	-5.416	-6.785***	0.000	0.767	1.304
DIV	0.021	0.831	0.406	0.989	1.011
GRW	0.889	0.793	0.428	0.949	1.064
LEV	-0.994	-1.714*	0.087	0.696	1.427
AGE	-1.928	-1.596	0.111	0.815	1.227
R ²	0.534				
Adj R ²	0.527				
F-stat	19.400***				
Durbin- Watson	1.999				
No. of Observations	350				

CSR is the dependent variable

*, **, *** indicate significant at 10%, 5% and 1% levels, respectively

Source: Authors' computation with the use of E- Views 7.0

The relationship between CSR and firm size is positive and significant at 1% level. The outcome is supported by some prior empirical studies conducted by Garcia-Sanchez (2008), Aibar-Guzman (2009), Chin et al (2010), Lu et al (2010), Uwuigbe (2011), Faris, et al (2012), Musa and Shehu (2013). This shows that firm size is a significant factor that determined the CSR activities of the sampled firm during the period of study. The null hypothesis 2 is rejected

and alternative hypothesis is accepted. Thus, there is a significant relationship between firm size and CSR.

There exists a negative and significant relationship between CSR and managerial share ownership (a proxy of ownership characteristic) at 1% level. It reveals that the higher the managerial shareholding, the lower the amount spent on CSR activities by the firm. provides evidence in support of ownership structure as a

primary determinant of CSR. The null hypothesis 3 is rejected and alternative hypothesis accepted. Thus, there is a significant relationship between managerial share ownership and CSR

The relationship between CSR and dividend payout is positive but insignificant. This is empirically supported by the work of Faris et al (2012). It shows that dividend payout is not an important determinant of CSR of the sampled firms during the study period. We therefore fail to reject the null hypothesis 4. Thus, there is no significant relationship between CSR and dividend payout of Nigerian listed non-financial firms.

Relatedly, the relationship between CSR and firm growth opportunity is positive and insignificant. It provides evidence that growth opportunity is not a primary CSR determinant factor. The null hypothesis 5 is hereby failed to be rejected. Thus, there is no significant relationship between CSR and growth opportunity.

CSR and leverage have a negative and significant relationship at 10% level. Belkaoui and Karpik (1989) and Ho and Taylor (2007) empirically supported the study's finding. This shows that leverage is an important determinant of CSR in Nigeria. The null hypothesis 6 is rejected and alternative hypothesis is accepted. Thus, there is a significant relationship between CSR and leverage.

Table 4 indicates a negative but insignificant relationship between CSR and firm age. It therefore confirms that firm age is not an important determinant of CSR of Nigerian listed firms. We hereby fail to reject the null hypothesis 7. Thus, there is no significant relationship between CSR and firm age.

Conclusion and Recommendation

The study examined the determinants of CSR of 35 Nigerian listed non-financial firms for the ten-year period, 2005-2014. The sampled firms covered 15 sectors of the economy. Seven factors (profitability, size, ownership characteristic, dividend payout, growth opportunity, leverage and firm age) commonly found in Financial Management/Finance extant literature were empirically tested. With the use of simple pooled OLS regression analysis, the study provided evidence that four factors- profitability, size, ownership characteristic and leverage were primary and significant factors that determined

the CSR activities of the sampled firms during the period of the study.

The implication of the finding above is that the four factors should be taken into consideration when Nigerian listed non-financial firms are designing their CSR policy and strategy. The three other factors (dividend payout, growth opportunity and firm age) are empirically not relevant.

The regulatory agencies should develop policies that will make it mandatory for corporations to disclose in explicit term the investment made by them in their financial statements.

In order to serve as motivating factor to management of corporations, the amount incurred in CSR activities should be deemed to be allowable expenses in the determination of taxable profit. If the corporation reports loss at the end of the financial year, the amount incurred on CSR activities should be allowed by the corporation to recoup it from future profits without any time limit.

For future study, attention of researchers should be drawn to specific sector; increase the sample size and the study period. By investigating other variables (such as institutional ownership, industry classification etc) will make the outcome of the study to be more robust.

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Appendix I: Companies used in the study

Sector	Number	Name of company
Agro/Agro-allied	1	Okomu Oil Palm Company Plc
Automobile and Tyre	1	RT Briscoe Plc
Breweries	2	Guinness Nigeria Plc Nigerian Breweries Plc
Healthcare	2	Morison Industries Plc GlaxoSmithkline Consumer Nigeria Plc
Industrial and Domestic product	2	Vitafoam Nigeria Plc First Aluminium Plc
Building Materials	3	Cement Company of Northern Nigeria Plc Lafarge Plc Nigeria Ropes Plc
Chemical and Paints	3	CAP Plc Berger Paints Plc IPWA Plc
Conglomerates	4	Unilever Plc UAC of Nigeria Plc PZ Industries Plc John Holt Nigeria Plc
Construction	2	Julius Berger Nigeria Plc Cappa and D'Alberto Plc
Printing and Publishing	2	University Press Plc Longman Nigeria Plc
Food/ Beverages and Tobacco	3	7 ^{up} Bottling Company Plc Nigerian Bottling Company Plc Flour Mills Nigeria Plc
Packaging	3	Poly Products (Nigeria) Plc Avon Crown Caps Coint Plc Beta Glass Company Plc
Petroleum (Marketing)	5	Forte Oil Plc Oando Plc Conoil Plc Mobil Oil Nigeria Plc Total Nigeria Plc
Textile	1	United Nigeria Textiles Industries Plc
Commercial/Services	1	Trans Nationwide Express Plc
Total	35	

Source: Researchers' selection from Nigerian Stock Exchange Fact Book (2005-2014 Publications)

Impact of Agriculture Value Added on the Growth of Nigerian Economy

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Abstract

This study empirically examined the impact of agriculture value added on the growth of the Nigerian economy. The study used Solow-Swan exogenous growth model. The data for the study were sourced from National Bureau of Statistics (NBS), World Bank, Central Bank of Nigeria and the Global Economy spanning 1981 to 2015. The model built for the study proxy gross domestic product as the endogenous variable measuring economic growth as a function of value added in agricultural sector, Government spending as percent of GDP, Inflation rate and growth in population size. The study used econometric techniques of Augmented Dickey-Fuller (ADF) unit root test, Johansen co-integration test and error correction model for empirical analysis. The results of unit root test revealed that all variables in the model were integrated at first difference (i.e.1(1)) while the co-integration test revealed one co-integrating equation. The study indicated that agriculture value added had positive but insignificant influence on the growth of the Nigerian economy in both the short and long run. However, Government spending was found to be statistically significant in contributing to the growth of the economy. The findings from the error correction model show an insignificant but moderate speed of adjustment at 23% in each period in case of any initial distortion. The study recommended that measures should be taken to advance the level of processing industries, innovations in improving existing processes, techniques, procedures, products/services and technology entirely to help foster the level of value added in agricultural sector thereby contributing to the growth of the economy. More so, the government should fund intending producers to develop value added producer-oriented businesses and enabling environment for effective performance of the businesses.

Keywords: Agriculture value added, economic growth, government spending.

Introduction

Since independence in 1960, Nigeria has consistently pursued growth strategies and has achieved GDP (Gross Domestic Product) growth rate of 6% in 2006, 7% in 2011 and 7% in 2012 and as Africa's largest economy with 2013 GDP estimated at US\$ 502 billion (Economy Watch, 2015). The GDP in Nigeria increased by 2.35% in the second quarter of 2015 over the same quarter of the previous year (Trading Economics, 2015). This growth has not been able to translate into a reduction in poverty as the country remains poor in the face of growing population while unemployment rate rose from 12.3% in 2006 to attain an all-time high rate of 23.9% in 2011 and 24% in 2013, and with over 70% of its labour force involved in agriculture, hence the quality of life of an average Nigerian has not improved (IMF, 2012). It is therefore theoretically unreasonable and represents the paradox of growth in the face of poverty, unemployment and inequality (Fefa and Okwori, 2014).

Although, Omawale and Rodriguez (1979) opined that for most developing countries like Nigeria, agriculture has been assigned an important role in national development. Therefore the role of agriculture in transforming both the social, economic and institutional framework of an economy cannot be over emphasized. Ugochukwu (1999) asserted that agriculture is the first and most thriven occupation of mankind likewise Anyanwu, Oyefus, Oaikhenan and Dimowo (1997) who reported that agriculture has been the main source of gainful employment from which Nigeria can feed its increasing population, providing the nations industries with local raw materials and as a reliable source of government revenue while Reynold (1975) asserted that agricultural development can promote economic development by increasing the supply of food available for domestic consumption and releasing the labour needed for industrial employment.

However, Agriculture production is engulfed by many challenging factors such as low prices of the products at the market, lack of storage and processing facilities, among others leading to low returns. Thus adding value to agricultural products is a worthwhile endeavor because of the higher returns that come with the investment, the opportunity to open new markets

and extend the producer's marketing season as well as creating new recognition for the farm. According to Boland (2009), adding value is the process of changing or transforming a product from its original state to a more valuable state, or by changing its current place, time and from one set of characteristics to other characteristics that are more preferred in the marketplace that would lead to greater opportunities for product differentiation and added value to raw commodities. Don (2010) opined that value added agriculture has been touted as the solution to the problems facing farmers and rural residents and that people promoting value added agriculture claim that it will increase output and reduce financial stress in the farm sector and lead to the revitalization of rural communities. He acclaimed that value added agriculture's potentials lies in creating long term solutions rather than short term fixes. Although, Born (2001) identified the keys to success in value added agriculture as high quality, good record keeping, planning and evaluation, perseverance, focus, and building long term relationships with customers. Therefore the need to become engaged in value added activity reflects the need to shore up farm income which has been declining in recent years (Evans, 2015).

Considering the overwhelming potentials and benefits of agriculture value added in an economy, it is instructive therefore to investigate the impact of agriculture value added on the growth of Nigerian economy.

Conceptual Issues

Agriculture Value Added

Before explaining the term agriculture value added, it is imperative to define adding value. Boland (2009) put it as the process of changing or transforming a product from its original state to a more valuable state. He gave an instance of the intrinsic value in commodities like field corn grown, harvested and stored on a farm and then fed to livestock on that farm has value. Thus the value of a changed product is added value, like processing wheat into flour. It can be referred to as a product by changing its current place, time and from one set of characteristics to other characteristics that are more preferred or desired in the marketplace. Agriculture value-added involves the changing of raw agricultural products into a new structure

through processing, packaging, drying, cooling, cleaning, or any other type of process or technique that differentiates the product from its original raw form (Mellissa, 2007). It entails transforming or converting raw materials into finished or semi-finished products and/or maintaining product quality. According to the U.S. Department of Agriculture, Rural Business Development (2015), Value-added products are defined as follows: “A change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam), the production of a product in a manner that enhances its value, as demonstrated through a business plan (such as organically produced products) and the physical segregation of an agricultural commodity or product in a manner that results in the enhancement of the value of that commodity or product (such as an identity preserved marketing system)”. While value added agricultural business is referred to as any activity an agricultural producer performs outside of traditional commodity production to receive a higher return per unit of commodity sold. Activities like agri-tourism and entertainment agriculture. Examples of value added agricultural products include garlic braids, bagged salad mix, artisan bread, lavender soaps and sausages. Adding value to agricultural products is a worthwhile endeavor because of the higher returns that come with the investment, the opportunity to open new markets and extend the producer's marketing season and new recognition for the farm.

Economic growth

According to Ijirshar (2015) economic growth is an increase in the capacity of an economy to produce goods and services, compared from one period of time to another which can be measured in nominal terms (including inflation) or in real terms (adjusted for inflation). In other words, economic growth can be defined as the increase in the monetary or market value of goods and services produced by an economy over time. It is conventionally measured as the percentage of rate of increase in real gross domestic product or real GDP. Growth is therefore calculated in real terms (that is, inflation adjusted terms) to eliminate the distorting effect of inflation on the price of goods produced.

Empirical Review

Ceylan and Özkan (2013) analysed agricultural value added and economic growth within the framework of the European Union integration process using an extended Solow growth model and panel data analysis tools. The study examined the effects of per capita agricultural value added on per capita income using two samples of 25 and 30 EU member and candidate states respectively for the periods 1995-2007 and 2002-2007. The results of the two-way random effects estimation revealed that, the agricultural value added elasticity of per capita income was 0.025 for the 1995-2007 period, and 0.22 for the 2002-2007 period. The study also found that average per capita income was 5.6% higher among EU members with a change representing a 1 point rise in composite risk, which means a reduction of the risk faced by the country concerned, it was demonstrated that per capita income rose 1% during both periods. The study also revealed that agriculture retains its economic importance, and that average per capita income among EU members is higher than among nonmembers due to exogenous factors.

Adeyemo, Ajijola, Odetola and Okoruwa (2015) explored the relationship between agriculture value added and current account balances in Nigeria spanning 1980 to 2013. The study found that the variables incorporated in the model were stationary at first difference. The study used Engel Granger two step test which revealed a long run relationship while the Johansen test found at least one co-integration relationship among the variables. The study found negative relationship of agriculture value added with current account balances in the country in both the long run and the short run while terms of trade and per capita gross domestic product had negative relationship with the current account position. The study revealed that net foreign asset, real effective exchange rate and the gross domestic output have positive effects on the current account position. The study also found that agricultural value added as a percentage of the GDP as well as the net foreign assets are the only variables capable of adjusting to their long run equilibrium within the economy from the short run adjustment parameters.

Tiffin and Irz (2006) in addressing formally the question raised by Gardner (2003) in his Elmhirst lecture as to the direction of causality

between agricultural value added per worker and Gross Domestic Product (GDP) per capita, the study used Granger causality test in the panel data analyzed by Gardner for 85 countries, and found overwhelming evidence that supports the conclusion that agricultural value added is the causal variable in developing countries while the direction of causality in developed countries is unclear. The study also examined the use of Granger causality test in integrated data and provided evidence that the performance of the test can be increased in small samples.

Fakoya (2014) asserted that Africa is considered to have a large proportion of the world's natural resources, yet its balance of trade remains in deficit if compared with other trading partners. Nevertheless, the trend poses a challenge to the economic growth and development of Africa. The study provided the analysis on economic growth based on World Bank indices such as export of goods and services, industry value added, gross capital formation, and agriculture value added vis-à-vis gross domestic product (GDP) over a period of 9 years on selected African countries viz: Algeria, Angola, Botswana, Egypt, Ethiopia, Gabon, Ghana, Kenya, Namibia, Nigeria, Senegal, South Africa, Tanzania, Uganda and Zimbabwe, and provided explanations on their impact on economic value added in relation to economic growth and development. The study found that rather than place a great deal of emphasis about the desirability of export earnings, one way to achieve economic growth and development is in terms of adding value to Africa's natural resources itself by transforming them into the final product.

Theoretical Model

The study was built on the Solow-Swan exogenous growth model which was developed independently by Robert Solow (1956) and Trevor Swan (1956). The theory is an economic model of long run economic growth through capital accumulation, labour or population growth, and increase in productivity commonly referred to as technological progress. Mathematically, the output is produced using two factors of production (i.e Labour (L), and Capital (K)) in an aggregate production function that satisfies the Inada condition, which implies that the elasticity of substitution must be

asymptotically equal to one.

$$Y_t = K_t^\alpha (A_t L_t)^{1-\alpha} \quad (1)$$

Where t denotes time, $0 < \alpha < 1$ is the elasticity of output with respect to capital and Y_t denotes total productivity. A represents labour-augmenting technology thus AL represents effective labour.

Model Specification

Using Solow-Swan exogenous growth model with modification of incorporating other determinants of growth (output), the study captured the model in a definitional form as:

$$RRGDP = f(GSPD, INFR, POPS, VAAG) \quad (1)$$

Stochastically as:

$$RRGDP = b_0 + b_1 GSPD + b_2 INFR + b_3 POPS + b_4 VAAG + U_i \quad (2)$$

Where;

- RRGDP = The rate of change of real GDP
- GSPD = Government Spending as percent of GDP
- INFR = Inflation rate
- POPS = Population size (growth rate)
- VAAG = Value added in the agricultural sector as percent of GDP
- b_0 = Constant Intercept
- b_1, b_2, b_3, b_4 = Slope of Coefficients of the explanatory variables that are captured in the model.
- U_i = Stochastic disturbance term.

Method of Data Analysis

The study used econometric tools of Augmented Dickey Fuller Test, Johansen Co-integration test and Vector Error Correction Test. The study used the Augmented Dickey Fuller Test (ADF) to ascertain the stationary properties of the time series. The ADF formula is specified as:

$$\Delta P_{it} = \beta_1 + \beta_2 t + \sigma P_{it-1} + \alpha \sum_{t-1}^m \Delta P_{it-1} + \epsilon_{it} \quad (3)$$

This study adopted VAR-based co-integration tests using the methodology developed in Johansen (1991, 1995). Thus formula is specified as:

$$y_t = A_1 y_{t-1} + \dots + A_p y_{t-p} + Bx_t + e_t \quad (4)$$

where y_t is a n -vector of non-stationary I(1) variables, x_t is a d -vector of deterministic

variables, and e_t is a vector of innovations.

The ECM incorporates both the short run and the long run effects. The purpose of the ECM is to determine the speed of adjustment from the short-run disequilibrium to the long-run equilibrium state. Therefore, equation (4) can be represented to include ECM to reflect the short run dynamics as:

$$\begin{aligned} \Delta RRGDP_t = & b_0 + \sum_{i=1}^n b_1 \Delta RRGDP_{t-1} + \sum_{i=1}^n b_2 \Delta GSPD_{t-1} \\ & + \sum_{i=1}^n b_3 \Delta INFR_{t-1} + \sum_{i=1}^n b_4 \Delta POPS_{t-1} \\ & + \sum_{i=1}^n b_5 \Delta VAAG_{t-1} + U_t \end{aligned} \quad (5)$$

Data Presentation and Analysis

Diagnostic Test of Unit Root

It is imperative to test the existence of unit root in the variables in time series data covering a long period of time and hence to establish their order of integration. The variables used in the analysis need to be stationary and/or should be co-integrated in order to infer a meaningful relationship from the regression. The results of the Augmented Dickey-Fuller statistic are presented in Table 1. The result revealed that all the variables (RRGDP, GSPD, INFR, POPS and VAAG) are integrated at the first difference i.e I(1). This is because the probability values of rate of change of real GDP, government spending as percent of GDP, inflation rate, population size (growth rate) and value added in the agricultural sector as percent of GDP are less than 5% critical value at first difference.

Johansen Hypothesized Co-integration Result

The results of Johansen Hypothesized Co-integration test results revealed in Table 2 indicate co-integration among the variables captured in the model. This is evidenced on the fact that the trace statistic of 82.97804 is greater than the critical value of 69.81889 at 5% critical level likewise the Maximum Eigenvalue statistic (Eigen value of 39.26792 is greater than the critical value of 33.87687 at 5% critical level). This implies that there is long-run relationship between agriculture value added and economic

growth in Nigeria, since they found one co-integration equation at the given level of at most 1 in both statistics.

The Impact of Agriculture Value Added on Economic Growth in Nigeria (Long-run)

The estimated model is summarized as:

$$\begin{aligned} RRGDP = & -54.43273 + 1.630642GSPD + \\ & 0.029036INFR + 9.288108POPS + \\ & 0.288989VAAG \\ & (0.16649) \quad (0.03876) \quad (6.95528) \\ & (0.14501) \end{aligned}$$

Note: standard errors are in parenthesis.

From the model, the estimates show that holding all other variables constant, the RRGDP will be negatively influenced by -54.43273. This may be attributed to the increasing population which increases the cost, among other factors. The coefficient of GSPD is with the correct sign and is statistically significant at 5% critical level. This implies that a unit increase in government spending (GSPD) leads to 1.630642 increases in the rate of Real Gross Domestic Product (RRGDP). Thus, there is a strong positive relationship between government spending and economic growth in Nigeria. This means that increased government spending through fiscal expansion contributes to the growth of the economy as explained by the Keynesian theory of increasing government expenditure or state activities. More so, the coefficient of INFR has obeyed its apriori expectation (since it is minimal), though insignificant in contributing to the growth of the Nigeria economy at 5% level of significance.

More so, the coefficient of population growth is positive and statistically insignificant at 5% critical level. Nevertheless, the coefficient of agriculture value added indicated positive but statistically insignificant in accounting for changes in the rate of Real Gross Domestic Product in Nigeria in the long run. This implies that Nigeria has not explored the benefits of value added in agriculture during the period under study.

The Impact of Agriculture Value Added on Economic Growth in Nigeria (Short-run)

From the results of the dynamic model, it revealed an insignificant error correction term of -23.4% indicating a low speed of adjustment. The

result also revealed a positive coefficient of agriculture value added but statistically insignificant in contributing to the growth of the economy in the short run at 5% level of significance. This implies that only increased and sustained activities of agriculture value added in the country would contribute significantly to the growth of the Nigeria economy. More so, the coefficient of multiple determination (R^2) indicated moderate percentage contribution of 68.99% which means that, the independent variables jointly explained 68.99% of the movement in the dependent variable with the \bar{R}^2 -adjusted of 60.04%. The fitness of the model is explained by the F-statistic which is 8.64.

Summary of Findings

The study found that all the variables were integrated at first difference at 5% critical level. The information was obtained through the application of the Augmented Dickey-Fuller test which implied that spurious result was avoided.

The study revealed one co-integrating equation from both the Trace statistic and the Maximum Eigenvalue statistic indicating a long run relationship among the various incorporated in the model.

It was also observed that agriculture value added is important in driving the knocks of economic growth at the macroeconomic level if the activity is sustained and improved. This is because, the agriculture value added was found insignificant in contributing to the rate of economic growth in the short run likewise in the long run. This shows that only increased, improved and sustained activities of agriculture value added in the country would contribute significantly to the growth of the Nigeria economy.

More so, the study revealed a low and insignificant speed of adjustment of -23.4%. From the coefficient of determination, it was revealed that about 60.04% of the changes in the rate of real GDP were accounted by the changes in the explanatory variables captured in the model.

Conclusion and Recommendations

Agriculture value added was found insignificant in contributing to the growth of the Nigeria economy in both the short and long run. Thus, much is needed to be done to improve and

sustain the activities of agriculture value added in Nigeria since greater percentage of farmers and/or majority depend on the farming activities for livelihood. This would help in increasing the returns from farmers' activities thereby contributing significantly to the growth of the Nigerian economy. The study therefore recommends the following:

- I. Since value added involves marketing/exchanges where buyers and sellers must benefit, agriculture value added should be improved in providing product at a desired place, assortment and at a desired time since value-added products are customer-oriented than producer-oriented.
- ii. Measures should be taken to advance the level of processing industries, innovations in improving existing processes, techniques, procedures, products/services and technology entirely to help foster the level of value added in agricultural sector thereby contributing to the growth of the economy.
- iii. The government should fund or support intending producers through financial initiatives that would help in developing value added enterprises/businesses.
- iv. The Nigerian government should as a matter of urgency create enabling environment for businesses to flourish effectively. This could be done through providing social amenities, tax incentives for intending entrepreneurs to may venture in agriculture value added activities, among others.

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Table 1 Result of Unit Root Test (ADF)

Variables	ADF with Constant and Trend			ADF with Constant		
	At level	First Difference	Order of Integration	At level	First Difference	Order of Integration
RRGDP	-2.262954	-8.300060	I(1)	-2.649971	-6.323403	I(1)
Prob	0.2429	0.0000**		0.2008	0.0000**	
GSDP	-2.822928	-6.658350	I(1)	-2.890482	-6.691452	I(1)
Prob	0.1999	0.0000**		0.1976	0.0000**	
INFR	-3.433237	-5.110416	I(1)	-3.261364	-5.744874	I(1)
Prob	0.0531	0.0013**		0.0857	0.0000**	
POPS	0.727022	-3.084027	I(1)	-2.216011	-4.823502	I(1)
Prob	0.9908	0.0390*		0.2853	0.0005**	
VAAG	-3.141520	-4.241080	I(1)	-2.528176	-6.000614	I(1)
Prob	0.1143	0.0028**		0.2085	0.0000**	

Source: Computed from the Unit Root Test (ADF), (=5% and **=1% critical level)*

Note: These critical values are computed from Mackinnon (1996) and if the probability value of a particular variable is less than the 5% critical

value, we reject the null hypothesis of the variable having a unit root.

Table 2: Result of Unrestricted Co-integration Rank Test (Trace)

Null hypothesis	n-r	Hypothesized No of CEs	Eigen value	Trace statistic	0.05 critical value	Prob**
r= 0	4	None *	0.729891	82.97804	69.81889	0.0031
r =2	3	At most 1	0.590014	43.71012	47.85613	0.1162
r= 2	2	At most 2	0.271084	16.96113	29.79707	0.6429
r = 3	1	At most 3	0.213374	7.475232	15.49471	0.5231
r = 4	0	At most 4	0.009130	0.275155	3.841466	0.5999

Source: E-views-9.5 Output

Trace test indicates 1 co-integration equation(s) at the 0.05 level *denotes rejection of

the hypothesis at the 0.05 level. **Mackinnon – Haug – Michelis (1999) p-values

Table 3: Result of Unrestricted Co-integration Rank test (Maximum Eigen value)

Null hypothesis	Hypothesized No of CEs	Eigen value	Trace statistic	0.05 critical value	Prob**
r= 0	None *	0.729891	39.26792	33.87687	0.0103
r =2	At most 1	0.590014	26.74899	27.58434	0.0637
r= 2	At most 2	0.271084	9.485898	21.13162	0.7914
r = 3	At most 3	0.213374	7.200077	14.26460	0.4657
r = 4	At most 4	0.009130	0.275155	3.841466	0.5999

Source: E-views-9.5 Output

Max- Eigen value test indicates 1 co-integrating equation(s) at the 0.05 level *denotes

rejection of the hypothesis at the 0.05 level. **Mackinnon – Haug – Michelis (1999) p-

Transformation of Agricultural Education in Nigeria: Implication for Food Security

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Abstract

The paper examines the transformation of agricultural education and the implication for food security in Nigeria. The paper argues that the level of hunger in Nigeria was minimal at independence because majority of the people engaged in agriculture. However, the discovery of crude oil in the 1970s and subsequently exportation contributed over 90% to government revenue. This enables government to embark on massive projects which injected much money into the economy. This led to abandonment of agriculture to the rural poor who continue to use crude implements. The result is food insecurity and hunger resulting in malnutrition and disease in many homes. The paper further argues that one sure way to transform the agricultural sector and ensure food security is adequate education of the populace on the use and application of agricultural tools and implements. Consequently, the way forward for agricultural transformation in Nigeria is suggested in the paper.

Keywords: Agriculture, Education, Food Security, Transformation, Institution.

Introduction

Nigeria has a highly diversified agro-ecological condition, which makes possible the production of a wide range of agricultural products such as cocoa, ground nut, palm produce etc (Modebelu and Nwakpadolu, 2013). The citizens could complain of poverty but not extreme hunger. This could be probably because virtually everybody was in one way or the other involved in agricultural activities. Although, the practice appeared crude and unnecessary energy sapping due to crude implements in use and inadequate application of modern agricultural practices, but it indeed ensure availability of food. Agriculture then seemed sustaining because everybody was involved, everybody had interest and it appeared to be everybody's major source of family sustenance. Consequently, there were less cases of unemployment due to less interest or crazy of white collar jobs. Thus, the sector is particularly important in terms of its employment generation and its contribution to Gross Domestic Product (GDP) and export revenue earnings.

However, despite Nigeria's rich agricultural resource endowment the agricultural sector has been growing at a very slow pace. For instance, less than 5 0% of the country's cultivable agricultural land is under cultivation (Manyong, Ikpi, Olayemi, Yusuf, Omonona, Okoruwa and Idachaba, 2005). This is even as smallholder and traditional farmers, who use rudimentary production techniques with resultant low yields, cultivate most of this land. The smallholder farmers are constrained by many problems including those of poor access to modern inputs and credit, poor infrastructure, inadequate access to markets, land and environmental degradation, and inadequate research and extension services (Manyong et al., 2005). Also, the advent of the oil boom led to complete diversion of the citizens and national interests from agriculture as source of income. The citizens now loss interest in agricultural practices because it is treated as business for the less privileged and peasants in the rural areas etc. The repercussions are that agricultural practices has been deserted, hunger and poverty have taken over.

Consequently, food security is now the order of the day especially at this era of incessant occurrence of various forms of natural disasters such as flood, erosion, desertification etc. The

only way forward is re-embracing agriculture as a veritable source of income, food, employment, hobby, tourism etc. This is while majority of third world nations are leaving no stone unturned in repositioning their agricultural sector. They see it as one sure way of eradicating extreme poverty and hunger as recommended in millennium development goals (MDGs). Food security is one sure way to meet up with this number one goal of MDGs.

Ostensibly, increase in the incidence and severity of poverty in Nigeria is predicated on the dwindling performance of the agricultural sector where majority of the poor are employed. Furthermore, poverty in Nigeria has been assuming wider dimensions including household income poverty, food poverty/insecurity, poor access to public services and infrastructure, unsanitary environment, illiteracy and ignorance, insecurity of life and property and poor governance. In response to the dwindling performance of agriculture in the country, governments have, over the decades, initiated numerous policies and programs aimed at restoring the agricultural sector to its pride of place in the economy. However, no significant success has been achieved due to the several persistent constraints inhibiting the performance of the sector (Manyong et al., 2005). From the perspective of sustainable agricultural growth and development in Nigeria, the most fundamental constraint is the peasant nature of the production system with its low productivity, poor response to technology adoption strategies, poor returns on investment and poor or inadequate education programme on agriculture.

To ensure transformation of agriculture activities in Nigeria, it is imperative that those constraints inhibiting the performance of the sector are first identified with a view to unlocking them and creating a conducive investment climate in the sector through enlighten education programmes such that, agriculture will become one of the most important growth points in the economy. It is against this backdrop that the study is undertaken. The rest of the paper is structured as follows. Section two undertakes brief conceptual literature as well as overview of agricultural transformation in Nigeria. In section three, some factors inhabiting agricultural sector growth were identified. Section four contains ways forward for food security in Nigeria while

section five concludes the paper.

Conceptual Literature

Agriculture can be defined as the practice of cultivating the soil and raising livestock to produce plant and animals useful to humans and in some instances animals (Asoegwu and Asoegwu, 2007). According to Udoh (2000), agriculture is the economic mainstay of the majority of households in Nigeria and is a vital sector for the economy. The important benefits of the agricultural sector to Nigeria's economy include: the provision of food, contribution to the gross domestic product, provision of employment, provision of raw materials for agro-allied industries and foreign exchange earnings (Oni, Nkonya, Pender, Philips and Kato, 2009).

On the other hand, food security refers to a situation where a nation has ready food to consume in their reserves. This is while Abbey (2011), argues that food security is a situation where all the individual, household, national, regional and global levels at all times have physical and economic access to sufficient safe and nutritious food to meet their dietary needs and food preference for active and healthy life. Sort (2001) describes food security as a world where person has access to sufficient food to sustain a healthy and productive life, where malnutrition is absent and where food originates from efficient, effective and low-cost food systems that are compatible with sustainable use of natural resources. Achor (2003) observes that food security is one of the major challenges facing the third world nations. He discovers that government inability to provide sufficient food for its ever increasing population has been the root cause of extreme poverty and hunger among the citizens.

Anyanwu and Anyanwu (2008) report that cases of food insecurity ensued due to sudden population increase which meant that the quantity of food and fruit gathered during hunting and local farming are now insufficient. They argue that it is easy to make more food available to the ever increasing populace and conclude that food security issue is not peculiar to Nigeria alone as many other developing nations are also facing acute food shortage due population explosion, poor management of resources, inability to adapt to new technology and utilizing education to explore new

challenges.

Overview of Nigeria Agricultural Policies

A number of agricultural policies have been formulated in Nigeria before and after independence. In the Colonial Ten Year Development Plan (1946–1956), the commodity crop production emphasized was mainly oil palm, cocoa, rubber, cotton and groundnuts. The document contained very little or no proposal for increased food production. After independence, the first National Development Plan was 1962–1968. The policy sought for increase in the production of export crops through better seed distribution and more modern methods of cultivation as well as through the increase in area under cultivation. Consequently, farm settlements and cooperative plantations as well as Tractor Hiring Units were established and agricultural extension services were greatly expanded (Asoegwu and Asoegwu, 2007). This Plan Period was a success as cash crops accounted for about 80% of total export and 45% of the gross domestic product (GDP). However, no mention was made of the food sector in this plan that had 11.6% capital allocation by both Federal and State Governments to Agriculture (Osakwe and Ojo, 1986).

In the period 1970–74, the government lunched The Second National Development Plan during which the National Agricultural and Cooperative Bank (NACB) was established in 1973 to facilitate agricultural financing to farmers. Also, the National Accelerated Food Production Programme (NAFPP) was initiated which laid emphasis on agricultural research and extension support to farmers. However, with massive exploration of crude oil which contributed over 98% to total export and 73% of GDP, the agricultural policies and programmes were clumsily executed and virtually abandoned by succeeding military regimes (Opara, 2006). Consequently, capital allocated to agriculture for crop production, irrigation, research, credit (loans or subsidy), mechanization, man-power and agricultural extension services, declined (Osakwe and Ojo, 1986). For instance, the cocoa plantations suffered serious setback, the cotton and groundnut pyramids disappeared, hides and skin became food for the embattled Nigerian populace, and the oil palm plantations which were battle fields during the Biafra/Nigeria Civil

War died natural death due to neglect. The disaster on agriculture and food production was enormous and the effect on Nigerians has not been ameliorated till date (Asoegwu and Asoegwu, 2007).

The Third National development Plan (1975-80) was the first to spell out provisions for food security because of serious deficit in food production. In 1976, the Operation Feed the Nation (OFN) programme was inaugurated to create awareness among Nigerians about the consequences of an empty national food basket. Also, a number of Marketing Boards were abolished and Production and Marketing Companies were established. There was also the establishment of River Basin Development Authorities (RBDAs), Agricultural Development Projects (ADPs) and many research and tertiary institutions among others were established with the aim of improving agricultural food production (Asoegwu and Asoegwu, 2007). However, there was no commensurate capital allocation to Agriculture and this led to decline in food production (Osakwe and Ojo, 1986).

The Fourth National Development Plan (1981-85) saw the emergence of the Green Revolution which tried to give more powers and impetus to the River Basin Development Authorities and the ADPs to produce more food for the nation with more capital allocated to the agricultural sector (Osakwe and Ojo, 1986). Even though these efforts seemed to have been guided by genuine concerns, they failed to make the necessary impacts in the agricultural sector because of fundamental structural problems in the economy. According to Asoegwu and Asoegwu (2007), agricultural sector contribution to GDP declined by about 20% during the period. This resulted in increased shortage of food as evidenced by increased food imports and increased high prices (Asoegwu and Asoegwu, 2007).

Experience from the three National Plan Periods convinced Government that there can be no alternative to well-designed and articulated agricultural policies as instruments for promoting agricultural growth and development in Nigeria (Igbeka, 2003). In 1988, the Federal Government published the first ever agricultural policy document for Nigeria aimed at redressing the underdevelopment of agriculture,

streamlining policies in all tiers of government and ensuring policy stability (Opara, 2006). However, many factors worked against the implementation of this policy. They include poor funding and poor state of infrastructure; poor administration of government support to agriculture and abandonment of projects midstream due to political reasons; lack of appropriate technology to reduce drudgery in agricultural production and processing and inadequate availability of inputs such as improved seeds and breed stock among others (Asoegwu and Asoegwu, 2007).

In the periods between 1992-1998, succeeding governments saw that women involvement in agriculture was high and as such government policies were centered on women. Thus, programmes such as Better Life for Rural Women; Family Support Program (FSP); Family Economic Advancement Programme (FEAP) were initiated. These were meant to empower the women for more and better involvement in agriculture and other rural activities in order to enhance the production of food and agricultural raw materials.

The current democratic dispensation began 1999 and the various governments till date have implemented different reform programmes ranging from privatization, commercialization, deregulation to corruption and financial crimes. These are meant to stabilize the economy and make it more productive ensuring that the era of subsidies and over-protection of key sectors of the economy including agriculture is over (Van Otterdijk, 2005). In 2001, New Agricultural Policy was introduced and in order to fast track the gains of the policy, government set up Presidential Initiatives in Agriculture (PIA) in 2004 and the National Special Food Security Program (NSFSP) and FADAMA II in 2005. At the moment, there are NSFSP and FADAMA I, II and III, all targeted at raising agricultural productivity and production as well as food security and eliminate poverty among resource poor rural farmers.

Trends in agricultural education and training

In Africa in general and Nigeria in particular, food security is still a critical issue and therefore food production will continue to be a major focus of agricultural education and training institutions for some time to come.

African agriculture has gone through considerable changes over the years and a number of these changes are unfolding. Some of the emerging trends and developments affecting agriculture and agricultural education in Africa include but not limited to.

Shift in focus from agriculture to rural development: One of the challenges to post-primary agricultural education in Nigeria is how to meet the challenge of providing education and training for rural development rather than for agriculture alone. It is clear that the older curricula which concentrated on production agriculture only are no longer able to produce educated people who can deal with the wider problems of rural development. To address this problem therefore, post-primary agricultural education and training needs to be applied on practical base rather than purely theoretical. Learning needs to emphasize inductive reasoning skills so that students can interpret problems and devise solutions.

Rapid population growth rates and urbanization: Excessive population growth and its problematic distribution in a number of countries pose one of the greatest challenges for successful tackling of food and agricultural problems in sub-Saharan Africa (SSA). One fact that is not always recognized is that the rapid rate of urbanization in SSA is bound to make urban food insecurity and poverty a major problem. The rates of urban population growth in SSA in general and Nigeria in particular are among the highest in the world. It is generally agreed that rural-urban migration is the single most important cause of the explosion in the growth of the continent's urban population. As the overall population of African countries has increased at an accelerated pace, agricultural productivity has declined as the absence of appropriate technologies force farmers to start cultivating marginal lands. The results have been rapid degradation of the environment and increasing levels of food insecurity and poverty. Because of the well known urban bias in national policies, the provision of physical, social and economic services in many rural areas is often either non-existent or extremely appalling. On the other hand, the provision of these services in the urban centers, although inadequate, appears in the eyes

of the rural population, to be much better. As a result, the pull of the cities becomes irresistible for many rural people, particularly the youths. Post-primary agricultural education and training institutions need to incorporate population education concepts and principles into their curricula (Vandenbosch, 2006).

HIV/AIDS: The rate at which HIV/AIDS pandemic is spreading in some countries in SSA is worrisome. There is a real risk that agricultural production will be drastically reduced. Agricultural educators and trainers need to analyze the challenges posed by this phenomenon and to make institutional changes to meet the replacement human resources needs and provide the education and training required by those left behind in the rural areas. The influence of HIV/AIDS on skills development is devastating. It reduces productivity while driving up the cost of labour. It deskills the work force while reducing incentives for investing in skills.

Environmental degradation and unsustainable water use: Environmental constraints are already posing serious limitations to food security in several African countries particularly in areas where population densities are increasing rapidly. Today, virtually no inhabited area of Africa is unaffected by environmental degradation of one sort or another. The problem is being compounded by reduced levels and erratic patterns of rainfall and accelerated by destructive cultural practices leading to severe soil problems and loss of valuable agricultural land. Rangelands are being destroyed as a result of overgrazing and wasteful and inadequate management of available water resources.

Increases in incomes and wealth: Ironically as the continent's resources are used to create wealth, the resulting growth in the per capita income of the poor will increase their purchasing power, upgrade the quality of their diets and create additional challenges for more food (Vandenbosch, 2006). This further aggravates the competition for land between agriculture and construction of cities, factories and roads as well as increase the demand for wood-based products, including fuel wood, lumber for construction,

poles, furniture and paper. National and sub-regional markets will play more important roles due to the high population increases in cities and urban centres. This will also have implications for the continent's forests, soils, wildlife habitat and biodiversity.

Problems of Agricultural Transformation in Africa

Soil erosion caused by water and wind is one of the main problems of agriculture in Africa. The lack of development in low-lying flood plains also hinders the development of agriculture in the continent. In addition, the dependence on imported foods has disincentive effect on investment in local farming. Specifically, some of the problems confronting agricultural productivity include:

Soil Infertility: The problems of agriculture in Africa begin with the soil. Most of the farmable land in Nigeria contains soil that is low to medium in productivity. The main problem that affects soil fertility is soil erosion. Wind erosion, in particular, is quite damaging. Overtime, strong winds expose seedlings and crop root systems by blowing away loose, fine grain soil particles. Another effect is the accumulation of soil particles in drifts, which can cover crops. Also, wind erosion changes the texture of the soil. The particles responsible for water retention and fertility, such as clay, silt and organic matter are generally lost, leaving behind a sandy soil. Wind erosion can be greatly reduced by planting trees near farming areas which will absorb most of the wind and prevent the loss of soil particles.

Poor Irrigation: The low-lying flood plains are very fertile during the rainy season, but the lack of rain during the dry season hinders agricultural development. The lack of water management systems in these areas is a concern for many agriculturalists and farmers. By adding irrigation canals and access roads to these areas, yearly production yields are expected to increase. Unfortunately, irrigation system in Nigeria is poor.

Food Processing Issues: It is estimated that about 20-40% of the yearly harvest is lost during processing. The primary cause is the lack of efficient harvesting techniques. Most farmers

harvest crops by hand, instead of using machines. Also, storage methods are not generally up to standards. Most of the crops are lost to physical damage caused by insects, bacteria or fungus.

Impact of Imported Food: Africa is a net importer of food. The country does not produce enough food to meet the demand of its people. This produces a lot of problems with regard to agricultural development. Generally, there is less incentive for local farmers to grow local foods, when cheaper, more palatable foods are imported. This forces local farmers to reduce prices, which reduces the income generated by the farm. The consequence is decreased farm production and food insecurity. To combat the effects of imported food on development, several initiatives are suggested, including providing farmers with micro-credit that is subsidized and increasing tariffs on imported food.

Infrastructural Inadequacies: Infrastructure here includes roads and railway system, educational and health facilities, social services such as electricity and communication system. In many parts of Africa, physical and marketing infrastructure is poorly developed, storage facilities are rudimentary and access to information and markets is highly restricted. The infrastructure constraint has persisted due to poor governance, poor political leadership, poor maintenance culture and poor funding. In terms of road facilities, the constructed roads do not often last for more than three to five years before they start to crumble due partly to poor maintenance culture. In addition, the railway system has been comatose for years thereby restricting the movement of agricultural inputs and outputs to the road transport system (Olukunle, 2013). The educational and health facilities are largely urban-biased. Electricity supply is often epileptic and communication system is still poor. Although recent expansion of the Global System of Mobile Communication (GSM) infrastructure and Internet services has improved the communication situation somewhat, the services are urban-biased and too expensive for the average people.

Unstable Input and Output Prices: A major problem inhibiting investment in agriculture is the escalating cost of major farm inputs. Average

prices of farm inputs such as hoe, matchet, sprayer, tractor and agrochemicals have been rising over the years. The rising prices of inputs are the results of instability in the factor markets arising from instability in macroeconomic policy actions leading to inflationary pressures, high interest rates and volatile exchange rate. Moreover, the rising prices of fuel have led to rising cost of transportation of farm inputs thus aggravating the rising cost of production. The situation not only made procurement difficult but again resulted in cost escalation arising from the depreciated naira exchange rate. Consequently, the rising costs of farm inputs combined with dearth of investible funds pose a serious constraint to investment in agriculture all of which leads to food insecurity.

Challenges in Agricultural Transformation in Nigeria

Nigeria faces two central challenges to her agricultural sector and food security: they include population dynamics and climate change.

1. Population Dynamics

The Nigeria population is believed to be growing at over 3%. A number of lessons emerge from the current and projected future population dynamics of Nigeria with major implications for agriculture and food security. According to Nwajiuba (2013), the lessons include:

- I. Nigeria's population is growing even as the country's food security challenges grow with it. At the current growth rate of domestic food production, Nigeria is unable to feed its growing population. Domestic food production will have to expand at a faster rate.
- ii. Nigeria's urban population will soon outstrip the rural population. The population shift to urban centres is projected to become even more pronounced in the future. Despite its roots, the urban population is disconnected from the food production system and will rely on the market for food supply. This supply will have to come from domestic production or imported food.
- iii. Youth make up a growing share of the population. They are the bulk of urban

migrants and are thus unavailable for agricultural vocations. This raises the challenge of retaining and educating the next generation of farmers. As agricultural technology development and diffusion has stagnated, the sector continues to rely on human labour for farm power. This stagnation is due to a lack of local innovation, especially in mechanization that is appropriate to the ecology. Farmers cannot afford the equipment, and in turn there is a lack of local maintenance capacity. Mechanization and labour saving devices are in urgent need and require the development of local capacity.

- iv. Rural poverty will increase just as urban poverty has increased. Employment and income will have to be created for a large and growing youth population. With modern research and technology, agriculture provides a great opportunity to turn rural poverty and stagnation into development. At least in theory, the rural youth could produce the food that the urban youth consume. However, this would assume that the urban youth have the required purchasing power. Can there be agricultural jobs without consumers? Can there be high demand for agricultural products without jobs for youth? Thus, agriculture as a development issue will remain a core challenge for Nigeria for the coming decades (Nwajiuba, 2013).

To address these challenges, Nwajiuba (2013) argues that Nigeria's agricultural and food security policy and programmes should adopt a twin-track approach, on one side encouraging commercial agribusiness, while on the other side supporting the huge population of subsistence producers, as this is critical to rural food security, social cohesion and poverty alleviation.

2. Climate Change in Nigeria Agriculture

Nigeria's climate is changing. Evidence from The Nigerian Meteorological Agency (NIMET) clearly shows that the weather is becoming more extreme, be that in form of

drought or rain, leading to different impacts according to climate and geographical zones (Nwajiuba, 2013). Climatic change is already having adverse effects on agriculture and, therefore, food security in various parts of the country.

Agricultural Transformation and Development in the Economy

Agricultural transformation is not only about food production, it is also about the development of the economy. FGN (2011) argues that economic development through agricultural transformation is achievable through the following four phases:

Import substitution agricultural development: Agricultural development with a focus on self-sufficiency via import substitution lowers the cost of food, increases real wages and drives down inflation.

Export-oriented agricultural sector: This involves a rapid transition to export-oriented agricultural policy that diversifies the economy and increase foreign exchange reserves as well as stabilizes the exchange rate. This policy will reduce inflation in the domestic economy and lead to macro-economic stability. Macro-economic stability will in turn significantly increase the level of foreign direct investment (FDI).

Grow value added agro-processing sector: Growth in foreign direct investment will lead to economies of scale derived from an export oriented large/efficient agricultural sector. This will provide inexpensive raw materials to stimulate investment in the agro-processing industry.

Backward integrate into higher value added manufacturing: With growth in agro-processing industry, backward integrate into higher value added services and manufacturing of industrial equipment and products for the burgeoning industry.

Way forward for Effective Agricultural Transformation in Nigeria

Effective transformation of the agricultural sector is the only sure way to ensure food security

and reduce hunger and mal-nutrition. To ensure this, the followings are recommended.

Land Resources: Land is a major resource for agricultural development. Different types of equipment are used for land development and once land is opened up for agricultural purposes, it should be protected against erosion. Agricultural land should not be cleared with heavy equipment to avoid soil structural degradation and compaction. Desert encroachment and wind erosion is managed by planting drought-resistant trees as wind breaks while soil erosion is mitigated by mechanical, biological and cultural approaches.

Availability of Capital: Capital is a vital resource that should be properly managed. Agricultural financing is very delicate. Agricultural credits should be utilized upon the purpose it is meant for. Loans should be used to expand the agricultural land, buy machinery and other inputs (fertilizer, pesticides, herbicides, seeds and seedlings) for increasing agricultural production. Thus, the effort of the Government of Nigeria at directing commercial banks in the country to put aside some percentage of their transactions for agriculture and give as loans to farmers with good feasibility studies and the capacity to repay the loans is a good step in the right direction. This loan should not be given to absentee farmers.

Management of Labor: Labor is the most important resource in agriculture, since labor includes the manager and the operator of any agricultural business. Labour may include the agricultural scientists, technologists and engineers that is acquired through education and which bring about the innovations in agricultural practice. Labor should be well trained, regularly retrained and properly motivated to sustain interest in and for agriculture and its natural environment. However, with the abundant unskilled labour in the rural areas of Nigeria, care must be taken to develop machinery that will empower them and be user-friendly.

Water Resources: Agriculture activities in Nigeria have been largely rain-fed. However, with the development of dams on rivers in the northern part of the country for agricultural

production, hydroelectricity and domestic use, it becomes imperative to manage river resources properly. Rivers have been used as sinks for the disposal of waste materials and effluents. Pollution, rising demands and climate change limits water resources availability. Conscientious use and conservation of water resources includes monitoring, controlling and reducing river water pollution and making it available for irrigation, industry, hydroelectric power generation, navigation and waste water treatment plants' effluent dilution. Groundwater aquifers are also used in agriculture as they are hydraulically linked to rivers.

Agricultural Power and Machinery: Many tractors and machines for agriculture may have been imported into or manufactured in Nigeria. Managing them should include scheduling them for work timely, for maintenance and repair with genuine spare parts to make them operable and making sure that only properly trained manpower operate them for optimum use. Managing them also means, making sure that proper records are kept on each equipment and machine. In Nigeria most of the agricultural machineries are imported and maintenance is usually difficult. Many unserviceable machines litter many institutions. However, with the use of IT and ICT technologies, scheduling and monitoring of machinery could be made easier.

Storage Facilities: Storage is an essential phase between harvesting, processing and consumption. Traditional grain storage with cribs, rhombus, gourds, sacks, by hanging on roof tops, trees and fireplaces and barns have not provided adequate protection from rain, insects and rodents, resulting in 20-65% loss annually in Nigeria (Asoegwu and Asoegwu, 2007). Modern silos and warehouses of different makes (metal, concrete, wood, mud and composite) and sizes to handle between 5-2500 metric tons of grains are available in Nigeria. Managing grain storage means that the prevailing environment of low moisture, relative humidity, temperature and oxygen is maintained so that sprouting, mould, rot and black spot growth, respiration rate, heat and moisture transfer, micro-organisms, insects and rodents will be minimized, if not mitigated.

Livestock Manure: Manure constitutes an unavoidable by-product of any livestock production system. Management of livestock manure is by recycling and may be by 1) direct recycling as a feed ingredient for livestock; 2) on-farm or 3) off-farm recycling for crop production; 4) recycling for non-agricultural uses; and 5) discharge to the environment (Richard, 1998). The different and highly variable physical, chemical and biological properties of livestock manure impinge on the environment and can result in both positive and negative impacts on air, soil, water, fauna, and flora (Statistics Canada, 2000). Manure can become an important source of pollution when the management systems are deficient (AAFC, 1980).

Management of IT Inputs: Farmers in Nigeria are expected to access new machines and integrated information systems. They should spend time interacting on high management decisions. In a situation where ITs, global positioning systems (GPS) and geographical information systems (GIS) are applied to the management of farms, the goal is to improve the efficiency of operations and the quality and consistency of agricultural products by compensating for the spatial variability of the soil environment. The farmer professional education should be enhanced to enable him benefit from the new technology in order to monitor and manage his land, protect and improve his income and advance his living environment.

Management of other Inputs: The management of Nigeria's research and education in agriculture should focus on the indigenous crops and animals, many of which are going into extinction. The ingenious cultural practices should be modernized to be influenced by science, technology and engineering through communication of relevant information on new approaches and innovations in agriculture. Fertilizers, pesticides and herbicides should be applied as and when due and in the appropriate quantity to avoid pollution of water resources systems. Rural farmer education is as critical as any other resource for increasing agricultural productivity through agricultural mechanization and environmental management.

Conclusion

The study examines the transformation of agricultural education and implication for food security in Nigeria. At independence in 1960, the level of hunger in Nigeria was minimal because majority of the people engaged in agriculture which they saw as means of sustenance. However, from 1970s when crude oil was discovered and subsequently exported, over 90% of government revenue came from crude oil export. This enables government to embark on a number of projects which injected much money into the economy. Consequently, agriculture was abandoned to the rural poor who continue to use crude implements. The result is food insecurity and hunger resulting in mal-nutrition in many homes. In order to transform the agricultural sector and ensure food security there must be adequate education especially on the use and application of agricultural tools and implements.

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Impact of Budgeting on Educational Growth in Nigeria: A Study of Wukari Local Government Area, Taraba State, Nigeria

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Abstract

The study was conducted to assess the impact of budgeting on educational growth in Wukari Local Government Area, Taraba State. In a quest to properly achieve the purpose of this research study, the selected schools had two persons each to answer the questionnaire i.e. the principal and Parent Teachers Association chairmen. Copies of questionnaires were administered to both the principals and P.T.A chairmen. The responses of both principals and P.T.A chairmen were used to analyze the research questions. The chi-squares (X^2) test of independence was used to test the research hypothesis at the 0.05 significance level. Result of the findings revealed that most schools plan budgets and these are mostly planned annually with a few schools planning quarterly or monthly. This study also revealed that budgeting is important as it serves as a blueprint or guide to the institution. Furthermore, it was gathered from this work that budgeting has a relationship with educational development and that it help in identifying the problems on ground and available resources to finance projects thereby avoiding wastages. As to the responsibility of planning the budget, the study revealed that it should be a collective responsibility and not that of the principal alone although the principals should lead in the planning. This study also revealed that budgeting is good but that the implementations are not prudently followed.

Introduction

There is no gain saying the fact that an efficient organization is based on how well it is being funded. This is to say that a sound financial base forms the bedrock of security growth as well as for the procurement and maintenance of the other resources that are needed for the implementation of the program of any organization. This applies to educational sector as Dyikuk (2002) puts it where funds are needed to employ. Develop and maintain good quality of staff and to provide good quality and suitable infrastructural facilities equipment and materials which will foster well valued and relevant education for students and the nation as a whole.

Anyanwu (1997:593) opines that education is concerned with the cultivation of the whole person. This whole person includes the intellectual, affective, character and psychomotor development. Any nation that embarks on the welfare of its citizenry must have realized that it is the human resources rather than its physical capital and material resources which ultimately determine the character and pace of its economic and social growth as such the benefits derived from education cannot have contributed in the overall development of the nation. The evidence is clear as Anyanwu (1997) put it that education raises the quality of life, it improves health and productivity in market and non-market work, increases individuals access to paid employment and often facilities social and political participation.

This is true because an educationally healthy society contributes immensely towards national growth and development because it is the human resources that constitute the basis for the wealth of nations, hence, they are referred to as the active agents who accumulate capital, exploit natural resources, build social, economic and political organization and carry forward national development. So if the 'active' agents have not education, health wise and in all other areas, there will be no growth.

Literature Review

Concept of Budget

A budget is a blue print or plan of action for effective resource allocation

Concept of Education

The process of teaching, training and learning in schools, colleges etc (Formal or informal) to acquire knowledge and develop skills.

Development

It is the gradual growth of something (education) so it becomes more advanced and stronger.

Budget Manual

This is a document or blueprint of the budgeting arrangement and procedures which relate to a particular budget.

Objective and principles of budgeting

Budgeting has several objectives which can be clearly defined; Steiss (1989) list such objectives to include:

- a. Providing the legal basis for spending and accountability since budgeting is integrally linked to the accounting process.
- b. Structuring the revenue and expenditure information to facilitate the continuous monitoring, evaluation and control of financial resources;
- c. Enabling the financial authority ways to delegate certain responsibility in the organization while maintaining appropriate central control;
- d. Decision making under conditions of uncertainty even though such decisions may have significant long term consequences;
- e. Policy formulation and programs management and serving as a substitution for mechanisms of the economic market system whereby decisions are made regarding allocation of scarce resources in terms of the politics of who gets what: Furthermore, Drury (1992) summarized the objectives of budgeting to include:
 - a. Aiding the planning of annual operations.
 - b. Coordinating the activities of the various parts of the organization and to ensure that the parts are in harmony with each other.
 - c. Communication of plans to the various responsible centers.
 - d. Motivating managers to strive to achieve the organizational goals and
 - e. Controlling of activities and evaluating the

performance of managers'

It should be noted that the traditional function of a budget is to control the use of funds so that decision makers must strive to control wastes and make allocation choices. Budgets in the public sectors are, therefore, used to help in allocating Government resources, control agency operations and manage service delivery.

It is line with the above mentioned objectives that several definitions have been given as to what a budget means. Hay and sell (1974) defines a budget as a plan of financial operation embodying an estimate of proposed expenditures for a given period of time and the proposed expenditures for a given period of time and the proposed means of financing them. This means that priorities are set and their financial obligation is set alongside these priorities. This financial aspect involves expenses to be incurred in the execution of such outlined priorities and the expected revenues with their various sources which aid in the execution of such projects. It is worthy of note that the revenue and expenditure covers a period of time which it is expected, the project will be done with. This may be a month, quarter or a year depending on the plans on ground.

Ogboru (1999) defines a budget as a systematic and comprehensive framework for recording and regulating through a central agency, the flow of estimated future resources in a defined period in relation to the various needs among which expenditure is to be allocated. In essence, a budget is a revenue and expenditure statement showing the project(s) an individual or government intend to execute in a particular fiscal year with how much the project(s) cost and the resources of revenue for financing such project(s) Anyanwu (1977) sees a budget as setting of expenditure priorities and the weighing of alternatives.

It is a system of resources allocation hence it implies looking a head and planning since decision involved in the process are of a future orientation. It is however, worth nothing that a budget goes beyond this the budget has come to be regarded as a tool for changing the behavior of the economy.

The chartered institute of cost and management Accountants (CICMA, 1981 :45) as cited in okwoli (2003) define a budget as a

financial and or quantitative statement prepared and approved prior to a defined period of the policy to be pursued during that period for the purpose of attaining given objectives. This may include income, expenditure and the employment of capital.

A budget could also be defined as the money available to a person or an organization and a plan of how it will be spent over a period of time. It may be a monthly, budget termly or an annual budget.

From the above definitions, we see that the resources available which is money is set against what need to be done with it. In other words, the expenditure must match the available resources and vice versa. This makes for a wise and useful decision in expanding the resources available there by avoiding wastage because decisions are taken for the best.

The two major type of budget is the Capital Budget and Recurrent Budget, Other type of budget includes functional budget, Static, flexible, rolling, and incremental budgets.

Educational Developments

Development has been defined a legion of ways some people see development as the training that increases skill in performing a specific task or objective.

It can be defined as the increase in knowledge and understanding in order to organize and increase productivity, lighten morale and to reduce cost. The oxford Advance Learners Dictionary (6th Ed.) defined development as; the gradual growth of something's so that it become more advanced and stronger; the process of producing or creating something new or more advanced; a new event or stage that is likely to affect what happens in a continuing situation.

From the definition above, we see that development is the change from old to new, from less advanced to a stronger level. In essence, development entails shift from the crude to a modern way of doing things

Todaro (1981) sees development as the process of improving the quality of all human lives. He also notes that development is a multifaceted concept which embraces more than financial and material aspect of life. The process involves the organization and re-orientation of the entire economic and social systems. He also

enumerated three equally important aspects of development. This include

1. Raising people's living level that is, their incomes and consumption level of food, medical services, education and so through "relevant" economic growth process. It has to be relevant in the sense that any economic growth must be related to the needs of the people which will in turn improve their standard of living. For instance, the basic needs of people are food, shelter and clothing. So the economic activity must be geared towards achieving basic necessities.
2. Creating conditions conducive to the growth of people's self esteem through the establishment of social, political and economic systems and situations which promote human dignity and respect and
3. Increasing people's freedom to choose by enlarging the range of their choice variables, for example increasing the varieties of consumer goods and services. In essence, what Tarado is saying here is that development entails a complete turn of the people from poverty to a better way of life. He sees development as having a choice and best out of the choice being made. He sees development as the elimination of poverty, inequality and unemployment. It is the capacity of a nation to promote, generate and sustain its resources within its nation frontiers for improvement and advancement of the citizenry. It is in light of this that Rodney (1972) sees development as entailing the promotion of the social political and cultural structures of the country.

This means that development is a process which brings about changes in the social structure and National institution with accelerated growth. These change are to better the conditions of its citizenry.

Genuine development must be self-reliant, internally, generating rather than externally determined. It is the quantitative and qualitative improvement and transformation of socio-economic living standards of the generality of the people.

Babalola (1999) defined education as going to school learning how to read and write

storage of valuable information and adaptation of such materials to all situation of daily living in ones immediate environment. Education is seen as a tool for sensitizing people to the needs and resources of a nation for the purpose of human development. In others, education makes an individual literate. It is worthy to note that education has different objectives for situations. It is in this line that Gesinde in Okwoli (2003) assert that the society expects education to produce rational skilled, enlightened and independent citizens. Essentially, the primary objectives of education as contained in the National policy on education (1984), is to give all students opportunities to acquire appropriate skills, abilities and competence both mental and physical, in order that they might live useful and productive live and contribute meaningfully to the overall development of their communities. Shelytzer and stone (1966), classified education in terms of its function and thus definition, education should be an instrument of transforming or moulding individuals in to good citizens of their societies and for equipping individuals for leadership roles.

Sule and Oken (2001), while analyzing it conjures a variety of ideas including instructions, training and teaching, which are scrupulously pursued for a better society. These definitions all explain the fact that education is a process of development for the better which is as trainer and trainee this interaction brings about a change for the better in any individual. This also explain that each society has its own way of defining who an educated person is, which goes on to show that education may not necessarily take place in a formal setting but that the informal setting such as the blacksmiths shop provides a sort of education to such people to come to learn.

We can sum up education as the development of a sound mind and skills which enhance a better standard of living of any individual and the society as a whole.

From what has been discussed earlier on in this chapter it regards development which is a process of change and an increased skill in the performance of a specific task and what has been said as education as an instrument or a process of teaching, training and learning which of course transform individuals in to good citizens. Educational development can be seen as a change in the training, teaching and learning which

brings about an improvement in the social structure of the society. It shows the relationship between education and development in the sense that one depends on the other. This is to say that one depends on the other. This is to say that development depends on education to bring changes in the lives of the citizenry and as such there is need for teaching, training and learning for improved skills or acquiring new skills. This is especially true when we look at the programmes outlined for educationist to keep them abreast with the latest happenings in the society. This is done through workshop, seminar etc this is just to bring about a sound educational system. That is why educational development could be seen as process which brings about changes in the educational sector.

The Relationship between Budgeting and Educational Development

There is no disputing the fact that is the bedrock of security development. This is so when such finances are used appropriately and at the right time. As earlier on mentioned, budgeting helps in identifying the resource available and to place or allocated these resources to be best possible programmes that borings about development. We see that budgeting sets priorities and when strictly followed, will bring about meaningful development. Take for instance, a situation where by there is no budgetary measures the scarce resources will not be used in the most efficient manner but will leaves the measure in a lot of problems as their numerous wants cannot done and strictly adhered to. This is to that without budgeting, there will be no development. This is because budgeting weights the problems on ground and provides alternatives means or ways of solving these problems looking at the progress made by development countries, we find that they adhere strictly to their budget and always take note of areas that used funds most to allocate such funds needed. For instance, the united state saw the need to have food in abundance and hence they set their goals towards achieving that state by allocating enough funds through the process of budgeting similarly, the medical and educational sectors were considered of almost importance that large sums of money were allocated to these sectors of the economy up till today. Using the above example, we can see that budgeting and

development go hand with budgeting forming a vital part of it.

The mutual relationship which exists between budgeting and education cannot be overemphasized. This is because funds are needed to employed, develop and maintain good quality staff and to provide good quality and suitable infrastructure facilities equipment and material which will foster well valued and relevant education for students and the nation as a whole. Adequate funding is also crucial as it enable management cope with emergencies arising due to expansion. The importance of adequate education funding is stressed by coombs and Hallak (1972) when they stated that money provides the essential purchasing power with which education acquires it human and physical inputs with too little money, education is helpless with ample supply, its problems becomes more manageable even though they do not vanish. This is true as the problem in the educational sector abounds due to the alarming rate at which it is expanding. It is a known fact that the education of yester years is not the education of today. There are more challenges facing the educational sector of today more than was yesterday. For instance, an increase in information technology has made it necessary for the inclusion of computer training in all areas of education. This has made it necessary, for large sum of money to be used in the educational sector to make these computers available and also the manpower to operate and teach the use of these computers. With proper budgeting however, the problems of expansion will be minimized. It is worthy of note here that for education sector to achieve its purpose of education the populace, there must be a budget. In essence, there cannot be any meaning education without a budget. It is because of this relationship that we find government budgeting towards key areas which include the educational sector

Methodology

This study was carried out in secondary schools located in Wukari Area of Taraba State. These schools include both the private and public schools. No consideration was given to either Senior or Junior Secondary School.

The study involved the collection of data from principals and the Parent Teacher's Association of the selected schools.

Those schools that were selected have 2 people each to answer the questionnaire i.e. the principal and Parent Teachers Association chairman thereby bringing the total sample to sixty four. The Percentages and chi-square techniques were used extensively in this work and it is denoted thus:

$$x^2 = \frac{\sum(f_o - f_e)^2}{f_e}$$

where

x_2 = Chi-square

f_o = Observed frequency

f_e = Expected frequency

Table 1: Budget Plan by Principals and PTA

Respondent	No of Respondent	% Budget Planned Monthly	% Budget Planned Quarterly	% Budget Planned Annually	Total
Principal	70	4.3 (3)	35.7 (25)	60 (42)	100
PTA	62	6.5 (4)	29.5 (40)	64.5 (40)	100
Total	132	10.8 (7)	64.7 (43)	124.5 (82)	

Table 1 reveals that of the 70 respondents (principals) 43% plan their budgets monthly, 35.7% quarterly while 60% plan annually. Furthermore, the table also revealed that 6.5% of PTA chairman out of 62 respondents plan their budgets monthly, 29% plan annually. The table also revealed that of the total number of respondents 5.3% plan their budgets monthly, 32.6% plan quarterly while 63.1% plan annually. This shows that both principals and PTA

chairman plan budgets and these are mostly done on a yearly basis as shown by the percentage of respondents.

Research Question 2

Is having a budget important?

The analysis of this question was based on the responses of both principals and PTA chairman to question one in questionnaire for both principals and PTA chairman.

Table 2:

Respondent	No of Respondent	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
Principal	70	30 (42.86%)	16 (22.86%)	0 (0%)	15 (21.86%)	9 (12.86%)	70 (100%)
PTA	62	25 (40.32%)	18 (29.03%)	0	13 (20.97%)	6 (9.68%)	62 (100%)
Total	132	55 (83.18%)	34 (51.89%)	0	28 (42.4%)	15 (22.54%)	

Table 2 showed that 46 of the principals representing 65.72% agreed that having budget is important while 24 of the respondents representing 34.25% disagreed. Furthermore, 43 out of the 62 PTA chairman who responded to the questionnaire agreed that having a budget is important. This represents 63 while the

remaining 19 representing 30.65% disagreed. This showed that out of the 132 respondents 89 of them representing 67.42% agreed that having a budget is important. A similar question was asked in the questionnaire for principals as to whether the plan is tedious and as such be forgotten. This had the following responses:

Respondent	No of Respondent	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
Principal	70	5 (7.14%)	8 (11.43%)	2 (2.86%)	15 (21.43%)	40 (57.14%)	70 (100%)

Table 3 revealed that 13 respondents (18.57%) agreed that the plan is tedious and as such should be forgotten. 78.57% disagreed that the plan is tedious and such should not be forgotten. This revealed that the principals believed in the importance of budgeting and as such, do not consider the plan to be tedious not to think of forgetting it.

Research Question 3

Has budgeting anything to do with the educational development in your school? The analysis of this question was based on the responses of principal to question 3 of the research questionnaire and the PTA chairman's responses to question 7 of the research questionnaire.

Section B

Table 4

Respondent	No of Respondent	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
Principal	70	56 (80%)	10 (14.29%)	0 (0%)	3 (4.29%)	1 (1.42%)	(100%)
PTA	62	42 (67.74%)	15 (24.19%)	0	3 (4.84%)	2 (3.23%)	(100%)
Total	132	98(147.74%)	25 (38.48%)	0	6 (9.13%)	3 (4.65%)	

Table 4 revealed that 80% of school principals strongly agreed that budgeting has something to do with the educational development in their school. 14.29% agreed, 4.29% disagreed while 1.42% strongly disagreed. Furthermore, the table revealed that out of the 62 PTA respondents, 67.74% strongly agreed that budgeting something to do with educational development, 24.19% agreed, 4.84% disagreed and 3.23% strongly disagreed.

while 9 respondents 6.28% disagreed that budgeting has anything to do with the development in their school. This clearly shows that both respondents agreed that budgeting has something to do with educational development implying a relationship between budgeting and educational development.

The table also revealed that out of the 132 respondents, 123 agreed that budgeting has something to do with educational development. This represent 93.18% of the total respondents

Research Question 4

Who is responsible for the planning of the budget?

This question was analyzed based on the responses of principals to section A of the principal's questionnaire.

Respondent	No of Respondent	Principal	Ministry	Bursar	Others	Total
Principal	70	50 (71.4%)	10 (14.3%)	10 (14.3%)	0	(100%)

Table 5 revealed that 71.4% of the respondents believe that the responsibility of planning of the budget lies with the principals. 14.3 see it as the responsibility of the bursar. This clearly shows that the principals believe that the

responsibility of planning the budget is theirs.

A similar question was asked in PTA questionnaire (question 2 section A), and it had the following responses.

Respondent	No of Respondent	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
PTA	62	6 (9.68%)	5 (8.06%)	1 (1.61%)	19 (30.65%)	31 (50%)	62 (100%)

Table 6 revealed that 9.6% of PTA chairman who responded to this question strongly agreed that budgeting concerns only school administrators, 8.06% agreed, 1.61% were undecided, 30.65% disagreed and 50% strongly disagreed. This shows that the PTA chairman representing 80.65% disagreed that budgeting concerns school administrators. They believe it is a collective responsibility.

Research Question 5

Do you think the budget is effectively implemented?

In analyzing this question, responses of principals to question 11 of section B of the questionnaire which says that most of the time, budget are not followed strictly was used.

Table 7: showing responses of principals to budget implementation.

Respondent	No of Respondent	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
Principal	70	35 (50%)	20 (28.6%)	10 (14.3%)	5 (7.1%)	0	70 (100%)

Table 7 revealed that 50% of the respondents strongly agreed that most of the time budgets are followed strictly 28.6% agreed, 14.3% were undecided and 7.1% disagreed. This table showed that most of the time budgets are not strictly followed and as such not properly implemented by the percentage of respondents

who agreed (78.6)

A similar question was asked in the PTA questionnaire which tried to find out whether conflicts between PTA and school administrators hinder effective implementation of the budget. It received the following responses.

Table 8: showing responses of PTA to conflicts

Respondent	No of Respondent	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
PTA	62	36 (58.06%)	19 (30.65%)	0	7 (11.29%)	0	62 (100%)

Table 8 revealed that out of the 62 respondents 58.06% strongly agreed that conflict between PTA and school administrators hinders effective implementation of budgets 30.65% agreed, 11.29% disagreed.

This shows that conflict to a large extent, hinders effective implementation of budgets.

Research Question 6

In what ways has budgeting affected the educational development in your school?

To analyze this research question, responses of principals to question 5 in the questionnaire and that of PTA chairman to question 3 in the questionnaire were used.

Table 9: showing responses of principals and PTA chairman

Respondent	No of Respondent	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Total
Principals	70	36 (80%)	10 (14.29%)	0 (0%)	3 (4.29%)	1 (1.42%)	(100%)

Table 9 reveals that 64.3% of principals strongly agreed that budgeting helps in knowing the problem on ground available resources to execute projects. 14.3% agreed, 10% were undecided, disagreed 7.1% disagreed, 43% strongly disagreed. More so, the table revealed that 72.6% of PTA chairman strongly agreed that budgeting helps in knowing the problem on ground and the available resources to execute project. 16.1% agreed, 8.1% disagreed while 3.2% strongly disagreed. This shows that budgeting helps in knowing the problems on group, the available resources to finance projects and the setting of priorities as indicated by the percentage of respondents (83.33%) who agreed.

Hypothesis Testing

H_0 : There is no significant relationship between budgeting and educational growth.

This hypothesis was tested using the chi-square test of independence at the 0.05 level of significance. If X^2 calculated is greater than the critical value of x^2 at 0.05% significance level, reject the null hypothesis, otherwise, the null hypothesis is accepted.

The responses from the research questionnaire on whether budgeting has anything to do with educational growth was tested in this hypothesis.

Responses

Respondent	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
Principal	(73.87) 80	(19.24) 14.29	(4.57) 4.29	(2.33) 1.42	100%
PTA	67.74 (73.87)	24.19 (19.24)	4.84 (4.57)	3.23 2.33	100
Total	147.74	38.48	9.13	4.65	200

Table 10 showing χ^2 values.

Calculated	Degree of Freedom	X2t	Level of Sign	Decision
4.3	2 - 1 = 1	3.84	005	Reject H0

Result in table 10 reveals that the X_2 calculated (4.3) at the 0.05 level of significance is greater than the X^2 tabulated at the same level of significance. This means the stated hypothesis is rejected.

Discussion of Result

The data which was based on research question and the hypothesis formulated in chapter one were analyzed using the method of data analysis which was described in chapter three.

The result of the analysis revealed that from research question one 82 of the respondents representing 62.12% plan their budgets annually. This showed that majority of the respondents plan their budget annually as how they plan their budgets. An annual budget goes in line with the school calendar which has three terms in a year and as such, budgets that are planned annually consider the projects on ground and what to be expected in terms of finance for that year. This question also revealed that most of the respondents plan budgets as indicated by their responses. The only difference is in the time the budget is to cover – monthly, quarterly or annually.

Research question two revealed that 65.72% of principals agreed that having a budget is important. Furthermore, 69.35% of PTA chairman also agreed that having a budget is important, 34.29% of principals disagreed that having a budget is not important while 30.65% of PTA also disagreed.

This result revealed that the respondent believe having a budget is important. This is so because budgeting involves setting of priorities in order of preference and how these priorities can be achieved owing to the importance of having a budget, a similar question was forgotten. The result of the analysis revealed that 57.14% of the respondents strongly disagreed that there was tedious and as such should be forgotten. This is a strongly indication that principals consider budgeting as important and don't consider the work to be tedious. This

finding agree with Scott in Okwoli (2003) where he concluded in his study that planning is an analytical process which encompasses an assessment of the future, the determiner of the desired objectives in the context of the future, the development of alternative courses of action to achieve such objectives and the selection of a course or courses of action from among these objectives.

Research question three revealed that budgeting brings about educational development as indicated by the responses of both principals and PTA chairmen representing 93.18% of the total respondents.

The research question which tried out who is responsible for planning the budget reveals that 71.4% of the respondents, who were school administrators, strongly agreed that the principals are responsible while 14.3% considered it the responsibility of the ministry or bursar. A similar question was asked the PTA chairmen and the result revealed that 50% of the respondents strongly disagreed that it should be the principals only that should be saddled with the responsibility of planning. They believed that it was a collective responsibility. These findings agree with Ogboru (2005) where he concluded in his companies and instructions including governments are involved in budgeting.

The research question which tried to find if the budgets are effectively implemented revealed that 50% of the respondents who were school principals strongly agreed that most of the time, budgets are followed strictly. This showed that budgeting on its own is not bad but the problem is implementation. This is common in Nigeria were we have laudable programmes on paper but when it comes to execution, the country is rated zero. This can be seen in the various development programmes that Nigeria have had. It is also evident in the number of abandoned projects scattered all over the country.

A question as regards the implementation was also asked in the PTA questionnaire and the result showed that 58.06% strongly agreed that conflict between PTA and school administrators

hinders effective implementation of budgets on the side of the PTA. This revealed often times; conflicts are not resolved in the best interest of the majority. This also revealed that such unresolved conflicts leads to some schools as it was gathered in the course of this work, are rendered ineffective.

Research question six which tried to find out ways budgeting has affected the educational growth in schools revealed that 78.6% principals agreed that budgeting helps in knowing the problem on ground and available resources to finance those problem identified. They also agreed that this helps in the execution of vital projects 88.7% of PTA chairmen also agreed that budgeting helps in knowing what is to be done and how it is to be done. This finding agrees with Chaudler in Okwoli (2003) where he concluded in his study that ... determination of the basic long term goals and objectives of an enterprise and the adoption of courses of action and the allocation of resources necessary to carry out these goals”.

From the research hypothesis, the X^2 calculated is greater than the X^2 tabulated at the 0.05 significance level with two categories of respondents, principals and PTA chairmen with degree of freedom. This shows that the null hypothesis which states that there is no significant relationship between budgeting and educational growth is rejected and the alternative which is there is a significant relationship between budgeting and educational growth, is accepted. This findings agrees with Oyikuk (2002) where he concluded that the budget gives the institution a plan for action, provides better formula for effective financial disbursement in the school efficiency of an organization is based on how well it is funded. Finance is the bedrock ... This is true of an educational organization where funds are needed to employ, develop and maintain good quality of staff and to provide good quality and suitable infrastructural facilities”. Also with Coombs and Hallak (1972) that '... money provides the essential purchasing power with which education acquires its human and physical inputs ...' This is to say that with too little money, little of education will be achieved or acquired. In conclusion, it can be seen that budgeting has a relationship with education. Although government budgets each year, there is need to see through improving the budgetary

allocation and period checks to ensure proper implementation of budgets.

Conclusion

For there to be sound educational system, the budgetary aspect should be taken care off. All those that have a say in the educational development of the society should ensure that budgets are prepared and funds made available to finance the budget.

The budget serves as a guide so as to enable the educational planners know what need to be done and how it should be done. The budget as such must be taken with all seriousness of purpose if the problems that abound in the educational sector which is hindering educational growth such as inadequate qualified skilled manpower and infrastructure is to be reduced, then budgets have to be reconsidered and restructured to reflect the rising need.

A nation that have majority of its resources undeveloped faces a serious crisis. And as it said, if you are planning for a year, sow rice, for ten years plant trees; for hundred years, educate people.

Recommendations

Although there are several problems militating against preparing and executing a budget considering the importance of budgets, a lot has to be done to ensure that the role a budget is supposed to play is properly taken care of. Budgeting should not be done away with, but that the bottle-necks be reduced to the barest minimum so as to encourage the planning and usage of such plans. The following should be done by all stake holders:

The government should ensure that budgets are prepared by all schools administrators and submitted to the planning division before the end of the 4th quarter of the year. The budget should be clear and straight forward stating the program of action and the sources of revenue to finance these programs. School administrators should ensure that they comply strictly to the blue print. There should be a cordial relationship between principals and PTA executives so as to enable the execution of project that are vital to the school. There should be proper record keeping by all principals indicating the infrastructural facilities on ground and the yearly enrolment. This should tally with those records kept by the ministry.

There should be periodic checks on the projects as stated in the blue print. Where the plan is not strictly followed, action should be taken immediately to correct the abnormality. Policy makers should work hard with school principals to ensure proper planning and implementation.

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Globalisation and the Openness of the Nigerian Economy: A Case for Production Expansion

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Abstract

This study analysed the openness of the Nigerian economy with a view to investigate whether Nigeria's involvement in international trade has significantly impacted her growth or otherwise. Using the Vector Error Correction Model, the study found that trade openness has not impacted significantly on economic growth in Nigeria within the study period (1986 – 2014) and currently postulates a negative relationship. This inverse relationship signifies that its present state is detrimental to the Nigerian economy. The study recommends that: government should encourage domestic production by granting subsidies and tax concessions to industries and farmers for expansion of production capacity to meet increasing demand of commodities in the economy hitherto being imported; they should also make efforts to improve institutional quality in ensuring standard of products which would encourage domestic wholesalers and retailers to patronise made in Nigeria goods; finally, they should improve on the existing infrastructure in agriculture and industry – enhancing productivity changes in the commodities thereof and thereby boost trade instead of relying solely on crude oil.

Keywords: Trade openness, economic growth, globalisationat the implementations are not prudently followed.

Introduction

The growing integration of economies all over the world has been one of the most burning issues in international economics over the past two decades. Economic “globalization” is a historical process, the result of human innovation and technological progress. It refers to the increasing integration of economies around the world, particularly through the movement of goods, services, and capital across borders. The term sometimes also refers to the movement of people (labour) and knowledge (technology) across international borders. There are also broader cultural, political, and environmental dimensions of globalization (IMF, 2008). The process of globalization means growing integration of the national economies, openness to trade, financial flows, foreign direct investment and increased interaction of people in all works of life. Globalization also implies the internationalization of production, distribution and marketing of goods and services.

The policy reforms undertaken by the Nigerian government since the 1980s had the objective of making the entire economy more efficient, technologically up-to-date and competitive. This was done with the expectation that efficiency improvement, technological upgrade and competitiveness would ensure that the Nigerian economy will achieve rapid growth. In view of greater openness of the Nigerian economy due to trade liberalization, private sector can build and expand capacity with less regulation. Advocates of globalization believe that policy reforms so far has improved economic growth and performance significantly while critics argue that the total withdrawal of restrictions on several matters have had negative effects on future growth and performance of the economy ((Nwakanma and Ibe, 2014). They are also of the view that globalization has worsened inequalities across and within the countries, environmental degradation and vulnerability of the poor nations have increased and that developed countries have established dominance over developing countries culminating in neo-colonization

Thus, economic policy in the last two decades had one dominating theme. As an integral element of the Structural Adjustment Package (SAP), trade openness was espoused on the argument that it enhances the welfare of

consumers and reduces poverty as it offers wider platform for choice from among wider variety of quality goods and cheaper imports (Nduka, 2013). There are fundamental reasons for this potential of welfare improvement. Nigeria's trade policy is at a crucial turning point. Historically, the country has had a very restrictive import regime that generated substantial transfers to domestic producers and strong anti-export bias. Nigeria, being fully integrated into the global economic system, is a member and signatory to many multilateral and regional trade agreements such as ECOWAS, OPEC (World Bank, 2000).

The policy response of such economic partnership agreements on trade policy has been to remove trade barriers, reduce tariffs and embark on outward oriented trade policies which lead to economic growth. In its current policies, Nigeria identified deeper trade integration as a means to foster economic growth and alleviate poverty. Border tariffs are being reduced, trade regulations are under review, and ambitious modernization programs for customs services and port infrastructure have been launched. The envisioned reforms involve far-reaching opportunities by improving the efficiency of production and consumptions, while requiring adjustment of domestic producers to the new, more competitive economic environment (Peter and Olivier, 2006).

Nigeria's export performance has been lacklustre. Unlike some other fuel producing countries, the country has not managed to diversify its economy so that petroleum continues to account for almost all merchandise exports. This dominance of fuel exports has made Nigeria highly dependent on developments in the world oil market and prevented it from taking advantage of dynamic opportunities in other sectors. Past attempts to foster non-fuel merchandise exports through export subsidies and other incentive measures have had very limited success, as many of the programs have been undermined by fraud and corruption.

Most economists especially development and international economists have argued in favour of international trade as it relates to global and domestic economic growth and development. They believed that international trade leads to specialization, increase in resource productivity, large total output, creation of

employment, generation of income and relaxation of foreign exchange restraints (Nnadozie, 2003). The positive relationship that exists between global trade and economic growth may be as a result of the likely positive externalities due to the involvement of different countries in the international trade. Many empirical studies have argued in favour of the importance of global trade on economic growth using the degree of trade openness, terms of trade, tariff and exchange rate as variables to explain the claim that open economies grow faster than closed economies (Edwards, 1998).

On the contrary, some economists have argued that the practice of protectionism is better means for domestic economic growth because in some instances the domestic economy may have comparative advantage over the foreign economy (Nnadozie, 2003). Nevertheless, the overwhelming evidence of positive impact of international trade on economic growth cannot be overemphasized.

However, there are some questions to ask: what relationship exists between Nigeria's involvement in international trade and her economic growth? Does international trade cause economic growth in Nigeria? It is against this backdrop that this research seeks to evaluate the effect of openness on the Nigerian economy. This work is structured into five sections. Section two covers the literature review. Sections three deals with research methodology while data analysis is done in section four. Conclusion and recommendations are done in section five.

Literature Review

Conceptual Framework

The term openness refers to the degree of dependence of an economy on international trade and financial flows. Trade openness measures the international competitiveness of a country in the global market. Thus, we may talk of trade openness and financial openness. Trade openness is often measured by the ratio of export and import to GDP or alternatively, the ratio of trade to GDP. It is now generally accepted that increased openness with respect to both trade and capital flows will be beneficial to a country. Integration and globalization are beneficial to developing countries although there are also some potential risks (Iyoha and Oriakhi, 2002).

Trade openness is interpreted to include

import and export taxes, as well as explicit non tariff distortions of trade or in varying degrees of broadness to cover such matters as exchange rate policies, domestic taxes and subsidies, competition and other regulatory policies, education policies, the nature of the legal system, the form of government, and the general nature of institution and culture (Baldwin, 2002).

One of the policy measures of the Structural Adjustment Programme (SAP) adopted by Nigeria in 1986 is Trade Openness. This means the dismantling of trade and exchange control domestically. Trade liberalization has been found to perform the role of engine of growth, especially via high real productivity export (Obadan, 1993). He argued that with export, a nation can take advantage of division of labour and procure desired goods and services from abroad, at considerable savings in terms of inputs of productive resources, thereby helping to increase the efficiency of the export industry. Export growth sets up a circle of growth, so that once a country is on the growth path, it maintains this momentum of competitive position in world trade and performs continually better relative to other countries.

In the course of this study, the terms "openness" and "trade openness" will be used interchangeably.

Theoretical Framework

There are different theories on trade. A few of them are the Neoclassical Supply-Side Model, Balance of Payments Constrained Growth Model, Virtuous Circle Models of Export-Led Growth; just to mention a few. It is worthy to note that, the doctrine that trade enhances welfare and growth has a long and distinguished ancestry dating back to Adam Smith. In his famous book, and inquiry into nature and causes of the wealth of nations (1776), Smith stressed the importance of trade as a vent for surplus production and as a means of widening the market thereby improving the division of labour and the level of productivity. He asserts that:

Between whatever places foreign trade is carried on, all of them derive two distinct benefits from it. It carries the surplus part of the produce of their land and labour for which there is no demand among them, and brings back in return something else for which there is a demand. It gives value to their superfluities, by exchanging

them for something else, which may satisfy part of their wants and increase their satisfaction. By means of it, the narrowness of the labour market does not hinder the division of labour in any particular branch of art or manufacture from being carried to the highest perfection. By opening a more extensive market for whatever part of the produce of their labour may exceed the home consumption, it encourages them to improve its productive powers and to augment its annual produce to the utmost, and thereby to increase the real revenue of wealth and society. (Thirlwal, 2000).

We may summarize the absolute advantage trade theory of Adam Smith thus: countries should specialize in and export those commodities in which they had an absolute advantage and should import those commodities in which the trading partner had an absolute advantage. That is to say, each country should export those commodities it produced more efficiently because the absolute labour required per unit was less than that of the prospective trading partners (Appleyard and Field, 1998).

In the 19th century, the Smithian trade theory generated a lot of arguments. This led to David Ricardo to develop the theory of comparative advantage and showed rigorously in his principles of political economy and taxation (1817) that on the assumptions of perfect competition and the full employment of resources, countries can reap welfare gains by specializing in the production of those goods with the lowest opportunity over domestic demand, provided that the international rate of exchange between commodities lies between the domestic opportunity cost ratios. These are essentially static gains that arise from the reallocation of resources from one sector to another as increased specialization, based on comparative advantage, takes place. These are the trade creation gains that arise within customs to trade are removed between members, but the gains are once-for-all. Once the tariff barriers have been removed, and no further reallocation takes place, the static gains are exhausted.

The static gains from trade stem from the basic fact that countries are differently endowed with resources and because of this the opportunity cost of producing products varies from country to country. The law of comparative advantage states that countries will benefit if they

specialize in the production of those goods for which the opportunity cost is low and exchange those goods for other goods, the opportunity cost of which is higher. That is to say, the static gains from trade are measured by the resource gains to be obtained by exporting to obtain imports more cheaply in terms of resources given up, compared to producing the goods oneself. In other words, the static gains from trade are measured by the excess cost of import substitution, by what is saved – by not producing the imported goods domestically. The resource gains can then be used in a variety of ways including increased domestic consumption of both goods (Thirlwal, 2000).

Empirical Review

Providing conclusive empirical evidence on the causal effect of trade on growth has been complicated by a multiplicity of factors. Hence, some researchers believe openness has a positive relationship with economic growth, others are caught in the cross fire and do not agree that openness has a significant impact on growth, and few concur that openness contributes significantly to economic growth.

Dudley and Karski (2001) investigated whether the degree of openness affect economic growth using panel regression during a period of 20 years from 1969 – 1989 for ten developing countries. Their results show that in 3 of the 10 countries, the degree of openness has a positive effect, on another 3 it has a negative effect and on the remaining 4 no effect.

Yanikkaya (2003) tested the relationship between trade openness and economic growth of over 100 developed and developing countries using panel data from 1970 to 1997. The results show that openness to international trade does not have a simple and straightforward relationship with economic growth. Moreover, the results further show that trade barriers were positively and, in most specifications, significantly associated with economic growth, particularly for developing countries and they were not consistent with the findings of theoretical economic growth.

Chimobi (2010) investigated the causal relationship among financial development, trade openness and economic growth in Nigeria and discovered that trade openness and financial developments have causal impact on economic

growth in Nigeria. Conversely, growth has causal impact on trade and financial development, implying support for growth-led trade but no support for trade-led growth.

Georgios (2003) investigated the effect of trade openness and growth using two panel data sets: one of 56 countries covering the period 1951 – 1998, and another of 105 countries over 1960 – 1997. The results show that the effect of trade openness on economic growth is positive, permanent, statistically significant, and economically sizable. Thus, he added that developing countries benefit more from increased openness than developed ones because technology is transferred from developed to developing economies.

Gilbert (2004) investigated trade openness policy, quality of institutions and economic growth in 102 countries employing panel data in endogenous growth model. His results shows that trade policy as associated to the natural openness constitute significant parameter to gain high economic growth rate. In other words, the global openness depending on the natural endowments and economic policies are good to reach high growth rate. He found that in sub-Saharan Africa – any country where openness has no significant impact on economic growth is as a result of low institutional quality (that is corruption). Thus, openness and good governance are required for improved economic growth.

Peter and Olivier (2006) investigated the impact of trade and diversification on growth in Nigeria. Their results show that in 2004, the share in GDP of imports plus exports of goods and services amounted to 86 percent in Nigeria. They found that Nigeria has enjoyed a sizable current account surplus in recent years, which according to Central Bank statistics amounted to more than 20 percent of GDP in 2004. They concluded that the impact of trade policy on productivity and investment is critical, and greater openness is generally associated with higher productivity, larger investment, and stronger growth.

Dollar and Kraay (2004) and Loayza, Fajnzylber, and Calderon (2005) run growth regressions on panel data of large samples of countries. Both papers use openness indicators based on trade volumes and control for their joint endogeneity and correlation with country-specific factors through GMM methods that

involve taking differences of data and instruments. This implies that, although they continue to use cross-country data, these papers favours within-country changes as the main source of relevant variation. Both papers conclude that opening the economy to international trade brings about significant growth improvements.

Wacziarg and Welch (2003) arrive to a similar, though more nuanced, conclusion from a methodological different stand point. Using an event-study methodology, where the event is defined as the year of substantial trade policy liberalization; they find that liberalizing countries tend to experience significantly higher volume of trade, investment rates, and most importantly, growth rates. However, in an examination of 13 country-case studies, Wacziarg and Welch find noticeable heterogeneity in the growth response to trade liberalization. Although their small sample does not allow for definite conclusions, it appears that the growth response after liberalization is positively related to conditions of political stability.

Joffrey (2003) in his work tries to clarify a number of issues related to the “trade openness and growth debate”. He considers a number of sector specialization indicators and examine whether they indeed affect the link between openness and growth. Using both cross-section and panel data techniques, he finds that both its pattern are likely to affect significantly the link between openness and growth.

Kandiero and Chitiga (2003) investigate the impact of openness to trade on the FDI inflow to Africa. Specifically, in addition to economy wide trade openness, they analyze the impact on FDI of openness and manufactured goods, primary commodities and services. The empirical work is conducted using cross-country data comprising of African countries observed over four periods: 1980 – 1985, 1985 – 1990, 1990 – 1995, and 1995 – 2001. They find that FDI to GDP ratio responds well to increased openness in the whole economy and in the services sector in particular.

Sarkar (2007) examines the relationship between openness (trade-GDP ratio) and growth. The cross-country panel data analysis of a sample 51 countries of the South during 1981 – 2002 shows that it is only 11 rich and highly trade-dependent countries that a higher real growth is

associated with a higher trade share. Time series study of individual country experiences shows that the majority of the countries covered in the sample including the East Asian countries experienced no positive long-term relationship between openness and growth during 1961-2002. He finds that the experience of various regions and groups shows that only the middle income group exhibited a positive long term relationship.

Method of Study

This study adopted the Vector Error Correction (VEC) Mechanism for data analysis. The VECM is employed to measure the cause-effect relationship between openness and growth in the Nigerian economy – under the framework of the VAR model. The model is built from the theoretical postulation of David Ricardo which examines the role of international trade via imports and exports vis-a-vis exchange capabilities between countries. The Unit root test and granger causality are also employed as augmenting analysis. The model is specified below:

$$RGDP = \alpha_0 + \alpha_1 EXP + \alpha_2 IMP + \alpha_3 EXR + \alpha_4 TOP + \mu$$

where

RGDP = Real Gross Domestic Product

EXP = Exports

IMP = Imports

TOP = Index of Trade Openness

EXR = Nominal Effective Exchange Rate (trade weighted)

$\alpha_0 - \alpha_4$ = Parameters to be Estimated

μ = Error Term.

On a priori basis, it is expected that α_1 and $\alpha_4 > 0$ while α_2 and $\alpha_3 < 0$ and generally; openness of the economy should have significant impact on growth in Nigeria.

The data required were gotten from secondary sources and obtained from Central Bank of Nigeria (CBN) Statistical Bulletin for a 29 year period of 1986 – 2014. As an integral element of the Structural Adjustment Package (SAP), trade openness was espoused on the argument that it enhances the welfare of consumers and reduces poverty as it offers wider platform for choice from among wider variety of quality goods and cheaper imports – hence the time period.

Results and Discussions

The unit root is used to examine the stationarity of the data series and since the data is time series, the ADF test is employed. It is important because it enhances validity of results and is also a prerequisite to the regression analysis. The result of the stationarity test is presented below:

Table 1: Stationarity Test

Variable	ADF Test Statistic	1% Critical Value	5% Critical Value	10% Critical Value	Prob.	Order Of Integration
RGDP	-7.77	-3.72	-2.99	-2.63	0.0000	I(2)
EXP	-4.73	-3.71	-2.98	-2.63	0.0009	I(1)
IMP	-4.42	-3.75	-3.00	-2.64	0.0022	I(2)
TOP	-6.82	-3.71	-2.98	-2.63	0.0000	I(1)
EXR	-6.08	-3.71	-2.98	-2.63	0.0000	I(1)

Source: Authors' Computation from Eviews 8

The result of the unit root test shows that all the variables are stationary. RGDP and IMP are stationary at 2nd difference while EXR, TOP and EXP are stationary at 1st difference. The ADF test statistic is less than the critical values at all significant levels. This is further buttressed by the low probability values.

Implication of I(1,2)

This shows that the variables exhibit a random walk suggesting short run disequilibrium implying that the outcome of the regression model may be empirically deficient hence yielding misleading results. Thus, estimates of equation will only be valid if all the variables are

level stationary. Thus, there is need to correct for short run disequilibrium.

VAR Lag Order Selection Criteria

An optimal lag of 2 is chosen for the

empirical model based on Schwarz Information Criterion, Akaike Information Criterion, Sequential Modified LR Test Statistic, Final Prediction Error and Hannan-Quinn Information Criterion.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-860.0028	NA	4.62e+21	64.07428	64.31425	64.14564
1	-771.5328	137.6200	4.36e+19	59.37280	60.81262	59.80093
2	-722.0547	58.64071*	8.80e+18*	57.55961*	60.19928*	58.34452*

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

Source: Authors' Computation from Eviews 8

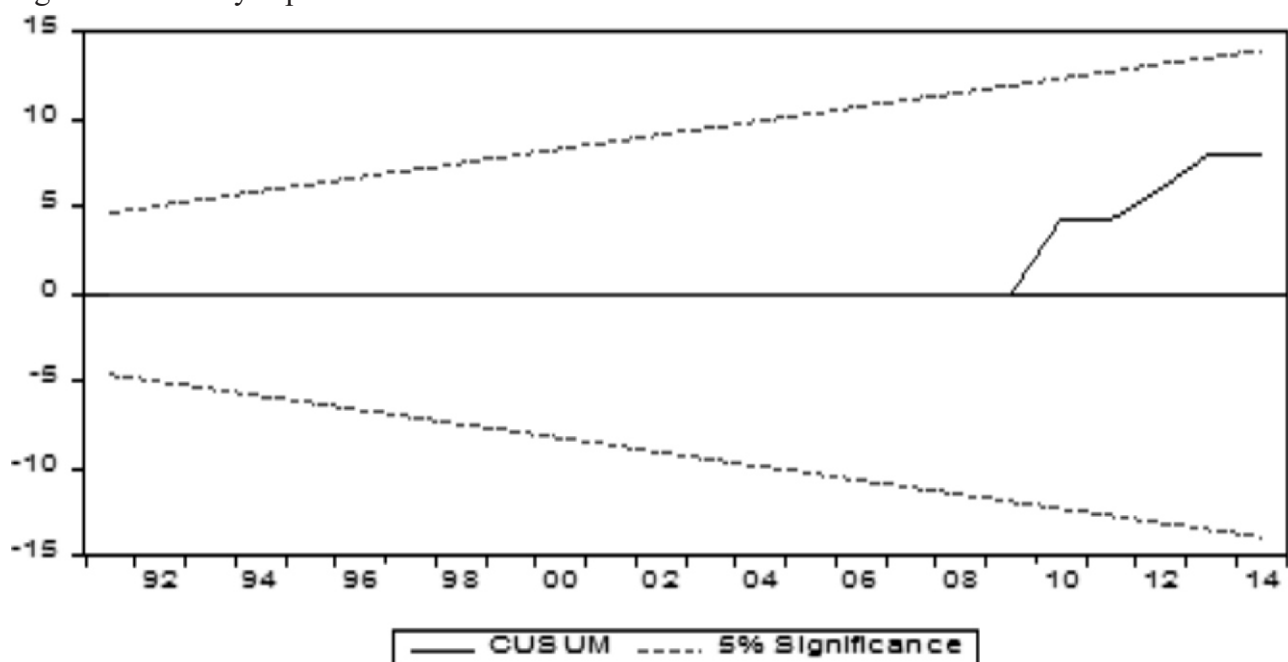
Stability Diagnostics

There are several diagnostic tests that examine whether the parameters of the model are stable across various subsamples of given data. The CUSUM test adopted is based on the cumulative sum of the recursive residuals. This option plots the cumulative sum together with the 5% critical lines. The test finds parameter instability if the cumulative sum goes outside the area between the two critical lines. The significance of any departure from the zero line is

assessed by reference to a pair of 5% significance lines, the distance between which increases with increases in t (subsamples). The 5% significance lines are found by connecting the points:

$$[k, \pm -0.948(T - k)^{\frac{1}{2}}] \text{ and } [T, \pm \times 0.948(T - k)^{\frac{1}{2}}]$$

Movement of recursive residuals outside the critical lines is suggestive of coefficient instability. CUSUM for the model is given below:



Source: Authors' Computation from Eviews8

The test clearly indicates stability in the equation during the sample period.

Forecasting Trade and Growth Trends in Nigeria

Granger causality is used to determine

whether one time series is useful in forecasting another. The result of the granger causality test is explained below.

Table 2: Granger Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.
IMP does not Granger Cause EXP01	27	0.76601	0.4769
EXP01 does not Granger Cause IMP		3.96222	0.0339
RGDP does not Granger Cause EXP01	27	7.12042	0.0041
EXP01 does not Granger Cause RGDP		11.5823	0.0004
RGDP does not Granger Cause IMP	27	24.5104	3.E-06
IMP does not Granger Cause RGDP		6.81446	0.0050
TOP does not Granger Cause IMP	27	4.40358	0.0246
IMP does not Granger Cause TOP		0.70828	0.5034

Source: Authors' Computation from Eviews8

The result reveals that there is a no directional causality between trade openness and economic growth in Nigeria. This is established from the probability which indicates a value of less than 5% to nullify the hypothesis that TOP does not granger cause RGDP and vice versa. The result clearly portends that TOP does not granger cause RGDP. Thus, there is no mutually reinforcing bilateral causality between trade openness and economic growth. This implies that the degree of openness of the economy contains no future information about economic growth in Nigeria. RGDP has bidirectional causality with EXP and IMP. The result also shows that EXP granger causes IMP but not vice versa. There is

also a unidirectional relationship between TOP and IMP with the dominance emanating from TOP.

Effect of Trade on Economic Growth in Nigeria

Since the stationarity test has purported the validity of our results giving rise to the use of the VECM, we proceed to analyse the effect of trade openness on economic growth in Nigeria. The long run model is presented below:

Given the model;

$$RGDP = \alpha_0 + \alpha_1 EXP + \alpha_2 IMP + \alpha_3 EXR + \alpha_4 TOP + \mu$$

Replacing the stochastic form of the model with the mathematical coefficients, we have;

Table 3: Long Run Model

RGDP = 1.00 + 0.04EXP – 0.03IMP – 1.62EXR – 135.23TOP
(0.02) (0.04) (0.50) (180.93)

Source: Authors' Computation from Eviews8

Note: Standard Error in parenthesis

The coefficients of EXP and EXR are statistically significant ($\frac{1}{2}b_i > S.E.$) while that of IMP and TOP are not ($\frac{1}{2}b_i < S.E.$). EXP, IMP and EXR are correctly signed in consonance with a priori expectation. Contrarily, TOP displays the obverse. The coefficients imply that a 1% change in EXP will cause RGDP to increase by 0.04.

Conversely, a 1% change in IMP, EXR and TOP will decrease RGDP by 0.03, 1.62 and 135.23 respectively.

Short Run Model

The table below shows the short run estimates of the VAR model.

Table 4: Vector Error Correction Model

Variable	Coefficient	Standard Error	T statistics
ECM	0.02	0.03	0.74
D(RGDP(-1))	0.48	0.28	1.72
D(EXP(-1))	-0.001	0.005	-0.29
D(IMP(-1))	0.0005	0.006	0.08
D(EXR(-1))	0.14	0.22	0.62
D(TOP(-1))	3.59	34.02	-0.10
C	9.79	9.31	1.05
R² = 0.79, Adjusted R² = 0.60, F statistics = 4.36, F_{0.05} = 2.84			

Source: Authors' Computation from Eviews 8

Whereas in the long run model TOP contradicts a priori expectation, in the short run model, only TOP is correctly signed. EXP, IMP and EXR are incorrectly signed. The adjusted R² shows a strong and positive relationship between trade openness and economic growth in Nigeria. A coefficient of 0.60 suggests that 60% of the variations in RGDP can be accounted for by EXP, IMP, EXR and TOP – 40% is unexplained by the regression equation. This is substantiated by the adjusted R² which shows that the additional explanatory variables have theoretical relevance to the data series. The F statistics further buttresses the result by accentuating the goodness of fit of the model implying that the explanatory variables have joint impact on the dependent variable. The magnitude of the cointegration term indicates that if there is any deviation, the long run equilibrium is adjusted slowly where only about 2% of the disequilibrium may be removed in each period. This shows that the speed of adjustment to where RGDP will equilibrate even when there is initial disequilibrium is at the rate of 2%.

Discussion of Findings

The result of our empirical analysis reveals that all the variables are correctly signed except for TOP and is also not statistically significant. This implies that the degree of openness of the economy is still low and the volume of trade in the same order. Its negative relationship signifies that its present state is detrimental to growth in the Nigerian economy. The index of trade openness in the past six years averaged 0.4 which is weak. This performance is similar to the average index between 1981 and 2002. Apart from the period 2003 – 2009 which showed a moderate index of trade openness, the result

clearly shows that Nigeria's trade relations has not improved over time and invariably is unchanged. This negative index can be explained by the volume of imports by the country which is unfavourable and in turn impedes growth.

Our model forecast (from the granger causality result) contradicts a priori expectation, but conforms to the findings of this research. It shows that trade openness does not have any causal impact on economic growth in Nigeria. The forecast also reveals that RGDP contains future information about exports and imports (components of trade) but not vice versa. This implies that if the economy grows steadily, exports and imports will also increase. Exports would improve as a result of increased productivity and so would imports in terms of raw materials for industrial utilisation. There is also a unidirectional relationship between imports and the degree of trade openness.

The adjusted R² shows a strong relationship between the dependent and independent variables with 60% of the variations accounted for. This implies that TOP, EXP, EXR and IMP can explain 60% of the changes in RGDP in the Nigerian economy and thus there are relatively few other macroeconomic variables that are core stimulants to economic growth. The F statistic lays emphasis on the strength of the explanatory variables in predicting the outcome of economic growth. It reveals that the choice of the variables is fitting to the research and therefore the additional explanatory variables namely EXP, IMP and EXR have theoretical relevance to the data series. The stationarity test supports the above findings by proving the validity of each of the variables used in the model.

Conclusion and Recommendations

Globalisation has made it possible for countries that are comparatively disadvantaged to benefit from trade. But some countries have made their economies inflexible – indicated by a low index of trade openness. Against a plethora of empirical studies, the findings of this research reveal that trade openness has not impacted significantly on economic growth in Nigeria within the study period. A few studies: Sarkar (2007), Yanikkaya (2003), Dudley and Karski (2001) carried out in other countries substantiates the findings from this research. The country has benefitted from globalisation, but its impact is not *yet* significant. The reason for this lie in the volatility of the naira and low exchange rate which makes the value of our products cheap in the international market leading to unfavourable balance of payments as a result of relatively more expensive imports. Over dependence on crude oil for foreign exchange earnings and consequent neglect of other viable sectors which accounts more to GDP also contributes to this non-significance. Thus, the lack of consensus as to positive, negative or no impact is not out of place because the rate at which countries have embraced globalisation is quite different and as such explains the reason for non unanimity.

The study therefore recommends that:

1. The Nigerian government should encourage domestic production especially to manufacturing and agriculture by granting subsidies and tax concessions to industries and farmers producing those commodities which are being imported – so they can expand their production capacity to meet increasing demand in the economy. Furthermore, this will enable the country to maintain a favourable balance of payments which will see our foreign reserves increasing instead of relying on imports.
2. The government should also ensure quality of products that would stimulate the interest of the general populace instead of considering options of importing. This would encourage domestic wholesalers and retailers to patronise *made in Nigeria goods*. The administrative machinery should also make efforts to improve institutional quality to curb fraud and corruption and thus improving non-fuel

exports.

3. Over dependence on crude oil which currently contributes less than 20% to GDP is baseless. The government should improve on the existing infrastructure in agriculture and industry thereby enhancing productivity changes in the commodities thereof and thereby boost trade.
4. Finally, the monetary authority should effectively control money supply based on a contractionary stance rather than consistently devaluing the naira; so as to reduce the price level thereby enhancing a high purchasing power parity of money, which will increase our balance of payments equilibrium due to a favourable exchange rate.

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The Impact of Infrastructure Development on Economic Growth in Nigeria

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Abstract

This paper examines the role of infrastructure development in promoting economic growth in Nigeria over the period 1980-2015. A Cobb-Douglas production function which models infrastructure as a stock variable is specified and estimated using the ordinary least squares method. The study finds positive and significant effects of total air transport infrastructure, communication infrastructure, power infrastructure and total rail lines on economic growth with estimated elasticities of 0.035, 0.016, 0.141 and 0.132, respectively. The study recommends that it will be worthwhile for the Nigerian government and policymakers to implement policies geared towards the development of infrastructure. Also, since the government cannot do it alone, an enabling environment should be created to encourage Public-Private Partnership in infrastructure development.

Key words: Infrastructure development, infrastructure components, economic growth, Cobb-Douglas production function

Introduction

Governments around the world are continually looking for new strategies to increase the ability of their economies to produce goods and services. In this light, over the last two and half decades attention has shifted to infrastructure development as a veritable tool for raising the productive capacity of the economy. Infrastructure plays a very important role in the growth process of an economy. In fact, development economists have considered infrastructure to be a precondition for industrialization and economic development (Sawada, 2015). Infrastructural development has been on the top of priority list for governments all over the world. Policymakers believe that appropriate infrastructural investment holds the key to social and economic development and growth. According to World Bank (2007), improving infrastructure in the world is key to reducing poverty, increasing growth and achieving the Millennium Development Goals (MDGs).

The need for infrastructure development is indeed crucial for developing countries, especially Africa. The lack of modern infrastructure has been regarded as an impediment to economic development and a major constraint not only on poverty reduction, but also on the attainment of the Millennium Development Goals (MDGs) in SSA countries (Habitat, 2011). Also, Ondiege et al. (2013) attributed the rise in the transaction costs of business in most African countries to inadequate infrastructure. Today, African countries exhibit the lowest levels of productivity of all low-income countries and are among the least competitive economies in the world.

In the case of Nigeria, the importance of infrastructure cannot be over-emphasized. Olaseni and Alade (2012) as well as Sanusi (2012) argue that infrastructural development is critical to the achievement of the Vision 20:2020 which is a vision set to make Nigeria one of the top 20 economies in the world by 2020 with a minimum GDP of \$900 billion and a per capita income of not less than \$4000 per annum.

How big is the contribution of infrastructure to aggregate economic performance? The answer is critical for many policy decisions. For example, it is important for gauging the growth effects of fiscal interventions

in the form of public investment changes, or for assessing if public infrastructure investments can be self-financing. Understanding this long lasting debate is essential to have a balanced quantitative view on the relevance of infrastructure for growth (Estache and Garsous, 2012). Economists, however, hold a mixed view about the consequences of infrastructure development. One of the views about infrastructural investment is that high rate of infrastructure growth raises the level of productivity in the current period, and also leads to a higher potential level of output for the future (Koner et al, 2012). The argument in opposition is that rapid infrastructural development leads to unbalanced form of development process (Koner et al, 2012). Consequently, some areas develop rapidly, whereas other areas remain underdeveloped. Population from underdeveloped areas move to developed areas imposing a burden on resources in these areas.

Literature Review

Theoretical Approaches to Modeling the Impact of Infrastructure on Growth

Following Dissou and Didic (2013), we can distinguish between two theoretical approaches to modeling the impact of infrastructure on growth. The first treats infrastructure expenditures as a flow variable which directly enters the production function. The second treats infrastructure as accumulated capital, rather than as current flows, and thereby represents infrastructure as a stock variable in the aggregate production function.

Modeling Infrastructure as a Flow Variable

Barro (1990) models infrastructure in the context of a simple AK endogenous growth model. The two building blocks of his model are a production function that incorporates public services (an expenditure flows variable) as an input to private production, and a Ramsey equation that captures the representative consumer's optimization behaviour.

The main advantage of modelling infrastructure as a flow variable is that it produces highly manageable models (Fisher and Turnovsky 2013). Agenor (2007) observes that the flow specification generates results that are not qualitatively very different from studies employing the stock specification of

infrastructure. However, it has been argued that as long as one is interested in modelling the impact of infrastructure on growth, the stock variable specification may be more appropriate or acceptable (Dissou and Didic, 2013). Another criticism of the flow specification approach captures the idea that it may not be realistic to describe government expenditures on infrastructure as a non-rival good like aggregate knowledge. Public infrastructural expenditures may not always be complementary to private capital in the aggregate production function, and instead may be rival at the level of the aggregate economy through crowding out effects.

Modeling Infrastructure as a Stock Variable

Futagami et al. (1993) combine Barro's (1990) model with the assumption that government spending does not influence the aggregate production function directly, but only indirectly via the stock of public capital. By including two stock variables, Futagami et al. (1993) bring transitional dynamics into the model in contrast to the endogenous growth models employing the flow specification. The main finding of the Futagami et al. (1993) study is that Barro's (1990) result about optimal fiscal policy remains valid in the steady-state equilibrium even if government services are proportional to the stock of public capital (rather than capital expenditure flows), but not in the development transition phase.

Futagami et al.'s (1993) modelling strategy of incorporating public infrastructure into an endogenous growth model differs from that of Barro (1990) in that government services are now accumulated like physical capital. In this framework, the steady-state per capita capital equation implies that consumption growth is positively related to infrastructure accumulation and is negatively related to the tax rate, the capital depreciation rate and the time preference rate.

Review of Empirical Literature

The empirical literature on the infrastructure-growth nexus was pioneered by Aschauer (1989a, 1989b). The results of Aschauer's (1989a, 1989b) papers, which revealed a strong empirical positive relation between public capital and GDP growth in developed economies, provoked intense interest. More specifically, he found that a 1% rise in the

public capital stock would raise total factor productivity by 0.39%. One of the major issues which have played a role in the subsequent literature concerns the statistical problems with infrastructure data availability. This section, therefore, presents a review of the findings of some of the studies in Nigeria, especially the very recent ones, for lack of enough space.

Evidence from Nigeria

In Nigeria, some authors have also attempted to examine the relationship between infrastructure and economic growth. For example, Imobighe and Awogbemi (2006) regressed private capital stock, non-military, net investment, time to capture the effects of the technical changes in economic growth, one year lag GDP and electricity supplied against Gross Domestic Product to assess the impact of capital stock in Nigeria's economic growth from 1980-1998. They found gross domestic product to be positively related to private capital stock by one year lag, while electricity supply was found to be negatively related to recurrent and capital expenditure, except expenditure on defence and technical change.

Nurudeen and Usman (2010) use cointegration and error correction methods to analyze the relationship between government expenditure and economic growth in Nigeria over the period 1970-2008. Their results reveal that government total capital expenditure, total recurrent expenditures, and government expenditure on education have negative effect on economic growth. On the contrary, rising government expenditure on transport and communication results to an increase in economic growth.

Using Ordinary Least Squares and Granger Causality econometric techniques, Owolabi-Merus (2015) investigates the infrastructural development-economic growth nexus in Nigeria over the period 1983 to 2013. His empirical results reveal that infrastructure (measured by Gross Fixed Capital Formation) has a positive and statistically significant impact on Nigeria's economic growth. However, the Granger Causality test connotes that there is no mutual correlation between both variables in Nigeria in the period under review.

Using both primary and secondary data, Siyan, Eremionkhale and Makwe (2015)

examined the impact of road transportation on economic growth in Nigeria. Probit model was used to analyse the primary data while multivariate model was used for analysing the secondary data to determine the long run relationship between growth and road transportation. Their results show that the transport sector has a positive impact on the economic growth in Nigeria.

In an empirical analysis of the relationship between infrastructural development and economic growth in Nigeria between 1981 and 2013, Michael (2016) collapsed two models, one of which is a Cobb-Douglas production function, into one which he estimated using OLS. From the results, it is clear that infrastructure (measured by the road component alone) is an integral part of Nigeria economic growth.

This study is an improvement on other studies on the infrastructure-growth nexus in Nigeria for two reasons. Firstly, unlike some of the previous studies in Nigeria which use data on public capital as proxy for infrastructure, it uses data on infrastructure. Public capital seems to be attractive because it is somewhat easier to identify in many countries. But it is a broader concept that is itself quite unclear. For instance, it can include all public buildings, including often hospitals, schools or public housing and office stocks, or police and fire stations. Thus the extent of its relevance to assess the impact of infrastructure on growth is at best unclear. It is in fact worsening since, as pointed out by Straub (2011), the relative importance of the private sector in infrastructure has increased a lot more than in other activities. Some other studies used government total capital expenditure. Even for those that used infrastructure stocks, they concentrated on just one component of infrastructure at a time. Secondly, this work extends the study period to 2015.

Methodology

This section focuses mainly on the theoretical framework, model specification, estimation technique, source of data, description and measurement of variables as well as expected contribution to knowledge.

Theoretical Model

In analysing the impact of infrastructure development on economic growth in Nigeria,

this study will employ the theoretical approach which models infrastructure as a stock variable. In view of this, it adopts the approach of Canning and Pedroni (2004) who use a supply side model to analyse the impact of infrastructure on growth with physical measures of infrastructure.

Canning and Pedroni (2004) specify a production function as follows:

$$Y_{it} = A_{it}F(K_{it}, G_{it}, L_{it}) \dots \dots \dots (1)$$

Where Y is aggregate output, K is physical capital, G is the infrastructure capital, L is labour, while A is the total factor productivity.

Model Specification

To arrive at the estimating model for this study, a Cobb-Douglas specification of the production function in equation (1) is employed as follows:

$$Y_t = A_t K_t^{\alpha_1} L_t^{\alpha_2} G_t^{\alpha_3} \dots \dots \dots (2)$$

where

Y = Output

A = Level of technology

K = Total physical capital

L = Labour force

G = Vector of infrastructure components

In this study, infrastructure (G) is broken down into air transport (AT), power infrastructure (PI), communication (CI), and rail lines (RL). Thus, decomposing infrastructure into its components in equation (2) and taking the natural logarithm of both sides of the equation yields the empirical model to be estimated in this study as follows:

$$\log GDP_t = \alpha_0 + \alpha_1 \log GFCF_t + \alpha_2 \log LAB_t + \alpha_3 \log AT_t + \alpha_4 \log PI_t + \alpha_5 CI_t + \alpha_6 \log RL_t + U_t \quad (3)$$

where

GDP = Gross Domestic Product

GFCF = Gross Fixed Capital Formation

LAB = Labour Force

AT, PI, CI, RL are as defined above and U represents the stochastic error term.

$\alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6$ are coefficients to be estimated.

The a priori expectations are: $\alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6 > 0$

Equation (3) which is the model to be used for the

empirical analysis of the study will be estimated using the Ordinary Least Squares (OLS) technique based on the unit roots properties of the variables included.

Measurement of Variables and Data Source

Economic growth will be measured using GDP at market prices (constant 2005 US\$). The capital stock will be measured using Gross fixed capital formation (constant 2005 US\$). Labour will be measured using the labour force (total). To measure air transport component, total air transport (freight, million ton-km) will be used. Fixed telephone subscriptions will be used to capture communication infrastructure. Power infrastructure will be measured using electric power consumption (kWh per capita). To measure the rail component, rail lines (total route-km) will be used. Data on all the variables will be obtained from the World Development

Indicators of the World Bank (2016 version).

Empirical Results

This section presents the results of the empirical tests conducted in the course of achieving the objective of the study.

Unit Roots Tests

Before carrying out the estimation of equation (3) which is the empirical model adopted for this study, there is the need to determine the time series properties of all the variables included in the model to prevent spurious results. In view of this, the unit root tests of the series were conducted using the Augmented Dickey-fuller (ADF) and Phillips-Perron (PP) approaches. Results of the tests are presented in Table 4.2 below (all the variables are in the natural-log form).

Table 1: Unit Roots Tests Results

Variable	ADF Test Statistic (At Level)	ADF Test Statistic (1 st Diff)	ADF Test 5% Critical Level	PP Test Statistic (At Level)	PP Test Statistic (1 st Diff)	ADF Test 5% Critical Level	Remarks
Log(GDP)	-2.479495	-5.53975*	-3.548490	-2.510766	-5.586195*	-3.548490	I(1)
Log(GFCF)	-1.530115	-3.790329*	-3.557759	-1.367994	-6.620509*	-3.548490	I(1)
Log(LAB)	-2.767721	-5.525181*	-3.548490	-2.947606	-5.666857*	-3.548490	I(1)
Log(AT)	-2.473545	-3.781052*	-3.557759	-2.685813	-6.361448*	-3.548490	I(1)
Log(CI)	-5.420931*		-3.562882	1.430451	-3.614429*	-3.548490	I(1)
Log(PI)	-3.222485	-8.635680*	-3.548490	-3.354348	-8.556179*	-3.548490	I(1)
Log(RL)	-2.983503	-5.507342*	-3.557759	-2.463116	-10.79126*	-3.548490	I(1)

Source: Authors' Computation, 2016

The results in Table 1 reveal that all the variables are integrated of order one. We then proceed with the Ordinary Least Squares regression involving equation (3).

Regression Results

Equation (3) was estimated using the

ordinary least square (OLS) technique with Eviews econometric software in order to examine the role of infrastructure development in promoting economic growth in Nigeria. The results are presented in Table 2.

Table 2: OLS Results

Dependent Variable: D(LOGGDP)

Method: Least Squares

Date: 06/30/16 Time: 08:18

Sample (adjusted): 1981 2015

Included observations: 35 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.054844	0.026815	2.045267	0.0503
D(LOGGFCF)	0.051667	0.060023	0.860796	0.0009
D(LOGLAB)	0.648852	0.686721	0.944856	0.0005
D(LOGAT)	0.034637	0.045751	0.757059	0.0005
D(LOGCI)	0.015473	0.059808	0.258710	0.0009
D(LOGPI)	0.141358	0.090604	1.560175	0.0013
D(LOGRL)	0.132155	0.368120	0.358999	0.0023
R-squared	0.944738	Mean dependent var		0.036143
Adjusted R-squared	0.938532	S.D. dependent var		0.073478
S.E. of regression	0.074880	Akaike info criterion		-2.168997
Sum squared resid	0.156997	Schwarz criterion		-1.857927
Log likelihood	44.95745	Hannan-Quinn criter.		-2.061616
F-statistic	26.789751	Durbin-Watson stat		2.004965
Prob(F-statistic)	0.040540			

Source: Authors' Computation (2016)

The results in Table 2 above show that there is a positive and significant relationship effect of total air transport infrastructure (AT), communication infrastructure (CI), power infrastructure (PI) and total rail lines (RL) on economic growth (measured by GDP) with elasticities of 0.035, 0.016, 0.141 and 0.132, respectively.

Conclusion

Based on the discussion and findings of this study, it is obvious that without adequate infrastructure, the Nigerian economy may not be able to overcome its structural challenges and achieve sustainable growth and development. It will, therefore, be worthwhile for the Nigerian government and policymakers to implement policies geared towards the development of infrastructure. Also, as the government cannot do it all alone, the private sector needs to be actively involved through the Public-Private Partnership

(PPP), with the government creating an enabling environment for this to thrive. It is true that the government has taken some steps in this regard such as with the establishment of an Infrastructure Finance Office in March 2010, with an accompanying N300 billion 'Power and Aviation Fund' (PAIF). According to Sanusi (2012), the Fund is administered by the Bank of Industry for onward lending to Deposit Money Banks at a maximum interest rate of 1.0 per cent, and disbursement at concessionary interest rates of not more than 7.0 per cent to client/projects of a 10-15 year tenor. The African Finance Corporation serves as Technical Adviser to the Fund. It is the hope of the government that the Fund will act as a much-needed catalyst to bridge the nation's infrastructural gap through lending at concessionary rates to the private sector. However, the government needs to make sure that such measures are sustained and are not politicised.

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Socio-Economic and Demographic Characteristics of People Living with HIV in Benue State: Evidence from Four Local Government Areas

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Abstract

This paper examined the link between socio-economic and demographic characteristics and HIV infection in Benue State, drawing evidence from four local government areas. Even though studies have been conducted on various aspects of the HIV scourge, none has focused on this area in Benue State. Data for the study was primary data obtained through administration of a structured questionnaire on members of selected Support groups of people living with HIV (PLWHIV). The data was analyzed using descriptive statistical tools. The findings show that the majority of PLWHIV are people of low socio-economic status (low education, poverty- stricken and mostly farmers) and young people whose age range mainly between 31 to 50 years. It was recommended that government's modernization of agriculture and women empowerment through direct cash transfer to the poorest of the poor will mitigate new infection.

Keywords: Socio-economic characteristic, demographic characteristic, people with HIV, Benue

Introduction

Following the first reported case of human immune-deficiency virus (HIV) in Nigeria in a 13-year old, sexually active hawker girl (Lambo, 2003) Benue State has continually ranked among states with the highest level of infection by the virus in Nigeria. Beginning with an infection rate of 1.6% in 1991 the infection rate has grown steadily to 4.7% in 1993, 6.7% (1995), 16.8% (1999), before declining minimally to 13.5% in 2001. In 2003 the rate was 9.3%, 10% in 2005, 10.6% in 2008 and 12.85 in 2010, (Federal Ministry of Health, National Sero-Prevalence Surveys, various editions, and ANC Technical Report, 2010).

Socio-economic status, SES, is often measured or regarded as a combination of education, income and occupation. It is often conceptualized as the social standing or class of an individual or group. When viewed from the social class lens privilege, power and control are emphasized. When viewed further, it reveals inequities in access to and distribution of resources, (APA Fact sheets, 2016).

Data on socioeconomic and demographic characteristics of those infected by HIV from different countries suggest that it is more prevalent among people who are within the reproductive and productive age groups (Laah and Ayiwulu, 2010).

Since 1986 when the first case was diagnosed in Nigeria the epidemic has extended beyond the high-risk groups to the general population. Young people, especially women aged between 20 – 24 years have become increasingly vulnerable to the infection. The prevalence has been largely fuelled by poverty, low literacy rates, cultural and religious factors, low condom usage, high rate of casual and transactional unprotected sex by young people as well as stigma and discrimination, (Avert, 2010, cited in Laah and Ayiwulu, 2010, NPC/ICF, 2009; Inungu and Karl, 2010).

Although a lot has been written about the epidemiology of HIV and the social characteristics of those infected elsewhere not much has been reported on the link between socioeconomic status and HIV infection in Benue State. The objective of this paper is therefore, to examine socioeconomic and demographic characteristics and HIV infection in Benue State.

Literature Review

Socioeconomic status (SES) is often measured as a combination of education, income and occupation, and is commonly conceptualized as the social standing or class of an individual or group. Furthermore, examining SES as a continuous variable reveals inequities in access to, and distribution of resources, (APA, 2016), hence, the higher the social standing of an individual or group, the higher their access to resources, and vice versa.

According to Perry (1998), domestically and internationally, HIV is a disease that is embedded in social and economic inequity because it affects those of lower socioeconomic status at a disproportionately higher rate. This suggests that a person's socioeconomic status has implications for contracting HIV and its progression to acquired immune-deficiency syndrome (AIDS). This is because the lack of socioeconomic resources is linked to risky health behaviors such as early initiation of sexual activity and infrequent use of condoms, (Adler, 2006). This led Ichoviks *et al* (2002) to conclude that social class is an important factor in HIV infection.

Furthermore, being HIV positive often has a negative impact on socioeconomic status by acting as a constraint on individual's ability to work and earn income, (Ominyi, 2015, Williams and Bathula, 2012). According to Rabkin, *et.al* (2004), up to 45% of people living with HIV are unemployed. In addition, Ominyi (2015) found that even for the people living with HIV who are still able to work after infection, there suffer reduction in income that they attribute to their HIV status.

In terms of age distribution of infected persons, data from most countries suggest that HIV is more pronounced among the young and active age groups. Data from USA shows that among youths aged 20-24, 64% of reported cases occurred among young men while 36% occurred among young women. Among those aged between 13 and 19 years, 57% of reported cases occur among women while 43% occurred among young men, (CDC, 2002). In the case of Nigeria, prevalence of infection is mostly among those aged 15-24 years of age (NYSC/UNICEF, 2007). Ominyi (2015), in a location-specific study found that people aged between 31 and 40 years are the most infected, followed by those aged

between 41 to 50 years of age. Taken together, those aged between 31 to 50 years accounted for 71.1% of the studied sample. In terms of gender distribution in the study conducted by Ominyi (2015) 67% of those infected were females while the remaining 33% were males.

In a study of the socioeconomic status of people living with HIV in Hyderabad City in India, Williams and Bathula (2012) found that HIV infected persons are usually poor people whose income barely meets their monthly expenses. They are also less educated as only 7% of the studied sample are university graduates and above.

Socioeconomic status determines HIV infected person's access to treatment. As Joy *et al* (2008) pointed out people of low socioeconomic status has delayed initiation of treatment when compared with their more affluent contemporaries, thereby reducing their chances of survival. This is corroborated by Cunningham *et al* (2005) when they indicated that research suggest correlation between low socioeconomic status and earlier death from HIV/AIDS. Accordingly therefore, people of higher socioeconomic status experience a slower progression of HIV infection, (Schechter *et al*, 1994).

Methodology

The sample for this study was proportionately drawn from among members of the Network of People Living with HIV in four (4) local government areas of Benue State, Nigeria. These local government areas are Katsina Ala, Tarka and Otukpo representing the three Benue Senatorial districts, and Makurdi, which is the capital city of Benue State and the headquarters of the Network of people living with the virus in Benue State. Members of the

Network are people who are living positively and openly with the virus.

The Network is organized in cells or groups known as Support Groups at the local government levels, with each group having a coordinator and other executive council (EXCO) members. The Support Group Coordinators report directly to the State Coordinator of the Network because there are no local government area coordinators. There are thirteen functional support groups in these LGAs with a total of one thousand and five (1,005) active members, out of which a sample of two hundred and eighty-six (286) was randomly and proportionately drawn.

Data was collected by means of a structured questionnaire administered through their group coordinators in their monthly meeting. Completed questionnaires were collected at the end of the meeting the same day, leading to a 100% retrieval rate.

Collected data were analysed using descriptive statistics such as charts, tables, percentages, frequency distributions and t test to check for differences in means of income pre- and post-HIV infection. The statistical software package used for the analysis of data was Software Package for the Social Sciences (SPSS), Version 20.

Socio-economic and Demographic Characteristics of People Living with HIV in Benue State

In this section data relating to the demographic and socio-economic characteristics of the respondents in Benue State is presented and interpreted.

Distribution of Respondents by Gender, Age and Local Government Area

Table 1: Distribution by Gender, Age and LGA

Gender	Frequency	Percentage
Male	95	33.2
Female	191	66.8
TOTAL	286	100.0
Age		
15-20	1	0.3
21-30	53	18.5
31-40	113	39.5
41-50	77	26.9
51 and above	23	8.0
Missing system	19	6.6
TOTAL	286	100.0
LGA		
Otukpo	85	29.7
Tarka	109	38.1
Makurdi	45	15.7
K/Ala	47	16.4
TOTAL	286	100.0

Source: Field survey, 2014

Table 1 shows the distribution of people living with HIV by gender, age and local government of residence. As is evident from it 67% (191) of the respondents are of the female gender, while 95 respondents, representing 33%, are of the male gender. A picturesque view of the gender distribution is shown in Figure 1. The import is that women bear a disproportionate share of the disease burden. This revelation is corroborated by Utulu, (2006), Laah and Ayiwulu, (2010). Reasons for this disproportionate infection include social and cultural practices like wife inheritance, gender inequality, inability to negotiate safe sex and the

anatomy of the female genitalia.

The gender distribution has economic implications for Benue State, because women constitute a substantial portion of households' farm labour. Therefore, when most victims of HIV infection are women it will be difficult to maintain the households' farm output. In addition, due to role stereo-typing, women have the main responsibility for children's up-bringing and house-keeping. If they are not healthy this important duty could suffer, leading to existence of more miscreants in the society, with all the attendant consequences of insecurity.

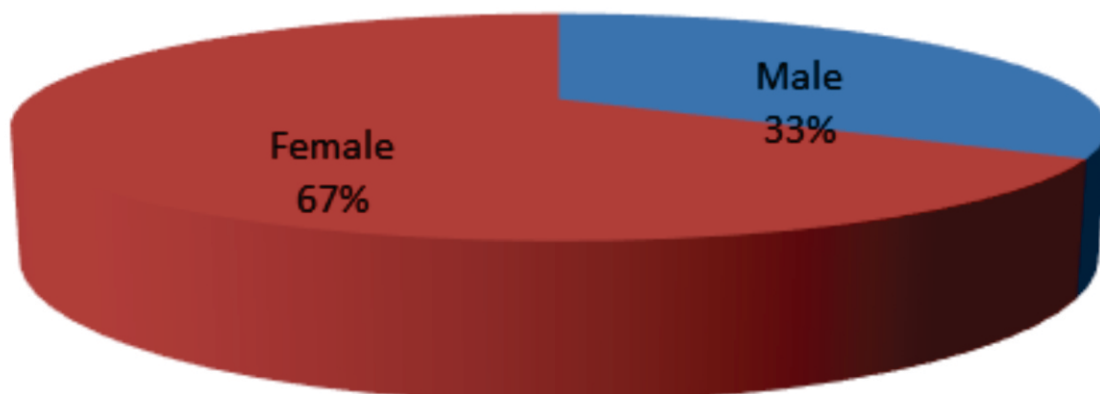
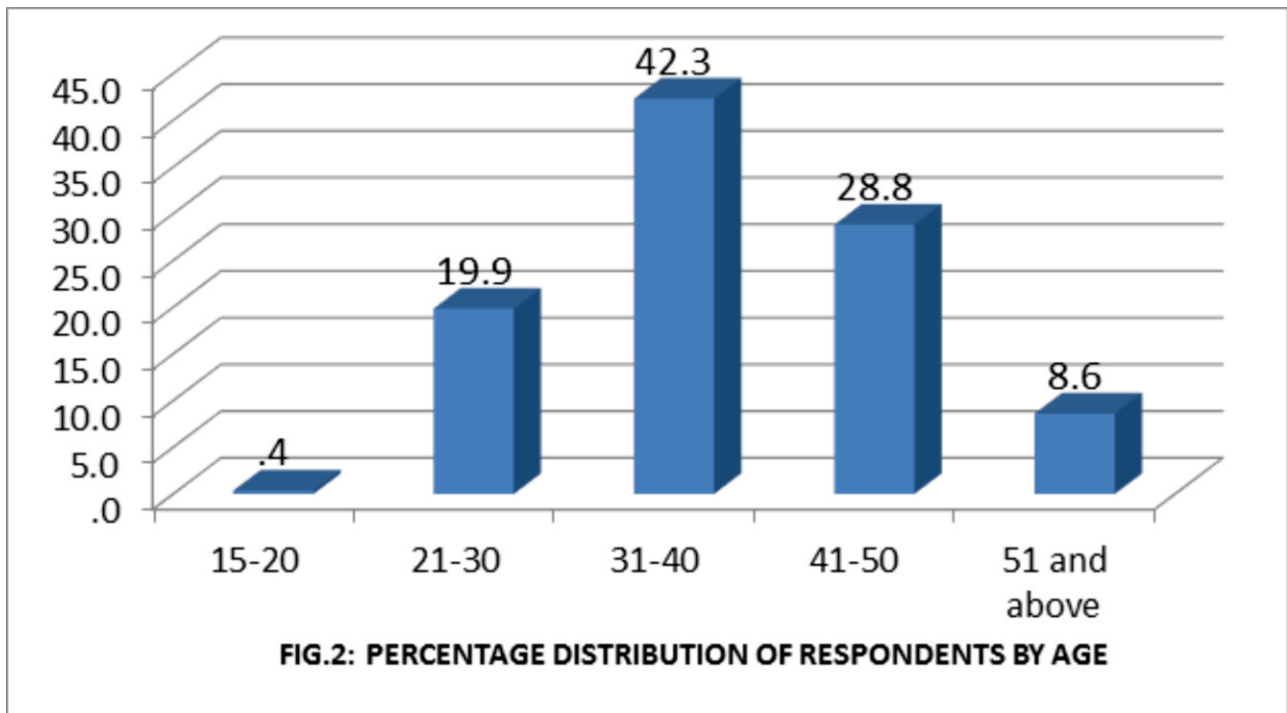


FIG. 1: PERCENTAGE DISTRIBUTION OF RESPONDENTS BY GENDER

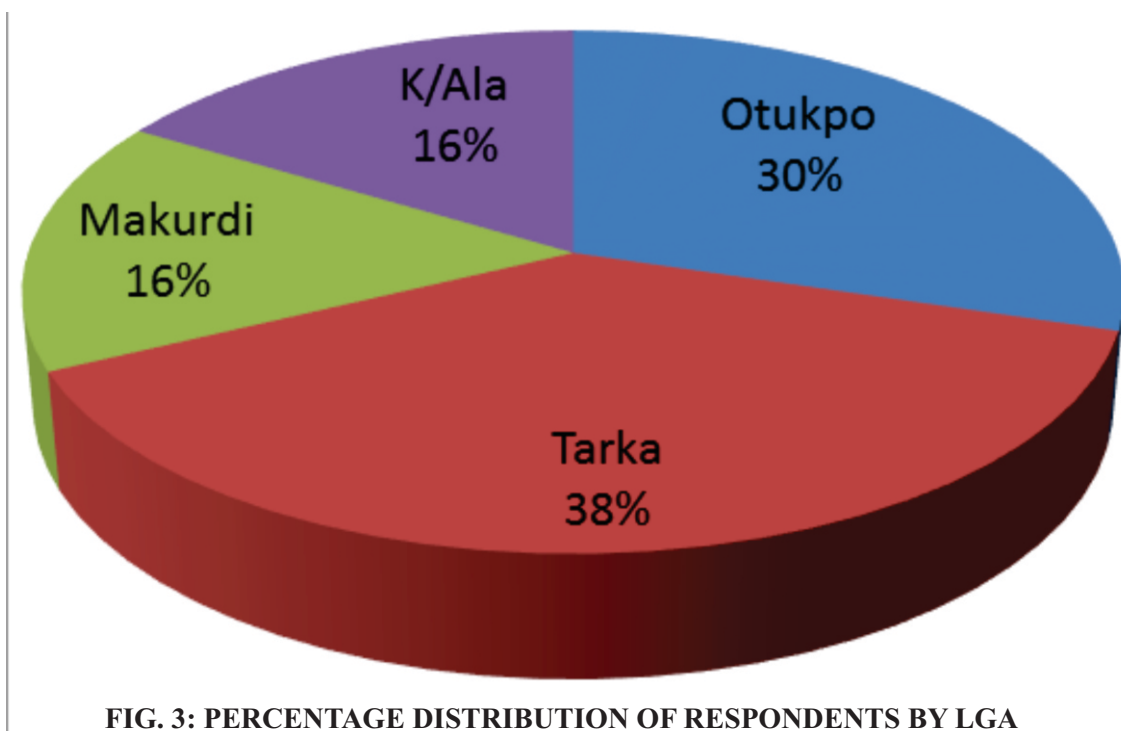
Source: Field Survey, 2014

In terms of age distribution of the respondents those aged between 31 and 40 years (representing 42.3%) are the most infected age bracket, followed by those aged between 41 and 50 years (28.8%). Others include those aged between 15 and 20 years (4%), 21 and 30 years (19.9%) and 51 years and over, (8.6%). Indeed, the finding reveals the truism that young people aged between 15 and 45 years are the most infected by HIV. Taken together, those aged

between 15 years and 50 years account for a total of 91.4% of the sample population. From the foregoing, we can say that the sample under study are predominantly of the female gender and are largely young people aged between 15 and 49. This, too has implications for the economy because the most infected age brackets constitute the bulk of both the productive and reproductive segment of the general population. The age distribution is shown in Figure 2 below.



Source: Field survey, 2014



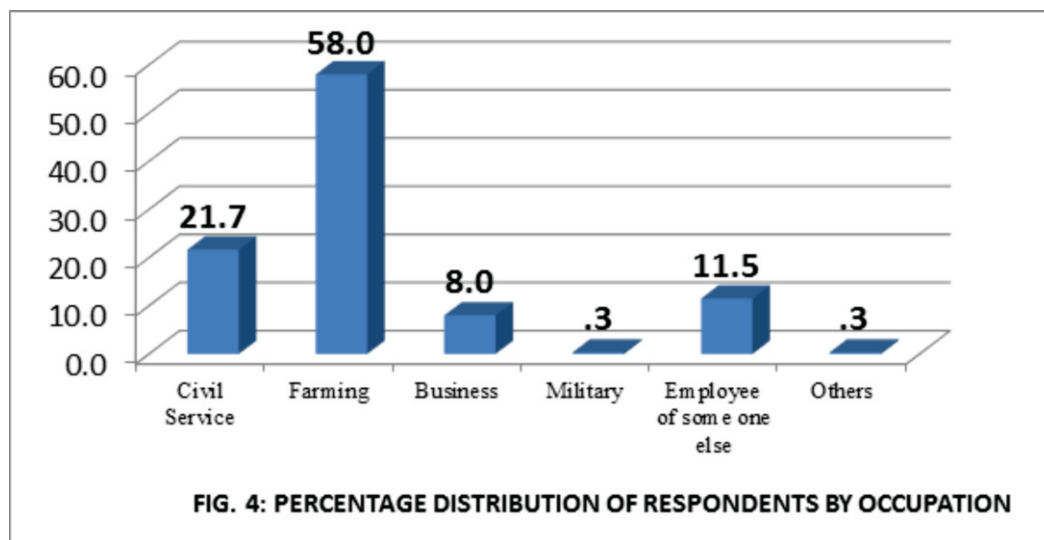
Source: Field Survey, 2014.

Distribution of Respondents by Occupation and Income

Most respondents in the sample are farmers which account for 58.0% (166 respondents), followed by civil servants, who account for 21.7% (62 respondents). Others include people in business (8.0%), employees of other people (11.5%), and a respondent each who is a military person and other un-stated occupation. This occupational distribution of those infected is not consistent with literature which suggests high-risk groups to include long distance drivers, uniformed personnel, commercial sex workers and men who sleep with men (MSM) who are poorly represented in this sample. Plausible explanations could be that as a social class, military personnel belong to the group of people that are at high risk of infection by HIV, but the low presence of the military in the sample can be attributable to their relative easier access to medication through their military hospitals, so they hardly join the support groups. Another explanation is that most of the support groups

studied are rural-based whereas military formations are mostly urban-based.

A picturesque view of the occupational distribution of the respondents is shown below in a bar chart (Figure 4). While farmers and civil servants account for more than two-thirds of the infected persons other occupations such as business people, other people's employees and the military are scantily represented. This may be attributable to the fact that vulnerable occupations like long-distance vehicle operators, uniformed (military) personnel, and the like, who are not poor have not registered with the studied support groups. Indeed, one of the coordinators likened some of the infected, well-to-do persons to Nicodemus in the Bible, who goes under the cover of darkness to the Saviour to ask how he (Nicodemus) can be saved. Others like commercial sex workers and men who sleep with men (MSM) may mask their true occupational identities with other occupations because of popular resentment for such vocations.



Source: Field survey, 2014

In terms of income changes the majority of those who have changed jobs report that their current jobs are less rewarding than their previous jobs. Similarly, the majority of respondents (89.8%) earn less than fifty thousand naira monthly. As a matter of fact, a random enquiry into their monthly income indicates that it hovers around less than ten thousand naira for those in agriculture especially. However, 29 of the respondents (10.2%) earn between N50,000.00 and N100,000.00. Only one respondent out of 286 earns over N101,000.00 monthly. Those earning fifty thousand naira and upwards

are, most likely the civil servants among the respondents.

From the foregoing, it can be deduced that those in the civil service are unlikely to experience sharp income swings irrespective of their HIV status, because their incomes are not calculated on the basis of productivity *per se*, unlike those in the other occupations. This will not be so for other PLWHIV whose incomes depend on productivity. Table 2 gives a bird's eye view of the income distributions of the respondents.

Table 2: Estimated Monthly Income Distribution of Respondents

Amount	Before		After	
	Frequency	Valid percentage	Frequency	Valid percentage
< N50,000	241	84.3	256	89.8
N50,000-N100,000	44	15.4	29	10.2
N101,000 –N150,000	1	0.3	0	0
Missing system (no response)	-	-	1	0.3
Total	286	100	286	100

Source: Field survey, 2014

In response to whether their incomes, after infection, cover their recurrent needs 6.3% of the respondents answered “yes” while 93.7% of them answered “no”. Given that poverty is often a reflection of the perception of the respondent, a follow-up question on how those who say their income is not enough to meet their recurrent needs make-up for the short-fall. 41.3%, or 118 respondents, say they make up for the shortfall by borrowing, 82 persons, or 28.7% of them are assisted by friends and relatives, while 53 of them have to sell some of their assets. Furthermore, 52.9% of them benefit from social security networks such as extended family members, faith-based organizations or clubs and societies, while 3.3% of them benefit from all three types of social networks. However, 43% of the respondents indicate that they do not benefit from

any of the above. The specific form of benefits include helping to look after sick members of households, financial assistance, medication, helping to pay for children's education, etc. In addition, 102 of the respondents (38.3%), indicated that they have had to sell some assets to be able to meet the households' needs, while 164 respondents (valid 61.7%) have not had to sell any of their assets as yet.

To help check for differences in the incomes of PLWHIV pre- and post- infection, if any, the students t-test was employed to test for the difference in the incomes *pre-* and *post-*infection with HIV. To achieve this, the total monthly expenditure, which was used to proxy income, was compared before and after the infection. The summary of the t test result is as shown in Table 3.

Table 3: Summary of t test results

Test	Significance (2- tailed)	Value	Critical value
T test	.001	3.521	-1.96 to +1.96

Source: Field Survey, 2014.

In the paired sample tests the calculated *t* value is 3.521, this falls into the rejection area, because the acceptance region of H_0 lies between -1.96 and +1.96 at $N - 1$ degrees of freedom (which is $286 - 1 = 285$) at 0.05 alpha levels. Therefore, the null hypothesis that there is no significant difference in the incomes of PLWHIV *pre-* and *post-* HIV infection is rejected. This is to be expected, bearing in mind that duration of infection has implications for the state of health of the PLWHIV. Among the 286 respondents in this study 203 respondents indicated that their health has started to fail already, affecting their work capability. This leads to a situation that makes the less healthy members of household not

only to be unable to contribute maximally to households' income, but also, in some cases limit other healthy household members' contribution because they have to devote a part of their time to look after the ill household member(s). Both factors reduce family incomes. A third reason for differences in household incomes *pre-* and *post-* HIV infection is the fact that the ill PLWHIV requires additional money to procure medical care and upkeep. These three factors constitute the so-called labour supply shortfall challenge facing households of PLWHIV who at the same time suffer raised expenditure due to the presence of HIV.

Conclusions

The major conclusion of this study is that, the majority of those infected with HIV in the four LGAs studied are predominantly poor people whose incomes fall short of their recurrent needs. In other words, those infected are poor and not-so-educated people and are mainly engaged in agriculture. It can therefore be summarized that they belong in the class of people with low socioeconomic status. This lends credence to what Ichoviks *et al* (2002) said when they alluded to socioeconomic status as an important factor in HIV infection. It is therefore, necessary for government to initiate policies that seek to improve the socioeconomic status of her citizens as one of the preventive measures of HIV infection. It is in the light of this that the diversification of the economy by President Buhari is commendable, as it seeks to make agriculture more rewarding to farmers. In addition, the inclusion of a social welfare package that targets the poorest of the poor in society is apt and commendable.

Furthermore, the issue of feminization of poverty is once again brought to the fore. Out of a total of 286 persons randomly sampled for this study, 191 of them are women. This represents approximately 67% of the sample. Given that the sample constitute largely of poor persons (only 15.7% of them earned up to N50, 000 and above in a month *pre-* infection, which declined to 10.2% *post-* infection) it is almost certain that the poorest of this sample are likely to be women. Modernizing agriculture will particularly be helpful to these women who constitute the bulk of farm hands.

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Effects of Globalization on Management Education in Nigeria

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Abstract

Globalisation is a phenomenon powered by information and communication technology. Its very nature has made the world a global village. You can be anywhere and yet, communicate on cell phone, conduct meetings, do transactions, study with universities that have on –line training facilities. The world has become interdependent. Globalization is said to be the widening, deepening and speeding up of worldwide interconnectedness in all aspect of contemporary social life. The paper set out to explain the concept, identify the drivers behind globalization, outline and discuss the benefits and problems the the key assumptions that underpin the study, and to narrate the effects globalisation has on management education The paper concluded by suggesting that national universities should improve their curriculum to meet international standards and many young people relocating from less developed countries to advanced nations should be prepared to remit part of their earnings for savings and to support the loved ones they left at home.

Keywords: Globalization, Management Education, Nigeria

Introduction

The world is said to be a global village. Realize that in a village setting; everybody, the products, services, markets and administrative settings are not ambiguous to anybody. At the back of your house, you just know who is selling what. Doing business is easy, friendly, risk-free and less costly.

These characteristics seem to be unanimous with doing business globally except that it assumes different dimension in respect of size, currency, risk, language, distance, method and magnitude.

Globalization is simply a phenomenon - Politics, Commerce, Management, Economy, Sports and Culture. You sit in your house and watch happenings in the world. In the comfort of your office you conduct your business globally either with your mobile phone or simply by the click of the mouse of your computer. Happenings in one country are likely to have effect almost immediately in others or at best in the shortest possible time. The objectives of this paper therefore are to explain the concept, identify the drivers behind globalization, outline and discuss the benefits and problems, examine the key assumptions that underpin the study and identify the effects that globalisation has on management education.

Literature Review

The Concept of Globalisation

Hill (2008) defines globalization as “the shift toward a more integrated and interdependence world economy.

Eslake (2000) says that globalization is simply the logical extension of the tendency towards specialization and trade has been going on almost since mankind first walked on the surface of the earth.

Friedman (1998) argues that globalization is not just about trade but about the triumph of market force, technology and open democratic forces throughout the world.

Levin Institute (2011) defines globalization as the process of interaction and integration among the people, companies and governments of different nations, a process driven by international trade and investment and aided by information technology.

Ozbilgin (2005) describes globalization as the way that world trade, culture and

technologies have become rapidly integrated over the last twenty years.

Sparrow et al (2004) says, globalization “is attributed to various considerations which are often associated with a wide range of factors allied with it, that are of an economic, political, cultural and sociological nature”.

Hucynski et al (2002), posits that globalization creates conditions of rapid change, all the changes way from the cyber revolution to trade liberalization, worldwide homogenization of consumer goods and services and export-oriented growth.

Drivers of Globalisation

Kapoor (2011) argues that globalization is propelled by the following factors:-

Shortage of talent in developed countries: In developed countries like the United States, Germany and Japan, population growth is put at 0.3%. This is making it impossible to meet up with aged workforce as they retire. The comforting alternative is for Multinational Corporations (MNCs) with origins from these countries to outsource basic functions to other developing ones like Brazil, South Africa, China, South Korea and India.

Availability of low cost labour from emerging countries: Developing country's population growth is put at six times that of developed countries. Furthermore, Mckinsey Global Institute has put the potential population of professionals in emerging markets at approximately 33 million and that this number is growing rapidly. This has provided a haven of professionally young talented people for Multinational Corporations (MNCs), of the developed world thereby making globalization endearing.

Technological progress: Globalization is made possible by the development of cost effective, yet very powerful technologies, including the intra- and internet, enterprise resource planning system, data warehouse, data mart, and data analytics. *Kapoor* (2011). Similarly, *Friedman* (2005) defined globalization as a whole set of technologies and political events converging – including the fall of Berlin Wall, and I add the collapse of USSR, the diffusion of the Windows Operating System, the creation of a global fibre-optic network, and the creation of interoperable software applications,

which made it very easy for people all over to work together – that leveled the playing fields. It created a global platform that allowed more

people to plug and play, collaborate and compete, share knowledge and share work, on a scale never seen before.

The Benefits of Globalization

	Benefits of globalization	Problems of globalization
1	Economies of countries that engage well with the international economy have consistently grown much faster than those countries that try to protect themselves. Well managed open economies have grown at rates that are on average 2 ½ percentage points higher than the rate of growth in economies closed to the forces of globalization.	Some countries have been unable to take advantage of globalization and their standards of living are dropping further behind the richest countries. The gap in incomes between the 20% of the richest and the poorest countries has grown from 30 to 1 in 1960 to 82 to 1 in 1995.
2	Countries which have had faster economic growth have then been able to improve living standards and reduce poverty . India has cut its poverty rate in half in the past two decades. China has reduced the number of rural poor from 250 million in 1978 to 34 million in 1999. Cheaper imports also make a wider range of products accessible to more people and, through competition, can help promote efficiency and productivity	Increased trade and travel have facilitated the spread of human, animal and plant diseases , like HIV/AIDS, SARS and bird flu, across borders. The AIDS crisis has reduced life expectancy in some parts of Africa to less than 33 years and delays in addressing the problems, caused by economic pressures, have exacerbated the situation. Globalization has also enabled the introduction of cigarettes and tobacco to developing countries, with major adverse health and financial costs associated with that.
3	Improved wealth through the economic gains of globalization has led to improved access to health care and clean water which has increased life expectancy . More than 85 percent of the world's population can expect to live for at least sixty years (that's twice as long as the average life expectancy 100 years ago!)	The increasing interdependence of countries in a globalised world makes them more vulnerable to economic problems like the Asian financial crisis of the late 1990's.
4	Increased global income and reduced investment barriers have led to an increase in foreign direct investment which has accelerated growth in many countries. In 1975, total foreign direct investment amounted to US\$23 billion while in 2003 it totalled US\$575 billion.	The environment has been harmed as agricultural, forest, mining and fishing industries exploit inadequate environmental codes and corrupt behaviour in developing countries. Agricultural seed companies are destroying the biodiversity of the planet, and depriving subsistence farmers of their livelihood.

5	Improved environmental awareness and accountability has contributed to positive environmental outcomes by encouraging the use of more efficient, less-polluting technologies and facilitating economies' imports of renewable substitutes for use in place of scarce domestic natural resources.	The major economic powers have a major influence in the institutions of globalisation, like the WTO, and this can work against the interests of the developing world . The level of agricultural protection by rich countries has also been estimated to be around five times what they provide in aid to poor countries
6	Increasing interdependence and global institutions like WTO and World Bank, that manage the settlement of government-to-government disputes, have enabled international political and economic tensions to be resolved on a "rules based" approach, rather than which country has the greatest economic or political power. Importantly it has bolstered peace as countries are unlikely to enter conflict with trading partners and poverty reduction helps reduce the breeding ground for terrorism.	Trade liberalisation and technological improvements change the economy of a country, destroying traditional agricultural communities and allowing cheap import. Cheap imports of manufactured goods. This can lead to unemployment if not carefully managed, as work in the traditional sectors of the economy becomes scarce and people may not have the appropriate skills for the jobs which may be created.
7	Improved technology has dramatically reduced costs and prices changing the way the world communicates, learns, does business and treats illnesses. Between 1990 and 1999, adult illiteracy rates in developing countries fell from 35 per cent to 29 per cent.	Modern communications have spread an awareness of the differences between countries, and increased the demand for migration to richer countries. Richer countries have tightened the barriers against migrant workers, xenophobic fears have increased and people smugglers have exploited vulnerable people.
8	Modern communications and the global spread of information have contributed to the toppling of undemocratic regimes and a growth in liberal democracies around the world.	Globalised competition can force a 'race to the bottom' in wage rates and labour standards. It can also foster a 'brain drain' of skilled workers , where highly educated and qualified professionals, such as doctors, engineers and IT specialists, migrate to developed countries to benefit from the higher wages and greater career and lifestyle prospects. This creates severe skilled labour shortages in developing countries.
9.	The voluntary adoption by global companies of workplace standards for their internationalised production facilities in developing countries has made an important contribution to respect for international labour standards. Wages paid by multinationals in middle- and low-income countries are on average 1.8 to 2.0 times the average wages in those countries.	Source: The World Bank, 2004, http://www.worldbank.org/ United Nations Development Programme, 2004
	Source: AusAID, 2004, http://www.ausaid.gov.au/	

Theoretical Perspectives on Globalization

Below is a cursory look at the theories of globalization.

Perspectives	Key Assumptions
Globalist	<ul style="list-style-type: none"> • There is a fully developed global economy that has supplanted previous forms of the international economy. • The global economy is driven by uncontrollable market forces, which have led to unprecedented cross-national networks of interdependency and integration. • National borders have dissolved and therefore the category of a national economy is now redundant. • All economic agents have to conform to the criteria for being internationally competitive. • The position is advocated by economic neo-liberals but condemned by neo-Marxist.
Traditionalist	<ul style="list-style-type: none"> • The international economy has not progressed to the stage of a global economy to the extent claimed by the globalists. • Separate national economies remain a salient category. • It is still possible to organize cooperation between national authorities to challenge market forces and manage domestic economies and govern the international economy. • The preservation of entitlements to welfare benefits, for instance, can still be secured at the national level.
Transformationalist	<ul style="list-style-type: none"> • New forms of intense interdependence and integration are sweeping the international economic system. • These place added constraints on the conduct of national economic policy making. • They also make the formulation of international public policy to govern and manage the system very difficult. • This position sees the present era as another step in a long evolutionary process in which closed local and national economies disintegrate into more mixed, interdependent and integrated 'cosmopolitan societies'.

Source: Thompson (2000,).

The Impact of Globalization on Management Education

Emphases and expansion strategic human resources management (SHRM): Globalization has influenced organizations to relook at the ways at which they manage their work-force. The last decade has witnessed a lot of changes due to the impact of globalization, fewer trade barriers, and the rapid spread of the cyber revolution Faugoo (2009). All these changes and

fluctuations have changed the world of work (Redman & Wilkinson, 2001). In response to these changes, organizations and institutions are increasingly realizing the importance of human competitiveness as essential to organizational survival and success, which has created a new paradigm shift as to the ways in which people should be managed, that has propelled the expansion of strategic HRM. (Hucynski & Buchanan, 2002). The essence of strategic HRM

is that people are regarded as competitive assets to be led, motivated, and deployed, in ways that contribute directly to the attainment of the firm's strategic objectives (Handy et al 1990). The overall purpose of Strategic HRM is to ensure that the organization is able to achieve success through people (Armstrong: 2000). Modern day organizations are in quest of gaining competitive advantage over their competitors and the belief is emerging that human resources are those strategic assets that can lend an organization added value over their competitors.

It has forced organizations to steer away from the hierarchical and directive management approaches that traditionally typified their countries corporate cultures to create more flexible styles that can cope with change (Kapoor: 2009).

Global firms especially Indian are responding in human resource capabilities of the firm. The approaches of management of these firms is by developing the knowledge-base, desired skills and attributes of the employees, which results in higher firm performance and competitive advantage and this coincides with the resource based view perspective of Strategic Human Resource Management as a source of competitive advantage and organizational success (Kapoor: 2009).

Managers of some global firms have realized that to continue with good performance, the onus is on management to elicit commitment and greater participation/involvement of the managers to the shared goals/strategy of the company (Kapoor: 2009).

Management should firmly believe in having the right type of employees at every level, not only at the highest level, but at all levels and are happy to work, are efficient and also work with their minds (Kapoor: 2009).

Local knowledge: Different markets also have different levels of sensitivity about nudity. While it is commonly accepted that sex sells in some countries, it could lead to people taking offence. It is not only the culture and language that are important when opening a new market; companies should seek the understanding of market conditions as well. This may be initiated with asking questions such as will the product be competitively priced? Is there a competitor that currently dominates the market? What about

brand loyalty? Local knowledge is a crucial part of marketing in different countries (Marcus: 2011).

Labour practices: The production process is also entirely different in different regions. Labour practices change very dramatically from one country to the other. Understanding the local labour market is an important consideration. What may be overlooked elsewhere may be responded to at home. For instance, when a plant is relocated to a region where labour is cheaper, unions and displaced workers may produce much resistance and could even lead to consumer boycotts in extreme cases. Dealing with the home market is an important part of the process. Knowledge of the local labour market is crucial. The local labour laws, the extent of unionization, the local work ethic and the quality of the work force are all of great importance. Global production requires knowledge and understanding of the local conditions. It also means that as a rule, it is necessary to recruit management from local communities. Again, it is a question of understanding the language, culture, and local labour practices. (Marcus: 2011).

Political language and sensitivity: Another aspect of globalization requires an understanding of the political stability of the target market. Economic and political considerations are important for management to take a view of future investment and development. A global view of business coupled with a broad knowledge of varying cultural, political and economic differences around the world are required when a business decides to engage in the global economy (Marcus: 2011).

Increases competition among organizations.

This opens the world up to a lot of opportunities, weakness and threats. The fact that the local producers are competing with the international producing agent for the same customer base, a lot of information is required for both organizations to seek to have towards effecting a good and timely decision if they are going to achieve the objective for which their organization was established. To achieve this, an international manager has to be conscious of change, amenable to the change and seek avenues where

and when proper change will be implemented to ensure smooth operations and success. In is in the light of this that information technology tools have to be acquired and properly deployed by the international manager. This is my personal view.

Good leadership in one country will not automatically be good leadership in another country for several reasons. A good leader may be deemed so by certain characteristics that are appreciated in a particular country and yet distasted in another country. This is because countries have their own culture and social standards, and this is important when considering leadership. It is in this light that a leader is required to be knowledgeable about a country's ethics, beliefs, customs and basic leadership skills which will provide beneficial leadership in another country and this only prepared by good business schools that are in tune with internationally accepted practices.

There are several skills that a leader can have that will help them become successful globally. These skills are strong business knowledge, awareness and sensitivity to cultural differences and standards, courage, commitment and integrity. The fact that you are outstanding in performance does not automatically make you a good leader in another country. However, a sound management education will prepare you as an astute leader with good work ethics, personal and professional integrity, and determination can be a good leader anywhere at all (Ganly: 2010).

Empirical Review on Effects of Globalization on Management Education

Manzuma-Ndaaba, Harada, Romle, & Shamsudin (2016) conceptually examined impact of globalization on Nigeria education system: challenges in the new millennium. The authors cited Druckker (1997) who hypothesized the extinction of traditional universities in favour of virtual universities as a consequence to information technological development. The authors also asserted that globalization has forced many universities to conform to international standards by drawing new programmes, changing their curricula to encourage and attract both local and international students (Kwon, 2013). Manzuma-Ndaaba et al. (2016) showed that globalization has realigned the mindset of many potential Nigerian students and even their parents to believe that except a

certificate obtained from a foreign university, the graduate is likely to be unemployable. Consequently the authors seem to conclude that our best brains go abroad to study and stay back thereby causing brain drain. They recommended that better programmes should be designed by national universities, high caliber faculty engaged, motivated, and retrained, and adequate provision of the necessary infrastructure effected for national universities to meet up with global standards.

Reed (2002) theoretically, analysed management education in an age of globalization: The need for critical perspectives. He posits that the analysis of the processes of globalization and its impact ought to include management education. This is because management is a discipline with the responsibility to methodically investigate the result of how its performance as well as its contributions to the world may be enhanced. This responsibility denotes that, it is impossible for management education to take a parochial view on training (prospective) managers on how to maximize profits alone. Instead, the discipline exposes students to the fundamental questions concerning the task of management (including business more generally) in the world and offers them with the theoretical skills to assess what it means for management and business to behave responsibly. Though, these roles are difficult under normal conditions, they are the more problematic as the globalization process brings complexity and the nature of corporate responsibilities undermines managers capacity to effect change. The author argued further that to incorporate the analysis of globalization into management education, it is obligatory to use critical perspectives. The use of critical perspectives will undoubtedly be significant in enhancing management education to level up with the escalating difficulties of advocating for responsible corporate behaviour in an age of globalization

Sai, Aham, and Manmadh (2011) conceptually surveyed Impact of globalization on management- effects on human resources manahement (HRM). The authors explained that a significant shift has occurred in the area of management practice due to globalization. The skill or the cost advantages that drive globalization initiative also influence the way

people run business organisations. The authors added that globalization has forced traditional managers to discard old management thinking for new ones. For instance theory X has given room to theory Y, hierarchically structured organisations have given room for flatter and more flexible structures, and autocratic leadership styles have given room to democratic styles. They concluded that because of the shrinking working population of the developed world, globalization encourages human resources management departments of multinational corporations to collect information on such variables like workers' turnover and recruitment, compensation and benefits, ethnic, gender, cultural, and nationality distributions, and input them into different data bases and data marts. By using advanced analytical methods on the data, human resource managers will have business insight, predict changes, and make informed decisions at operational and strategic levels.

Bruner, *et al.* (2011) examined the globalization of management education: Changing international structures, adaptive strategies, and the impact on institutions. They concluded thus:

One, successful globalization of management education transform into increased competence and confidence among graduates who aspire to do business with global influence; it offers deeper research understanding into the global intricacies of the managers, enterprises, and markets; and it at last enables better service to the global business profession. Successful globalization also entails the capacity of business schools in graduating their students who are proficient enough to succeed and lead in a progressively globalised environment. Through the illumination of the strategies, practices, and social influences of business globalisation, management educators do increase the pace and assist in reducing its costs and disruptions. With effective international management education, responsible globalization in business and society is assured.

Two, globalization does not ignore differences. The background environment of management amplifies the advantages of an education in which international disparities and, more significantly, the way we organize and think concerning the disparities is vital. People

who have the capability to survive in contextually complex society are a indispensable resource for both businesses and governments; they are future leaders that may be skillful at advancing international peace as well as economic prosperity

Three, straight forward economic gains are also exploited from the globalization of management education. Apparently, the increasing mobility of students, employers, and providers have led to the upsurge in the number and variety of choices. Currently, the desire of many American and European citizens to take degree programmes in Asia because their aspirations to launch a career or business in the region and because, more and more, they believe the quality is comparable to their next-best Western alternative. Similarly there is noticeable expansion taking place in recruitment and continuing education options for businesses around the world, and the number of potential foreign partners for high-quality business schools has grown. These kinds of international evaluations have kindled competition and elevate overall quality. also, they encourage schools to ascertain and fortify distinct centers of excellence. A catalogue of courses to select, improved quality, and specialization in management education suggest a healthy, efficient industry

Conclusion and Recommendations

Globalisation has become part of the culture of the international community. No matter the cultural phobia that the advanced world seem to exhibit, it is becoming apparent that majority of the young people today may want to relocate to countries of the advanced world to pursue their dreams or yet better life. Some of the youth believe studying abroad will give them the opportunity to launch their businesses. In some other developed societies the percentage of working population is shrinking rapidly and there is the urgent need to replace the vacancies that are created because of retirements. The paper highlights largely the potentials of globalization and the intricacies to make the phenomenon work. Achieving this squarely lies on the shoulders of business schools that teach the concepts, theories and sound management practices. Therefore, it is required that managers of this institutions do all that is to make

management domain an indispensable springboard of globalization. Consequently, the paper suggest that universities in less developed countries should redesign their curriculum in a way to meet international standard so that graduates of our business schools will fit into job openings abroad to earn sufficiently in order to remit back home for improved standard of living of those they left behind and help in accumulating savings and eventually stimulate domestic investment.

Also, because of the large market Nigeria has, a new wave of negotiation should commence with automobile makers towards revamping the assembly plants for better employment and skills development. Management education stand to develop better in a globalised world and our universities should be open to benchmark best international practices if they want to stand tall among similar organisations.

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Assessment of Entrepreneurial Competencies of Benue State University Students

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Abstract

This study assesses the Personal Entrepreneurial Competencies (PECs) of Benue State University (BSU) students. The study employs a survey design using questionnaire as a method of data collection. Data analysis was carried out using descriptive statistics, Levene and independent t-tests for the significance level of the differences in variance and means respectively. Results indicate that BSU students possess moderate personal entrepreneurial competencies. The study findings also indicate that male students have more PECs than their female counterparts. In comparison to the findings of McClelland et al. (1987), the study found that the PECs of BSU students are below those required of average, successful, start-up and potential entrepreneurs in Malawi. Looking at the competencies individually, the study finds that BSU students are “strong” in Information Seeking, Concern for High Quality, and Commitment to Work Contracts; while they are “moderate” in Problem Solving, Initiative, and Persistence. The students are also “moderate” in Use of Influence, Self Confidence, Assertiveness, Opportunity Recognition, and Persuasion. In the other two PECs, i.e., efficiency, and systematic planning, the students were found to be “weak”. Based on these findings, the study recommends that more efforts should be made by the Nigerian Universities Commission (NUC) and the Centre for Entrepreneurship Studies of BSU to improve the PECs of the students to measure up to those suggested for successful entrepreneurs.

Key words: Entrepreneurial competencies, Entrepreneurship education, Benue State University students.

Introduction

It is established that entrepreneurship plays a crucial role in promoting economic growth and development irrespective of region, ethnic group, or country. Societies with higher levels of entrepreneurship activities experience lower levels of unemployment. This explains why countries, regions or ethnic groups promote entrepreneurship as a veritable vehicle for stimulating economic growth and development. In Nigeria for instance, the National Universities Commission mandates all the universities to develop entrepreneurial skills and inculcate the entrepreneurial spirit in their students. Mandating the entrepreneurship training in students is based on assumption that the possession of certain competencies (Personal Entrepreneurial Competencies) pre-disposes individuals to entrepreneurial behaviour in either their own businesses or in paid employment.

Personal Entrepreneurial Competencies (PECs) are skills and competencies required to start and run a business; that significantly differentiate successful and average entrepreneurs; and that have been demonstrated to be present before starting a business or attaining a management position (McClelland, Mansfield, Spencer & Santiago, 1987). The argument is that PECs are not the sole cause of entrepreneurship initiation. The economic and institutional factors also significantly affect entrepreneurial initiations (Hayton, George & Zahra, 2002). Possession of the PECs provides the confidence to develop business ideas and to eventually establish new businesses. Hence there is the need to explore PECs of Benue State University students consequent upon their mandatory training in entrepreneurship.

This paper assesses and ascertains the extent to which BSU students possess PECs. This study is important in the sense that knowledge about the competencies in which the students excel and those in which they need to improve on will enable the university to re-design and craft an efficient and effective entrepreneurial education programme to enhance their students' confidence in developing business ideas and eventually to establish new businesses or attain management positions in established organisations.

From the results, respondents who score high on PECs are more entrepreneurial than those with low scores. The study is organised in five

sections: the next section is literature review, followed by methodology, and results and discussions respectively. The last section is the conclusion and recommendations.

Literature Review

Despite the fact that entrepreneurs are complex and diverse in terms of nationality, gender, race and ethnic background, they have common underlying characteristics. The characteristics include generic and specific knowledge, attitudes, values, beliefs, skills, expertise (social, technical, and managerial), mindset and behavioural tendencies (Boyatzis, 1982). Furthermore, the entrepreneur interacts with the highly competitive and continuously changing business environment. In order to cope with these rigours, successful entrepreneurs utilise a high level of attitudinal, behavioural, technical, and managerial competencies (Baum & Locke, 2004).

“Competencies” are the sum of experiences, knowledge, skills, and attitudes acquired or learned during one's lifetime for productive performance in a task or a job (Man, Lau & Chan, 2002). They also mean “abilities that manifest in behaviour” (van Gelderen, 2007: 3). Some of these competences are innate and built-up tacitly during an individual's life experience and career (Brownell, 2006). Other competencies are acquired through training, education and practice (McClelland, 1973; Garavan & McGuire, 2001; Man & Lau, 2005).

Several classifications and approaches to competencies exist in the literature (Dixon, Meier, Brown & Custer, 2005; Bagheri & Pihie, 2011; Gibb, 1998; Spencer & Spencer, 1993; Grezda, 2005; Capaldo, Iandoli & Ponsiglione, 2004; Man & Lau, 2000; etc). However, in this study, the concepts and classifications by McClelland et al. (1987) that identified 13 PECs or inclinations among successful entrepreneurs in Malawi, India, and Ecuador have been adopted. The McClelland et al. (1987) study was based on critical case analyses of successful entrepreneurs. They reported that these PECs, grouped in three clusters (i.e., Achievement, Planning, and “Power” clusters), transcend nationality, gender, ethnic group, culture and geographical location. The PECs are summarised in the Table 1 and explained in details in the next subsections.

Table 1: *Personal Entrepreneurial Competencies in their 3 Clusters*

Achievement Competencies	Planning Competencies	“Power” Competencies
Opportunity recognition	Information seeking	Persuasion/Networking
Initiative	Systematic planning	Use of influence strategies
Persistence		Self confidence
Commitment to work Contracts		Assertiveness
Concern for high quality		
Concern for efficiency		
Problem solving		

Source: McClelland et al. (1987)

According to Table 1, the Achievement Cluster comprises seven competencies, the Planning Cluster has two competencies and the Power Cluster has four competencies.

Achievement competencies

Reviews of literature provide evidence of a significant relationship between achievement motivation and entrepreneurial activity (Johnson, 1990). McClelland (1961, 1965) argued that individuals high on achievement motivation prefer tasks that involve skill and effort, provide clear performance feedback, and are of moderate challenge or risk. Competences in the achievement motivation domain include recognising and acting on opportunities, initiative, persistence, and commitment to contracts. Others are concern for efficiency, commitment to high quality and problem solving ability.

Opportunity recognition competency is the ability of the entrepreneur to seek, recognise, develop and turn opportunities into positive outcomes (Man, 2001). Because the decision to exploit the opportunities depends on the entrepreneurs' knowledge of customer demand; they are required to engage in a continuous search for products and services that could add value for potential customers/consumers (Choi & Shepherd, 2004). Initiative is the drive to do, initiate, innovate, and achieve something; thereby accelerating the process of economic development. Persistence refers to entrepreneurs' tenacity to push to the finish line even when it seems out of reach. Persistence is absolutely

crucial as mistakes are bound to be made. In the absence of persistence, learning opportunities which come from mistakes is lost. Entrepreneurs honour their commitments irrespective of the obstacles involved. The concern for high quality competency reflects the entrepreneurs' underlying drive to ensure high standards of quality and accuracy appropriate to meet and even exceed customer demands. Successful entrepreneurs always devise new ways and methods to promote efficiency; that is, doing things faster, using fewer resources, and/or at lower costs. A successful entrepreneur is a problem solver; crafts alternative and innovative strategies to overcome emerging or anticipated problems.

Planning competencies

Information seeking and systematic planning and monitoring constitute the planning cluster. A successful entrepreneur voraciously seeks and is receptive to new and evolving information and ideas which can be useful to realising his/her goals. This might involve consulting experts for advice. Successful entrepreneurs develop and use logical plans to reach their business goals. They develop alternative plans in the face of anticipated obstacles and they ensure proper execution of the plans to ensure attainment of their goals.

Power competencies

Power competencies reflect the understanding of the use of power and the need to influence the behaviour of others. A successful

entrepreneur would score highly on power competencies to signal that he/she knows what is required and influences others accordingly in order to achieve the targeted goals. A successful entrepreneur uses sound arguments and logical reasoning to persuade, convince, and influence others in mobilising resources, obtaining inputs, organising operations/production and selling products and services. Similarly, successful entrepreneurs have a strong belief in themselves and the potency of their abilities. They are not afraid of future uncertainties. They have the full confidence that they would complete any task or meet any challenge no matter the circumstances. Moreover, entrepreneurs assert themselves; they confront problems and issues with others directly. They make subordinates know what is expected of them; and reprimand or discipline those who perform below expectation. Finally, successful entrepreneurs use influential people to reach their business goals; they develop business contacts, get contracts/commitments, and persuade others to their business' interests and viewpoints.

Methodology

It is expected that students in the Faculty of Management Sciences (Departments of Accounting and Business Management), as they are already familiar with the theoretical aspects of entrepreneurship, would constitute a significant pool of potential entrepreneurs. Hence, final year (2011/2012) undergraduate students of the Departments of Accounting and Business Management were purposively sampled for this study. The useable sample was 224 students comprising 166 males and 58 females. The majority of the respondents were male (74%) despite the policy of promoting equal opportunity for women in university education. However, this situation could not be helped because there are more male than female students in the Faculty of Management Sciences in the BSU.

The study is based on a descriptive survey and analyses of PECs of BSU students. The research instrument used was a self-rating questionnaire; considered to be the most appropriate method of obtaining information from the target population. The self-rating questionnaire was adapted from McClelland *et al.* (1987). The questionnaire covered the

following: name, matriculation number, gender, and local government of origin. Completing and submitting the questionnaire was part of the students' "continuous assessment" examination in ACC/BSM 414: Elements of Entrepreneurship. In this way, bias/problems associated with survey research were removed.

The instrument comprised of 70 behavioural statements. The respondents used a Likert five-point scale to rate how well each statement described him or her (with 5 = very well, 4 = well, 3 = somewhat, 2 = very little and 1 = not at all). There were 5 items based on each of the 13 competencies and an additional 5 items composing a social desirability scale. The scoring for each competency scale includes a correction factor based on the social desirability score.

As suggested by McClelland *et al.* (1987: 72), the score sheet was moderated so as to mitigate the tendency of subjects to fake responses in order to present a socially desirable picture of them. Consequently, if the total score on the social desirability scale was 20 or more, then the total scores on the 13 competencies were moderated or corrected to arrive at the "true" assessment of the strength of each individual's competences. Where the social desirability score was 24-25; 22-23; 20-21; and 19 or less; the competency scores are deducted by 7; 5; 3; and 0 respectively. Appendix 1 demonstrates the moderation/correction procedure.

Data analysis was carried out using the descriptive and comparative analysis of the PECs of BSU students with McClelland *et al.* (1987) average, successful, start-up and potential entrepreneurs. The difference in variance and mean was tested using the Levene's test and two sample independent t-tests.

McClelland *et al.* (1987) tested the measurement instruments exhaustively for validity. The researchers ensured that each competency (i) differentiated successful from average entrepreneurs, (ii) occurred with sufficient frequency to justify assessing its presence in existing or potential entrepreneurs; and (iii) was demonstrated to be present before starting a business or attaining a managerial position. Thus the researchers demonstrated that each competency had content validity and; also established that each competency's behavioural indicators are really the skills needed in starting

or running a business. Therefore, no additional validity test was performed on the measurement instruments used in this study.

To enhance the reliability of data and guard against the possibility of unduly high collaboration; the students were instructed to complete the questionnaire in private and not to confer with others.

Analysis and Results

Data was moderated as shown in Appendix 1 and analysed with the SPSS 16 using Summary and t-tests. Weighted means were used to

measure PEC levels, which included initiative, opportunity recognition, persistence, and concern for high quality, concern for contracts, efficiency and problem solving. Others are information seeking, systematic planning, self confidence, assertiveness, persuasion, and use of influence strategies.

Table 2 presents descriptive statistics on the PECs of BSU students. The table is divided into two panels A and B. Panel A is descriptive statistics based on the overall sample, while Panel B present the descriptive statistics based on the various competency clusters:

Table 2: *Descriptive Statistics*

Panel A: descriptive statistics of BSU students PECs based on the overall PECs

	Total Sample	Male students	Female students
Mean	236.50	238.64	230.45
Std Deviation	20.23	19.83	20.33
Minimum	168	168	181
Maximum	295	271	295
Std Error	1.35	1.54	2.67
N	224	166	58

Panel B: Descriptive Statistics analysed into the various competency clusters.

Competency Clusters	Competency	Whole sample	Male students	Female students
		N = 224	N = 166	N = 58
ACHIEVEMENT CLUSTER	Initiative	18.37 (± 2.87)	18.42 (± 2.88)	18.24 (± 2.86)
	Opportunity	17.58 (± 2.73)	18.00 (± 2.71)	16.40 (± 2.46)
	Persistence	18.37 (± 2.78)	18.64 (± 2.80)	17.59 (± 2.59)
	Concern for high quality	19.75 (± 2.37)	19.96 (± 2.36)	19.17 (± 2.33)
	Commitment to contracts	19.05 (± 2.29)	19.08 (± 2.29)	18.95 (± 2.29)
	Efficiency	16.82 (± 2.55)	16.89 (± 2.56)	16.64 (± 2.53)
	Problem solving	18.60 (± 2.79)	19.01 (± 2.63)	17.43 (± 2.94)
	Achievement Cluster			
PLANNING CLUSTER	Info-seeking	20.79 (± 2.75)	20.87 (± 2.72)	20.55 (± 2.83)
	Systematic planning	16.02 (± 2.34)	16.03 (± 2.42)	15.98 (± 2.10)
	Planning cluster			
POWER CLUSTER	Self-confidence	17.97 (± 3.15)	18.17 (± 3.11)	17.41 (± 3.22)
	Assertiveness	17.82 (± 2.93)	17.73 (± 2.84)	18.09 (± 3.19)
	Persuasion	17.17 (± 2.95)	17.42 (± 3.00)	16.45 (± 2.70)
	Use of influence	18.19 (± 3.13)	18.42 (± 3.00)	17.55 (± 3.43)
	Power cluster			
	Total	236.50(±20.23)	238.64(±19.83)	230.45(±20.33)

Legend: 13- 14 Very Weak; 15 – 16 Weak; 17 – 18 Moderate; 19 – 20 Strong; 21 – 23 Very Strong.

Figures in parenthesis are standard deviations

Table 2 Panel A indicates that the mean PECs are 236.63; 238.64 and 230.45 for full sample, male and female subsamples respectively. With an overall average PECs score of 18.19 (236.63/13) the PECs is “moderate” for the full sample. In relation to male versus female sub-sample, the descriptive statistics in the Table 2 suggest that male students possess more PECs than their female counterparts. Apart from assertiveness, male students were more inclined to entrepreneurship than the female students. This finding is on one hand in agreement with the Global Entrepreneurship Monitor (GEM) Report (2012) for Sub-Sahara Africa which reported that men are generally more likely to pursue entrepreneurship than women. On the other hand the same report, (i.e., GEM, 2012) observed that female entrepreneurs outnumber their male counterparts in Ghana and to some extent Nigeria. Traditionally, it has been assumed that in Africa, there will be more male than female entrepreneurs because of (African) cultural customs about the role of women in the home than outside it. However, that males are more entrepreneurial than females is not universal; Hisrich and Peter (2002) reported that gender has no effect on entrepreneurial behaviour. One can only conclude that, in this study, males happen to be more entrepreneurial than females.

Looking at the competencies individually, BSU sample's strength is “very strong” in Information Seeking (20.79); and “strong” in Concern for High Quality (19.75); Commitment to Work Contracts (19.05) and Problem Solving (18.60). The BSU sample is “weak” in Systematic Planning (16.02). The BSU students are “moderate” in all the other PECs: Initiative (18.37), Persistence (18.37), Use of Influence (18.19), Self Confidence (17.97), Assertiveness (17.82), Opportunity Recognition (17.58), Persuasion (17.17), and Efficiency (16.82). The results signal PEC gaps in BSU students. “Gaps” exist where competency scores are lower than the sample mean score (i.e., 18.20). The competencies that gap exist are: systematic planning, efficiency, persuasion, self confidence, opportunity recognition, assertiveness, self confidence, and the use of influence strategies (8 out of 13 competencies).

In analysing the results further to provide insight and perspective into the current study's findings; a comparative analysis of the current

study and that of its exemplar, that is, McClelland et al., (1987) is discussed next. The McClelland et al. (1987) study was conducted in India, Malawi, and Ecuador. The results for the Malawi component, being an African country like Nigeria, will be used in the comparative analysis.

The McClelland et al., (1987) study addressed two questions:

- *Do the successful entrepreneurs differ significantly from the average entrepreneurs on competencies?*
- *Are there differences between and among the four groups and, if so, which groups are different from each other?*

McClelland *et al.*, (1987:86)'s “groups” referred to in their second research question are in fact the categories within the study's sample. The study used a sample comprising of 93 existing, 38 start-up, and 30 potential entrepreneurs respectively. Each existing entrepreneur had to have started the business, alone or with partners and each had been in business for at least three years and had at least three employees. The existing entrepreneurs were partitioned into two categories/ groups: “average” (N = 45) and “successful” (N = 48) which effectively resulted into four groups. The following procedure was adopted to discern each of the four groups: -

- i. **Successful Entrepreneurs:** Nominations were solicited from as many national and local organisations as had knowledge about entrepreneurs in the geographical region selected for sampling. Entrepreneurs nominated by at least two different organisations or institutions would be selected for the “successful entrepreneurs” group. The number of the successful entrepreneurs group was subject to their being evenly divided/spread among three types of businesses; manufacturing, marketing/trading, and services.
- ii. **Average Entrepreneurs:** Existing entrepreneurs not classified as “successful entrepreneur” were retained as “average entrepreneurs”.
- iii. **Start-up Entrepreneurs:** Entrepreneurs who started a business alone or with partners for less than one year were classified as “start-up entrepreneurs”
- iv. **Potential Entrepreneurs:** “Potential

entrepreneurs” referred to the group that had enrolled in an entrepreneurship training course or applied for a loan to start a business. All potential entrepreneurs had no previous experience as entrepreneurs.

Table 4 presents and summarises the mean competency scores from self-rating questionnaire instrument for the current and McClelland *et al.*, (1987) studies.

Table 5 presents four independent sample test statistics of the current study and that of McClelland *et al.*, (1987). The independent sample test pairs are (i) BSU sample and McClelland start-up entrepreneurs, (ii) BSU sample and McClelland successful entrepreneurs, (iii) BSU sample and McClelland potential entrepreneurs, and (iv) BSU sample and McClelland average entrepreneurs

Table 4: Comparative Results of Current and McClelland *et al.* (1987) Study.

1	2	3	4	5	6
	BSU Sample	McClelland			
		Average”	Successful	Start-up	Potential
N	224	45	48	38	30
Initiative	18.37	15.53	17.46	16.24	15.73
Opportunity	17.58	17.31	17.90	17.84	19.03
Persistence	18.37	18.71	19.46	19.13	19.93
High Quality	19.75	20.51	20.04	20.66	20.10
Commitment	19.05	20.33	20.67	20.71	20.67
Efficiency	16.82	20.02	21.08	19.82	20.87
Problem Solving	18.60	19.82	19.19	18.87	19.53
Information Seeking	20.79	20.36	21.04	20.87	22.93
Systematic Planning	16.02	18.67	19.17	19.16	20.13
Self Confidence	17.97	15.20	15.46	15.71	16.97
Assertiveness	17.82	17.70	19.17	17.82	20.63
Persuasion	17.17	18.31	17.85	18.13	19.87
Use of Influence	18.19	19.40	18.81	19.26	19.47
Total	236.56	247.18	247.30	244.22	255.86
Mean	18.20	19.01	19.02	18.79	19.68

Source: Researcher’s compilation of current and McClelland *et al.*, (1987:106) results.

Table 6 presents and summarises the results of comparing the mean PEC scores of the current (BSU) study and that of McClelland *et al.*, (1987:106). The comparisons of the independent sample means show that in all four sets, the BSU sample recorded the lowest score. However, (i) there are no significant differences in the variances of their means; and (ii) there are no significant differences in the PEC mean values in the current study and McClelland *et al.*, (1987)'s average, successful, and start-up samples; however, the current study's PEC mean value was

significantly ($t = -2.483$, $p = 0.021$) lower than McClelland *et al.*, (1987)'s potential entrepreneurs' sample.

Thus the results show an absence of significant differences between McClelland *et al.*, (1987)'s average, successful, and start-up entrepreneurs and the BSU sample. This can be so because (i) there are really no significant differences between the sample groups or (ii) there were differences which were not adequately captured by the measurement instruments.

Table 5: Results of comparative test of differences in variance and mean between BSU sample and McClelland criteria

Comparison of:	Levene’s test	t-test
BSU Sample with Average Entrepreneurs	1.825 (0.189)	-0.691 (0.496)
BSU Sample with Successful Entrepreneurs	0.630 (0.435)	-1.490 (0.149)
BSU Sample with Start-up Entrepreneurs	1.257 (0.273)	-1.007 (0.324)
BSU Sample with Potential Entrepreneurs	0.482 (0.494)	-2.483 (0.021*)

*Significant at 95% confidence level

Values in parenthesis are p-values

The difference in the entrepreneurship levels of the BSU sample and that of McClelland et al., (1987)'s potential entrepreneurs is significant as indicated above.

It is instructive to note the similarity of the BSU sample with the McClelland et al. (1987)'s potential entrepreneurs' sample: they both had no practical experience in entrepreneurship; but they had theoretical exposure to entrepreneurship training, and they both had a strong tendency to give socially acceptable answers. The significant differences could be as a result of (i) the samples being really different or (ii) the differences in the respondents in the samples over-rating them in order to look socially desirable.

Conclusions and Recommendations

In line with the findings obtained, the study concludes that the sampled students had moderate levels of PECs. Competency gaps were identified with the degree of PECs expected of the successful entrepreneurs in other jurisdictions (India, Ecuador, and Malawi) identified by McClelland *et al.* (1987). The study also finds that male students possess more PECs than their female counterparts.

As the success or failure of the business depends heavily on a person's competency (Capaldo, Iandoli & Ponsiglione, 2004); it is recommended that the youth, being the future entrepreneurs and labour force of the society, a more innovative training model should be developed to enhance the PECs of BSU students to a significant degree. The study also recommends that the institution should pay attention to the identified competency gaps, review the curricula to concentrate on improving entrepreneurial competencies, upholding action learning, internship, fieldwork, and establish mini-enterprises to be run by students.

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APPENDIX 1: SELF-RATING QUESTIONNAIRE

Your Name 3 = somewhat
 Gender..... 2 = very little
 Matriculation Number 1 = not at all
 Department.....
 Local Government of
 Origin.....

3. Write the number you select on the line to the right of each statement. Here is an example:
 I remain calm in stressful situations 2
 The person who responded to the item above wrote a “2” indicating that the statement described him or her very little.

Instructions

1. This questionnaire consists of 70 brief statements. Read each statement and decide how well it describes you. Please be honest about yourself.
2. Select one of the numbers below to indicate how well the statement describes you:
 5 = very well
 4 = well
4. Some statements may be similar, but no two are exactly alike
5. Please answer all questions
 Write the number on the line to the right of each statement.

Question number	Statement	Score
1	I look for things that need to be done	
2	I like challenges and new opportunities	
3	When faced with difficult problems, I spend a lot of time trying to find a solution	
4	When starting a new task or project, I gather a great deal of information	
5	It bothers me when things are not done very well	
6	I give much effort to my work.	
7	I find ways to do things faster	
8	I plan a large project by breaking it down into smaller tasks	
9	I think of unusual solutions to problems	
10	I feel confident that will succeed at whatever I try to do	
11	I tell others when they have not performed as expected	
12	I get others to support my recommendations	
13	I develop strategies to influence others	
14	No matter whom I’m talking to, I’m good listener	
15	I do things that need to be done before being asked to by others	
16	I prefer activities that I know well and with which I am comfortable	
17	I try several times to get people to do what I would them to do like	
18	I seek the advice of people who know a lot about the problems or tasks I am working on	
19	It is important to me to do high quality job	
20	I work long hours and make personal sacrifices to complete jobs on time	
21	I am not good at using my time well	
22	I think about the advantages and disadvantages of different ways of accomplishing things	
23	I think of many new ideas	
24	I change my mind if others disagree strongly with me	
25	If I am angry or upset with someone, I tell that person	
26	I convince others of my ideas	
27	I do not spend much time thinking about how to influence others	

28	I feel resentful when I don't get my way	
29	I do things before it is clear that they must be done	
30	I notice opportunities to do new things	
31	When something gets in the way of what I am trying to do, I keep on trying to accomplish what I want	
32	I take action without seeking information	
33	My own work is better than that of other people I work with	
34	I do whatever it takes to complete a job	
35	It bothers me when my time is wasted	
36	I try to think alone of problems I may encounter and plan what to do if each problem occurs	
37	Once I have selected an approach to solving a problem, I do not change that approach	
38	When trying something difficult or challenging. I feel confident that I will succeed	
39	It is difficult for me to order people to do things	
40	I get others to see how I will be able to accomplish what I set out to do	
41	I get important people to help me accomplish my goals	
42	In the past, I have had failures	
43	I take action before it is clear that I must	
44	I try things that are very new and different from what I have done before	
45	When faced with a major difficulty, I quickly go to other things	
46	When working on a project for someone, I ask many questions to be sure I understand what that person wants	
47	When something I have been working on is satisfactory I do not spend extra time trying to make it better	
48	When I am doing a job for someone, I make a special effort to make sure that person is satisfied with my work	
49	I find ways to do things for less cost	
50	I deal with problems as they arise, rather than spend time trying to anticipate them	
51	I think of many ways to solve problems	
52	I do things that are risky	
53	When I disagree with others, I let them know	
54	I am very persuasive with others	
55	In order to reach my goals, I think of solutions that benefit everyone involved in the problem	
56	There has been occasions when I took advantage of someone	
57	I wait for directions from others before taking action	
58	I take advantage of opportunities that arise	
59	I try several ways to overcome things that get in the way of reaching my goals	
60	I go to several different sources to get information to help with tasks or projects	
61	I want the company I own to be the best of its type	
62	I do not let my work interfere with my family or personal life	
63	I get the most I can out of the money I have to accomplish a project or task	
64	I take logical and systematic approach to activities	
65	If one approach to a problem does not work, I think of another approach	
66	I stick with my decisions even if others disagree strongly with me	
67	I tell people what they have to do, even if they do not want to do it	
68	I cannot get people who have strong opinions or ideas to change their minds	
69	I get to know people who may be able to help me reach my goals	
70	When I do not know something, I do not mind admitting it	

Scoring Sheet

Rating of statements	Score	Competency
$_ _ + _ _ + _ _ + _ _ - _ _ + 6 =$ (1) (15) (29) (43) (57)		Initiative
$_ _ - _ _ + _ _ + _ _ + 6 =$ (2) (16) (30) (44) (58)		Sees and acts on opportunities
$_ _ + _ _ - _ _ + _ _ + 6 =$ (3) (17) (31) (45) (59)		Persistence
$_ _ + _ _ - _ _ + _ _ - _ _ + 6 =$ (4) (18) (32) (46) (60)		Information seeking
$_ _ + _ _ - _ _ - _ _ + _ _ + 6 =$ (5) (19) (33) (47) (61)		Concern for high quality of work
$_ _ + _ _ + _ _ - _ _ + 6 =$ (6) (20) (34) (48) (62)		Commitment to work contract
$_ _ - _ _ + _ _ + _ _ + 6 =$ (7) (21) (35) (49) (63)		Efficiency orientation
$_ _ + _ _ - _ _ + _ _ + 6 =$ (8) (22) (36) (50) (64)		Systematic planning
$_ _ + _ _ - _ _ + _ _ + 6 =$ (9) (23) (37) (51) (65)		Problem solving
$_ _ - _ _ + _ _ + _ _ + 6 =$ (10) (24) (38) (52) (66)		Self confidence
$_ _ + _ _ - _ _ + _ _ + 6 =$ (11) (25) (39) (53) (67)		Assertiveness
$_ _ + _ _ + _ _ - _ _ + 6 =$ (12) (26) (40) (54) (68)		Persuasion
$_ _ - _ _ + _ _ + _ _ + 6 =$ (13) (27) (41) (55) (69)		Use of influence strategies
TOTAL SCORE		
$_ _ - _ _ - _ _ - _ _ + 18 =$ (14) (28) (41) (55) (70)		Correction factor
$_ _ + _ _ - _ _ + _ _ + 6 =$ (9) (23) (37) (51) (65)		Problem solving
$_ _ - _ _ + _ _ + _ _ + 6 =$ (10) (24) (38) (52) (66)		Self confidence
$_ _ + _ _ - _ _ + _ _ + 6 =$ (11) (25) (39) (53) (67)		Assertiveness
$_ _ + _ _ + _ _ - _ _ + 6 =$ (12) (26) (40) (54) (68)		Persuasion
$_ _ - _ _ + _ _ + _ _ + 6 =$ (13) (27) (41) (55) (69)		Use of influence strategies
TOTAL SCORE		
$_ _ - _ _ - _ _ - _ _ + 18 =$ (14) (28) (41) (55) (70)		Correction factor

CORRECTED SCORING SHEET

Instructions

1 The Correction Factor (the total of items **14, 28, 42, 56, and 70**) is used to determine whether or not a person tries to present a very favourable image of himself. If the total score on this factor is 20 or greater, then the total scores on the 13 competencies must be corrected to provide a more accurate assessment of the strength of the competencies for that individual.

2 Use the following numbers when figuring the corrected score

	Subtract the following correction
If the Correction	number from the total score for each competency
Factor score is	
24 or 25	7
22 or 23	5
20 or 21	3
19 or less	0

3 Use the next page to correct each competency before using the Profile Sheet

CORRECTED SCORE SHEET

	Original Score	Correction Number*	Corrected Total
Competency			
Initiative			
Sees and Acts on Opportunities			
Persistence			
Information Seeking			
Concern for High Quality of Work			
Commitment to Work Contract			
Efficiency Orientation			
Systematic Planning			
Problem Solving			
Self-Confidence			
Assertiveness			
Persuasion			
Use of Influence Strategies			

The Efficacy of Corporate Governance Mechanisms on Earnings Management: Evidence From Manufacturing Firms Listed on the Nigerian Stock Exchange.

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Abstract

The study empirically examined the efficacy of corporate governance mechanisms on earnings management with evidence from manufacturing firms listed on the Nigerian Stock Exchange. Earnings management as a dependent variable was measured using Discretionary Accruals (DAC). Four independent variables i.e. Chief Executive Officer (CEO) duality, Board size (BRDSIZE), Board composition (BRDCOM) Audit committee independence (AUDCOM), and five control variables i.e. firm size (SIZE), firm performance (ROA), firm age (AGE), Auditor type (AUDTYP) and leverage (LEV) were used in the study. The data used for this study were sourced from the annual reports and accounts of fifty (50) manufacturing firms listed on the Nigerian Stock Exchange for the period 2010 – 2014. Multiple regression with the Ordinary Least Square (OLS) framework was used. The results show that; CEO duality and board composition are negatively associated with earnings management at significant levels; however board size and audit committee independence have no significant relationship with earnings management. The study recommends that provisions on CEO duality and board composition should be safeguarded and strengthened since they are important mechanisms that significantly reduce earnings management.

Keywords: Corporate governance, Earnings management, manufacturing firms.

Introduction

In recent times the pervasiveness of corporate failure has led to the loss of confidence in both financial reports and reporting accountants by investors. The quantum of financial scandals around the world and recent collapse of major corporate institutions in giant economies, (United States of American (USA), Europe and Asia) such as Parmalat, Tyco, Enron, Adelphia, World Com have raised a very big question as to whether good corporate governance practices exist in organizations (Okougbo, 2010).

Equally, a series of well publicized cases of accounting improprieties in Nigerian firms (such as Wema Bank, NAMPAC, Finbank, Spring Bank and Cadbury Nig. Plc) have captured the attention of not just investors alone but also regulators alike. At the center of these corporate failures, financial scandals and accounting improprieties, earnings management is usually figured out (Goncharov, 2005).

In order to protect the rights of the stakeholders, it is therefore imperative for shareholders through their Boards of Directors to put some monitoring mechanisms in place aimed at checking the opportunistic behaviour of management.

In Nigeria, more attention needs to be paid on corporate governance issue to re-assure the investing public who have lost their valuable investments through the recent spate of corporate failures in this country. Boards of directors in most instances have been criticized for these failures. Some of the reasons normally given for these corporate failures are the lack of vigilant oversight functions by the board of directors, the board relinquishing control to corporate managers who pursue their own self-interests and the board been remiss in its accountability to shareholders (Olayinka, 2010).

It was in response to the above situation that Nigeria, through the Securities and Exchange Commission came up with "Code of Corporate governance best practices" issued in 2003 and revised in 2009 and 2011. The code came along with it some corporate governance mechanisms that could mitigate the incidence of earnings management. The effect of these mechanisms on earnings management in the manufacturing firms listed on the Nigerian Stock Exchange has however remained an empirical

question. This study therefore examines the impact of corporate governance mechanisms on earnings management especially CEO duality Board Size, Board composition and Audit Committee. The main focus here will be to examine the impact corporate governance mechanisms have played in putting in check the earnings management practices in manufacturing companies listed on the Nigerian Stock Exchange.

The study apart from contributing to literature, will also assist the policy makers in Nigeria to evaluate whether the code of corporate governance best practices issued in 2003 and revised in 2009 and 2011 has the desired impact in checking the excesses of corporate governance practices in Nigeria.

The remainder of the paper is organized as follows: section two reviews the relevant literature covering the concept and theories associated with corporate governance. Section three covers the methodology used to support the empirical results obtained. Section four is on data presentation analysis and results, while section five concludes the paper.

Review of Related Literature

The concept of corporate governance and earnings management.

Researches in corporate governance have not yet agreed on a universal definition or meaning of corporate governance. The word has been identified to mean different things to different people (Messier *et al.*, 2008) they (Messier *et al.*, 2008) went ahead to define corporate governance as a system "consisting of all the people, processes and activities to help ensure stewardship over an entity's assets". A more practical definition of corporate governance was given by Lin and Hwang (2010) who define the benefits of well-organized corporate governance: "A good corporate governance structure helps to ensure that, management properly utilizes the enterprises resources in the best interest of absentee owners and fairly reports the financial condition and operating performance of the enterprise". Abor (2007); Keasey *et al.*, (1997); Carbury Report (1992) Organization for Economic Cooperation and Development (OECD, 1999) And many other researchers have their views as to what corporate governance means.

Earnings management is defined by Healey and Wahlen (1999) in their study thus; "Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers".

From all these definitions, we can argue that, corporate governance is a network of many actors trying to as effectively as possible to cater for the needs of both the company itself and also the interest of groups inside and outside.

An essential question here now is, what activities do we regard them as earnings management? The nature of accrual accounting gives managers a great deal of discretion in determining the actual earnings a firm reports in any given period. The most common practice is to manipulate the timing of expenditures such as advertising expenses or outlays for research and development.

Theories of Corporate Governance

A review of literature on corporate governance indicates that, there are a number of theoretical frameworks which have been used to explain and analyze the association between corporate governance and earnings management. These theories arose as a result of divergent and sometimes conflicting objectives between managers and shareholders which have given rise to many concepts and mechanisms to ensure that the costs associated with such divergent interest is minimal. Some of the theories most frequently used are; Agency theory, Stewardship theory, Stakeholder theory, Institutional theory and resource dependency theory.

Each of the theories mentioned above is useful in considering the efficacy and effectiveness of the monitoring and control functions of corporate governance (Hung, 1998).

This work intends to draw from Agency theory to be able to test whether the hypothesized relationships exist between corporate governance and the incidence of earnings management. The Agency theory framework has the ability to explain the motivation for earnings management. It also explains the expected association between corporate governance and earnings management.

Review of Empirical Studies

Corporate governance is networks of many actors trying to effectively as possible cater for the needs of both the company itself and also the interest groups outside and inside.

Theory and empirical evidence indicate that, there are several corporate governance mechanisms that affect the opportunity for management to engage in earnings management. Some of these include CEO duality, Board size, Audit committee, Board composition, ownership concentration, debt reliance, Board independence, managerial ownership and independent directors ownership (Bugshan, 2010). Out of these variables, this study selected four of them for its empirical tests. These are CEO duality, Board size, Board composition and Audit committee independence. These are selected based on the stipulations of the Securities and Exchange Commission code of corporate governance in Nigeria 2011. Empirical works done on each of them will be examined in turn.

CEO duality

Several studies have examined the separation of CEO and chairman of the Board, positing that, the agency problems are higher when the same person occupies the two positions. Using a sample of 452 firms in the annual forbes magazine rankings of the 500 largest USA public firms between 1954 and 1991, Yermak (1996) shows that firms are more valuable when the CEO and the chairman of the Board positions are occupied by different persons. Gul and Leung (2004) find that CEO dominance is associated with lower voluntary corporate disclosure for Hong Kong companies. They argue that CEO dominance combines decision management and decision control which could erode the board's ability to exercise effective control. Finkelstein and D' Aveni (1994) find empirical evidence to support the view that, CEO duality is likely to lead to more opportunistic managerial behaviour due to the reduction in effective Board monitoring over executive. Core *et al.*, (1999) find that CEO compensation is lower when the board chairmen are separate. Dechow *et al.*, (1996) also provide evidence that firms whose CEO chairs the Board of directors are more likely to be subjected to accounting enforcement action by the Securities

and Exchange Commission for alleged violation of GAAP. The Agency theory takes the same position of discouraging the combination of the two positions i.e. CEO duality. The stewardship theory however is in favour of CEO duality because according to them, CEO duality enhances leadership. The Securities and Exchange Commission (2003) considers the separation of the offices of the chairman and the chief Executive officer as an essential element of corporate governance so as to prevent undue concentration of powers.

There are expectations that, the positive relationship between CEO duality and earnings management will limit agency problems, however, mixed results coming from empirical literature seem to suggest differently.

Board size

Prior studies provide evidence on the role of Board size in enhancing the monitoring of management. Monks and Minow (1995) and Lipton and Lorsch (1992) suggest that larger boards are able to commit more time and efforts and smaller boards commit less time and efforts to overseeing management.

Rashidah and Finizanana (2006) in their study in Malaysia support the view that larger Boards are ineffective in their oversight duties relative to smaller boards because they find that, Board size is positively related to earnings management. Xie *et al.*, (2003) examine the characteristics of the board in constraining earnings management using discretionary current accruals using Jones (1991) model to measure earnings management for the years 1992, 1994 and 1996. Their results show that earnings management is less likely to take place in firms with large boards.

Yu, (2008) find that small boards seem more prone to failure to detect earnings management. Alonso *et al.*, (2000) argue that large boards exhibit poorer coordination and communication between members and their results display a significant positive association between larger board size and earnings management.

Yermack (1996) using data from Finland also find negative correlation between Board size and profitability. Eslenberg *et al.*, (1998), Mak and Kusuadi (2005) also report that small size boards are, positively related to high firms

performance in Nigeria.

The agency theory and resource dependency theory are the dual schools of thought on the Board size Agency theory proposes smaller boards and as put by Ning *et al.*, (2010) when board size increases agency problems in the boardroom increases simultaneously, therefore leading to more problems and internal conflicts among directors. On the other hand, resource dependency theory support larger boards because of the wealth of experience, expertise, skills and resources the board members are likely to make accessible to the organization.

The a priori expectation is that board size would have a positive significant relationship with earnings management. A positive relationship purports a reduction in agency problems in terms of lower board size resulting in reduced earnings management and vice-versa.

Board composition

The size to which increased levels of outside director representation on the board of directors protect the rights of shareholders is the focus of much discussion.

Prior studies empirically show that, board composition is positively associated with board monitoring. Wersbach (1998) find a stronger association between prior performance and the probability of a CEO resignation for firms with outsider-dominated boards than for firms with insider-dominated boards. Rosenstein and Wayatt (1990) find that the appointment of an outside director who is an official of a financial firm increases share value. Byrd and Hickman (1992) find that less negative returns to shareholders of bidding firms are associated with boards of directors in which at least 50% of the members are independent of firm managers. Brickely *et al.*, (1994) discovered that the average stock market reaction to announcements of poison pills is positive when the board has majority of outside directors and negative when it does not.

Earnings associated with outsider dominated boards are perceived by shareholders to be more value relevant than those associated with insider dominated boards.

Audit committee independence

Audit committees generally aim at

increasing the integrity of the financial auditing process (Klein, 2000) and the quality of financial reporting McMullen (1994); Dechow *et al.*, (1996) report that, firms without audit committee are more likely to commit financial fraud. In United Kingdom and the United States, public companies are required to form, audit committees by law. The same goes for Nigeria where the Companies and Allied Matters Act (1990) as amended to date specifies the audit committee structure in Nigeria.

Garcia-Meca and Sanchez-Ballesta (2009) find that audit committee independence is one of the major corporate governance mechanisms in constraining earnings management. Choi *et al.*, (2004); Park and Shin (2003) found a significant relationship between audit committee and earnings management. In contrast, Peasnell *et al.*, (2001) find no significant relationship between audit committee and earnings management. Highly independent audit committees are expected to have an impact on shareholders perception of earnings reliability and relevance because stronger audit committee monitoring should enhance the integrity of the financial reporting process and should provide assurance to shareholders on the reliability of reported earnings.

Methodology

Ho₁: There is no significant relationship between CEO duality and earnings management.

Ho₂: There is no significant relationship existing between Board size and earnings management.

Ho₃: There is no significant relationship existing between the board composition and earnings management.

Ho₄: There is no significant relationship between Audit committee independence and earnings management.

The research design adopted for this study is the Ex-post facto (After-the-fact) research. Ex-post facto research is referred to as causal-comparative research in the sense that it is aimed at the discovery of possible causes for behaviour pattern by comparing subjects in whom this pattern is present with similar subjects in whom it is absent or present to a lesser degree. This research approach was considered because it is capable of bringing out clearly the pattern of the

relationship among the variables defined in this work. The population for this study is made up of manufacturing companies listed on the floor of the Nigerian Stock Exchange (NSE) as at 2013 and have consistently submitted their annual reports to the NSE from 2009 – 2013. A total number of 77 manufacturing firms were identified as per the NSE fact book 2012/2013. Out of this number, 50 companies were selected as a sample based on purposive non-probability sampling technique. The sample of firms collected cut across twelve sectors of the Nigerian economy as classified by NSE in their fact book published annually. This sampling method was preferred because the annual reports and accounts of the firms selected for the study are audited and can provide quickly and easily the required information needed for the study. With 65% of the population included in the sample size, it is believed that the sample is a good representative of the working population under investigation.

The study uses both dependent and independent variables in order to investigate the hypothesized impact of corporate governance mechanisms on earnings management. In this study earnings management is our dependent variable. The vast majority of recent earnings management literature relies on discretionary accruals as a proxy for earnings management. They apply various models in isolating two discretionary accruals with the total accruals i.e. Discretionary and Non-discretionary accruals (See Dechow *et al.*, 1995; Sarkar *et al.*, 2006; Hashim and Devi, 2008; Alishah *et al.*, 2009a). This study uses the discretionary accruals as a proxy for earnings management through the cash flow statement method. This method can be calculated using the following formula (Alishah *et al.*, 2009a).

$$TA_t = N./_t - CFO_t$$

Where TA_t = Total accruals in year t, $N./_t$ = Net income in year t and CFO_t = Net cash flow from operating activities.

Many methods have been used by researchers in order to calculate the discretionary accruals. Habbash (2010), in his work examined these models in an evolutionary manner. The Healey model (1985); the De Angelo mode (1986); the Jones model (1991); the modified Jones model (1995); Defond and Jiamblavo (1994); Dechow *et al.*, (1995). The recent model

is modified cross sectional Jones model 1995 and is used in this study.

This is because of the ability of the model to eliminate errors caused when discretion is exercised over revenue through credit sales (Dechow *et al.*, 1995). According to modified cross sectional Jones mode (1995) discretionary accruals are calculated by deducting non-discretionary accruals from total accruals and these non-discretionary accruals are calculated as follows;

$$NDA_t = \beta_1 \frac{1}{A_{t-1}} + \beta_2 \frac{(\Delta REV_t - \Delta REC_t)}{A_{t-1}} + \beta_3 \frac{PPE_t}{A_{t-1}}$$

NDA_t = Non-discretionary accruals in year t scaled by lagged total assets.

A_{t-1} = Total assets at the end of year $t-1$

ΔREV_t = change in revenues in year t

ΔREC_t = change in total receivables in year t

PPE_t = gross property plant and equipment (All variables are scaled by lagged total assets).

$\beta_1, \beta_2, \beta_3$ are firm specific parameters beta coefficients.

The discretionary accruals is then determined as follows; $DAC_t = TAC_t - NDA$
Where:

DAC_t = Discretionary accruals

TAC_t = Total Accruals

The independent variables used in this study are CEO duality represented by a dummy variable one (1) if chairman is also the CEO, otherwise, it is equal to Zero. Board size measured as the total number of directors on the board. Board composition measured by the percentage independent directors on the board. Audit committee independence measured as the number of non-executive directors/size of audit committee.

In addition to the independent variables selected above, a number of control variables are included in this study to control for firm characteristics that can influence the extent of earnings management. The control variables used for this study are; firm size(SIZE), firm performance (ROA) firm age(AGE), auditor type AUDTYP and firm leverage(LEV). The independent and dependent variables and their measurements are summarized as follows;

Table 1: Summary of variables and their measurements

Symbol	Variable	Measurement
Dependent variable		
DAC	Discretionary Accruals	Estimated by the modified Jones cross sectional model
Independent variables		
CEO	CEO duality	Measured by a dummy variable one (1) if the chairman is also CEO, otherwise it is equal to zero.
BRDSIZE	Board size	The total number of directors on the board.
AUDCOM	Audit committee independence	The number of non-executive directors/size of audit committee.
BRDCOM	Board composition	Measured by the percentage of independent directors to total number of directors on the board.
Control variables		
SIZE	Firm size	Natural log of total assets at the year end.
ROA	Firm performance	Measured as net income divided by total assets.
AGE	Firm Age	Measured by the age of the firm from date of incorporation.
AUDTYP	Auditor type	Estimated by classification of audit firms into big 4 audit firms and non-big 4 audit firms. One assigned to big 4 audit firms or otherwise 0.
LEV	Firm leverage	Estimated as total long-term debts divided by total assets.
ε		An error term

Source: Compiled by the Researcher.

The data for this study was extracted from the sampled audited annual reports and accounts of the fifty manufacturing firms listed on the Nigerian Stock Exchange as contained in the Nigeria Stock Exchange fact book 2012/2013 for the period 2009 – 2013. The study also made use of other hard copies of annual reports and accounts of the same companies for the period under study.

The multiple regression analysis OLS framework is used in this work to investigate the relationship between the dependent and independent variables. The preference for this statistical tool is because of its ability to perform both predictive and explanatory functions Odugbemi and Oyesiku, (2003). The study uses one multiple regression model with earnings management proxied by Discretionary Accruals (DAC) as the dependent variable and the corporate governance mechanisms of CEO duality, Board size, Board composition and Audit committee independence as the independent variables. The model also incorporates five control variables that prior studies like Okuogbo (2011) and Field (2000) have found to be associated with earnings management. The five variables are firm size (SIZE), Return on Assets (ROA), Age of the firm (AGE), Audit type (AUDTYP) and Leverage (LEV).

The entire model is given below:

$$DAC = \beta_0 + \beta_1 CEO + \beta_2 BRDSIZE + \beta_3 BRDCOM + \beta_4 AUDCOM + \beta_5 SIZE + \beta_6 ROA + \beta_7 AGE + \beta_8 AUDTYP + \beta_9 LEV + \varepsilon$$

Where;

DAC	= Discretionary accruals
CEO	= CEO duality
BRDSIZE	= Board size
BRDCOM	= Board composition
AUDCOM	= Audit committee independence
SIZE	= Firm size
ROA	= Return on assets
AGE	= Age of the firm
AUDTYP	= Audit type
LEV	= Leverage
β_0	= Constant of the model
$\beta_1, \beta_2, \dots, \beta_9$	= error term coefficients
ε	= error term

Data Presentation, Analysis and Results

This section of the work presents the result of data analysis from the method earlier described in section three. Tests of research hypothesis are performed with the aim of

providing empirical evidence to either accept or reject the hypothesis earlier alluded to in section two of the work. These analyses are carried out with the aid of the statistical package for social sciences (SPSS Version 20) now called PASW. The study has one dependent variable, i.e. Discretionary Accruals (DAC) and four independent variables i.e. Chief Executive Officer (CEO) duality, Board size (BRDSIZE) Board composition (BRDCOM) and Audit Committee (AUDCOM), five control variables found to be associated with earnings management or corporate governance. The five variables are firm size (SIZE), Return on Assets (ROA) Age of the firm (AGE) Audit type (AUDTYP) and leverage (LEV). The data collated for the variables were analyzed using descriptive analysis, correlation matrix and the ordinary least square (OLS) regression framework. The hypothesis were tested using the students "t" test from the OLS regression results at 5% level of significance in a two tail test at a critical value of ± 1.96 . The descriptive statistic of the variables (see table 2 below) show that, the mean value of DAC is -.000036225 and the minimum and maximum values standing at -.0000036314 and .0000050795 with a standard deviation of 0.0000011661992. CEO has an observed value of 0.080000 i.e. 8% with a minimum and maximum, value of 0.0000 and 1.0000 with a standard deviation of .2740475. BRDSIZE has a mean of 8.440000 i.e. 8 members on the board. The minimum and maximum values are 3.0000 and 14.0000 members with a standard deviation of 2.9496456. The AUDCOM is rated .514800 i.e. 51.48% with a minimum and maximum values of .2500 and .7500 and a standard deviation of .0817472. BRDCOM has a mean of 0.684000 i.e. 68.40% and minimum and maximum values of .3300 and .9200 with a standard deviation of .1438253. The firm size has a mean value of 9.241464 (i.e. N380.1 million using the anti-log of 9.24). The minimum and maximum figures stand at 5.6083 and 10.6301 with a standard deviation of 1.0743253. The firm performance provided by Return on Assets (ROA) reflects a mean of 0.083858 i.e. 8% and a minimum and maximum values of -.2670 and 1.0471 with a standard deviation of 15.0574953. The Age of the firms selected for this study have a mean of 47 years. The minimum and maximum years are 15 and 89. The AUDTYP has a mean of 0.680000 i.e. 68%. The minimum and maximum figures

are .0000 and 1.0000 with a standard deviation of .4712121. LEV has a mean of 0.071342 and minimum and maximum value of 0.0000 and 0.6439 with a standard deviation of 0.1314761.

Table 2: Descriptive statistics

Variables	Observations	Minimum	Maximum	Mean	Standard deviation
DAC	50	-3.6314E6	5.0795E6	-3.622516E5	1.1661992E6
CEO	50	.0000	1.0000	0.080000	.2740475
BRDSIZE	50	3.0000	14.0000	8.440000	2.9496454
AUDCOM	50	.2500	.7500	0.514800	0.817472
BRDCOM	50	.3300	.9200	0.684000	0.1438253
SIZE	50	5.6083	10.6301	9.241464	1.0743253
ROA	50	-.2670	1.0471	0.83858	0.1997902
AGE	50	15.0000	89.0000	47.080000	15.0574953
AUDTYP	50	.0000	1.0000	0.6800000	0.4712121
LEV	50	.0000	0.6439	0.71342	0.1314761

Source: SPSS (PASW) output file version 20.0

The results of the correlation analysis between the measures of the dependent and independent variables are presented in a correla

Table 3: Correlation Matrix

	DAC	CEO	BRDSIZ E	AUDCO M	BRDCO M	SIZE	ROA	AGE	AUDTYP	LEV
DAC	1.000									
CEO	-0.145	1.000								
BRDSIZ E	-0.166	-0.070	1.000							
AUDCO M	-0.008	0.174	0.029	1.000						
BRDCO M	-0.147	-0.257	0.140	-0.188	1.000					
SIZE	-0.260	-0.021	0.268	-0.172	-0.346	1.000				
ROA	0.305	-0.071	0.332	-0.049	0.002	0.219	1.000			
AGE	-0.522	-0.066	-0.067	-0.130	-0.143	0.233	-0.081	1.000		
AUDTYP	-0.299	-0.114	0.118	0.163	-0.270	0.311	-0.028	0.199	1.000	
LEV	-0.021	0.075	0.067	-0.079	0.183	-0.255	0.183	0.105	-0.170	1.000

Source: SPSS (PASW) Output file version 20.0

The results of the correlation analysis as in Table 3 above show that CEO duality, BRDSIZE, AUDCOM, BRDCOM, SIZE, AGE, AUDTYP and LEV have a weak negative relationship with the Discretionary accruals. There is also a weak positive relationship between firm performance (ROA) and Discretionary accruals. The results

also show the absence of multi collinearity among the explanatory variables. From the table the highest, correlation is between BRDSIZE and ROA which is 0.332.

Table 4 below shows the test statistics of the model.

Table 4: Model summary

R	R square	Adjusted R ²	F. change	SIS F.change	Durbin Watson
0.802	0.642	0.642	7.984	0.000	1.696

Source: SPSS output file (PASW) version 20.0

- a) Predictors: (constant) CEO, BRDSIZE, AUDCOM, BRDCOM, SIZE, ROA, AGE, AUDTYP, LEV.
- b) Dependent variable: DAC

The table shows R at 0.802 indicating that all the variables in the model have a relationship with the dependent variable. The coefficient of

determination (R^2) stands at 64.2%. This means that, 64.2% of the variations in DAC are explained by the independent and control variables. The remaining 35.8% of the variations in the DAC of the firms are explained by factors not captured in the model. The F-statistics at 7.98 signifies that, the overall equation is significant at 0% (below 5%) level.

Table 5: Regression Coefficient

Variable	Std error	Beta coefficients	t-statistics	Significance
(Constant)	1877176.386		4.526	0.000
CEO	436655.104	-.286	-2.791	0.008
BRDSIZE	42970.314	-.164	-1.506	0.140
AUDCOM	1498211.563	-.101	-.964	0.341
BRDCOM	932111.819	-.442	-3.349	0.0000
SIZE	135354.970	-.303	-2.434	0.020
ROA	619644.154	.365	3.440	0.001
AGE	8028.303	-.479	-4.622	0.000
AUDTYP	265923.991	-.223	-2.072	0.045
LEV	944982.646	-.048	-.0446	0.658

Dependent variable: DAC

Source: SPSS (PASW) Output file version 20.0

The results from Table 5 show that, if any of the independent variables CEO, AUDCOM, BRDSIZE, BRDCOM, SIZE, AGE, AUDTYP and LEV increases by one holding others constant, the dependent variable DAC will reduce by -0.286, -0.101, -0.164, -0.442, -0.303, -0.479, -0.223 and -0.048. An increase in ROA by one unit holding other independent variables constant will result to an increase in DAC by .365. This result explains that, it is only ROA that is proportionally related to DAC while all the other explanatory variables are inversely related to DAC.

Test of Hypothesis

Ho₁: There is no significant relationship between CEO duality and earnings management.

From our results in Table 5 above, the value of "t" is -2.791 which is outside the region of non-rejection of ± 1.96 , we therefore reject the null hypothesis and accept that, there is a significant relationship between CEO duality and earnings management at a significant level of $0.008 < 0.05$.

Ho₂: There is no significant relationship existing between Board size and earnings management.

Here, the calculated value of "t" is -1.506 which falls within the region of non-rejection of ± 1.96 , we therefore accept the null hypothesis that, there is no significant relationship between Audit committee independence and earnings management.

Interpretation of Results

Evidence gathered from our regression results see (Table 5) show that CEO duality affects earnings management significantly suggesting that, the separation of Chairman and CEO plays an important role in constraining management behaviour. This position is supported by SEC (2009). Agency theory also proposes it because it enhances the system of checks and balances. The findings are also consistent with those of Bugshan 2005; Sakar, *et al.*, (2006); Roodposhti and Chashmi, (2010) who find concentrated decision - making power as a result of non-independent chairman may impair the board's oversight and monitoring roles.

The regression results also show that, the board size does not really have a positive effect on earnings management. The descriptive statistics show an average of small board of size of members against maximum of 20 members

permitted by the code of corporate governance (2009). This however did not reflect on earnings management. These findings are supported by resource dependency theory which affirms that, larger boards are likely to make available their wealth of expertise skills and resources to the organization. The findings are also consistent with those of Bughsan (2005) and Roodposhti and Chashmi (2010) who found a negative relationship between the board size and earnings management.

The results also show that, there is a negative significant relationship between the board composition and earnings management i.e. -3.849 and 0.000 or 0%. The descriptive statistics show that, the proportion of independent directors sitting on the board is 68% which makes shareholders to believe that, there is a higher degree of monitoring of management which will reduce earnings management. These findings align with Agency theory which asserts that, outside directors should dominate the board of firms in order to increase the boards' independence from management. The findings also corroborate those of Tsui *et al.*, 2001; Lawler *et al.*, (2002) and Wersabch (1988).

The relationship between Audit Committee Independence and earnings management is shown to be significant and negative i.e. -.964 and .341 or 34%. This means that Audit committee independence has no effect on earnings management. The descriptive statistic mean of about 51% show that most of the sampled firms are complying with the 50% Audit Committee independence requirement of the code of corporate governance 2009. This corroborates with the findings of Roodposhti and Lashmi (2010) who stated that, the board of directors is seen to be ineffective in discharging their duties due to management dominance over board matters.

With control variables, the firm size shows a negative significant relationship with earnings management. ROA show a positive significant relationship with a low mean of only 8% suggesting that, most of the sampled firms for this study report diminutive profits and others make losses while increasing their total assets base. Firm age shows a negative significant relationship with earnings management at an average of 47 years. AUDTYP also has a negative significant relationship with earnings management. The significance of the relationship could be as a result of the high

expectations from the big four audit firms. The big four auditors which are global firms are expected to be more detailed, effective and efficient in their tasks compared to the non-big four. These findings are similar to those of Zhou and Randal (2001).

Leverage shows a negative insignificant relationship with earnings management. It has a very low average of 7% meaning that, most of the firms sampled for this study have used less debt. They are more of equity financing based; they therefore face less financial risk.

Conclusion

The motivation for this study is the contrast between the theory and empirical evidence that earnings management and poor corporate governance mechanisms are positively related. This is done through the use of the statistical tool of multiple regressions using the OLS on 50 manufacturing firms listed on the Nigerian Stock Exchange.

The results of this study are mixed. CEO duality and board composition have a significant relationship with earnings management. We therefore conclude that, CEO duality plays an important role in constraining earnings management and that, the higher proportion of independent directors sitting on the board will also reduce earnings management.

The board size and audit committee have no significant relationship with earnings management. We therefore conclude that smaller boards are not appropriate in reducing earnings management. The advocacy here is for a suitable board size that is bigger than that of size of 8 persons based on the result of descriptive statistics. The code of corporate governance 2009 specifies a maximum of 20 board members. Among the control variables, it is only ROA that is empirically detected to have a positive significant relationship with earnings management. We therefore conclude that ROA is one of the key determinants of earnings management because the more profitability, the greater the earnings management.

This agrees with the results of Hutchinson and Gul (2004) who suggest that not all corporate governance mechanisms are appropriate for all firms. Corporate governance is therefore used selectively as control devices depending on a firm's characteristics.

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APPENDIX I
FIRMS SELECTED FOR THE STUDY

ADSWITCH PLC	LIVESTOCK FEEDS PLC
AFPRINT NIG.PLC	MAY AND BEKER NIG. PLC
ALUMAKO PLC	MOBIL OIL NIG. PLC
ALUMINIUM EXTRUSION IND.PLC	NAMPAK NIG.PLC
ASHAKA CEMENT PLC	NEIMETH INTERNATIONAL
AVON CROWNCAPS AND CONTAINERS NIG PLC	PHARMACEUTICALS PLC
B.O.C.GASES NIG PLC	NESTLE NIG.PLC
BERGER PAINTS PLC	NIGERIAN BAG MANUFACTURING COY PLC
BETA GLASS COMPANY PLC	NIGERIAN ENAMELWARE PLC
CADBURY NIG. PLC	NIGERIA-GERMAN CHEMICALS PLC
CEMENT COMPANY OF NORTHERN NIGERIA PLC	NIGERIAN ROPES PLC
CHELLARMS PLC	NIGERIAN WIRE AND CABLE PLC
CON OIL PLC	NIGERIAN WIRE INDUSTRIES PLC
CUTIX PLC	PHARMADEKO PLC
DN MEYER PLC	POLY PRODUCTS NIG.PLC
ETERNA OIL PLC	PORTLAND PAINTS AND PRODUCTS NIG.PLC
EVANS MEDICAL PLC	PREMIER PAINTS NIG.PLC
FIDSON HEALTHCARE PLC	PZ CUSSONS NIGERIA PLC
FIRST ALUMINIUM PLC	SCOANIG PLC
FLOUR MILLS NIGERIA PLC	TANTALIZERS PLC
GLAXOSMITHLINE CONSUMER PLC	THOMAS WYATT NIGERIA PLC
GRIEF NIG.PLC	UAC PLC
INTERLINKED TECHNOLOGIES	UNILEVER NIGERIA PLC
IPWA NIG. PLC	UNITED NIGERIA TEXTILES
LAFARGE WAPCO PLC	VITAFOAM NIG.PLC

The Challenges of Six Sigma Strategy in Nigerian Companies

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Abstract

The paper examined the challenges of the application of six sigma strategy in Nigerian companies. The survey method was adopted. The instrument for data collection was built on a five point Likert-scale questionnaire. The questionnaire has a reliability coefficient (r) value tested with Cronbach's alpha statistics of above 80%. Data was presented using simple tables and percentages. Based on the analysis, it is discovered that six sigma adds significant value to the organization that adopt the strategy. The infrastructural level of the organization is critical for implementing the six sigma strategy in Nigeria. The study also revealed that Upper management support and fear of cultural change are major challenges facing companies implementing the six sigma strategy. Six sigma strategy could be better implemented and better result achieved when environment is conducive than when it is not. The study recommends that Government should create a conducive business environment for the application of six sigma. Also strong leadership commitment and support cannot be overstated. Leadership needs to empower staff, be actively involved, and continuously drive quality improvement.

Keywords: Six sigma strategy, Cultural change, strong leadership, process improvement:

Introduction

In today's marketplace, continuous quality improvement is one of the key answers to business problems. Organizations need to improve the quality of all product and services, cost reduction, improved resource utilization, and improved process efficiency (Waege 2004). Six sigma is a project-driven method aimed at sustainable business performance improvement. It focuses on better understanding of changing customers requirements, improving processes throughout the organization, and enhancing the organization's performance. It is used to improve the organization's products, services and processes across various disciplines, including innovation, research, new product development, production, marketing, sales, finance, information systems, and administration, (Anbari, 2002)

Continuous process improvement programs such as total quality management and just-in time management is prevalent in organizations (Voss, 2005). The main purpose of such programs is maintaining a sustained effort at improving the efficiency and effectiveness of work-processes (Liker and Choi, 1995). These programs consist of combinations of practices that aim to encourage and enable the participation of frontline personnel in process improvement (MacDuffie, 1995). Different combinations of work practices emerge from time to time as new continuous process improvement programs (Cole, 1999). Six Sigma is one such continuous improvement program that has captured the interest of several organizations (Linderman *et al.*, 2003).

With continuous process improvement goals, similar to TQM and quality circles, two new developments emerged, the theory of constraints and process reengineering. Both focused on process improvement. Six Sigma introduces structures for organizational and operational level implementation of practices and addresses this deficiency in TQM implementations (Antony, 2004). Six Sigma not only fulfills gap of TQM, it also adds incremental features that represent an evolution toward better process improvement. Some of the innovative features of Six Sigma is to add useful elements to the three existing percepts of TQM – customer satisfaction, continuous improvement and system view (Pyzdek, 2003).

In six sigma, customer-focused improvement is targeted without losing sight of

the wellbeing of the investors in the company (Hoerl 2001). The six sigma strategy was thus the result of an internal discovery of a combination of practices for process improvement. For companies to remain competitive and stable new improved business strategy must be adopted (Bharadwaj and Menon, 2000).

Process improvements are actions taken for improving organizational processes, the need for making process improvements continually is imperative for the survival of organizations because of the need to respond rapidly to ever-changing environments in the face of stiff competition (Hayes and Pisano, 1994). Six sigma can be considered both a business strategy and a science that has the aim of reducing manufacturing and service costs, and creating significant improvements in customer satisfaction and bottom-line savings through combining statistical and business process methodologies into an integrated model of process, product and service improvement.

In six sigma, customer focus becomes the top priority and any improvements are defined by their impact on customer satisfaction and value (Pande and Neumann, 2002). From an internal perspective, six sigma provides a way of improving processes so that the company can more efficiently and predictably produce world-class products and services. Conceptually, Six Sigma is focused on variation reduction. If companies can understand and reduce variation in their process, then they can implement improvement initiatives that will stabilize the process and ensure accuracy and reliability according to the expectation (Goeke and Offodile, 2005)

Thomas (2009) opines that Six Sigma program has gained tremendous popularity as a process improvement program in all types of organizations – manufacturing, service and non-profit. Pande *et al.*, 2000) believes that Six Sigma is “A comprehensive and flexible system for achieving, sustaining and maximizing business success . . . uniquely driven by a close understanding of customer needs, disciplined use of facts, data and statistical analysis, and diligent attention to managing, improving and reinventing business processes”.

Organizations are increasingly adopting Six Sigma in a bid to improve the quality of their processes and products, and thus achieve competitive advantage, (Goh *et al.*, 2002). However, despite the apparent popularity of Six

Sigma, very little is known about the extent to which Six Sigma has actually been adopted by business firms in Nigeria, the patterns of adoption across industrial sectors and occupational groups, and the factors that differentiate firms that heavily adopt Six Sigma from those that do not (Ibru 2005).

Many organizations in the Nigeria are operating below three sigma quality levels. That means they could be losing up to 25-40 percent of their total revenue due to processes that deliver too many defects that take up time and effort to repair as well as creating unhappy customer (Ibru, 2005). In many world-class organizations, Six Sigma has overshadowed techniques previously viewed as the continuous improvement tools of choice. This is as a result of the bottom-line effect — Six Sigma directly impacts financial results and customer satisfaction, (Obinna 2005). However, even with the threat of globalization, many Nigerian companies are still not aware of the tremendous power of Six Sigma as a competitive weapon and yet some are complacent and seem to be taking a “wait and see” attitude.” Based on these situations, the study intends to investigate the challenges of the application of six sigma strategy in Nigeria.

Review of related literature

Raisinghani (2005) believe that companies exist to be profitable. Profitable companies provide jobs and pay taxes that benefit the community, state, and country where they make their products or provide their services. Making a profit is based on having customers who want your product or service. Linderman *et al.*, (2003) concede that Six Sigma, is "an organized and systematic method for strategic process improvement and new product and service development that relies on statistical methods and the scientific method to make dramatic reductions in customer defined defect rates", generates intense interest in industry. (Snee and Hoerl, 2003) opined that since its initiation at Motorola in the 1980s, many companies including GE, Honeywell, Sony, Caterpillar, and Johnson Controls have adopted Six Sigma and obtained substantial benefits.

Harry & Schroeder, (2000) are of the opinion that Six Sigma is viewed today as a disciplined, systematic, measurement-based and data-driven approach to reduce process variation. This powerful management strategy combines

improved metrics to reduce defects or mistakes or errors in processes and thereby strengthening a company's market position and enhancing the financial impact to the bottom-line. Smith, (2003) assert that Six Sigma focuses on process improvement through reducing sources and motivation for error discovered through the structured application of statistically-based analytic tools.

Ibru (2005) believe that Six Sigma is a business strategy using quality improvement tool, began in the 1980's. An important problem in business has been how to implement Six Sigma at companies. Nevertheless (Linderman *et al.*, 2003) consider Six Sigma, as "an organized and systematic method for strategic process improvement and new product and service development that relies on statistical methods and the scientific method to make dramatic reductions in customer defined defect rates". Anthony (2002) argues that, Six Sigma is a strategic business improvement approach that seeks to increase both customer satisfaction and a company's financial health.

The American Society for Quality website (ASQ, 2004) provides a large amount of information on Six Sigma and its impact on industry. Their websites states that “the simplest definition for Six Sigma is to eliminate waste and to mistake proof the processes that creates value for customers”. According to Hahn *et al.* (1999) the origin of six sigma comes from statistics and statisticians. This is in consistence with Montgomery (2001) that discusses the six sigma method from a statistical, probabilistic, and quantitative point of view. (Antony and Banuelas, 2002) also sees six sigma from statistical point of view, and defined six sigma as having less than 3.4 defects per million opportunities or a success rate of 99.9997% where sigma is a term used to represent the variation about the process average.

The study by (McClusky, 2000) also found out that if an organization is operating at three sigma levels for quality control, this is interpreted as achieving a success rate of 93% or 66,800 defects per million opportunities. Therefore, the six sigma method is a very rigorous quality control concept where many organizations still performs at three sigma level. An Empirical study by (Hensley, 2005) found that, Six Sigma is a popular management philosophy that is sweeping the globe. Its goal is to make an organization more effective and

efficient. Effectiveness is the degree to which an organization meets and exceeds the needs and requirements of its customers. Efficiency is the resources consumed in achieving effectiveness. Six Sigma is equivalent to no more than 3.4 bad customer experiences for every million customer opportunities. Most organizations operate at between Two to Three Sigma performances, which at best is nearly 70,000 bad customer experiences per million customer opportunities.

Six Sigma Techniques and Methodology

The employees must be capable of choosing the most appropriate tools and techniques for their situations. According to (Henderson Evans, 2000) the major sets of tools/techniques that are required within the Six Sigma problem solving frameworks are outlined below:

1. Six Sigma should begin and end with the customers. Projects should begin with the determination of customer requirements.
2. Poorly selected and defined projects lead to delayed results and also a great deal of frustration.

DMAIC methodology

Six Sigma improvement model typically has five phases: Define, Measure, Analyze, Improve and Control: (Sleeper, 2006)

There are approximately 66 statistical tools used in two methodologies. The methodologies are:

DFSS methodology

Mader, (2002) opine that DFSS is a systematic methodology utilizing tools, training and measurements to enable the organization to design products and processes that meet customer expectations and can be produced at Six Sigma quality levels. The goal of DFSS is to achieve minimum defect rates, six sigma level, and maximize positive impact. As (Treichler *et al.* 2002) noted that, the essence of DFSS is 'predicting design quality up front and driving quality measurement and predictability improvement during the early design phases.' Essentially, the DFSS process is focused on new or innovative designs that yield a higher level of performance. De Feo and Bar-El (2002)

Implementations of Six Sigma Methodology

The implementation of Six Sigma in a large organization requires a significant time and

financial investment. Burton and Sams (2005) First, executive training will take place over four to eight weeks and will be considered the champion level. According to (Anbari, 2005) the governance of six sigma projects is accomplished by using a strong matrix organizational structure. Patel (2004) argue that implementation of Six Sigma may have at least several full time employees working for the initiative within an organization. According to (Gnibus, 2003) the motivation behind Six Sigma is to reduce the cost that arises from poor quality. Quality related costs have been measured to be as much as 40% of sales in some organizations.

Six Sigma Application and Nigerian Business Environment

According to Imaga (2000) the environment of a company in business is the pattern of all the external conditions and influences that affect its life and growth or expansion. The environmental influences, in relation to long range business planning, operate in a company's industry, the total business community, its city, its country, and the real world in which it has found itself. The influences are felt in four directions: Technology, Economic, Social, and Political forces.

This was collaborated by (Beer *et al.*, 2005) that, Organizations that make appropriate and aligned internal and external innovations are successful; they are able to take advantage of environmental opportunities and survive environmental challenges including competition. In a round table discussion on Nigerian business environment Iweala (2004) argues that the business system is diverse, interdependent and dynamic. There is diversity of products or services through millions of firms largely independent of each other. Geographical diversity or dispersion shows rapid growth of both the domestic and international business, thereby enabling more of the nation's ever growing needs to be met. The role of six sigma has evolved in response to new environmental challenges faced by organizations. This is inconsistency with the opinion of (Brown and Blackmon, 2005) and (Cole, 2002) that, a vast increase in the speed and intensity of environmental changes has resulted in expanding the objectives of continuous improvement initiatives. Endorsing this view, (Boer and Gersten, 2003) assert that, continually improving process flexibility and innovation capabilities

now supplement traditional continuous improvement objectives of increasing efficiencies and reducing costs.

Schonberger, (1994) concede that, the search for a new combination of practices is initiated in response to changes in environmental demands such as increasing need for flexibility or to improve internal abilities such as continually reducing defects. Nevertheless, (Konter, 1985) believe that, the task environment, by contrast, is that which has a major and direct impact upon the organization, and its strategic planning process.

The impact of organizational infrastructures on six sigma Application

There is empirical evidence to support the notion that infrastructure is important for the success of continuous process improvement programs (Flynn and Sakakibara, 1995). The selection of right people is crucial for the execution of Six Sigma projects. Once the Six Sigma infrastructure is defined with the help of a Six Sigma consultant with adequate experience, training may begin. Wruck and Jensen, (1998) concede that, such infrastructure is crucial for systematic planning of process improvement programs at the organizational level as it ensures that improvements made through process-focused projects are in line with organizational objectives.

Endorsing this view (Guha *et al.*, 1997) assert that, the infrastructure for six sigma provides the organizational support necessary for the cohesiveness and continuity of such projects. The broad idea of the six sigma infrastructure framework is for organizations to arrange and manage their operations in relation to the environment and gain competitive advantage by using current capabilities and resources, and building new ones. Quinn, (1991) opines that, the infrastructure of six sigma programs provides an atmosphere that encourages experimentation, while ensuring a controlled and structured approach, resulting in a type of “controlled chaos” that is essential for six sigma. This was collaborated by (Gilson *et al.*, 2005) that, by encouraging and facilitating proactive and team-oriented problem solving the six sigma infrastructure facilitates insights for better products and processes enabling organizations to address the multi-functional issues of complex processes in an integrated system wide manner.

Bateman, (2005) assert that, employees and middle management are not only responsible for

making processes improvements; they are also expected to suggest broader changes in the strategies at the next higher level (Bartlett and Ghoshal, 1994). Endorsing this view (Beer *et al.*, 2005) believe that, by providing structures that interlink vertical organizational levels, six sigma infrastructures can help middle and lower level managers take active part in not just implementation but also the formulation of the underlying strategic goals of the six sigma program

Challenges in the implementation of Six Sigma

The study by Pyzdek (2003) also found out that, there are several barriers and challenges lurking below the surface for organization consideration before the implementation and deployment of Six Sigma business strategy. The first and foremost challenge is the initial investment in Six Sigma Belt System training. The absence or difficulty to obtain the baseline data on process performance is another major challenge while applying Six Sigma strategy. Another barrier to Six Sigma deployment in is the psychology of the workforce. Last but not the least, it is important to present recommendations using the business language rather than the statistical language. Furthermore he notes that organizations undertaking a Six Sigma program need to change in three domains:

Issues in organizational culture

Quality concepts need to be embedded into the process of designing rather than just monitoring the quality at the manufacturing level (McClusky, 2000). The more important issue is the change in organizational culture that puts quality into planning. Addressing the problems and issues that are easy to correct and claiming that the six sigma method is a big success is simply deceiving. Organizations without a complete understanding of real obstacles of six sigma projects or a comprehensive change management plan are likely to fail. Senior management's strong commitment, support, and leadership are essential to dealing with any cultural issues or differences related to six sigma implementation. If the commitment and support of utilizing various resources do not exist, organization should probably not consider adopting six sigma.

Issues in training (Belt Program)

Training is a key success factor in implementing six sigma projects successfully and should be part of an integrated approach. The belt program should start from the top and be applied to the entire organization. The curriculum of the belt program should reflect the organization's needs and requirements. It benefits. Training should also cover both qualitative and quantitative measures and metrics, leadership, and project management practices and skills. It is important to note that formal training is part of the development plan of producing different belt level experts. Participants need to be well informed of the latest trends, tools, and techniques of six sigma, and communicate with actual data analysis. The authors found that selection of less-capable employees for Black Belt assignments was associated with challenges to six sigma projects.

Strong leadership and top management commitment

Many previous quality initiatives, such as TQM, have been faced with a major difficulty, which has been a leadership attitude of 'Do as I say..... Not as I do'. Some initiatives also faded out because the company leaders lost focus (Pande *et al.*, 2000).

In order to overcome this problem, company leaders have to ensure that the Six Sigma initiative is a momentum for process improvement and hence it must be sustained over the long term. Good support from top management is imperative in the restructuring of the organization and achieving the cultural change and motivation of employees towards quality and the Six Sigma strategy to the business. The leaders have to be strong advocates of Six Sigma. Eagerness and enthusiasm shown by the leaders can go a long way in getting the rest of the employees on board.

Organizational infrastructure

In addition to top management support, there also needs to be an effective organizational infrastructure to support the Six Sigma undertaking. A great deal of work in Six Sigma is done by teams. The various roles played and positions held by the team members are explained under the belt system. Pande *et al* (2000) suggest that a good number for any project team is between 5 to 8 people. Many of the project teams will require cross-functional

teams in order to successfully tackle the problem and implement process improvements. In many organizations practicing Six Sigma will have project sponsor and process owner in launching and supporting the projects.

Cultural change

According to Patel (2004), one strength of implementing Six Sigma in organization is the open communication between employees and managers. When choosing a person or persons to use as the Six Sigma pioneer within the company, they must already have good communication and rapport with the other employees as well as being a good and patient teacher. This increases the likelihood of other employees identifying with them, understanding the concepts and successfully applying the principles. This also goes along with Patel's suggestion that support from top management is crucial to success. Top management support allows the Six Sigma implementation to change the culture and bring about a new way of thinking to solve problems.

Burton and Sams (2005) outline several key principles of implementing Six Sigma in any organization. One of them is linking the vision to only the most critical issues. The Pareto principle outlines that 80% of the issues can be taken care of with 20% of the fixes. Implementation of Six Sigma should be focused on the issues that will bring about the most solutions.

Benefits of implementing six sigma strategy

Numerous books and articles provide the basic concepts and benefits of the six sigma method (Harry and Schroeder, 2000) (Hoerl, 1998, 2001). The challenges and realities in implementing the six sigma method successfully are immense. However, the benefits of applying the six sigma method to technology-driven, project-driven organizations are equally great.

Common metrics used to assess Six Sigma results:

1. **Cost avoidance** - This benefit is measured as the realistic cost avoided as a result of the Implementation of the new process.
2. **Cost reduction** - Start by including resources or other costs and take them out of the business bottom line. Next provide an overall reduction of the expenses that fall to the bottom line. If resources are eliminated as a result of the project, the project receives a benefit for the cost

reduction. This impacts the organizations bottom line.

3. **Increased capacity** - This benefit is measured by calculating the amount of expense retained in order to prevent future cost increases. This measurement tool is used to improve the productivity of a process.
4. **Retained revenue** - Revenue retained from existing customers at risk. This is measured by calculating the value of existing business over a pre-defined period.
5. **Revenue growth** - This is measured by calculating the value of new business for the increase in revenue over a pre-defined period.
6. **Risk management** - Projects that minimize the organization's risk in projects, products, and services provided. Benefits of these types of projects are measured by improvements in either reduced economic capital or a lower cost of capital.

Unlike other operational strategies, the implementation of Six Sigma on a company structure will produce both tangible and intangible results. Here are a few results that you can expect.

Increase in customer loyalty. Better products result in more satisfied customers, and that means customers who return to your business.

Increased bottom line. Receiving Six Sigma certification will mean a dedication to efficient processes across the board. Fewer resources are allocated to correction and more towards production, meaning more products for sale and fewer defects.

Shareholder value. The increased customer loyalty and increased revenues will result in a rise in company stock prices, therefore an increased

value for your shareholders.

Customer satisfaction. Your customers will get what they paid for every time. In addition, they will receive it at a higher value or a lower cost.

Increased employee satisfaction. Any company has to worry about the costs of employee turnover, and certification through Six Sigma has proven to increase employee satisfaction. Positive returns of quality work prove to be highly motivational, and motivation reduces burnout.

Benefits to the supply chain. Supplier and customers both benefit from the creation of a better product through adherence to the Six Sigma principles, achieved in certification.

Methodology

The research method adopted is survey, by administering questionnaires to the relevant respondents in order to acquire fact and reliable information. Also related literatures to the subject of the research were sourced through internet search and other published materials. The mean statistics was adopted as the statistical tools for analyzing the data. The decision mean is based on a cutoff point 3.0 a mean 3.0 and above are regarded as accepted, while points below a mean average of 3.0 are regarded as rejected or disagreed.

Presentation of summary statistics

The statistics presented below are the frequency distributions of key variables in the questionnaire. First and foremost data were objectively classified and presented in logical categories to reflect the originality of the study. Subsequently, the desired analytical tables were highlighted for the proper data analysis and hypothesis testing. The presentations of the data summaries in form of frequency tables as well as the analytical tables are as follows

Table 1: Companies in Nigeria pursue Six Sigma strategies vigorously.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	9	2.4	2.4
Agree	11	2.9	5.3
Undecided	150	39.5	44.7
Disagree	139	36.6	81.3
Strongly Disagree	71	18.7	100.0
Total	380	100.0	

Source: survey 2015

From Table 1, particularly from the survey data, it can be deduced that only a cumulative of 5.3% of the respondents agreed that companies in Nigeria pursue Six Sigma strategy vigorously.

On the other hand, a cumulative of 55.3% of the respondents disagreed with the same notion while 39.5% of them remained undecided.

Table 2: Six sigma is an effort to continuously improve service standard.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	147	38.7	38.7
Agree	213	56.1	94.7
Undecided	6	1.6	96.3
Disagree	7	1.8	98.2
Strongly Disagree	7	1.8	100.0
Total	380	100.0	

Source: survey 2015

From Table 2, particularly from the survey data, it can be deduced that a cumulative of 94.7% of the respondents agreed that Six sigma is an effort to Continuously improve service

standard. On the other hand, a cumulative of 3.6% of the respondents disagreed with the same notion while 1.6% of them remained undecided.

Table 3: Production process has improved after the company adopts the strategy.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	197	51.8	51.8
Agree	163	42.9	94.7
Undecided	6	1.6	96.3
Disagree	7	1.8	98.2
Strongly Disagree	7	1.8	100.0
Total	380	100.0	

Source: survey 2015

From Table 3, particularly from the survey data, it can be deduced that a cumulative of 94.7% of the respondents agreed that production process has improved after their company adopts

the strategy. On the other hand, a cumulative of 3.6% of the respondents disagreed with the same notion while 1.6% of them remained undecided.

Table 4: The organizational level of infrastructure for the application of Six Sigma strategy is adequate.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	213	56.1	56.1
Agree	141	37.1	93.2
Undecided	12	3.2	96.3
Disagree	7	1.8	98.2
Strongly Disagree	7	1.8	100.0
Total	380	100.0	

Source: survey 2015

From Table 4, particularly from the survey data, it can be deduced that a cumulative of 93.2% of the respondents agreed that their organizational level of infrastructure for the

application of Six Sigma strategy is adequate. On the other hand, a cumulative of 3.6% of the respondents disagreed with the same notion while 3.2% of them remained undecided.

Table 5: Business environment affects the application of Six Sigma strategy in Nigeria.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	40	10.5	10.5
Agree	228	60.0	70.5
Undecided	70	18.4	88.9
Disagree	36	9.5	98.4
Strongly Disagree	6	1.6	100.0
Total	380	100.0	

Source: survey 2015

From Table 5, particularly from the survey data, it can be deduced that a cumulative of 70.5% of the respondents agreed that Technological environment affects the application of Six Sigma

strategy in Nigeria. On the other hand, a cumulative of 11.1% of the respondents disagreed with the same notion while 18.4% of them remained undecided.

Table 6: Six Sigma implementation requires a lot of fund in investment.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	193	50.8	50.8
Agree	142	37.4	88.2
Undecided	10	2.6	90.8
Disagree	31	8.2	98.9
Strongly Disagree	4	1.1	100.0
Total	380	100.0	

Source: survey 2015

From Table 6, particularly from the survey data, it can be deduced that a cumulative of 88.2% of the respondents agreed that Six Sigma implementation requires a lot of fund in

investment. On the other hand, a cumulative of 9.3% of the respondents disagreed with the same notion while 2.6% of them remained undecided.

Table 7: The benefits of Six Sigma strategy outweigh the cost of implementing it.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	223	58.7	58.7
Agree	142	37.4	96.1
Undecided	6	1.6	97.6
Disagree	5	1.3	98.9
Strongly Disagree	4	1.1	100.0
Total	380	100.0	

Source: survey 2015

From Table 7, particularly from the survey data, it can be deduced that a cumulative of 96.1% of the respondents agreed that the benefits of Six Sigma strategy outweigh the cost of

implementing it. On the other hand, a cumulative of 2.4% of the respondents disagreed with the same notion while 1.6% of them remained undecided.

Table 8: Company that adopts Six Sigma strategy cuts cost and reduces operational defects.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	225	59.2	59.2
Agree	140	36.8	96.1
Undecided	5	1.3	97.4
Disagree	5	1.3	98.7
Strongly Disagree	5	1.3	100.0
Total	380	100.0	

Source: survey 2015

From Table 8, particularly from the survey data, it can be deduced that a cumulative of 96.1% of the respondents agreed that the Company that adopts Six Sigma strategy cuts

cost and reduces operational defects. On the other hand, a cumulative of 2.6% of the respondents disagreed with the same notion while 1.3% of them remained undecided.

Table 9: Six Sigma strategy enhances customer satisfaction and increases customer retention.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	211	55.5	55.5
Agree	154	40.5	96.1
Undecided	5	1.3	97.4
Disagree	5	1.3	98.7
Strongly Disagree	5	1.3	100.0
Total	380	100.0	

Source: survey 2015

From Table 9, particularly from the survey data, it can be deduced that a cumulative of 96.1% of the respondents agreed that the Six Sigma strategy enhances customer satisfaction

and increases customer retention. On the other hand, a cumulative of 2.6% of the respondents disagreed with the same notion while 1.3% of them remained undecided.

Table 10: Six Sigma strategy has improved employee job satisfaction in the company.

Responses	Frequency	Percent	Cumulative Percent
Strongly Agree	229	60.3	60.3
Agree	128	33.7	93.9
Undecided	11	2.9	96.8
Disagree	7	1.8	98.7
Strongly Disagree	5	1.3	100.0
Total	380	100.0	

Source: survey 2015

From Table 10, particularly from the survey data, it can be deduced that a cumulative of 93.6% of the respondents agreed that the Six Sigma strategy has improved employee job satisfaction in their company. On the other hand, a cumulative of 4.7% of the respondents disagreed with the same notion while 1.3% of them remained undecided.

variables in the questionnaire using the five Likert-scale criteria. Subsequently, remark for each mean is included in the table for easy interpretation. The presentations of the descriptive tables to assess and evaluate the application of Six Sigma strategy in selected manufacturing and service firms in Nigeria with particular emphasis on the challenges and prospects according to research questions are as follows:

Presentation of Descriptive Statistics

The descriptive statistics presented below were the mean and standard deviation of key

Table 11: The place of Six Sigma Strategy in the Evolution of Effective, Continuous Improvement Programme in Nigerian Companies:

Responses	N	Mean	Std. Dev	Remark
Companies in Nigeria pursue Six Sigma strategy vigorously	380	2.54	0.894	Undecided
Six sigma is an effort to continuously improve service standard	380	4.28	0.752	Agree
Production process has improved after the company adopts the strategy	380	4.55	0.779	Strongly Agree
The staff of the company are fully aware of Six Sigma strategy	380	4.52	0.784	Strongly Agree
The customers of the company are aware of Six Sigma strategy	380	3.51	0.891	Agree
The organizational level of infrastructure for the application of Six Sigma strategy is adequate	380	4.54	0.802	Strongly Agree

Source: survey 2015

From Table 11, since all the standard deviations across the table are relatively very small; the means can adequately be used to represent the data. Hence, we used the mean statistics as the measure of location for the summary of responses. In summary, the respondents were undecided, with a mean value

of 2.54, that the companies in Nigeria pursue Six Sigma strategy vigorously. On the other hand, the respondents agreed, with a mean value of 4.28, that the six sigma is an effort to continuously improve service standard and so forth as shown in table 11.

Table 12: Environmental Factors that Influence the Application of Six Sigma Strategy in Nigeria:

Responses	N	Mean	Std. Dev	Remark
Customers influence the applications of Six Sigma in Nigeria	380	3.87	0.827	Agree
Technological environment affects the application of Six Sigma strategy in Nigeria	380	3.68	0.844	Agree
The application of Six Sigma Strategy is influenced by the economic environment	380	3.75	0.794	Agree
The legal cum political environment in Nigeria influences the application of Six Sigma strategy	380	3.58	0.854	Agree

Source: survey 2015

From Table 12, since all the standard deviations across the table are relatively very small; the means can adequately be used to represent the data. Hence, we used the mean statistics as the measure of location for the summary of responses. In summary, the respondents agreed, with a mean value of 3.87,

that customers influence the applications of Six Sigma in Nigeria. Similarly, the respondents also agreed, with a mean value of 3.68, that technological environment affects the application of Six Sigma strategy in Nigeria and so forth as shown in table 12.

Table 13: Six Sigma Strategy Adds Value to Organizations:

Responses	N	Mean	Std. Dev	Remark
Six Sigma implementation requires a lot of fund in investment	380	4.29	0.936	Agree
The benefits of Six Sigma strategy outweigh the cost of implementing it	380	4.51	0.699	Strongly Agree
Company that adopts Six Sigma strategy cuts cost and reduces operational defects	380	4.57	0.717	Strongly Agree
Six Sigma strategy enhances customer satisfaction and increases customer retention	380	4.52	0.717	Strongly Agree
Six Sigma strategy has improved employee job satisfaction in the company	380	4.50	0.760	Strongly Agree
Six Sigma improve company profitability	380	4.51	0.717	Strongly Agree

Source: survey 2015

From Table 13, since all the standard deviations across the table are relatively very small; the means can adequately be used to represent the data. Hence, we used the mean statistics as the measure of location for the summary of responses. In summary, the respondents agreed, with a mean value of 4.29, that Six Sigma implementation requires a lot of fund in investment. Similarly, the respondents also strongly agreed, with a mean value of 4.51, that the benefits of Six Sigma strategy outweighs the cost of implementing it and so forth as shown in table 13.

Findings

In general, six sigma strategy has some underlying positive relationship with value improvement to organizations that adopt the strategy.

The infrastructural level of the organization is critical for implementing the six sigma strategy in Nigeria. In other words, the implementation of six sigma strategy could be achieved to a great extent depending on the infrastructural level of the organizations.

The environmental factors positively affect the six sigma strategy in Nigeria. In others, the six sigma strategy could be better implemented and better result achieved when environment is conducive than when it is not.

The benefits of six sigma outweigh the cost of implementing it. In other words, the six sigma strategies help organizations to actualize return on investment.

Upper management support and fear of cultural change are major challenges facing

companies implementing the six sigma strategy.

The application of six sigma strategy creates quality improvement initiative in Nigerian companies that adopt the strategy. In other words, the application of six sigma strategy has positive relationship with quality improvement initiative.

Conclusion

The paper investigated the challenges of the application of six sigma strategy in Nigeria. Based on the findings of the study, it is concluded that six sigma adds significant value to the organizations that adopt the strategy. That the successful application of six sigma largely depends on the infrastructural level of the organizations. More so, that the environmental factors have positive impact on six sigma application in Nigeria. Upper management support and fear of cultural change are major challenges facing companies implementing the six sigma strategy. The application of six sigma strategy has tremendous benefit attached to it. The application of six sigma strategy has positive relationship with quality improvement initiative.

Implication of the study

There is strong evidence that the application of six sigma strategy has transcended to high level of process improvement in Nigerian companies. In this vein Harry & Schroeder; (2000) suggest that Six Sigma is an operational process improvement strategy that focuses on improving process design and reducing process error and waste.

The evidence that the application of six sigma strategy adds significant value to organizations that adopt it; this has enabled the companies to increase safety performance and better merchandise. Pyzdek, (2001) agreed that six sigma strategy enable organizations in terms of cost savings, customer retention and capturing new markets.

The evidence that environmental factors influence the application of six sigma strategy in Nigeria was shown by the staff of the companies. Support for this view can be found in Imaga (2000:40-49) that highlighted how the organization should work with the environment for their success..

The evidence that six sigma strategy adds tremendous benefits to companies that adopt it in Nigeria. This was supported by Pande *et al.*,(2000:) that six sigma strategy focused on adding value for customers through better customer service – lower costing, better quality and customized products delivered quickly and on time.

The evidence that six sigma strategy improve process quality to organizations that adopt it. Chen, (2006) agreed that Continuous process improvement is an ongoing activity aimed at improving companywide performance through focused incremental changes in processes.

The evidence that upper management support and fear of cultural change are the major challenges facing companies implementing six sigma strategy. Breyfogle, *et al* (2001) agreed that senior manager's support for six sigma determines the degree to which other quality practices are implemented.

Recommendations

Based on the findings and conclusions, the following recommendations have been made to facilitate the applications of six sigma strategy in Nigeria.

The business community in collaboration with core professionals, in the nation

and all major stake holders should organize a seminar, workshops and conferences on six sigma process and its application. This will help both the owners of the business and their customers to understand and appreciate the process.

Government should create a conducive environment in relations to infrastructure development and guided monetary and fiscal

policy, for the industry in order to have competitive advantage.

Constant review or scanning of the environment should be encouraged to avoid the unforeseeable troubles.

Adopting organization-wide communication standards, methods, and protocols, and

adding communication skills training to the Six Sigma curriculum will help Six Sigma teams communicate and sell their ideas, plans, and solutions internally, will make life easier for overburdened managers, and will substantially increase a project's likelihood of success.

Graphs and charts are often touted as the language of Six Sigma – and they are important, but it is equally important that Six Sigma teams wrap their charts and graphs in clear, effective communications that make sense of the data and their interpretations and solutions.

The importance of having strong leadership commitment and support cannot be overstated. Leadership needs to empower staff, be actively involved, and continuously drive quality improvement. Without the commitment and support of senior-level leadership, even the best intended projects are at great risk of not being successful.

A culture of safety and improvement that rewards improvement and is driven to improve quality is important. The culture is needed to support a quality infrastructure that has the resources and human capital required for successfully improving quality.

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Customer Satisfaction and Internet Banking Service Quality in Nigeria

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Abstract

This study was done to evaluate customer satisfaction and internet banking service quality among commercial banks in Nigeria. The study adopted expectation disconfirmation theory. Data were collected through a survey design of questionnaire. The research used sample size estimation method based on a proportion with an approximate 95% confidence level to determine a sample size of 400 respondents from an unknown number of populations of customers using internet banking services in Nigerian commercial banks, and only 384 questionnaires were retrieved. A data analysis was carried out with the use of descriptive statistics such as frequencies, percentages, means, and standard deviations. The study found that majority of the sampled respondents were satisfied with the easy completion of online transactions, easy logging on banks portal/site, whereas majority of the sampled respondents were not satisfied with the reliability and credibility of transactions on banks portal, and the reasonability of the transaction fee for the internet banking, and majority were satisfied with the accuracy of the online transaction process of the bank among others. The study recommended that continuous efforts should be made on regular basis to improve internet banking service quality.

Keywords: Internet Banking, Service Quality, Customer Satisfaction

Introduction

Information and communications technologies (ICTs) have changed the way of conducting business transactions and meeting the growing demands of customers for most organizations (Hinson and Abor, 2004). One of the significant forces and dynamic change that is occurring in the universal business environment today is technology, and this brings in new products, service market opportunities and developing more information system that is business oriented and supports management processes such as planning, controlling and co-ordination (Liao and Cheung, 2002).

Most banks in the developing world are now offering internet banking services with various levels of sophistication (Bawumia, 2007). For example, while some banks have adopted internet banking for communicating to customer on regarding bank statements, other banks use internet banking services to allow customers to access their bank accounts and perform other banking transactions (Bawumia, 2007). For example, banks like United Bank for Africa, First Bank, Guarantee Trust Bank, Zenith Bank, First City Monument Bank, among others, provide customers with a wide range of electronic products and transactions, some of which allow customers to receive their monthly bank statements via e-mail, online checking of accounts balance, online transfer of funds, the use of electronic cash systems, among others.

Banking is one service that is information intensive and an ideal centre for successful development of e-commerce because it provides the opportunity to use the internet and e-commerce to facilitate quick business transactions that results in customer satisfaction (Kardaras and Papathanassiou, 2001). For the banks, technology has emerged as a strategic resource for attaining efficiency, control operations, productivity and profitability. But on the part of customers, the underlying factors are anytime, anywhere and anyway banking transactions, and these have caused the banks to welcome technology so as to meet the increasing customer expectations (Abdil and Stephen, 2011).

The increasing penetration of personal computers, relatively easier access to the Internet and particularly the wider diffusion of mobile phones has drawn the attention of most banks to

internet banking service. However, the continuing convergence of information, communications and media technologies is also opening up new electronic channels of delivering banking services.

In an era of mature and intense competitive pressures, many firms are focusing their efforts on maintaining a satisfied customer base. It is a common assertion among management and marketing theorists that service quality is essential to business success (Kristensen et al., 1992; McColl-Kennedy and Schneider, 2000; Zeithaml *et al.*, 1996). Firms that provide superior service quality as measured by customer satisfaction also experience higher economic returns than competitors that are not so service-oriented (Aaker and Jacobson, 1994; Bolton, 1998). This is particularly true in the financial services sector where deregulation has created an environment that allows consumers considerable choice in satisfying their financial needs. In response, many financial institutions are directing their strategies towards increasing customer satisfaction and loyalty through improved service quality (Bolton, 1998).

The state of customer satisfaction with internet banking service quality has not received much attention in the literature (Abor, 2004, Gyasi and Azumah, 2009). In recent times many of the studies have looked at customer satisfaction in different industry context in Africa (Abor, 2004, Gyasi and Azumah, 2009). There is the need to examine customer satisfaction in internet banking industry in Nigeria in order to provide feedback to management and have empirical evidence on the phenomenon for better understanding. It is against this background that we seek to evaluate customers' satisfaction on the quality of internet banking service in Nigeria. Specifically, the objectives for this study include:

- i. To evaluate customer satisfaction /dissatisfaction on the quality of internet banking service in Nigeria.
- ii. To identify and prioritize the dimensions of the service quality with internet service quality among commercial banks in Nigeria.

Conceptual Clarifications

Internet Banking: Internet banking is one of the technologies which are fastest growing banking practice nowadays. It is defined as the provision

of information or service by a bank to its customers over the internet. It is viewed as a supplemental channel used in conjunction with other channels to provide the convenience of banking anytime from one's home or work, without having to incur some of the costs associated with a branch visit like going to the branch or waiting on lines. Online banking eliminates physical and geographic boundaries and time limitations of banking services (Yang et al., 2007).

Also as compared with traditional banking labour is replaced by machine very significantly (computer networks) which is low in cost and is available easily 24/7 (Wu et al., 2006). E-banking services first emerged in the early 1990's, when credit card, ATM, and telephone banking services were three major applications. During the last decade, database, information system and other technologies were applied into banking services at different levels. After the availability of internet facility, e-banking services are now conducted through a secure website operated by local banks and include online enquiry, e-payments, e-transfer etc.

Service Quality: Service is an act or performance that one party offers to another which is essentially intangible and does not result in the ownership of anything. Because of the service feature of intangibility, consumers are often faced with the problem of not knowing what to expect of a service until they consume it and hence perceive service as risky (Coulter and Coulter, 2002).

Thus, service quality is one of the main factors that determines the success or failure of electronic commerce (Santos, 2003). It is very important component in any banking business. Service quality is the difference between customer expectations for the service encounter and the perceptions of the services received (Oliver, 1980). Service quality can also be defined as consumer's overall impression of the relative inferiority/superiority of the organisation and its services (Bitner et al., 1990). Accordingly service quality is defined as how well a delivered service level matches customer expectations. Customers perceive the quality of services of online banking based on the performance of online delivery systems and not on the processes in which the delivered service is

developed and produced.

Customer Satisfaction: The concept of customer satisfaction is equally important for service organisations, such as banks, as many of them subscribe to the fact that higher customer satisfaction will lead to greater customer loyalty (Boulding et al., 1993) which in turn leads to future revenue. Customer satisfaction not only means a happy customer but rather more than that. The concept of customer satisfaction is a synthesis of two distinct words referred as customer and his/her satisfaction. In common language, the word customer means a buyer who purchases a product or avails a service from another. Satisfaction occurs when one gets what one need, desires, expects, deserves or deems to be one's entitlement. Oliver (1980) defines customer satisfaction as product performance equivalent to customer expectation. Oliver (1981) expressed satisfaction as a psychological state resulting from a process of emotional and cognitive evaluation.

According to Hansemark and Albinsson (2004), satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfilment of some need, goal or desire. Kotler (1997) defined satisfaction as a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations. Further customer satisfaction is a collective outcome of perception, evaluation and psychological reaction to the consumption experience with a product or service. Haoyer and Mach Innis (2001) expressed that satisfaction can be associated with the feelings of acceptance, happiness, relief, excitement and delight. In a competitive marketplace, where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy.

Relevant Literature Review and Theoretical Framework

Tulani et al., (2009) examined the extent of adoption and usage of internet banking by commercial banks in Zimbabwe and found people using internet banking for checking account balances, payment of bills and fund

transfer. They also found perceived benefits of using internet banking as cost reduction, increased loyalty and attracting new customers. Singhal and Padhmanabhan (2008) determine utility request, security, utility transaction, ticket booking and fund transfer as the factors influencing users to adopt e-banking channel. Quereshi *et al.*, (2008) evaluate factors that manipulate the nature of customer's towards online banking and found almost 50% of the clients shifted from traditional banking to online banking system because of perceived usefulness, security and privacy provided by online banks. Likewise, Azouzi (2009) also examined the adoption of electronic banking in Tunisia and found majority of respondents (95%) having an access to internet, but only few of them using it as a primary banking channel. Auta (2007) empirically examines the impact of e-banking in Nigeria's economy and found customers are satisfied with e-banking system which provides convenience and flexible advantages such as easy transfer, speedy transfer, less cost and time saving benefits. Lichenstein and Williamson (2006) also provide an understanding of how and why specific factors affect the consumer decision about internet banking in an Australian context and found convenience as the main motivator for consumers to bank online. Flavian *et al.*, (2006) analysed how perceptions of consumers about traditional bank influence their decision to adopt the services offered by the same bank on the internet and found consumer trust in a traditional bank as well as income, age and sex of the respondents as the major factors that influence consumer decision to work with the same bank via the internet. Thus, online banking service has recently become very effective offering sophisticated tools, including account aggregation, stock quotes, rate alerts and portfolio managing programmes to help their customers manage all their assets more effectively and on time (Tan and Teo, 2000).

The researchers have also focussed on various factors affecting adoption of internet banking (Ashtiani and Iranmanesh, 2012; Eze *et al.*, 2011; Yaghoubi and Bahmani, 2010; Oii *et al.*, 2010; Kashier *et al.*, 2009). Tat *et al.*, (2008) revealed trust as the most important factor influencing intention to continue using the internet banking services followed by compatibility and ease of use. Bander and

Charter (2006) also measure impact of trust on acceptance of online banking and found trust playing an important role in increasing the usability of online banking. Wang *et al.*, (2009) investigated whether consumer perception of risk (perceived risk) in transacting on the internet would have an influence on e-banking website (specific trust) and customer's willingness to use e-banking and found perceived risk having a direct influence on consumer willingness to use e-banking and specific trust having a positive moderating influence on the relationship between perceived risk and willingness to use e-banking.

In addition to this, there are numerous studies conducted by Hassan *et al.*, 2012 Ravichandran *et al.*, 2010; Dixit and Datta, 2010; Baskar and Ramesh, 2010; Ganguli and Roy, 2010; Khurana, 2009; Haque *et al.*, 2009, Yang and Peterson, 2004 indicating that service quality of banks also affects intention to use internet banking as well as their satisfaction. Also, Lee and Lin, 2005; Siu and Mou, 2005, You and Donthu, 2001, Wong *et al.*, 2008, Parasuraman *et al.*, 1985, Parasuraman *et al.*, 1988 develop various dimensions of online service quality.

Moreover, Muhammad and Rana (2012) found perceived ease of use, perceived usefulness, compatibility, innovativeness and perceived credibility influencing customer's intention to adopt internet banking. Similarly Wu, Chang and Lin (2012) found trust, perceived usefulness and perceived ease of use and relative advantage having a significant effect on customer's behavioural intention to adopt internet banking. Chang and Hamid (2010) also explored two factors viz. perceived ease of use and perceived usefulness influencing behavioural intention of customer's to adopt internet banking in Taiwan. In the same manner, Yiu *et al.*, (2007) also make an attempt to know the adoption of internet banking by retail customers in Hong Kong and found constructs such as perceived usefulness, perceived ease of use, perceived risk and personal innovativeness on information technology having a positive relationship with internet banking adoption.

Expectation Disconfirmation Theory (EDT)

EDT is a prominent theory from marketing that can predict and explain consumers' satisfaction with products or services (Spreng

and Page 2003; Patterson et al. 1997; Oliver 1980). Recently, EDT has been used to explain users' information technology satisfaction (Bhattacharjee and Premkumar 2004; Hsu et al. 2004; Susarla *et al.* 2003; Khalifa and Liu 2003, 2002; Bhattacharjee 2001a, 2001b). The theory proposes that users first form expectations or belief probabilities of attribute occurrence. They then form post-usage perceptions about performance and a comparison between initial expectations and performance known as disconfirmation of expectations (Bhattacharjee and Premkumar 2004; Spreng and Page 2003; Oliver 1980). A positive disconfirmation means performance was better than expected, and a negative disconfirmation means performance was worse than expected. According to EDT, the better performance is, or the more positive the disconfirmation, the greater the satisfaction (Yi, 1990).

In line with the explanations of the theory, this study seeks to use the above theoretical underpinning to evaluate customer satisfaction on the quality of internet banking services to exploit whether there is a positive disconfirmation, implying performance was better than expected or there is negative disconfirmation implying performance was worse than expected, and subsequently draw recommendations.

Materials and Methods

The research strategy adopted in this study is the survey design. The population of banks customers using internet banking services seems to be infinite or difficult to be established, hence the sample size estimation is based on a proportion with an approximate 95% confidence

level using the formula $n_r = 4pq/d^2$ Where n_r = required sample size, p = proportion of the population having the characteristic, $q = 1-p$ and d = the degree of precision. Since the proportion of the population (p) is unknown, then $p = 0.5$ which assumes maximum heterogeneity (i.e. a 50/50 split). The degree of precision (d) is the margin of error that is acceptable. Setting $d = 0.05$, this would give a margin error of plus or minus 5%. Thus, substituting the values in the formula, we have $n_r = (4 \times 0.5 \times 0.5)/0.05^2 = 1/0.0025 = 400$. Therefore, the sample size for this study is taken as 400 customers using internet banking services.

Data collection is done by means of administration of questionnaire to the respondents. The questionnaire also has one item that measures the overall satisfaction with the internet banking service quality by asking respondents to rate their satisfaction with internet banking service quality using a satisfied/dissatisfied scale: Satisfied (3), not satisfied (2), indifferent (1). In the data analysis, data resulting from the administered questionnaires is analysed using descriptive statistics such as the frequencies, mean, standard deviation, range, standard error of the mean, and sum. These are presented in tables.

Presentation of Results

This section of the paper consists of empirical data presentation and discussion, the results of the study and the discussions pertaining to them and the findings from the results.

Data on the distribution and retrieval of questionnaires from the commercial banks' customers using internet banking services is presented in Table 1.

Table 1: Distribution and Retrieval of Questionnaires from Customers of Internet Banking among Commercial Banks

Questionnaires administered	Questionnaires retrieved	Questionnaires not retrieved	% Retrieved	%Not Retrieved
400	384	16	96	4

Source: Field Survey, 2016.

Table 4.1 showed that 400 questionnaires were distributed to customers with commercial banks using internet banking services in Nigeria. Table 4.1 showed that 384 questionnaires representing 96% of the sampled respondents

were retrieved; only 16 questionnaires representing 4% of the sampled respondents were not retrieved due to circumstances that the researchers could not subdue.

Demographic Information of the Sampled Respondents

This research made efforts to obtain data on demographic characteristics of the customers using internet banking services in commercial

banks in Nigeria. This includes gender, age, education level, income in terms of naira, and marital status. Data covering all these aspects of the sampled respondents were collected and presented in Table 2

Table 2: Distribution of Sampled Respondents by Demographic Information

Variable	Frequency	Percentage (%)
<u>Age (Years)</u>		
Below 25	21	5.5
25-35	145	37.8
36-45	149	38.8
46-55	42	10.9
56 and above	27	7.0
Total	384	100
<u>Gender</u>		
Male	203	52.9
Female	181	47.1
Total	384	100
<u>Income (₦)</u>		
Below 1,000,000	90	23.4
1,000,000-2,000,000	207	53.9
2,000,001-3,000,000	48	12.5
Above 3,000,000	39	10.2
Total	384	100
<u>Marital Status</u>		
Married	208	54.2
Single	138	35.9
Others	38	9.9
Total	384	100
<u>Education Level</u>		
Primary	19	4.9
Secondary	89	23.2
Tertiary	276	71.9
Total	384	100

Source: Field Survey, 2016.

Age Distribution of the Respondent

Age is an important variable that determines the level of one's experience to assess objectively. Table 2 presents the distribution of sampled respondents by demographic information. Table 2 showed that 5.5% were

below 25 years, 37.8% were 25-35 years, 38.8% were 36-45 years, 10.9% were 46-55 years, and 7% were 56 years and above. This implies that majority of the respondents were in the economically active population (25-45 years) representing 76.6% (i.e 37.8%+38.8%) of the

sampled respondents.

Gender Distribution of the Respondents

Table 2 reveals that 52.9% of sampled respondents were males, while 47.1% were females. This suggests that majority of the respondents among customers were males, and it also implied that most of the people who used internet banking services are males. This may be due to the reason of males dominating the business environment more than the female folks.

Income Distribution of the Respondents

In terms of income per annum as presented in Table 2, 23.4% of sampled respondents earned below ₦1,000,000, while 53.9% earned ₦1,000,000-₦2,000,000, whereas 12.5% earned ₦2,000,001-₦3,000,000, and 10.2% earned above ₦3,000,000. This implied that majority (53.9%) of the sampled respondents were earning between ₦1,000,000-₦2,000,000 per annum which is reasonable for financial transactions in the commercial banks using internet services for various transactions.

Marital Status of the Respondents

Table 2 presents the distribution of the respondents by marital status. It showed that majority (54.2%) of the sampled respondents were married while 35.9% were single, and others were 9.9% of the sampled respondents. The greater percentage of sampled respondents who were married showed that most of them

were responsible and busy people thus needs internet banking services for their transactions.

Education Level of the Respondents

Education is an important variable that tends to influence a good judgement of an activity. Table 2 presents the distribution of the sampled respondents by educational level. It revealed that 4.9% of the sampled respondents had attend up to primary level, 23.2% up to secondary level, and 71.9% of the sampled respondents had attend up to tertiary level. The high percentage (71.9%) of the sampled respondents who attended up to tertiary education level is an indication that the sampled respondents among the customers were well advanced academically and could have an objective and fair assessment of the internet banking service quality of the commercial banks in Nigeria.

Customer Satisfaction/Dissatisfaction with Internet Banking Service Quality (IBSQ)

Understanding customer satisfaction (CS) provides useful feedback and implications for management strategy (Kotler and Keller, 2006). To describe CS, customers were asked to rate their satisfaction with the internet banking service quality ranging from much worse than expected to much better than expected on a numerical scale of 1 to 5 respectively. The results of the respondents rating are presented in Table 3 to evaluate the quality of internet banking services by the commercial banks in Nigeria.

Table 3: Distribution of Sampled Respondents by Evaluation of Internet Banking Service Quality among Commercial Banks in Nigeria

Dimension Items	Satisfied	Not Satisfied	Indifferent
Easy completion of online transactions	218(57%)	86 (22%)	80 (21%)
Easy logging on banks portal	254 (66%)	72 (19%)	58 (15%)
Reliability and credibility of transactions on bank portal	136 (36%)	185 (48%)	63 (16%)
Reasonability of the transaction fee for internet banking	139 (36%)	162 (42%)	83 (22%)
Accuracy of the online transaction process of the bank	177 (46%)	126 (33%)	81 (21%)
Total	384 (100%)	384 (100%)	384 (100%)

Source: Field Survey, 2016.

Table 3 presented data from the sampled respondents on the evaluation of internet banking service quality among the commercial banks in Nigeria. Table 3 showed that 57% of the sampled respondents were satisfied with the ease of

completion of online transactions in commercial internet banking service while 22% of the sampled respondents were not satisfied, and 21% of the sampled respondents were indifferent in reporting. This result implied that there is easy

completion of online transactions using internet service, which also agreed with the quality of the internet banking service among the commercial banks in Nigeria. The result is in line with the findings of Mohammad and Rana (2012) who found ease of usefulness compatibility innovativeness and perceived credibility influencing customers' intention to adopt internet banking.

Similarly, Table 3 showed that 66% of the sampled respondents were satisfied with the easy logging on banks portal, 19% of the sampled respondents were not satisfied, and 15% of the sampled respondents were indifferent on whether it is easy or not. This implied that, it is not difficult to logging to the banks portal for various transactions. The result is in line with the findings of Yiu *et. al.*, (2007) in Hong Kong that found ease of use of internet banking that equally present easy logging to banks portal site.

Table 3 further presented data on the reliability and credibility of transactions on the banking portal site. The result indicated that 36% of the sampled respondents were satisfied with the reliability and credibility of transactions on the banking portal site while 48% of the sampled respondents were not satisfied with the service quality, and 16% of the sampled respondents were indifferent. This result implied that the quality characteristic of reliability and credibility of transactions on the banking portal site does not satisfy the customers using internet banking services among the commercial banks in Nigeria. This result is in line to Wang *et al.*, (2009) who found perceived risk having a direct influence on consumer willingness to use e-banking and specific trust having a positive moderating influence on the relationship between perceived

risk and willingness to use e-banking, which means the customer have doubt or not satisfied with the reliability and the credibility of transactions on the banking portal site hence faces the risk.

Also, Table 3 showed that 36% of the sampled respondents were satisfied with the reasonability of the transaction fee for internet banking service, 42% were not satisfied, and 22% were indifferent on the item. This implied that the fee charged for transactions on internet banking services are not customer friendly and need to be reduced to a reasonable level that can become customer friendly. In addition, Table 3 showed that 46% of the sampled respondents were satisfied with the accuracy of the online transaction process of the banks while 33% of the sampled respondents were not satisfied, and 21% were indifferent. This revealed that the online transaction process of commercial banks in Nigeria is accurate since majority of the customers are satisfied. This finding is in line with Auta (2007) who found that customers are satisfied with e-banking system which provides convenience and flexible advantages such as easy transfer, speedy transfer, and time saving.

Prioritizing Customer Satisfaction /Dissatisfaction of Internet Banking Service Quality of Commercial Banks in Nigeria

In order to be able to identify the relative importance of the rating of customer satisfaction/dissatisfaction with the internet banking service quality (IBSQ) of commercial banks in Nigeria, the means and standard deviations of the satisfaction ratings are analysed and presented in Table 4.

Table 4: Distribution of Sampled Respondents by Prioritizing Internet Banking Service Quality among Commercial Banks in Nigeria

Dimension Items	Rank	Mean	S.D
Easy completion of online transactions	2	2.36	78.4
Easy logging on banks portal	1	2.51	82.6
Reliability and credibility of transactions on bank portal	4	2.19	65.1
Reasonability of the transaction fee for internet banking	5	2.15	61.7
Accuracy of the online transaction process of the bank	3	2.25	73.9

Source: Field Survey, 2016.

Table 4 presented the ratings of the internet banking service quality of the commercial banks in Nigeria by the sampled customers who are users of the services. The highest rated dimension of internet banking service quality in terms of mean customer satisfaction is easy logging on banks portal, easy completion of online transactions, accuracy of the online transaction process of the bank, reliability and credibility of transactions on bank portal, while the least rated item for this study is reasonability of the transaction fee for internet banking.

Summary of Findings

The study found that majority of the sampled respondents fall within the age bracket of 25-46, majority were male, and majority of the respondents earned between ₦1,000,000-2,000,000 per annum, majority were married, and majority of the respondents were schooled up to tertiary education level. In evaluating internet banking service quality among commercial banks in Nigeria, majority of the sampled respondents were satisfied with the easy completion of online transactions. Also, majority of the sampled respondents were satisfied with easy logging on banks portal site, whereas majority of the sampled respondents were not satisfied with the reliability and credibility of transactions on banks portal, in the same manner, majority of the sampled respondents were not satisfied with the reasonability of the transaction fee for the internet banking, and majority were satisfied with the accuracy of the online transaction process of the bank.

It was also found in terms of priority of internet banking service quality among the commercial banks in Nigeria using rated mean of the sampled respondents that, easy logging on banks portal was rated high, followed by easy completion of online transactions, accuracy of the online transaction process of the bank, reliability and credibility of transactions on bank portal, and reasonability of the transaction fee for internet banking rated least.

Conclusion and Recommendations

Based on the findings of this research which sought to evaluate and describe customer satisfaction with internet banking service quality in Commercial Banks in Nigeria, it can be concluded that more customers are satisfied with most dimensions of internet banking service

quality in commercial banks in Nigeria, though others need adjustment for improved quality. Typically, internet banking service quality in terms of easy completion of online transactions, easy logging on banks portal, and accuracy of the online transaction process of the bank satisfied customers, on the contrary, reliability and credibility of transactions on bank portal as well as reasonability of the transaction fee for internet banking do not satisfied customers. Hence in order to satisfy the customers, the recommendations raised from this paper are advised to be applied to improve the internet banking service quality.

Recommendations

This paper drew policy recommendations based on the findings. In order to overcome the perceived challenges presented by the sampled respondents who are users of the internet banking services of Nigerian commercial banks, the following recommendations are made:

- i. Management of Nigeria's commercial banks should lower online banking rates/fees and charges to attract more online customers. The managements can achieve this by involving customers in pricing decisions as this may help reveal many reasonable considerations that customers may expect from the bank regarding online transaction fees.
- ii. In order to solve the issue of reliability and credibility of transactions on banks portal, management should develop secured web that can reduce unnecessary obscurities that may confused or misled customers in carrying out their online transactions.
- iii. Commercial banks in Nigeria should work more on the strong and effective availability of their networks to ease e-banking among users of internet banking services both within and outside the territories of Nigeria.

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