Effect of Cloud Computing Corporate Social Responsibility
Capital Budget Implementation Accounting Information System

Discovering Thoughts, Inventing Future
GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: D ACCOUNTING AND AUDITING

Volume 17 Issue 3 (Ver. 1.0)

Open Association of Research Society
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**Global Journal of Management and Business Research**

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The Effect of Cloud Computing on Elements of Accounting Information System

By Dr. Abdullah Mohammad Al-zoubi

Al-Albayt University


Methodology: The descriptive approach was adopted in this study through the collection of previous literature on cloud computing and information technology and their impact on accounting information systems.

Results: The Cloud Computing lead to Reducing the size of the enterprise in terms of the building and the offices because they allow property anywhere without management commitment to a specific location, Improving operational performance in terms of facilitating the completion of operations and accurate accounting operations, The cloud has become a place for the completion of operations and dialogue between employees or customers with enterprise system, Dispensing the documents to ensure they are self-service to customers, reduce the number of salespeople because it enables customers to check out the established products and offer sales orders electronically from a variety of geographical locations without the need to delegate sales to travel between clients and Finally It allows individuals and firms to use software and physical equipment without the need to buy the software and install it on their computers.

Keywords: cloud computing, accounting information system, elements of the accounting information system.

GJMBR-D Classification: JEL Code: M41

Strictly as per the compliance and regulations of:
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Originality/value: The current research produced its main contribution to keep abreast of technological changes and to identify what this technology reflects on the elements of the systems, especially accounting information systems.

Keywords: cloud computing, accounting information system, elements of the accounting information system.

I. Introduction

The world is rapidly heading at the moment to evolution, technology and an excessive use of modern techniques as a result of imposed requirements of this era upon us. We were obliged to obey them due to what this technology poses as a source of power and authority. In addition, the world is completely dependent on these technologies in the field of education, such as computerized lessons; in the field of communications such as the development of cellular devices and communication networks; in the area of weapons technology to identify its goals and remote-control them, and in the field of business such as the development of information systems that it governs.

When applied in the field of business, precisely, these technologies will impose some changes in the methods used in the functions of information systems such as methods of data collection, processing and report. It may also affect the elements of these systems by addition, dispensing or modification, especially accounting information systems.

As a result of the technological changes witnessed by the world in recent times, a new notion was introduced in the field of computing known as Cloud Computing, which provided data special for companies on demand anytime and anywhere via the Internet in accordance with the software and security and confidentiality standards of the data. This change did not stop at computer science and its regulations only, but to exceed to the accounting science and its information system by making some changes and adding other elements to its system such as software and hardware. This is especially after the introduction of the computer and its development from a manual to an electronic system.

Now and after the emergence of cloud computing that is ruling the accounting information system due to the nature of the close relationship between that system and the technological changes or information technology (Bagranoff et. al., 2010, P 36), it leads us to question the impact that cloud computing might have on the accounting information system. The researcher will address specifically the elements of the accounting information system so that the purpose of the study will be: The impact of cloud computing on the elements of the accounting information system.

This study is an attempt to answer an important research question, which is:- What is the nature of the impact of cloud computing on the elements of accounting information system? represented by:

1. Establishment "Accounting Entity."
3. Documents.
6. Users
7. Procedures.
8. Software.

Given that cloud computing fall under the information technology, the significance of this study...
comes from the importance of information technology to the accounting information system presented as follows:

1. Compatible Information Technology with and support the other component of an accounting Information System.

2. Information Technology profoundly affects the way they now work and how they will work in the future. (Bagranoff et. al., 2010, P 37).

II. Methodology

The descriptive approach was adopted in this study through the collection of previous literature on cloud computing and information technology and their impact on accounting information systems. Information Technologies were addressed because cloud computing is part of them. It was also referred to some books that talked about accounting information systems and their elements.

III. Accounting Information System

Accounting Information systems "is a collection of data and processing procedures that creates needs information for its users" (Bagranoff et. al., 2010, P 5).

Another definition is "a unified structure within an entity, that employs physical resources and other components to transform economic data into accounting information, with the objective of satisfying the information needs of variety of users." (Wilkinson and Cerullo, 1997, P7-8)

Furthermore, AI is "the whole of the related components that are put together to collect information, raw data or ordinary data and transform them into financial data for the purpose of reporting them to decision makers" (Saleh et. al, 2010, 187)

Previous definitions indicate that the Components or Elements of the Accounting Information System play the role of the collection and processing of data to eventually take it out in the form of information and deliver it to users. That is why the components will be introduced, namely:

a) Accounting Entity

It is considered as an established accounting unit which has an independent legal personality of the owners of any entity that the financial activities of the business must be separated from the financial activities of the owner of the facility (Godwin, 2011, 11-12).

To set these activities, there should be system to govern them, and this system is the information system of accounting. This means there is no facility without system and vice versa.

b) Financial Transactions

The processes are known as: ‘All the activities of internal and external events of the facility, and that they must control it and channel it in order to achieve the objectives which it was created (Kassem, 2012.38).

The events of a financial nature are called financial transactions, which result from the data documented to complete the accounting system work processes.

c) Financial Documents

They are documents that contain a set of basic and important statements of the registration process of financial accounting (Kassem, 2012.215) which is obtained from the operations system (revenue system, expenses, production, finance), and divided into: internal documents, source-tion within the enterprise, such as: and selling bonds, bills receivable, external documents outside the facility, such as purchasing and billing of telephone bills, bank statement. These documents are considered more authoritative and stronger than internal documents.

d) Accounting Books

After the provision of the documentary cycle in the operating system, the documents must be addressed so that all the financial statements are adjusted for the facility. The use of accounting books aims at this treatment in terms of registration and classification, summarization and analysis.

It has committed Jordanian Trade Act No. (12) year (1966) in the article (16) maintenance of general journal as an e mandatory accounting: a book registers its day to day operations of the facility (Jordanian Trade Act, 1966, article (16).

The nature of the financial statements in the accounting system of treatment requires maintenance of other books to complete the process and delivery of financial information to its users, namely: customary books such as General Ledger (General where this book contains all the accounts established that each account has its own page, and combines the effects of financial operations in the Journal in total at the end of each month (rain, 2007.68-69)

And the Subsidiary Ledger (Debtor & Creditors): This book contains all accounts receivable which are: people who have property amounts to them, and creditors are: people who have their payments on the facility.

e) Financial Reporting

Is the final product of the accounting system information where:

Preparation of financial reports on the enterprise for use by both internal and external parties.

Internal Reports: Preparation Managerial accounting to communication financial information needed by management to plan, control, and evaluate company. (Delawi and Adnani, 2011, 11)

External Reports: Preparation Financial accounting (Qubaisi , 2010 481) to communication financial information needed by Investors, Creditors and Unions (Delawi and Adnani, 2011, 11), and this Reports as to get to International accounting standards: Statement of

(f) Procedures
All the steps related to the method of conducting transactions and processing of financial operations and reporting, and the date that must be implemented by (Abdullah et al., 1990.68)

(g) User
The ones who are dialoguing with the system through terminals by Application Software. (Kassem, 2012.293)

(h) Application Software
The application software is “all of the programs that enable you to use the computer to perform tasks and accomplish work”. (laberta, 2011, 157) which is used by users to accomplish specific tasks. (www.openprojects.org/software-definition.htm) such as: Calculation process, recording financial transaction and classification, after that can preparing financial report and communication to users. This software use alternative to manual processes.

(i) Hardware
The hardware includes all the physical components of the computer and its related devices, such as: Devices, Servers, CD, DVD, USB, Cable or DSL modem. (laberta, 2011, 6-7).

IV. Cloud Computing
Cloud computing definition “a pay-per-use model for enabling available, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, services) that can be rapidly provisioned and released with minimal management effort or service provider interaction” (Wang, 2011).

It is “a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction”. (Mell and Grance, 2011, 2-3)

Cloud computing is also “a computing resource deployment and procurement model that enables an organization to obtain its computing resources and applications from any location via an Internet connection” (Chan et. al, 2012, 2)

Cloud computing is a colloquial term used to describe a way of using computer technology via the internet:

The architecting of cloud computing consists of three cloud services models: Software as a services (SaaS), Platform as a services (PaaS), and Infrastructure as a service (IaaS) as in figure bellow No.(1), Each model provides a level of abstraction that reduces the efforts required by the service consumer to build and deploy systems.(Kavis, 2014, 13-14)

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Figure 1: Architecting Cloud Computing

Infrastructure as a Service (IaaS) is the capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer is able to deploy and run arbitrary software, which can include operating systems and applications. (Mell and Grance, 2011, 2-3),
and (IaaS) is Cloud service provider provides an entire virtual data center of resources (e.g., network, computing resources, and storage resources) (Chan et. al, 2012, 2)

**Platform as a Service (PaaS)** is the capability provided to the consumer is to deploy on to the cloud infrastructure consumer-created or acquired applications created using programming languages, libraries, services, and tools supported by the provider. (Mell and Grance, 2011, 2-3), and definition is Development environments for building and deploying applications (Chan et. al, 2012, 2).

**Software as a Service (SaaS)** is the capability provided to the consumer is to use the provider’s applications running on a cloud infrastructure. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based email), or a program interface. (Mell and Grance, 2011, 2-3), and definition is Applications organizations use to perform specific functions or processes (Chan et. al, 2012, 2).

### V. Literature Review

Previous studies have been divided into two sections:

**Section I:** Talks about accounting or accounting information systems and cloud computing.

**Section II:** Talks about accounting or accounting information and information technology systems, and the reason for the review of information technology is that the essence of cloud computing is that some Information Technology processes move from the user's personal computer or the in-house file server, to an external supplier (Page, 2010, 5).

**Section I: Literature review Accounting or AIS and cloud computing**

Sekar and Maniatis (2011) show that Cloud computing provides users the ability to reduce operating costs and capital expenditures because of the infrastructure provided to them.

Also, Ebenezer et. al. (2014) shows that 'cloud computing can still be applied successfully for accounting purposes. Though cloud accounting may seem not too different from a desktop accounting in nature, in practice, cloud computing has a lot of ways by which it can enhance accounting. The goal of every Accounting Information System is to collect and store data about activities and transactions; process data into information that is useful for making decisions; and provide adequate controls to safeguard the organization’s assets. With the benefit of cloud computing giving every user the opportunity to be mobile with everything he or she does, financial information can no more be delayed. Accountants on the cloud can do mobile accounting by approving transactions; authorizing payments; entering financial data; preparing financial statement; and what have anywhere without necessarily being in an office where the accounting software package may have been installed on the desktop. This mobility opportunity would afford accountants the benefit of sharing timely information which would enhance the speed of decision making. Moreover, financial data can be stored at a relatively cheaper cost with no need for investment in infrastructure and its maintenance cost”.

When financial information is provided with all timeliness and speed through sharing and receiving information on the cloud, decision making is enhanced in the whole organization. All information is stored and all transactions are done in the cloud, in a real-time situation, just a laptop with a modem or a smart phone can still keep business going.

Zhygalova (2013) shows that in "companies that perform selective outsourcing cloud users indicated higher improvement levels in their accounting processes than non-cloud users. This leads to the conclusion that outsourcing service providers may improve perceived value of their services by adopting cloud systems”.

The study of Christauskas and Misevičiene (2012) shows "Characteristics of the cloud computing advantages is:

1. Reduces expenses on hardware and software, networking management and overall IT.
2. Adding new software is very simple.
3. Web browser is all needed to access accounting, all users will have the same version of software, offer real-time backup which results in less data loss.
4. Global access: employees, partners and clients can access, and update information wherever they are, rather than having to run back the office”

**Section II: Literature review Accounting or AIS and Information Technology**

Qatawneh (2012) showed that "e-commerce had a positive impact on the AIS and that e-commerce has a significantly statistical relationship with AIS itself, AIS development, cost reduction aspect in the AIS of the bank, the aspect of improving the operational performance of the bank’s AIS and finally with the customer service”.

Moorthy et. al (2012) talked about "Application of Information Technology in Management Accounting Decision Making. The study indicate that IT has major impact on the costs, and shows that IT can improve accounting department efficiency and produce result effortlessly, timely and accurately”.

Moghaddam et. al. (2012) show that "information technology increase accuracy in accounting process, decrease cost of gathering information, and has affected on accountants they need to acquire new skills like as applied software’s of accounting, excel and access. Also as decreasing book keeping and saving time of accountants, it will be provided the better
background for improving accounting profession and role-creating more suitable accountants in organizations”.

Sacer and oluic (2013) show that “IT influence the way how accounting Information System operates, contributes a preparing, Processing, Presenting, and delivering accounting information. It significantly contributes the accuracy and timeliness of accounting information and the quality of accounting information systems”.

Dandago and Rufai (2014) argued that “accounting information technology can improve performance by reducing operational cost, facilitating transactions, relevant in simplifying issues and in the provision of quality information, and recommends to should continue to utilize and upgrade their information technology for efficient service delivery and profitability”.

VI. DISCUSSION

When we applied cloud computing recommended reviews of infrastructure, software, personnel, procedures and data (Kinkela, 2013, 4). After reviewing the theoretical literature that talked about cloud computing, information technology and accounting information systems, it has been confirmed that cloud computing and information technology have multiple effects which are presented as follows:

a) Accounting Entity

The meaning of accounting unit is that the entity has its own personality dependent from its owners. Cloud accounting means they are dealing with an entity with its own rules and not with individuals. The cloud system helps accomplishing a variety of jobs including accounting, management, and helps employees and stakeholders access to applications through computers and cellular devices (Lobana, 2013).

On the other hand, it is a physical entity of the facility (facility or building site). Upon application of cloud computing, they allow employees, partners and customers access to the system and update data from anywhere without returning to the office (Christauskas and Miseviciene, 2012). This will lead to reduce the size of the business in terms of building and offices because it will make the facility management possible from anywhere without the obligation of a specific place, a so-called virtual facility.

b) Financial Transactions

These operations are reflected for all activities of internal and external events of the entity of a financial nature. As shown in Lobana (2013), cloud computing will enable the organization to provide service in a timely manner. In addition, all the studies have shown that cloud computing and information technology improve the performance of operations as follows:

6. Zhygalova (2013): indicated higher improvement levels in their accounting process.

c) Financial Documents

By definition of (Kassem, 2012), the financial documents are documents that contain a set of basic and important financial data of the registration process of accounting. The overall objective of the document is to contain important data which can be dispensed in cloud computing because it ensures self-service to the customer. This means that the customer can ask for what they want as products through resources provided by cloud computing over the internet by using the established system applications. These applications are stored within the cloud (Office of the Privacy Commissioner of Canada, 2010, p1-2) on any established system available on the cloud. It was confirmed by Christauskas and Miseviciene (2012) that the cloud based accounting system is basically a way to run business accounts entirely online.

Thus, all the business accounting process may be carried out on the cloud and the data stored on are available to the customer and the company. Thus, there is no need for documents to provide data for the accounting register.

d) Accounting Books

They are used regularly as e-accounting books, for example, to record all daily operations of the facility (Jordanian Trade Act, 1966, Article 16).

This means that the financial statements of these transactions in the form of accounting entries associated with the accounts are affected by the financial process recording. The use of cloud computing is similar to an electronic system that dispenses accounting books because cloud computing applications provided by Software as a Services (SAAS) (Mell and Grance, 2011, 2 3) that allows the registration of all financial data entry bonds and bills of exchange and capture other applications that allow perform specific functions or processes (Chan et. al, 2012, 2).
e) Financial Reporting

The final product is the financial reporting system of accounting information and these reports are the means by which information is communicated to users. It has been shown by Ebenezer et. al. (2014) that cloud computing can still be applied successfully for accounting purposes.

Financial reporting and accounting is one of the three mentioned by Kieso et. al. They defined, recording and communication (Kieso et. Al., 2011, P4).

As the cloud computing allows access to the information that is available on the facility provided Internet accessibility, computing services allow individuals and organizations using the software and hardware (Office of the Privacy Commissioner of Canada, 2010, P1).

Therefore, the users of financial statements have access to all the financial reports provided by the established system at any time according to the powers granted by the company to its users.

f) Procedures

The actions of all the steps involved in the conduct of the transactions and processing of financial operations and reporting of the data (Abdullah et al., 1990.68). The impact of cloud computing on these measures includes the following:

1. Internal processes and procedures: the effect is the transition from the traditional manual system to the electronic system within the enterprise. It gets thus established on the advantages of electronic transactions of speed and accuracy in the completion of operations, processing and issuing reports and tighten oversight (Zubi 2011.60).

2. Foreign Operations procedures: the effect will be to facilitate the display products and provide sales orders by customers self-service procedures (Office of the Privacy Commissioner of Canada, 2010, p2). Thus, the customer can see the products offered through the provision of special applications from which to choose the products they want and submit sales orders. This procedure is reflected on the internal processes that can follow accountant sales request and issue sales invoice which is then recorded and its value rationalized in the customer's account. The client can also follow the movement of his account through the applications provided by the facility available on the cloud within the powers granted by the facility for customers.

g) Users

Kassem (2012.293) explains that they are the ones who are dialoguing with the system through terminals by Application Software. According to Lobana (2013) cloud computing allows employees such as accountants Connects to the central information-sharing resources throughout the facility. It also allows customers to communicate remote access to the information and resources of the computer from any place where there is available Internet (Office of the Privacy Commissioner of Canada, 2010, p6), as well as to access to all of their accounting data (Christauskas & Miseviciene, 2012, 16). The impact that cloud computing might have is to make it easier for all users access the data they want.

On the other hand, the cloud computing has the same impact of electronic systems that may occur when using only a small number of individuals to complete the accounting operations (Zoubi, 2011.60). The number of salespeople is reduced because, as previously stated, foreign operations procedures are presented products and provide sales orders electronically by clients from a variety of geographical locations without the need to delegate sales to travel between clients.

h) Software and hardware or physical components

It was stated formerly that the software are all the programs that enable an individual to use the computer to perform multiple tasks and accomplish a given work. (Labera, 2011, 157). And that physical devices or hardware are all the physical components of the computer and its related devices. (Labera, 2011, 6-7).

Here we will review the impact of cloud computing on these two key components (software and physical equipment) in relation to the similarity of the nature of the impact on them in terms of the fact that:

1. Cloud computing allows individuals and firms use software and physical equipments (Office of the Privacy Commissioner of Canada, 2010, P1) without the need to buy the software and install it on their computers. (Christauskas and Miseviciene, 2012, 16) Also, there is no need to buy some equipment, such as physical Server, because cloud computing provides Server for corporate data stored on them which is presented by the Infrastructure as a Service (IaaS).

2. There is no need to spend money on infrastructure, technology or software to buy material and equipment as stated by Sekar and Maniatis (2011), (Office of the Privacy Commissioner of Canada, 2010, p6), which provides the facility of capital expenses.

3. Cloud service provider is responsible for the maintenance and management of hardware and software. (Lobana, 2013).

4. As shown by Dandago & Rufai (2014) and Christauskas & Miseviciene (2012) concerning the software that it adds only new computing software which is simple and easy to use.
VII. Results

The nature of the impact of cloud computing on the accounting information system when applied is as follows:

a) Reducing the size of the enterprise in terms of the building and the offices because they allow property anywhere without management commitment to a specific location. This is the reason why they allow employees and stakeholders access to applications through computers and cellular devices from anywhere, provided the Internet access.

b) Improving operational performance in terms of:
   1. Facilitating the completion of operations in terms of processing and reporting.
   2. Timeliness and accurate accounting operations accuracy in accounting process.
   3. The cloud has become a place for the completion of operations and dialogue between employees or customers with enterprise system. This includes all business accounting process carried out on the cloud.
   4. Dispensing the documents to ensure they are self-service to customers, which is also reflected by allowing them to submit sales orders, and enable staff to issue sell orders and make available processors on the established system of cloud-like system.
   5. It is similar to the electronic systems to dispense accounting books and the reason is the availability of applications on the cloud by Software as Services (SAAS).
   6. The cloud computing users can get all the financial reports provided by the established system at any time according to the powers granted by the company to its users.
   7. Making it easier for all users to access the data they want.
   8. Having the same impact as the electronic systems in using only a small number of individuals to complete the accounting operations. It also helps reduce the number of salespeople because it enables customers to check out the established products and offer sales orders electronically from a variety of geographical locations without the need to delegate sales to travel between clients.
   9. It allows individuals and firms to use software and physical equipment without the need to buy the software and install it on their computers.
   10. It adds new software that is simple and easy to use.

VIII. Recommendations

Through the presentation of the results, many effects of cloud computing on the accounting information system are reflected. Furthermore, it has many advantages from being used. In the light of these conclusions, the researcher recommends that:

1. When applying cloud computing, the infrastructure for information technology must be revised such as software and procedures for operations and other elements of the accounting information system.
2. The cloud computing should be applied by companies since it has many advantages, such as providing expenses of buying hardware and software, reducing the size of the enterprise, reducing the number of staff, speed and accuracy in the completion of the operations and facilitating the procedures.
3. A study should be conducted on the possibility of industrial or commercial companies to apply cloud computing.

References Références Referencias

5. Chan W., Leung E. and Pili H., (2012), Enterprise risk Management for cloud computing, Committee of Sponsoring Organizations of the Treadway Commission (COSO), Crowe Horwath LLP.


Impact of Capital Budget Implementation on Economic Growth in Nigeria

By OL AOYE Clement Olatunji, OL AOYE Festus Oladipupo & AFOLABI Ademola Joshua
Ekiti State University

Abstract - The study examined the impact of capital budget expenditure implementation on economic growth in Nigeria. Specifically, the study assessed the impact of implementation of capital expenditure on administration, economic services, socio-community services on the growth of Nigerian economy. Secondary data used in the study were collated from Central Bank of Nigeria (CBN) statistical bulletins, and analyzed with the use of Augmented Dickey-Fuller unit root test, co-integration test, and error correction model (ECM) analysis. The long run normalized estimation reported coefficient values of -387, 2292, 69.05, 184.17 for capital expenditure on administration, economic services and socio-community services respectively, while the short run parsimonious ECM estimation reported coefficient estimates and probability value of 27.20 (p=0.11), -27.82 (p=0.001), -17.23 (p=0.49) respectively. Thus, it was concluded that capital expenditure implementation is germane in maintaining and sustaining economic growth in Nigeria. Hence, it was recommended that government should ensure adequate implementation of capital expenditure in the country especially in areas of economic and socio-community services and also overhaul ministries, government agencies and parastatals to curb and curtail loopholes impeding effective and efficient implementation of capital budget in the country.

Keywords: capital budget, budget implementation, economic growth, capital expenditure, socio-community services, augmented dickey-fuller unit root test.

GJMBR-D Classification: JEL Code: F43

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Impact of Capital Budget Implementation on Economic Growth in Nigeria

OLAJOYE Clement Olutunji, OLAJOYE Festus Olatunji & AFOLABI Ademola Joshua

Abstract: The study examined the impact of capital budget expenditure implementation on economic growth in Nigeria. Specifically, the study assessed the impact of implementation of capital expenditure on administration, economic services, socio-community services on the growth of Nigerian economy. Secondary data used in the study were collated from Central Bank of Nigeria (CBN) statistical bulletins, and analyzed with the use of Augmented Dickey-Fuller unit root test, co-integration test and error correction model (ECM) analysis. The long run normalized estimation reported coefficient values of -387, 2292, 69.05, 184.17 for capital expenditure on administration, economic services and socio-community services respectively, while the short run parsimonious ECM estimation reported coefficient estimates and probability value of 27.20 (p = 0.11), -27.82 (p = 0.001), -17.23 (p = 0.49) respectively. Thus, it was concluded that capital expenditure implementation is germane in maintaining and sustaining economic growth in Nigeria. Hence, it was recommended that government should ensure adequate implementation of capital expenditure in the country especially in areas of economic and socio-community services and also overhaul ministries, government agencies and parastatals to curb and curtaililopholes impeding effective and efficient implementation of capital budget in the country.

Keywords: capital budget, budget implementation, economic growth, capital expenditure, socio-community services, augmented dickey-fuller unit root test.

I. Introduction

Budget is an important instrument of governance in any modern state. It exercises control over size and relationship of government receipts (revenue) and expenditures (payment) (Edame, 2010). These expenditures comprises of recurrent expenditures, capital expenditures, subsidies, debt servicing and so on. These expenditures often have significant impact on the economy. Ohanele (2010) further stressed that a well-functioning budget system is vital for the formulation of sustainable fiscal policy and the facilitation of economic growth. In a bid to achieve the macroeconomic goals and objectives of stable and full employment, infrastructural development among others, the national government initiates several types of budget such as surplus, balanced, deficit, supplementary, development budget; and also include the line item or traditional budgeting system, performance budgeting system, planning budgeting system, programming budgeting system and the zero-based budgeting system.

Ogujiuba and Ehigiamusoe (2013) posited that the national budget is the most important economic policy instrument for a government and it reflects the government’s priorities regarding social and economic policy more than any other document. In addition, the instrument translates policies, campaign promises, political commitments, and goals into decisions regarding where funds should be spent and how funds should be collected. The focus on the budget has assumed greater prominence in recent years with increasing democratization, civil society participation and the desire to respond to development challenge of poverty. The national budget is basically divided into recurrent and capital budget.

The capital budget is a fragment of the national budget which shows the proportion of the national revenue allocated for the purpose of carrying out project with useful life of more than a year. The crux of this study being ‘capital budget’ unlike the recurrent budget is initiated to provide funds to finance capital projects or assets. Ogujiuba and Ehigiamusoe (2013) stated that capital project includes the likes of construction of roads, bridges, hospitals, schools, prisons, public administrative buildings, highways, dams, and irrigation systems; the purchase of machinery and equipment; and the supply of water, electricity, and transport, health, and educational facilities. Either a recurrent or capital budget, a budget must fulfill the obligation for which it was initiated.

Generally, for a budget (capital or recurrent) to perform its obligations effectively and efficiently, it must however possess some important qualities. Faleti and Myrick (2012) in their study opined that for a public budget to effectively perform its obligations, it should be well designed, effectively and efficiently implemented, adequately monitored, and ultimately, its performance should be evaluated. However, it must be stated herein that the beauty of a budget lies not in its formulation or initiation but in its implementation. The performance of a country’s budget heavily depends on whether it is effectively and efficiently implemented to meet the needs and aspirations of the people of the country. A well-implemented budget helps to translate government policies and programs into outcomes that have a direct, positive impact on people, such as the development of critical infrastructure (electricity, roads, water, hospitals,
schools and so on), the provision of employment opportunities, the reduction of poverty, and the supply of transport, health, and educational facilities. Hence this study analyzed impact of capital budget implementation on economic growth in Nigeria.

The size and structure of public expenditure (both recurrent and capital expenditure) is expected to boost the growth in output of the economy. This statement is believed to be true even without conducting any research whatsoever. A recent study conducted by Ogujiuba and Ehigiamusoe (2013) indicated that the level of capital budget implementation in Nigeria since the advent of democracy in 1999 has been low and that there have been wide disparity between budgeted capital expenditures and actual capital expenditures. The researcher would resolve to the fact that this above assertion is true but the fact is that the problem with capital budget is traceable to as far back as 1986 (SAP period), this has been a recurring problem.

Contrary to Ogujiuba and Ehigiamusoe (2013) that the level of capital budget implementation in Nigeria since the advent of democracy in 1999 has been low, Maku (2009) reported that the rate of government expenditures have been increasing since the Structural Adjustment Programme (SAP) despite having no significant contribution to economic growth in Nigeria. What Maku (2009) has been able to establish is that from the SAP period till this time, the major challenge among others challenges confronting capital budget implementation in Nigeria is that in as much as the capital budget is implemented, it is not having any significant positive effect on the nation’s Gross Domestic Product (GDP).

Tracing history revealed that the implementation of the 2012 capital budget did not match expectations, as controversy concerning the implementation level of the 2012 Appropriation Act continued between the executive and legislative arms of the government. While the executive claimed that 56% of the budget had been released and implemented by July 20, 2012, the National Assembly submitted that less than 30% of the budget was implemented by September 30, 2012. The Central Bank of Nigeria (CBN) in their various bulletin issues has made it clear that administration, economic services, social community services and transfer are the major components of capital expenditure. The aforementioned will be used as proxy for capital expenditure in Nigeria. It becomes imperative to use this variables as they serve a good indicators to reveal the actual component of capital expenditure that contribute negatively to economic growth or otherwise. Unfortunately, studies by Olurakinse (2012), Ogujiuba and Ehigiamusoe (2013) among others previously conducted have not addressed the subject matter from this perspective.

The broad objective of this study is to evaluate the impact of capital budget implementation on the economic growth in Nigeria, while the specific objectives are to assess the impact of the capital implementation of expenditure on administration on the growth of the Nigerian economy, also to evaluate the impact of the capital implementation of economic services on administration on the growth of the Nigerian economy and to examine the impact of the capital implementation of expenditure on social community services on the growth of the Nigerian economy.

II. LITERATURE REVIEW

a) Capital Budget Implementation in Nigeria

Emphasizing the importance of capital budget implementation in the process and promotion of democracy within the territory of a nation state, Makstutis (2007) analyzed the global economic factors that drive the development of a nation state and examined the place of a nation state in the development of progress, the promotion of democracy in the territory of the state, and activation of public activity in light of globalization Boyo (2012) asserted that Nigerians may be misguided, however, for expecting substantial improvements in social welfare resulting for the appropriate and full disbursement of the capital budget. Indeed, the seemingly traditional pattern of less than 30% allocation for capital projects cannot truly support rapid infrastructural improvement for a country of over 160 million people. Furthermore, tangible progress is further precluded by the prevalent culture of impunity and corruption, which inevitably substantially diminishes the already meager capital budget.

i. Capital Budget Expenditure and Economic Growth

Different forms of government expenditures and economic growth have been examined in the literature. Rizvi, Qamar and Shamim (2010) investigated the relationship between government expenditures and Gross Domestic Product (GDP) based on modern time series econometric techniques. The paper used thirty years of data for the period from 1979 to 2008 and found a long-run relationship between government development expenditures and economic growth. A Granger causality test indicated that government expenditures are caused by economic growth, while an error correction model showed that there is a short-run relationship between government development expenditures and economic growth. Wagner’s law proposed by the German economist Adolph Wagner (1835-1917) predicts that the development of an industrial economy will be accompanied by an increased share of public expenditures in Gross National Product. During the last three decades, Wagner’s law has been tested very intensively, particularly for the developed countries and more recently for developing countries (Rizvi et al., 2010). Henrekson (2003) claimed that there are three main reasons for an increase in the role of government. First,
industrialization and modernization would lead to a substitution of public for private activities. Second, an increase in real income leads to an expansion of income-elastic “cultural and welfare” expenditures. Third, natural monopolies, such as railroads, have to be taken over by government because private companies would otherwise be unable to run these undertakings efficiently because it would be impossible to raise the huge financing needed to develop them.

b) Theoretical Review

i. The Keynesian Theory

Keynes theory on public expenditure and economic growth was among the most noted with his apparently contrasting viewpoint on this relation. Keynes regards public expenditures as an exogenous factor which can be utilized as a policy instruments promote economic growth. From the Keynesian’s point of view, public expenditure can contribute positively to economic growth. Hence, an increase in the government consumption is likely to lead to an increase in employment, profitability and investment through multiplier effects on aggregate demand. As a result, government expenditure augments the aggregate demand, which provokes an increased output depending on expenditure multipliers.

c) Empirical Review

Loizides and Vamvouks (2005) employed the causality test to examine the relationship between public expenditure and economic growth, using data set on Greece, United Kingdom, and Ireland. The authors found that government size Granger causes economic growth in all the countries they studied. The results also indicated that economic growth Granger causes public expenditure for Greece and United Kingdom.

Zheng, Li, Wong and Li (2010) studied the empirical analysis on the relationship between the sizes of Chinese government, as measured by its annual spending, and the growth rate of the economy. More specifically, it designed to examine the applicability of Wagner’s law to the Chinese economy. The statistics used in this research is annual time series data on total government spending and gross domestic product covering the period from 1952 to 2007. Empirical results showed no strong evidence in support of the validity of Wagner’s law for Chinese economy.

Bingxin, Fan and Saurkar, (2009) assessed the impact of the composition of public expenditure on economic growth in developing countries. They used a dynamic generalized method of moment (GMM) model and a panel data set for 44 developing countries between 1980 and 2004. The results indicated that the various types of government spending had different impact on economic growth. In Africa, human capital expenditure contributes to economic growth whereas, in Asia, capital formation, agriculture, and education expenditure had strong growth promoting effect.

Asghar, Hussain and Rehman (2012) examined the impact of government spending on poverty reduction in various sectors of the economy in Pakistan. Time series annual data for the period from 1972 to 2008 were used to analyze the long-run impact of government spending on education, health, and economic and community services. The results showed that government spending on education and law and order significantly contribute to poverty reduction, while government spending on budget deficit and economic and community services appeared to be responsible for increased poverty in Pakistan. The study recommended that the Government of Pakistan allocate more resources to the education and health sectors to foster the development of human capital. Health and education are very important determinants of poverty. Educated and healthy individuals may have more opportunities to obtain better employment, which increases their earnings and helps raise their standard of living. Education is considered to be the most important way to build human capital and eradicate poverty by enhancing productivity. Health is another major form of human capital. The results of various studies have shown that there is a positive relationship between government expenditures on health and poverty reduction, as spending on health increases individuals’ capabilities and thereby reduces poverty. Improvements in health lead to increased life expectancy, which provides more opportunities for people to work and earn more income and eventually leads to poverty reduction. Government spending on both education and health are accordingly expected to have a negative impact on poverty (Asghar, et al 2012).

Maku (2009) examined the connection between total government spending and economic growth in Nigeria over 30 years (1977-2006). The author regressed real GDP on private investment, human capital investment, government investment, and consumption spending. The result showed that human capital investment as a share of real output has a positive but statistically non-significant effect on the growth rate of real GDP. Maku concluded that government expenditures have had no significant influence on economic growth in Nigeria based on his analysis, which reveals that the variables have not maintained a uniform pattern over the period of study because of a persistent random shock effect on the time series. He reported that the rate of government expenditures to real GDP has been increasing since the Structural Adjustment Programme (SAP) despite having no significant contribution to economic growth in Nigeria. Maku attributed this increase to the lack of government monitoring of the contract awarding process of capital projects, the ineffective deployment of government funds to productive activities, and the lack of transparency and accountability by the government.
regarding government spending (Oluwatobi & Ogunrinola, 2011).

Ogujiuba and Ehigiamusoe (2013) examined the capital budget implementation in Nigeria: evidence from the 2012 capital budget. Using descriptive analysis, this paper examines the capital budget implementation in Nigeria by focusing on the 2012 Federal Government Budget. The findings indicate that only 51% of the total appropriated funds for capital expenditures were utilized as of December 31st, 2012. The observed level of performance is insufficient to foster rapid economic development and reduce poverty. Some of the challenges that are responsible for the low performance include poor conceptualization of the budget, the inadequacy of implementation plans, the non-release or late release of budgeted funds, the lack of budget performance monitoring, the lack of technical capacity among MDAs, and delays in budget passage and enactment. The paper recommends that Nigerian government formulate a realistic and credible budget, release appropriated funds early to Ministries, Departments, and Agencies (MDAs), and strengthen MDAs’ technical capacity to utilize capital expenditures in order to improve the index of capture in public expenditures.

III. Method

a) Model Specification

The study adopts an econometric model in determining the effect of capital budget implementation on economic growth in Nigeria. The study adopts a similar model used by Oke (2013) which is specified below as:

\[ GDP = f(P_{EX}, P_{RE}, P_{CE}, P_{DS}) \] \hspace{1cm} Eqn 3.1

In specifying the model for this study, the above model will be modified substituting all the explanatory variables of the study for CAD, CES, CSCS and CT. As a result, the new model adopted to underpin the research is specified below as:

\[ GDP = f(C_{AD}, C_{ES}, C_{SCS}, C_{T}, U) \] \hspace{1cm} Eqn 3.2

GDP= Gross Domestic Product, CAD= Capital Expenditure on Administration, CES= Capital Expenditure on Economic Services, CSCS= Capital Expenditure on Social Community Services, CT= Capital Expenditure on Transfer

b) Sources of Data and Methods of Estimation

The model is estimated using time series annual data for the period 1981 – 2014. The data needed for the study are secondary in nature; implying data will be obtained from published sources. The main source of these data is the Central Bank of Nigeria (CBN) Statistical Bulletin, various issues. The study employed techniques of co-integration and error correction model (ECM) after carried out correlation and stationary test on the data collated to ascertain the direction of relationship between the series, and the order of integration. The intention behind the use of co-integration and error correction model is to tackle both long run and short run nexus between interest rate and portfolio management.

IV. Data Presentation and Analysis of Result

a) Results

Table 4.1: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>CAD</th>
<th>CES</th>
<th>CSCS</th>
<th>CT</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1</td>
<td>0.8007</td>
<td>0.6568</td>
<td>0.7756</td>
<td>0.7534</td>
</tr>
<tr>
<td>CAD</td>
<td>0.8007</td>
<td>1</td>
<td>0.5027</td>
<td>0.4580</td>
<td>0.8942</td>
</tr>
<tr>
<td>CES</td>
<td>0.6568</td>
<td>0.5027</td>
<td>1</td>
<td>0.3055</td>
<td>0.8978</td>
</tr>
<tr>
<td>CSCS</td>
<td>0.7756</td>
<td>0.4580</td>
<td>0.3055</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CT</td>
<td>0.7534</td>
<td>0.8942</td>
<td>0.8978</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors Computation, (2017)

The correlation coefficients between pairs of variables included in the model are presented in Table 4.1 above. Table 4.1 reveals that there is positive correlation between all pairs of variables used in the study. Specifically tables 4.1 reported correlation coefficient of 0.8007, 0.6568, 0.7756, 0.7534, 0.5027, 0.4580, 0.3055, 0.8942, 0.8978 for GDP and CAD, GDP and CES, GDP and CSCS, GDP and CT, CAD and CES, CAD and CSCS, CAD and CT, CES and CSCS, CES and CT, CSCS and CT. This implies that the above pairs of variables moves in the same direction, meaning as one variable increases the other also increases with the strength of their relationships reflected in the magnitude of the correlation coefficient.
### b) Unit Root Test Analysis

**Table 4.2a:** Augmented Dickey Fuller Unit Root Test at Level (1981-2014)

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF stat</th>
<th>1% critical value</th>
<th>5% critical value</th>
<th>Order of integration</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>-0.197626</td>
<td>-3.646342</td>
<td>-2.954021</td>
<td>---</td>
<td>Non-Stationary</td>
</tr>
<tr>
<td>CAD</td>
<td>-0.344171</td>
<td>-3.646342</td>
<td>-2.954021</td>
<td>---</td>
<td>Non-Stationary</td>
</tr>
<tr>
<td>CES</td>
<td>-0.952327</td>
<td>-3.646342</td>
<td>-2.954021</td>
<td>---</td>
<td>Non-Stationary</td>
</tr>
<tr>
<td>CSCS</td>
<td>-0.108036</td>
<td>-3.646342</td>
<td>-2.954021</td>
<td>---</td>
<td>Non-Stationary</td>
</tr>
<tr>
<td>CT</td>
<td>-2.601504</td>
<td>-3.646342</td>
<td>-2.954021</td>
<td>---</td>
<td>Non-Stationary</td>
</tr>
</tbody>
</table>

Source: Authors Computation, (2017)

**Table 4.2b:** Augmented Dickey Fuller Unit Root Test at First Difference (1981-2014)

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF stat</th>
<th>1% critical value</th>
<th>5% critical value</th>
<th>Order of integration</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>-5.378235</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>CAD</td>
<td>-9.047395</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>CES</td>
<td>-5.901772</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>CSCS</td>
<td>-8.301753</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
<tr>
<td>CT</td>
<td>-7.146513</td>
<td>-3.653730</td>
<td>-2.957110</td>
<td>I(1)</td>
<td>Stationary</td>
</tr>
</tbody>
</table>

Note: * (***) denotes significance at 1%(5%) significant levels respectively

Source: Authors Computation, (2017)

Tables 4.2a&b presents the unit root test result of variables used in the study. Table 4.2a reports the unit root test result of the series at level while table 4.2b reports the unit root test at first difference. From table 4.2a&b it can be observed that all the series used in the study are not stationary at level, but they became stationary only after first differencing, which connotes that all the variables are integrated of order one (I(1)). This implies that all the variables used in the study retain innovative shock passed on them only for short period of time after which they let go. Hence confirmation of the presence of non-stationary variables in the series, which brings to book the possibility of spurious relationship in the short run due to the presence of random walk, suggest that long run association test should be carried out to test for the presence of co-integrating equation amidst the multivariate series in the long run. The co-integration test was done using Johansen maximum likelihood ratio approach.

### c) Co-integration result

**Table 4.3:** Johansen Co-integration Test Result

<table>
<thead>
<tr>
<th>Hypothesized No of CE(s)</th>
<th>Eigen Value</th>
<th>Trace Statistics</th>
<th>5 Percent Critical Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.894658</td>
<td>147.7052</td>
<td>76.97277</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.809192</td>
<td>75.68797</td>
<td>54.07904</td>
<td>0.0002</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.338877</td>
<td>22.68044</td>
<td>35.19275</td>
<td>0.5497</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.212130</td>
<td>9.438339</td>
<td>20.26184</td>
<td>0.6946</td>
</tr>
<tr>
<td>At most 4</td>
<td>0.054958</td>
<td>1.808828</td>
<td>9.164546</td>
<td>0.8154</td>
</tr>
</tbody>
</table>

*(***)* denote rejection of the hypothesis at 5%(1%) significance level trace test indicate 2 cointegration equation(s) at the 0.05 level of significance.

The normalized long run equation is thus estimated as:

<table>
<thead>
<tr>
<th>GDP</th>
<th>CAD</th>
<th>CES</th>
<th>CSCS</th>
<th>CT</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000000</td>
<td>-387.2292</td>
<td>69.05100</td>
<td>184.1746</td>
<td>-183.5151</td>
<td>1000.236</td>
</tr>
<tr>
<td>(32.5932)</td>
<td>(9.89691)</td>
<td>(54.4776)</td>
<td>(11.8732)</td>
<td>(652.254)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors Computation, (2017)
Co-integration test result presented in table 4.3 above is the summary of co-integration analysis using Johansen trace statistics approach. This test statistics strongly rejects the null hypothesis of no co-integration, in favor of two co-integrating equation at 5 percent significance level. This depicts that even though there is no short run equilibrium equation as a result of the presence of non-stationary series in the model, on the long run there is equilibrium relationship, meaning linear combination of all the series will produce a stationary error term on the long run. From the normalized long run estimate presented in table 4.3 it was revealed that capital expenditure on administration and transfer exert significant negative impact on economic growth on the long run, while capital expenditure on economic services as well as socio community services exert significant positive impact on economic growth on the long run. It thus implies that implementation of capital expenditure on the general ground exert significant influence on economic growth though the direction of such impact depend on the type of capital expenditure.

d) Error Correction Model (ECM)

Table 4.4: Parsimonious (ECM)

<table>
<thead>
<tr>
<th>Series: GDP CAD CES CSCS CT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: D(GDP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>t-statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-52.09077</td>
<td>548.8256</td>
<td>-0.094913</td>
<td>0.9253</td>
</tr>
<tr>
<td>D(GDP(-2))</td>
<td>0.507408</td>
<td>0.127908</td>
<td>3.966971</td>
<td>0.0008</td>
</tr>
<tr>
<td>D(CAD)</td>
<td>27.20799</td>
<td>16.42982</td>
<td>1.656012</td>
<td>0.1133</td>
</tr>
<tr>
<td>D(CAD(-2))</td>
<td>171.6068</td>
<td>29.91349</td>
<td>5.736770</td>
<td>0.0000</td>
</tr>
<tr>
<td>D(CES)</td>
<td>-27.81787</td>
<td>5.544910</td>
<td>-5.016831</td>
<td>0.0001</td>
</tr>
<tr>
<td>D(CES(-1))</td>
<td>-32.57411</td>
<td>7.938129</td>
<td>-4.103500</td>
<td>0.0006</td>
</tr>
<tr>
<td>D(CES(-2))</td>
<td>-14.52232</td>
<td>9.355409</td>
<td>-1.552291</td>
<td>0.1363</td>
</tr>
<tr>
<td>D(CSCS)</td>
<td>-17.22578</td>
<td>24.88537</td>
<td>-0.692205</td>
<td>0.4968</td>
</tr>
<tr>
<td>D(CT(-1))</td>
<td>63.28427</td>
<td>10.73068</td>
<td>5.897506</td>
<td>0.0000</td>
</tr>
<tr>
<td>D(CT(-2))</td>
<td>74.27267</td>
<td>10.44065</td>
<td>7.113798</td>
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</tr>
<tr>
<td>ECM(-1)</td>
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<td>0.081412</td>
<td>-1.327938</td>
<td>0.1992</td>
</tr>
</tbody>
</table>

R-Squared=0.901087, Adjusted R-Square=0.851630, Durbin Watson stat=2.330456, F-statistics=18.21976, Prob (F-statistics) =0.000000

Source: Authors Computation, (2017)

The result of parsimonious error correction model presented in table 4.4 above showed the coefficient of the parameter estimates, alongside the standard errors, t-values and the probability values. The result reveals that there existed pronounced feed-back of the previous period disequilibrium from the long-run trend. Specifically, the result indicated feed-back of about 10%. Notably the reported ECM(-1) coefficient is correctly signed, thus validating the presence of long run relationship amidst the variables and that about 10% of the short run inconsistencies are corrected and incorporated into the long run dynamics annually. The parsimonious error correction model explained the short run relationship between the variables. Notably the result revealed that on the short run capital expenditure on administration and transfer exert positive impact on economic growth, while the impact of capital expenditure on economic services, as well as socio community services tend to be negative. The result reported R-square value of 0.901087, which implies that about 90% of the systematic variations in the dependent variable (gross domestic product) can be explained by variations in the explanatory variables. The result showed that the model is overall significant given the f-statistics probability value of 0.000000. This implies that the explanatory variables jointly and significantly explain the variation in economic growth measured by real gross domestic product, thus the model is a good-fit. The Durbin-Watson statistics of 2.330456 which falls within the acceptance region of the null autocorrelation between successive values of error terms, hence the model is econometrically fit.
From the analyses conducted in the study the following discoveries were made: First the study discovered that there is strong relationship between capital expenditure implementation on administration, economic services, socio community services, transfer and economic growth of Nigeria. Secondly it was discovered in the study that there is on the long run capital expenditure implementation on administration exert significant negative impact on economic growth of Nigeria, but positive on the short run. Thirdly the study discovered that on the long run capital expenditure on socio community service exert significant positive impact on economic growth of Nigeria, though negative on the short run. Fourthly the study discovered that on the long run capital expenditure on socio community service exert significant positive impact on economic growth of Nigeria, though negative on the short run. On the fifth ground the study discovered that on the long run capital expenditure on transfer exert negative impact on economic growth but positive on the long run, and finally the study discovered that both on the long and short run capital expenditure implementation exert significant impact on economic growth of Nigeria.

V. CONCLUSION AND RECOMMENDATIONS

Premised on the findings of the study, it was concluded that capital expenditure implementation is germane to maintaining and sustaining economic growth in Nigeria, that capital expenditure on some sectors of the economy influence the growth prospect of the economy more on the long run that some other sectors. Based on the discoveries made in the study government should ensure adequate implementation of capital expenditure in the country especially in areas of economic services and socio community services as this has a significant capacity to trigger rapid growth of the economy on the long run, increase the percentage of the total expenditure that goes to capital expenditure has this will put the economy on the vantage position for rapid growth which when sustained will culminate into economic development, and also overhaul the ministries, government agencies and parastatals to curb and correct loopholes impeding effective and efficient implementation of government capital budget in the country.

REFERENCES Références Referencias

## APPENDIX

### Correlation

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>CAD</th>
<th>CES</th>
<th>CSCS</th>
<th>CT</th>
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<td></td>
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</table>

### COINTEGRATION

Date: 07/03/16  Time: 13:25  
Sample (adjusted): 1983 2014  
Included observations: 32 after adjustments  
Trend assumption: No deterministic trend (restricted constant)  
Series: GDP CAD CES CSCS CT  
Lags interval (in first differences): 1 to 1

#### Unrestricted Cointegration Rank Test (Trace)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
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<tbody>
<tr>
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<td>0.894658</td>
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<td>At most 1 *</td>
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<tr>
<td>At most 4</td>
<td>0.054958</td>
<td>1.808828</td>
<td>9.164546</td>
<td>0.8154</td>
</tr>
</tbody>
</table>

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level  
* denotes rejection of the hypothesis at the 0.05 level  
**MacKinnon-Haug-Michelis (1999) p-values

#### Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
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</thead>
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<td>At most 4</td>
<td>0.054958</td>
<td>1.808828</td>
<td>9.164546</td>
<td>0.8154</td>
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</tbody>
</table>

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level  
* denotes rejection of the hypothesis at the 0.05 level  
**MacKinnon-Haug-Michelis (1999) p-values

#### Unrestricted Cointegrating Coefficients (normalized by $b^*S^{-1}b=I$):

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>CAD</th>
<th>CES</th>
<th>CSCS</th>
<th>CT</th>
<th>C</th>
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</thead>
<tbody>
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<td>0.010528</td>
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<tr>
<td>CAD</td>
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Unrestricted Adjustment Coefficients (alpha):
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<th>CSCS</th>
<th>CT</th>
<th>C</th>
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<tbody>
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<td>D(CSCS)</td>
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<td>D(CT)</td>
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1 Cointegrating Equation(s): Log likelihood  -937.6641

Normalized cointegrating coefficients (standard error in parentheses)

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<tr>
<th></th>
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<th>CES</th>
<th>CSCS</th>
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<td>(652.254)</td>
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Adjustment coefficients (standard error in parentheses)

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>CAD</th>
<th>CES</th>
<th>CSCS</th>
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<th>C</th>
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</thead>
<tbody>
<tr>
<td>D(GDP)</td>
<td>-0.139723</td>
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<td>D(CES)</td>
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2 Cointegrating Equation(s): Log likelihood  -911.1604

Normalized cointegrating coefficients (standard error in parentheses)

<table>
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<tr>
<th></th>
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Adjustment coefficients (standard error in parentheses)

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<tr>
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3 Cointegrating Equation(s): Log likelihood  -904.5393

Normalized cointegrating coefficients (standard error in parentheses)

<table>
<thead>
<tr>
<th></th>
<th>GDP</th>
<th>CAD</th>
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Adjustment coefficients (standard error in parentheses)

<table>
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<tr>
<th></th>
<th>Coefficient</th>
<th>Std. Error</th>
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<th>Prob.</th>
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Normalized cointegrating coefficients (standard error in parentheses)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
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</thead>
<tbody>
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<td>-411.7159</td>
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<td>CES</td>
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<td>-1.387695</td>
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Adjustment coefficients (standard error in parentheses)

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<tr>
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<td>D(GDP)</td>
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<td></td>
<td>(0.09028)</td>
<td>(40.3297)</td>
<td>(12.3179)</td>
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<tr>
<td>D(CAD)</td>
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<td>(0.70902)</td>
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<td>(1.09090)</td>
<td>(0.33319)</td>
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<td>D(CSCS)</td>
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<td>-0.139779</td>
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<td>(0.00113)</td>
<td>(0.50685)</td>
<td>(0.15481)</td>
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<tr>
<td>D(CT)</td>
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<td>0.073101</td>
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<td>(0.00208)</td>
<td>(0.92886)</td>
<td>(0.28370)</td>
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OVERPARAMETERIZED ECM

Dependent Variable: D(GDP)
Method: Least Squares
Date: 07/03/16  Time: 13:32
Sample (adjusted): 1984 2014
Included observations: 31 after adjustments

<table>
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<th>t-Statistic</th>
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<td>-0.210185</td>
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<tr>
<td>D(GDP(-1))</td>
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<td>D(GDP(-2))</td>
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<td>D(CAD)</td>
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<td>D(CAD(-1))</td>
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<td>D(CAD(-2))</td>
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### PARSIMONIOUS ECM

**Dependent Variable:** D(GDP)  
**Method:** Least Squares  
**Date:** 07/03/16   **Time:** 13:40  
**Sample (adjusted):** 1984-2014  
**Included observations:** 31 after adjustments

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<th>t-Statistic</th>
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<td>-0.094913</td>
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<tr>
<td>D(GDP(-2))</td>
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<td>0.127908</td>
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<td>D(CES)</td>
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<td>D(CES(-1))</td>
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<tr>
<td>D(CES(-2))</td>
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<td>D(CSCS)</td>
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<td>D(CT(-1))</td>
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<td>D(CT(-2))</td>
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**R-squared** 0.901087  
**Adjusted R-squared** 0.851630  
**S.E. of regression** 2213.205  
**Sum squared resid** 97965505  
**Log likelihood** -275.9622  
**F-statistic** 18.21976  
**Prob(F-statistic)** 0.000000
Accounting Performance of SMEs and Effect of Accounting Information System: A Conceptual Model

By Emad Harash
Madenat Alelem University

Abstract- The objective of this study is to describe the effects of accounting information system (AIS) on the accounting performance of Small and medium enterprises (SMEs). Generally, there have been a large number of studies conducted on accounting information system. This study is one of the most unique studies in this field in Iraq. Studies’ providing empirical evidence on the link between AIS and accounting performance of SMEs, to our knowledge, has been somewhat limited. The formulation of the problem examined in this study was based on a questionable president, "What is the impact of AIS on the accounting performance of SMEs?". The results of previous studies show a positive relationship between the AIS and accounting performance in Iraqi SMEs. This shows that the accounting performance in these Iraqi enterprises can be improved.

GJMBR-D Classification: JEL Code: M41

Strictly as per the compliance and regulations of:
Accounting Performance of SMEs and Effect of Accounting Information System: A Conceptual Model

Emad Harash

Abstract: The objective of this study is to describe the effects of accounting information system (AIS) on the accounting performance of Small and medium enterprises (SMEs). Generally, there have been a large number of studies conducted on accounting information system. This study is one of the most unique studies in this field in Iraq. Studies' providing empirical evidence on the link between AIS and accounting performance of SMEs, to our knowledge, has been somewhat limited. The formulation of the problem examined in this study was based on a questionable president, "What is the impact of AIS on the accounting performance of SMEs?". The results of previous studies show a positive relationship between the AIS and accounting performance in Iraqi SMEs. This shows that the accounting performance in these Iraqi enterprises can be improved.

1. Introduction

Small and medium enterprises (SMEs) regardless of its size has to be effectively and successfully managed for it to grow, remain competitive and survive. The SMEs in Iraq have been chosen primarily because these enterprises play a significant role in the development of the industry in the country in general. Private SMEs are typically held directly or indirectly by the private sector. SMEs are gaining widespread acceptance as viable drivers of economic growth (Harash, 2014; Harash, 2015). According to previous empirical studies shows that SMEs in developing countries are markedly supporter and attraction economic prosperity (Harash, 2013; Harash, 2014; Harash, 2015; Njogo & Safiriyu, 2012; Olatunji, 2013). Available data from the Central Organization for Statistics (COS) indicates that private sector in Iraq consists primarily of SMEs where are a focal point in shaping enterprise policy and those represent (99) percent of all companies in Iraq (Harash, 2013; Harash, 2014; Harash, 2015).

SMEs are the building blocks of any growing economy. SMEs have tremendous influence on the state and wellbeing of the nation in employment generation and rapid substantial industrial development and key to ensuring economic growth, innovation, job creation, and social integration (Njogo & Safiriyu, 2012; Olatunji, 2013). This target group has been identified as the catalyst for the economic growth of the country as they are a major source of income and employment, introduce innovations, stimulate competition and assist large companies (Harash, et al. 2013; Njogo & Safiriyu, 2012; Olatunji, 2013). However, several of these enterprises demise without fulfilling expectations due to poor internal administration policies arising from weak design of an effective accounting information system.

Years of previous studies show strong evidence that relationship between accounting information system and accounting performance have mainly concentrated on large companies. These studies provide strong evidence that suggests accounting information system are associated with the accounting performance of large companies. These studies provide strong evidence that suggests accounting information system are associated with the accounting performance of large companies. Due to inconsistency in the findings of previous studies on the accounting information system that may influence accounting performance. Generally, there have been a large number of studies conducted on accounting information system.

However, the number of the studies on accounting information system in SMEs institutions was shown to be relatively small. In addition, most research in the area of accounting information system in SMEs has been conducted among populations from developed countries namely the U.S. and Europe, compared to studies on accounting information system in SMEs in developing countries are limited (Fagbemi & Olaoye, 2016; Harash, 2014; Harash, 2015). This study intended to empirically examine the relationships between accounting information system and accounting performance in SMEs. Its provides to the decision.
makers in SMEs a method in order to determine of level of accounting performance of Iraqi SMEs.

II. Accounting Performance of SMEs

The performance plays an important role in the development and growth in any company to survive. Traditionally accounting performance has been based on the income statement and balance sheet (Harash, 2014a). Accounting performance is not only necessary for giving reasonably high returns to the organization. Its thus flags up some vital issues for studying and revising budgetary practice that correlate to the higher goals of the organization. It is also the key to avoiding the combination of factors has a negative influence on the efficiency and performance of organizations (Otley, 1999).

Accounting performance is considered a management initiative to upgrade the accuracy and timeliness of financial information and non-financial to meet the required standards while supporting day to day operations (Tarawneh, 2006). The accounting performance refers to the level of companies’ financial measures such as earnings and accounting returns and non-financial (drivers of value) such as customer and employee satisfaction, innovation and quality relative to their major competitors over the same years (Harash, 2015). The accounting performance of SMEs represents one of the most problematic aspects of performance; that is why it has gained the attention of many scholars and researchers (Harash, et al. 2013). Thus, measuring accounting performance has become a fundamental concern to SMEs managers in the previous years (Harash, 2014a). Such trends encouraged academicians and practitioners to develop and adopt specific approaches and methods for measuring and evaluating the accounting performance of SMEs (Harash, 2014; Harash, 2015). Accordingly, the significance of AIS has been raised from the problems that accompanied the measurement of accounting performance of SMEs. Moreover, the significance of AIS has been raised from the problems that accompanied the measurement of accounting performance of SMEs.

This difficulty stems from the interrelation between the exerted efforts and the contribution of the groups of people who work on the AIS cannot be determined objectively. Second is the difficulty in quantifying the beneficial contribution of AIS to the enterprises (Fagbemi & Olaoye, 2016; Harash, 2014; Harash, 2015). Third is matching the specific inputs of AIS and processing or intermediating the outputs with the final outcomes (including newly improved and developed products and processes. According to studies Harash (2014) and Harash (2015) the present study uses the following accounting performance indicators: financial measures such as earnings and accounting returns and non-financial (drivers of value) such as customer and employee satisfaction, innovation and quality.

a) Accounting information system (AIS)

Important information comes from accounting information systems. As a consequence, processing the accounting information is one of the most decisive elements of the pre-decisive, i.e. pro-decisive process of accountants, consultants, business analysts, managers, chief financial officers (CFOs), auditors and regulatory and tax agencies (Fagbemi & Olaoye, 2016; Harash, 2014; Harash, 2015). Therefore, accounting information system (AIS) is a system of collecting, storing and processing financial and accounting data that are used by decision makers by management or externally by other interested parties including investors, creditors and tax authorities (Kebede Manaye, 2016). AIS are critical to the production of quality accounting information provide accurate and timely reports and the communication of that information to the decision makers (Harash, 2014; Harash, 2015). AIS is vital to all organizations, designed to help in the management and collect information, raw data or ordinary data and transform them into financial data for the purpose of reporting them to decision makers and control of topics related to organization (Dandago & Rufai, 2014; Harash, 2014; Harash, 2015). AIS is a system used to collection and recording of data and information regarding events that have an economic impact upon organizations and the maintenance, processing and communication of such information to both internal and external stakeholders (Olusola et al. 2013). AIS is also a system used to provide internal and external reporting data, financial statements and trend analysis capabilities to affect an organizational performance (Fagbemi & Olaoye, 2016).

AIS is computer-based systems that increases control and enhances cooperation in the organization (Nicolau, 2000). AIS is one of the core success factors that effectively support the achievement of accounting and financial objectives, improve strategic effort of SMEs and improve data sharing and integrity. AIS also provide an opportunity to update procedures and align them with perceived examples of best practice (Fagbemi & Olaoye, 2016; Harash, 2014; Harash, 2015). AIS is of great importance to both businesses and organization in which it helps in facilitating decision making because adequate accounting information is essential for every effective decision making process. The main objective of many businesses to adopt this system are to improve their business efficiency and increase competitiveness (Hla & Teru, 2015).

Another critical problem faced by Iraqi SMEs is that most SMEs do not apply sound accounting information system principles due to lack of regulatory resources and new technological resources. There is a need for a comprehensive understanding of the
performance of the SMEs sector in Iraq. Using accounting information system and how using AIS impact accounting performance (Harash, 2014; Harash, 2015). As a result, it is still necessary to address how using AIS correlate with accounting performance of Iraqi SMEs. Therefore, conducting such research is timely and pertinent since the existing limited studies showed that using AIS was the weakest area in most Iraqi SMEs (Harash, 2015).

According to Harash (2014) and Harash (2015) this kind of research on using AIS is still lack in its implementation in Iraq. Based on the information obtained from the literature, this study will focus of investigate the using AIS and how using AIS affecting on accounting performance of Iraqi SMEs. Thus, the current study is examining the effect of using AIS system on accounting performance of Iraqi SMEs. The present study uses the following AIS indicators (used by study Harash, 2015): characteristics of information such as reliability, relevance, and timeliness.

b) Accounting information system and accounting performance in SMEs

According to studies Fagbemi & Olaoye (2016), Harash (2014) and Harash (2015) accounting information system have become an important component for SMEs in the all sectors to cope with intense competition and to meet customers’ needs. Analyzing the role that accounting information system can play in providing SME managers with relevant and accurate information can strengthen SMEs’ impact on the economic wellbeing of the areas in which they operate.

Previous empirical study to Beke (2010) and Fagbemi & Olaoye (2016) found that there is no one best accounting information system for all companies; rather, an organization’s systems should be contingent on the circumstances it faces. Previous empirical studies to Beke (2010), Fagbemi & Olaoye (2016), Harash (2014) and Harash (2015) suggested that a contingency theory approach can be used to shed light on the application of accounting information system and its impact on accounting performance in SMEs. To date, few studies have examined the role that accounting information system play on the accounting performance in SMEs. According to contingency theory, accounting performance in SMEs will improve if there is a suitable fit between the accounting information system and this performance.

Although some researchers lend some support to the idea that greater use of accounting information system is positively linked to the accounting performance of an enterprise, in many cases, their findings are inconclusive (Fagbemi & Olaoye, 2016; Harash, 2014; Harash, 2015). Many have noted this effect but few studies to date have investigated the effect of accounting information system on the accounting performance in SMEs (Harash, 2014; Harash, 2015). For example, Previous empirical studies (Fagbemi & Olaoye, 2016; Foong, 1999; Harash, 2014; Harash, 2015) found that SMEs that operate in a highly complex environment make more extensive use of accounting information system tools to improve accounting performance. Thus, it is expected that a good fit between accounting information system and accounting performance should improve SMEs performance.

Study Fagbemi & Olaoye (2016) was concluded that accounting information systems would significantly influence the accounting performance of SMEs. Therefore, it was recommended that SMEs that adopt computerized accounting information system should ensure that the level of computerization improves in line with current level of advancement in technology.

Previous empirical studies Beke, 2010 and Pollock & Comford, 2004) suggested that there is an improvement in accounting performance and decision making associated with using AIS since AIS records ensure easy access to information records that are properly kept. This studies argued that AIS also provide an opportunity to update procedures and align them with perceived examples of best practice.

The relationship between accounting Information systems and SMEs performance was conducted by Harash (2014), who tested the influence of characteristics enjoyed by the accounting information in determining SMEs’ performance. It was found that the characteristics enjoyed by the accounting information such as: reliability, relevance, timeliness, and accessible have significant effects on the use of AIS and SMEs' performance.

Ultimately, the goal is to develop a testable model of the relationship between accounting performance in SMEs and the using of accounting information system and, in turn, the system effect on accounting performance in SMEs. Traditional difficulties that SMEs face in using of accounting information system have been complicated by advances in manufacturing technology (Fagbemi & Olaoye, 2016; Harash, 2014; Harash, 2015) Therefore, business administrators and accounting professionals have developed several new accounting information system to deal with them. New accounting information systems can improve the relevance and quality of information that management needs to keep the organization running smoothly (Beke, 2010, Fagbemi & Olaoye, 2016; Harash, 2014; Harash, 2015).

Based on the review of this study, accounting performance becomes a critical issue and many studies dealt with this subject from many respects. The study
tries to deal with many issues of accounting performance. Its discusses one of the important issues: (the status and conditions of accounting information system (AIS) activities and accounting performance. This study will shed light on how accounting information system significantly affect accounting performance of Iraqi SMEs.

### III. Contingency Framework

Contingency theory suggests that an accounting information system should be designed in a flexible manner. It’s also need to be adapting to the specific decisions being considered so as to consider the environment and organizational structure confronting an organization (Dandago & Rufai, 2014). Information technology and accounting information system in the nigerian banking industry. Asian Economic and Financial Review, 4(5), 655-670.). The theoretical framework developed in this study is based on conceptual Contingency Theory. Most of the research in contingency theory is built on their frameworks to show the relationships between variables on the particularity in the early phases of development, Thus, the majority of frameworks of contingency Theory have assumed that the relationships between variables are linear (suhal, 2014).

The proposed framework suggests that in order to improve performance, managers of SMEs should devote particular attention to their use of accounting information system, taking care to adopt the systems best tailored to their special circumstances. Thus, this leads to developed frameworks of research based contingency where “a conditional association of two or more independent with a dependent outcome is hypothesized.” Claimed that the ultimate goal of the research in contingency of accounting should be to develop and test a comprehensive framework or model that includes multiple elements of accounting information systems with accounting performance variables. In line with this rationale:

H- Accounting information system has a positive direct effect on accounting performance in SMEs.

Along with the hypothesis presented above, the framework highlights contingency theory to explain the relationships between accounting information system and accounting performance in SMEs. The development of hypotheses of this study depends on the prior relevant literature and empirical studies conducted. As well as based on the theoretical framework that presented by the current study (see Figure:1). This theoretical framework is designed to take into account and reflect all significant financial and non-financial factors that evaluate and examine the SMEs accounting performance.
IV. Conclusions

This study discussed the theoretical framework and pointed out to the literature review that can be used and useful to apply the theoretical framework through the availability of indicators that will be used in testing the theoretical framework. Accounting performance plays an important role in the development and growth in SMEs to survive. It's not only necessary for giving reasonably high returns to the organization. It thus flags up some vital issues for studying and revising budgetary practice that correlate to the higher goals of the SMEs. Efficient accounting information systems ensures that all levels of management get sufficient, adequate, relevant and true information for planning and increases the control and enhances the accounting performance in SMEs also provide an opportunity to update procedures and align them with perceived examples of best accounting performance and improve strategic effort of SMEs and improve data sharing and integrity. Empirical testing is needed to the expansion of literature on improving accounting performance in SMEs. Subsequent research will expand this survey to include other variables such as accounting practices, in evaluating the adoption of accounting information system in SMEs.

References Références Referencias


Publications
Impact of Corporate Social Responsibility on the Profitability of Multinational Companies in Nigeria

By Dr. G.T. Akinleye & Adedayo Temitayo Faustina
Ekiti State University

Abstract- This study investigated the impact of corporate social responsibility (CSR) on profitability of multinational companies in Nigeria. Specifically, the study analyzed the relationship and impact of corporate social responsibility spending on profit after tax, as well as the causal relationship between corporate social spending and profit after tax. Five multinational companies were randomly selected in the study and data were collated from their respective financial reports for a period of five years covering 2010 to 2014. The study employed techniques including correlation analysis, pooled OLS estimation, fixed effect and random effect estimations, Granger causality estimation and post estimation test such as restricted F-test and Hausman test. Result revealed that there is weak negative correlation between corporate social spending and profit after tax (-0.0648). Corporate social spending exerts negative insignificant impact on profit after tax ($\beta=-27.0860, P=0.704$), while there is only evidence for unidirectional causal relationship running from corporate social spending to profit after tax for Oando plc, among all the selected multinational companies (f-stat=208.868, P=0.0440).

Keywords: corporate social responsibility, profitability, multinational companies, CSR spending.

GJMBR-D Classification: JEL Code: M49
Impact of Corporate Social Responsibility on the Profitability of Multinational Companies in Nigeria

Dr. G.T Akinleye & Adedayo Temitayo Faustina

Abstract- This study investigated the impact of corporate social responsibility (CSR) on profitability of multinational companies in Nigeria. Specifically the study analyzed the relationship and impact of corporate social responsibility spending on profit after tax, as well as the causal relationship between corporate social spending and profit after tax. Five multinational companies were randomly selected in the study and data were collated from their respective financial reports for a period of five years covering 2010 to 2014. The study employed techniques including correlation analysis, pooled ols estimation, fixed effect and random effect estimations, granger causality estimation and post estimation test such as restricted f-test and Hausman test. Result revealed that there is weak negative correlation between corporate social spending and profit after tax (-0.0648). Corporate social spending exerts negative insignificant impact on profit after tax (β=-27.0880, P=0.704), while there is only evidence for unidirectional causal relationship running from corporate social spending to profit after tax for Oando plc, among all the selected multinational companies (f-stat=208.868, P=0.0440). Hence, the study concluded that there is insignificant relationship between corporate social responsibility and profitability of multinational companies, and that there is no substantial evidence of causality between corporate social responsibility and profitability among multinational companies in Nigeria. Thus the study recommended that multinational companies should increase their dedication to giving back to the society, by formulating a framework for CSR spending to boost the standard of living of Nigerians to the point that their social reputation will engender positive and substantial increase in financial performance, as this is essential for their going concern in the country.

Keywords: corporate social responsibility, profitability, multinational companies, CSR spending.

1. Introduction

Corporate social responsibility (CSR) has become a(deck in corporate policies of multinational corporations (MNCs) in recent time, owing to the growing concern of government policy makers, agitation of host communities and environmental degradation effect of operation of most of the multinational companies around the world. The term Corporate Social Responsibility (CSR) as posited by Olaroyeke and Nasieku (2015) encompasses a variety of issues revolving around companies’ interactions with society. It refers to sets of actions that appear to further some social good, beyond the interests of the firm and that which is required by law (McWilliams & Siegel, 2000). Important in this definition is that CSR activities are on a voluntary basis, going beyond the firm’s legal and contractual obligations. As such it involves a wide range of activities such as being employee-friendly, environment-friendly, and respectful of communities where the firms’ plants are located, and even investor-friendly (Bénabou & Tirole, 2010).

Globally, there is increased focus on corporate social responsibility not only by business organizations but also by government, international institutions and other stakeholders. The proliferation of the practice and expansion of corporate social responsibility around the world had led to a wide range of developed structures, principles, standards and framework by which corporate social responsibility can be governed. Several indices over time had been developed for evaluation of corporate social responsibility. Such rating include the Dow Jones Sustainability Index (DJSI) and the Financial Times Stocks Exchange Index. These indices rate firms based on various criteria including but not limited to human rights, environmental protection, worker’s health and safety, labour standard, and accountability (Kashyap, Rajan & Stein 2008).

With increasing number of Multinational corporations in African continents such as those in oil and gas, airlines, beverages and pharmaceutical industries, CSR has become very relevant, especially in the new millennium. However, researches in these areas have received overwhelming dominance from the western-centric and these researches have been mostly within the developed countries of North America and Europe and of late focus on the transitional or emerging economies of China, Brazil, India, and Russia (Frederick, 1960); Friedman 1962; Davis and Blomstrom, 1966; Sethi, 1975; Carroll, 1979; Jones, 1980; Wood, 1991; Baker, 2003; Carroll and Buchholtz, 2008; Marcia, Otgontsetseg & Hassan, 2013; Lorraine, 2009; Carmen-Pilar, Rosa and Lisa, 2013.

In Nigeria, investigations carried out to delineate the nexus between corporate social spending and corporate financial performance had left much controversy than usual. Ohiokha, Odion and Akhalumeh...

Due to this unevenness of research findings in Nigeria, there is need to further investigate the connection between corporate social responsibility and profitability especially in the context of multinational corporations (MNCs). Gaps identified in the study include dearth of investigation into the dynamic impact of corporate social responsibility on profitability of multinational corporations cutting across industries and the fact that previous studies do not fully harness the strength of panel data analysis to cover both fixed effect and random effect estimations. Thus this study set out to investigate the impact of corporate social responsibility on profitability of multinational companies using full static panel data analysis including pooled OLS estimation, fixed effect estimation and random effect estimation for static investigation, as well as granger causality analysis. Specifically the paper set out to:

i. analyse the relationship between corporate social responsibility and profitability of multinational companies in Nigeria;

ii. analyse the impact of corporate social responsibility on profitability of multinational companies in Nigeria; and

iii. ascertain the causal relationship between corporate social responsibility and profitability of multinational companies in Nigeria.

II.  LITERATURE REVIEW

a) Conceptual Review

i. Corporate Social Responsibility (CSR)

Corporate Social Responsibility (CSR) as posited by Olaruyoe and Nasieku (2015) encompasses a variety of issues revolving around companies’ interactions with society. It refers to sets of actions that appear to further some social good, beyond the interests of the firm and that which is required by law (McWilliams & Siegel, 2000). Important in this definition is that CSR activities are on a voluntary basis, going beyond the firm’s legal and contractual obligations. As such it involves a wide range of activities such as being employee-friendly, environment-friendly, and respectful of communities where the firms’ plants are located, and even investor-friendly (Bénabou & Tirole, 2010). According to Enahoro, Akinyomi, & Olutoye, (2013), Corporate social responsibility (CSR) covers a wide range of issues such as plant closures, employee relations, human rights, corporate ethics, community relations and the environment.

ii. Multinational Corporations (MNCs)

The term multinational corporation (MNC) can be defined and described from differing perspectives and on a number of various levels including law, sociology, history and strategy as well as from the perspectives of business ethics and society. Multinational corporations are companies which seek to operate strategically on a global scale. A multinational corporation is a company, firm or enterprise that operates worldwide with its headquarters in a metropolitan or developed country. Hill (2005) defines Multinational Enterprise as any business that has productive activities in two or more countries. Certain characteristics of Multinational Corporations should be identified at the start since they serve, in part, as their defining features. Often referred to as “multinational enterprises,” and in some early documents of the United Nations they are called “transnational organizations,” Multinational Corporations are usually very large corporate entities that while having their base of operations in one nation—the “home nation”—carry out and conduct business in at least one other, but usually many nations, in what are called the “host nations.” Multinational Corporations are usually very large entities having a global presence and reach (Kim, 2000). Multinational corporations (MNCs) can spur economic activities in developing countries and provide an opportunity to improve the qualities of life, economic growth, and regional and global commons.

iii. Concept of Profitability

Profitability is considered as one of the most important studied indicators of the strategic value of CSR (Ortlitzki, Schmidt, & Rynes, 2003). Researchers have started the empirical study of CSR and profitability several decades ago in western countries. Many firms have been faced with increasing pressure for corporate accountability from their stakeholders (managers, employees, customer, government, shareholders, and so on) (Waddock, 2004). This pressure includes aspects such as legal, social, moral, and financial aspects. Profitability in this context implies financial performance. However result of existing researches on CSR and its relationship with financial performance, are inconclusive. Results of some studies showed a positive relationship between CSR and profitability, on the other hand some concluded that a negative relationship exists while some gave a non significant relationship.
b) **Theoretical Review**

i. **Stakeholder’s Theory**

Stakeholder’s theory is a very basic theory to CSR. Freeman’s stakeholder theory asserts that managers must satisfy a variety of constituents (e.g., workers, customers, suppliers, local community organizations) who can influence firms’ outcomes. According to this view, it is not sufficient for managers to focus exclusively on the needs of stockholders, or the owners of the corporation. Stakeholder theory implies that it can be beneficial for the firm to engage in certain CSR activities that non-financial stakeholders perceive to be important; because in the absence of this, these groups might withdraw their support for the firm (McWilliams & Siegel, 2000). A fundamental aspect of stakeholder theory, in any of its aspects, is that it identifies numerous different factions within a society to whom an organization may have some responsibility. Stakeholder’s theory is a theory of organizational management and business ethics that addresses moral and values in managing organizations. In the traditional view of the firm, the shareholder view, the shareholders or stockholders are the owners of the company, and the firm has a binding financial obligation to put their needs first, to increase value for them. However, stakeholder theory argues that there are other parties involved, including governmental bodies, political groups, trade associations, trade unions, communities, financiers, suppliers, employees, and customers. Sometimes even competitors are counted as stakeholders - their status being derived from their capacity to affect the firm and its other stakeholders.

ii. **Carroll’s Model of Corporate Social Responsibility**

One of the prominent models of corporate social responsibility is Carroll’s pyramid model of corporate social responsibility. According to Carroll (1991) corporate social responsibility constitutes four kinds of corporate social responsibility namely: economic responsibility, legal responsibility ethical responsibility and philanthropic responsibility. As posited by Caroll (1991) these responsibilities are framed in a pyramid structure. In his opinion the economic components of corporate social responsibility is about the responsibility for profit and this responsibility serves as the base for the other components of the pyramid. With regard to the legal aspect, society expects organizations to comply with the laws and regulations. Ethical responsibilities are about how society expects organizations to embrace values and norms even if the values and norms might constitute a higher standard of performance than required by law, while Philanthropic responsibilities are those actions that society expect for a company to be a good corporate citizen.

iii. **Empirical Review**

Scholtens (2008) investigated the relationship between CSR and financial performance of a sample of 289 firms from the US for the period of 1991-2004 by using Ordinary least square OLS and Granger causation technics of analysis. It was concluded in the study there is significant correlation between corporate social responsibility (CSR) and financial performance, though components of CSR like community involvement, employee relations, diversity, environment does not have positive relationship with financial performance in the respect of return and risk.

Foote, Gaffney, and Evans, (2010) studied the impact of corporate social responsibility on performance of organization in the perspective of Malcolm Baldrige criteria of the USA and also compared this with the current academic thought. They had gone through various theories of firm’s management, current academic thought and research to carry out the study in the criteria of Malcolm Baldrige. They concluded that there was a positive influence of corporate social responsibility on firm’s performance.

Iqbal, Ahmad, Basheer, & Nadeem, (2012) examined the connectivity of CSR with financial performance, market value of share and financial leverage of 156 listed companies on Karachi Stock Exchange for the period of 2010-11. They adopted descriptive statistics, correlation and regression to conduct the study. This study showed a mixed result, that CSR negatively affected the market value of those companies and that CSR did not have any influence on those companies and also that there was no relationship between CSR and financial leverage.

Mujahid and Abdullah (2014) studied the dependency of CSR on firm’s financial performance as well as on shareholders’ wealth in Pakistan. They had selected 10 firms which are highly rated as CSR firms and 10 non-CSR firms to see the differences in their financial performances and shareholders wealth as well. They selected the return on equity (ROE) and return on assets (ROA) ratios as financial performance indicators and stock prices and earnings per share (EPS) as representing shareholders’ wealth. They adopted a mixed methodology in the study and concluded that there was a significant positive relationship between CSR and financial performance and shareholders’ wealth.

Ohiokha, Odion, Akhalumeh (2016) analyzed corporate social responsibility and corporate financial performance in Nigeria. The study empirically demonstrated the impact of corporate social responsibility on firms financial performance. The study adopted pooled survey research design covering twenty nine (29) firms in Nigeria over a period covering 2005 to 2010. Data collected from the annual reports of the selected firms were analyzed using panel data regression analysis. Result revealed that corporate
social responsibility (CSR) had little impact on the financial performance of the sampled companies.

Olaroyeke and Nasieku (2015) conducted an investigation of the effect of corporate social responsibility on the performance of listed manufacturing companies in Nigeria. The population comprised of all the listed manufacturing companies in the Nigerian Stock Exchange. Out of the total 74 quoted companies, 15 companies were randomly selected from five difference sectors of the manufacturing sector. Descriptive techniques were employed in this analysis based on primary data collated from responses of senior managers, chief accountants, and chief auditors. Result revealed that corporate social responsibility activities have a moderate positive effect on the performance of manufacturing companies listed on Nigeria Stock Exchange, and that manufacturing companies engage in CSR not only for profitability but for other reasons such as better corporate image, marketing and advertising strategy; employee satisfaction and fulfillment, improve competitive advantages, productivity and business opportunities; organizational values, among others. The study, therefore, recommended that companies engage in CSR policies and strategies not only to improve their performance but also to strengthening its legitimacy, reputation and building competitive advantage

Onyewuchi and Obumeke (2013) studied multinational corporations and the Nigeria economy. The study specifically analyzed how multinational corporations have served as agent of imperialism in any country they operated. In the study it was established that the multinational companies are exploitative as natural resources found in the country which is meant for the development of the country are productively utilized due to de-capitalization of the economy in form of profit repatriation. However the study emphasized that despite the negative activities of MNCs, they contribute positively in the areas of technological development and creation of employment opportunities

Richard and Okoye (2013) examined the impact of corporate social responsibility on the deposit money banks of Nigeria. Descriptive survey research design was adopted in the study with focus review of literatures on the subject matter of corporate social responsibility and financial performance. The study reveals that Social responsibility has a great impact on the society by adding to the infrastructures and development of the society. It was therefore concluded in the study that a company has to give back to the society in which it operates, clean up all forms of pollution it has caused in its course of operation and also provide infrastructural facilities to the society as a way of giving back and developing the society. Hence the study recommended that CSR should be included in the law and enforced on the firms accordingly and that Government should fix a minimum percentage of profit corporate firm should expend on corporate social responsibility activities.

III. Research Method

a) Model Specification

The model of this study is hinged on the theoretical framework of the stakeholder theory which states that managers must satisfy a variety of constituents (e.g., workers, customers, suppliers, local community organizations) who can influence firm outcomes. The theory implies that it can be beneficial for the firm to engage in certain CSR activities that stakeholders perceive to be important, because in the absence of this, stakeholder might withdraw their support for the firm, which will ultimately affect their performance. The theory identified corporate social responsibility as a phenomenon of corporate performance. Thus the models of the study are specific in linear forms below:

Static Model:

\[ PAT_{it} = \alpha_0 + \alpha_1 CSS_{it} + \alpha_2 TOL_{it} + \alpha_3 TOA_{it} + \mu_i \] (i)

Dynamic Model:

\[ PAT_t = \sum_{i=1}^{n} \delta_i PAT_{t-i} + \sum_{j=1}^{n} \theta_j CSS_{t-j} + U_{tt} \] (iii)

\[ CSS_t = \sum_{i=1}^{n} \delta_i CSS_{t-i} + \sum_{j=1}^{n} \theta_j PAT_{t-j} + U_{tt} \] (iv)

Where:

- \( PAT \)= Profit after Tax
- \( CSS \)= Corporate social Spending
- \( TOL \)= Total Liability
- \( TOA \)= Total Asset
- \( U (s) \)= Stochastic Error Terms
- \( i=\) cross sectional unit subscript
- \( t=\) period subscript

b) Sources of Data and Methods of Estimation

Data used in this study were collected from the annual financial statements of five randomly selected multinational companies including Guinness Nigeria Plc, Oando Nigeria Plc, Breweries Nigeria Plc, Cadbury Nigeria Plc and Unilever Nigeria Plc. Data collated in the study covered a period of five years spanning from 2010 to 2014. In the quest to attain the objectives predetermined in the research work and to provide answers to research questions raised, the study employed panel data analysis such pooled ols estimation, fixed effect estimation, random effect estimation and granger causality analysis, alongside post estimation test such as restricted f-test, and hausman test.
IV. Results and Discussion

a) Correlation Analysis

Table 1: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>PAT</th>
<th>CSS</th>
<th>TOA</th>
<th>TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSS</td>
<td>-0.0648</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOA</td>
<td>0.0485</td>
<td>0.7196</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>TOL</td>
<td>-0.2085</td>
<td>0.7157</td>
<td>0.9546</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Author’s Computation, (2016)

As shown in Table 1, the correlation between profit after tax and explanatory variables including corporate social responsibility (CSR) Total asset (TOA) and Total liability (TOL) stood at -0.0648, 0.0485, -0.2085 respectively. Reported correlation statistics revealed that there is negative relationship between profit after tax and corporate social responsibility, which connotes that profit and corporate social responsibility moves in opposite direction, consideration the strength of correlation statistics, it can be observed that the relationship between profit after tax and corporate social responsibility is weak. The reported statistics also revealed that profit after tax and total asset of the selected multinational companies moves in the same direction, while profit after tax moves in opposite with total liability of the selected multinational companies. Correlation statistics reported for pairs of explanatory variables stood at 0.7196, 0.7157, 0.9546 for CSS AND TOA, CSS AND TOL, TOA AND TOL respectively, meaning corporate social responsibility of multinational companies selected in the study moves in the same direction as their total asset and total liability and also that both total asset and total liability move in like direction.

b) Pooled Regression Analysis

Table 2: Pooled OLS Parameter Estimates

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Test Values</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>6205.231</td>
<td>5059.199</td>
<td>1.23</td>
<td>0.234</td>
</tr>
<tr>
<td>CSS</td>
<td>-16.31206</td>
<td>73.62828</td>
<td>-0.22</td>
<td>0.827</td>
</tr>
<tr>
<td>TOA</td>
<td>0.7720722</td>
<td>0.105713</td>
<td>7.30</td>
<td>0.000*</td>
</tr>
<tr>
<td>TOL</td>
<td>-1.175202</td>
<td>0.156886</td>
<td>-7.49</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

R-square=0.7339
Adjusted R-square=0.6959
F-statistics=19.31
Prob (F-stat) =0.0000

Source: Author’s Computation, (2016)

Result of pooled OLS estimation reported in Table 2 revealed that corporate social responsibility has insignificant negative impact on profit after tax, with reported estimate of -16.31206, and probability value of 0.827. the impact of total asset on profit after tax as revealed in the reported estimate of 0.7720722 and corresponding probability value of 0.000 is said to be positive and significant, while total liability exert negative significant impact on profit after tax based on the reported estimates of -1.175202 and probability values of 0.000. reported R-square for the pooled OLS estimation stood at 0.7339, meaning about 73% of systematic variation in profit after tax of the selected multinational companies can be explained by variation in corporate social responsibility, total asset and total liability combined, with justification for joint significant impact of the explanatory variables on the profit after tax, based on the reported f-statistics of 19.31 and its corresponding probability value of 0.00000

c) Fixed Effect Analysis

Table 3: Fixed Effect Parameter Estimates (Cross Sectional Specific)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Test Values</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>21279.08</td>
<td>8245.878</td>
<td>2.58</td>
<td>0.019</td>
</tr>
<tr>
<td>CSS</td>
<td>-27.0860</td>
<td>69.98992</td>
<td>-0.39</td>
<td>0.704</td>
</tr>
<tr>
<td>TOA</td>
<td>0.5328433</td>
<td>0.1195442</td>
<td>4.46</td>
<td>0.000*</td>
</tr>
<tr>
<td>TOL</td>
<td>-9743104</td>
<td>0.1518247</td>
<td>-6.42</td>
<td>0.000*</td>
</tr>
<tr>
<td>QANDO</td>
<td>-613.9566</td>
<td>10200.71</td>
<td>-0.06</td>
<td>0.953</td>
</tr>
<tr>
<td>BREWERIES</td>
<td>-19024.75</td>
<td>8957.705</td>
<td>-2.12</td>
<td>0.049*</td>
</tr>
<tr>
<td>CADBURY</td>
<td>26181.18</td>
<td>10743.31</td>
<td>2.44</td>
<td>0.026*</td>
</tr>
<tr>
<td>UNILEVER</td>
<td>-7889.948</td>
<td>8706.926</td>
<td>-0.91</td>
<td>0.378</td>
</tr>
</tbody>
</table>

R-square=0.8566 Adjusted R²=0.7975, F-statistics=14.50, Prob(F-stat) = 0.0000

Source: Author’s Computation, (2016)

Reported in table 3 is the fixed effect cross section specific estimation result, which account for the likely heterogeneity effect that might exist among the selected multinational companies. Table 3 revealed that the impact corporate social responsibility on profit after tax is negative and insignificant given reported coefficient estimates and probability values of -27.0860 and 0.704 respectively. The tables revealed that total
asset exert significant impact on profit after tax of the selected multinational companies with reported estimate and probability value of .5328433 and 0.000, while the impact is negative and significant with estimate and probability values reported to be -0.9743104 and 0.000 respectively. Table 3 reported deviation of the intercept term corresponding to Oando, Breweries, Cadbury, and Unilever from the reference intercept term (21279.08) representing intercept term for Guinness plc. Specifically table reported deviation term to be -613.9566, -19024.75, 26181.18, and -7889.948 for Oando, Breweries, Cadbury, and Unilever respectively. Reported probability values for the corresponding deviation terms revealed that the intercept term for Breweries and Cadbury differ significantly from that of the reference firms (Guniness), which reflects that there is presence of heterogeneity effect amidst the selected multinational companies. Reported R-square at stood at 0.8566 which implies that about 86% of the systematic variation in profit after tax of the selected multinational companies can be explained by corporate social responsibility spending, total asset and total liability. F-statistics and probability values of 14.50 and 0.0000 confirmed the fitness of the model.

d) Random Effect Estimation

Table 4: Random Effect Estimation

<table>
<thead>
<tr>
<th>Series: PAT CSS TOA TOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>CSS</td>
</tr>
<tr>
<td>TOA</td>
</tr>
<tr>
<td>TOL</td>
</tr>
</tbody>
</table>

R-square=0.7339, Wald chi2=57.92, Prob > chi2=0.000
Source: Author’s Computation, (2016)

Result of random effect estimation conducted in the study reported in table 4 revealed that corporate social responsibility exerts negative insignificant impact on profit after tax. Specifically the reported estimates stood at -16.31206 alongside probability values of 0.825. The result on the other hand revealed that total asset exert significant positive impact on profit after tax with estimates and probability values of 0.7720722, and 0.000 respectively, while the impact of total liability on profit after tax is negative and significant with reported estimate and probability values of -1.175202 and 0.000. R-square value reported in table 4 stood at 0.7339, alongside Wald statistics and probability values of 57.92 and 0.0000 respectively.

e) Post Estimation Test

Table 5: Restricted F Test of Heterogeneity (Cross-Sectional Specific)

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>F-statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>all differential intercept are not significantly different from zero</td>
<td>3.63</td>
<td>0.0258</td>
</tr>
</tbody>
</table>

Source: Author’s Computation, (2016)

Table 5 reported the result of test conducted to ascertain whether restriction on the heterogeneity effect among the selected multinational companies is valid. F-statistics value reported stood at 3.63 alongside probability value of 0.0258 respectively. The result revealed that there is enough evidence to reject the null hypothesis that all differential intercept corresponding to the cross sectional specific units are equal to zero. Therefore it can be concluded that there is cross-sectional heterogeneity/unicomity among the selected multinational companies. Thus pooled OLS estimator restriction is not valid as cross-sectional heterogeneity effect is too significant to be ignored.

Table 6: Hausman Test

<table>
<thead>
<tr>
<th>Difference in estimate of fixed effect and random is not systematic</th>
<th>Chi-square stat</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.85</td>
<td>0.0050</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Computation, (2016)

Result of Hausman test reported chi-square value of 12.85 alongside probability values of 0.0050, which implies that there is enough evidence to reject the null hypothesis with differences in estimates of fixed effect and random is not systematic in favour of the alternative hypothesis that difference in estimate of fixed effect and random is systematic. It thus stands that error component model (random effect) estimator is not appropriate because the random effects are probably correlated with one or more regressors. Thus the most consistent and efficient estimation for the study is the fixed effect cross-sectional specific estimation presented in Table 3 above.
Table 7: Result of Granger Causality Test

<table>
<thead>
<tr>
<th>Company</th>
<th>Null Hypotheses</th>
<th>F-Statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUINNESS</td>
<td>PAT does not Granger Cause CSS</td>
<td>95.0328</td>
<td>0.0651</td>
</tr>
<tr>
<td></td>
<td>CSS does not Granger Cause PAT</td>
<td>0.00018</td>
<td>0.9914</td>
</tr>
<tr>
<td>OANDO</td>
<td>PAT does not Granger Cause CSS</td>
<td>2.4E-06</td>
<td>0.9990</td>
</tr>
<tr>
<td></td>
<td>CSS does not Granger Cause PAT</td>
<td>208.868</td>
<td>0.0440*</td>
</tr>
<tr>
<td>BREWERIES</td>
<td>PAT does not Granger Cause CSS</td>
<td>29.5813</td>
<td>0.1158</td>
</tr>
<tr>
<td></td>
<td>CSS does not Granger Cause PAT</td>
<td>6.83862</td>
<td>0.2325</td>
</tr>
<tr>
<td>CADBURY</td>
<td>PAT does not Granger Cause CSS</td>
<td>0.23134</td>
<td>0.7146</td>
</tr>
<tr>
<td></td>
<td>CSS does not Granger Cause PAT</td>
<td>0.40991</td>
<td>0.6375</td>
</tr>
<tr>
<td>UNILEVER</td>
<td>PAT does not Granger Cause CSS</td>
<td>0.26720</td>
<td>0.6963</td>
</tr>
<tr>
<td></td>
<td>CSS does not Granger Cause PAT</td>
<td>1.13774</td>
<td>0.4795</td>
</tr>
</tbody>
</table>

(*) significant at 5% level of significant
Source: Author’s Computation, (2016)

Table 7 reported result of granger causality analysis conducted in the study to ascertain the causal relationship between corporate social responsibility and profitability of the selected multinational companies. The reported statistics revealed that there is no evidence of causal relationship between profit after tax and corporate social spending for all the selected multinational companies except Oando which recorded the presence of unidirectional causality running from corporate social spending to profit after tax, with specific f-statistics and probability values of 208.868 and 0.0440 respectively.

V. Conclusion and Recommendations

From the correlation statistics presented in Table 1, it can be observed that there is weak negative correlation between corporate social spending and profit after tax (-0.0648) which suggests that corporate social spending of selected multinational companies move in opposite direction, though with weak degree. The reported estimates for the impact of corporate social spending in its most consistent and efficient presented in Table 3 stood at -27.0860 alongside probability values of 0.704, meaning that profitability of the selected multinational companies responds negatively and insignificantly to increase in corporate social spending. Specifically the result revealed that profitability tends to decline in the same period by 27.0860 million Naira for every one million increase in the total corporate social spending of the selected multinational companies. Table 3 revealed that profitability of multinational companies selected in the study respond positively and significantly to increase in total asset, while increase in total liability dampens their profitability prospect on the other hand. As reported in the table 7 there is no evidence of causal relationship between profitability and corporate social responsibility spending for all the selected multinational companies except Oando plc where a unidirectional causality running from corporate social responsibility spending was recorded (f-statistics = 208.868, prob=0.0440 ). It thus implies that past corporate social spending of multinational companies does not significantly influence their present level of profitability except in the case of Oando plc. From the foregoing, the study underscored the fact that most of the multinational do not consider corporate social responsibility spending as an important factor that can boost their performance, as such they invest meager amount that could not trigger positive social interest and boost their reputation to the point that increase profitability will be guaranteed. In a nutshell, the study established that CSR spending by multinational companies in Nigeria over time had removed from their profitability prospect than it has added to it. Observably, the insignificant relationship/impact of corporate social responsibility and/on profitability substantiate the findings of previous studies including Ohiokha, Odion, and Akhalumeh (2016) where it was established that corporate social responsibility has insignificant impact on financial performance of firms in Nigeria, as well as
Igbal et al (2012) where it was established that CSR spending has negative impact on firms value and performance. Contrariwise discoveries made in the study does not agree with the discoveries and submissions of Olaroyeke and nasieku (2015), Onyewuchi and Olameke (2013) and Udensi (2015).

From the discoveries made in the study, it becomes evident that there is insignificant negative relationship between corporate social responsibility and profitability of multinational companies in Nigeria. Corporate social responsibility exerts negative insignificant impact on profitability of multinational companies. The study also established that there is no causal relationship between corporate social responsibility and profitability for most of the multinational companies sampled in the study, save for the case of Oando Plc (an oil company ) that reflect unidirectional causal relationship running from corporate social responsibility to profitability. The study thus recommended that multinational companies should increase their dedication to giving back to the society, by formulating a framework for CSR spending to boost the standard of live of Nigerians to the point that their social reputation will engender positive and substantial increase in their financial performance, as this is essential for their going concern in the country.

References Références Referencias


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The FARSBA member can apply for grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A. Once you are designated as FARSBA, you may send us a scanned copy of all of your credentials. OARS will verify, grade and certify them. This will be based on your academic records, quality of research papers published by you, and some more criteria. After certification of all your credentials by OARS, they will be published on your Fellow Profile link on website https://associationofresearch.org which will be helpful to upgrade the dignity.

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MARSB accrediting is an honor. It authenticates your research activities. After becoming MARSBA, you can add 'MARSBA' title with your name as you use this recognition as additional suffix to your status. This will definitely enhance and add more value and repute to your name. You may use it on your professional Counseling Materials such as CV, Resume, Visiting Card and Name Plate etc.

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We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.

The MARSBA member can apply for approval, grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A.

Once you are designated as MARSBA, you may send us a scanned copy of all of your credentials. OARS will verify, grade and certify them. This will be based on your academic records, quality of research papers published by you, and some more criteria.

It is mandatory to read all terms and conditions carefully.
Auxiliary Memberships

Institutional Fellow of Open Association of Research Society (USA)-OARS (USA)

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The “FARSC” is a dignified title which is accorded to a person’s name viz. Dr. John E. Hall, Ph.D., FARSC or William Walldroff, M.S., FARSC.

The IFOARS institution is entitled to form a Board comprised of one Chairperson and three to five board members preferably from different streams. The Board will be recognized as “Institutional Board of Open Association of Research Society”-(IBOARS).

The Institute will be entitled to following benefits:

- The IBOARS can initially review research papers of their institute and recommend them to publish with respective journal of Global Journals. It can also review the papers of other institutions after obtaining our consent. The second review will be done by peer reviewer of Global Journals Incorporation (USA).
- The Board is at liberty to appoint a peer reviewer with the approval of chairperson after consulting us.
- The author fees of such paper may be waived off up to 40%.
- The Global Journals Incorporation (USA) at its discretion can also refer double blind peer reviewed paper at their end to the board for the verification and to get recommendation for final stage of acceptance of publication.
- The IBOARS can organize symposium/seminar/conference in their country on behalf of Global Journals Incorporation (USA)-OARS (USA). The terms and conditions can be discussed separately.
- The Board can also play vital role by exploring and giving valuable suggestions regarding the Standards of “Open Association of Research Society, U.S.A (OARS)” so that proper amendment can take place for the benefit of entire research community.
- We shall provide details of particular standard only on receipt of request from the Board.
- The board members can also join us as Individual Fellow with 40% discount on total fees applicable to Individual Fellow. They will be entitled to avail all the benefits as declared. Please visit Individual Fellow-sub menu of GlobalJournals.org to have more relevant details.
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time. This may be utilized in your library for the enrichment of knowledge of your students as well as it
can also be helpful for the concerned faculty members.

After nomination of your institution as “Institutional Fellow” and constantly
functioning successfully for one year, we can consider giving recognition to your
institute to function as Regional/Zonal office on our behalf.
The board can also take up the additional allied activities for betterment after our
consultation.

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Open Association of Research Society, U.S.A (OARS) By-laws states that an individual
Fellow may use the designations as applicable, or the corresponding initials. The
Credentials of individual Fellow and Associate designations signify that the individual
has gained knowledge of the fundamental concepts. One is magnanimous and
proficient in an expertise course covering the professional code of conduct, and
follows recognized standards of practice.

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professional membership organizations. Achieving our individual Fellow or Associate
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We shall provide print version of 12 issues of any three journals [as per your requirement] out of our
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Other:

The individual Fellow and Associate designations accredited by Open Association of Research
Society (US) credentials signify guarantees following achievements:

➢ The professional accredited with Fellow honor, is entitled to various benefits viz. name, fame,
honor, regular flow of income, secured bright future, social status etc.
In addition to above, if one is single author, then entitled to 40% discount on publishing research paper and can get 10% discount if one is co-author or main author among group of authors.

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Fellow can also join as paid peer reviewer and earn 15% remuneration of author charges and can also get an opportunity to join as member of the Editorial Board of Global Journals Incorporation (USA)

• This individual has learned the basic methods of applying those concepts and techniques to common challenging situations. This individual has further demonstrated an in-depth understanding of the application of suitable techniques to a particular area of research practice.

Note:

- In future, if the board feels the necessity to change any board member, the same can be done with the consent of the chairperson along with anyone board member without our approval.

- In case, the chairperson needs to be replaced then consent of 2/3rd board members are required and they are also required to jointly pass the resolution copy of which should be sent to us. In such case, it will be compulsory to obtain our approval before replacement.

- In case of “Difference of Opinion [if any]” among the Board members, our decision will be final and binding to everyone.
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The paper should be in proper format. The format can be downloaded from first page of ‘Author Guideline’ Menu. The Author is expected to follow the general rules as mentioned in this menu. The paper should be written in MS-Word Format (*.DOC,*.DOCX).

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   (II) Choose corresponding Journal.

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- Author Name in Font Size of 11 with one column as of Title.
- Abstract Font size of 9 Bold, “Abstract” word in Italic Bold.
- Main Text: Font size 10 with justified two columns section
- Two Column with Equal Column with of 3.38 and Gaping of .2
- First Character must be three lines Drop capped.
- Paragraph before Spacing of 1 pt and After of 0 pt.
- Line Spacing of 1 pt
- Large Images must be in One Column
- Numbering of First Main Headings (Heading 1) must be in Roman Letters, Capital Letter, and Font Size of 10.
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You can use your own standard format also.

Author Guidelines:

1. General,

2. Ethical Guidelines,

3. Submission of Manuscripts,

4. Manuscript’s Category,

5. Structure and Format of Manuscript,

6. After Acceptance.

1. GENERAL

Before submitting your research paper, one is advised to go through the details as mentioned in following heads. It will be beneficial, while peer reviewer justify your paper for publication.

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The Global Journals Inc. (US) welcome the submission of original paper, review paper, survey article relevant to the all the streams of Philosophy and knowledge. The Global Journals Inc. (US) is parental platform for Global Journal of Computer Science and Technology, Researches in Engineering, Medical Research, Science Frontier Research, Human Social Science, Management, and Business organization. The choice of specific field can be done otherwise as following in Abstracting and Indexing Page on this Website. As the all Global
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1) Substantial contributions to conception and acquisition of data, analysis and interpretation of the findings.

2) Drafting the paper and revising it critically regarding important academic content.

3) Final approval of the version of the paper to be published.

All authors should have been credited according to their appropriate contribution in research activity and preparing paper. Contributors who do not match the criteria as authors may be mentioned under Acknowledgement.

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Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.
To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

Complete support for both authors and co-author is provided.

4. MANUSCRIPT’S CATEGORY

Based on potential and nature, the manuscript can be categorized under the following heads:

Original research paper: Such papers are reports of high-level significant original research work.

Review papers: These are concise, significant but helpful and decisive topics for young researchers.

Research articles: These are handled with small investigation and applications

Research letters: The letters are small and concise comments on previously published matters.

5. STRUCTURE AND FORMAT OF MANUSCRIPT

The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also. Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

Papers: These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

(a) Title should be relevant and commensurate with the theme of the paper.

(b) A brief Summary, “Abstract” (less than 150 words) containing the major results and conclusions.

(c) Up to ten keywords, that precisely identifies the paper’s subject, purpose, and focus.

(d) An Introduction, giving necessary background excluding subheadings; objectives must be clearly declared.

(e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition; sources of information must be given and numerical methods must be specified by reference, unless non-standard.

(f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;

(g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.

(h) Brief Acknowledgements.

(i) References in the proper form.

Authors should very cautiously consider the preparation of papers to ensure that they communicate efficiently. Papers are much more likely to be accepted, if they are cautiously designed and laid out, contain few or no errors, are summarizing, and be conventional to the approach and instructions. They will in addition, be published with much less delays than those that require much technical and editorial correction.
The Editorial Board reserves the right to make literary corrections and to make suggestions to improve briefness.

It is vital, that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

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*Language:* The language of publication is UK English. Authors, for whom English is a second language, must have their manuscript efficiently edited by an English-speaking person before submission to make sure that, the English is of high excellence. It is preferable, that manuscripts should be professionally edited.

Standard Usage, Abbreviations, and Units: Spelling and hyphenation should be conventional to The Concise Oxford English Dictionary. Statistics and measurements should at all times be given in figures, e.g. 16 min, except for when the number begins a sentence. When the number does not refer to a unit of measurement it should be spelt in full unless, it is 160 or greater.

Abbreviations supposed to be used carefully. The abbreviated name or expression is supposed to be cited in full at first usage, followed by the conventional abbreviation in parentheses.

Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than 1.4 × 10⁻³ m³, or 4 mm somewhat than 4 × 10⁻³ m. Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

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*Abstract, used in Original Papers and Reviews:*

Optimizing Abstract for Search Engines

Many researchers searching for information online will use search engines such as Google, Yahoo or similar. By optimizing your paper for search engines, you will amplify the chance of someone finding it. This in turn will make it more likely to be viewed and/or cited in a further work. Global Journals Inc. (US) have compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

*Key Words*

A major linchpin in research work for the writing research paper is the keyword search, which one will employ to find both library and Internet resources.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy and planning a list of possible keywords and phrases to try.

Search engines for most searches, use Boolean searching, which is somewhat different from Internet searches. The Boolean search uses "operators," words (and, or, not, and near) that enable you to expand or narrow your affords. Tips for research paper while preparing research paper are very helpful guideline of research paper.

Choice of key words is first tool of tips to write research paper. Research paper writing is an art. A few tips for deciding as strategically as possible about keyword search:
One should start brainstorming lists of possible keywords before even begin searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in research paper?" Then consider synonyms for the important words.

It may take the discovery of only one relevant paper to let steer in the right keyword direction because in most databases, the keywords under which a research paper is abstracted are listed with the paper.

One should avoid outdated words.

Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

Numerical Methods: Numerical methods used should be clear and, where appropriate, supported by references.

Acknowledgements: Please make these as concise as possible.

References

References follow the Harvard scheme of referencing. References in the text should cite the authors' names followed by the time of their publication, unless there are three or more authors when simply the first author's name is quoted followed by et al. unpublished work has to only be cited where necessary, and only in the text. Copies of references in press in other journals have to be supplied with submitted typescripts. It is necessary that all citations and references be carefully checked before submission, as mistakes or omissions will cause delays.

References to information on the World Wide Web can be given, but only if the information is available without charge to readers on an official site. Wikipedia and similar websites are not allowed where anyone can change the information. Authors will be asked to make available electronic copies of the cited information for inclusion on the Global Journals Inc. (US) homepage at the judgment of the Editorial Board.

The Editorial Board and Global Journals Inc. (US) recommend that, citation of online-published papers and other material should be done via a DOI (digital object identifier). If an author cites anything, which does not have a DOI, they run the risk of the cited material not being noticeable.

The Editorial Board and Global Journals Inc. (US) recommend the use of a tool such as Reference Manager for reference management and formatting.

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Figures: Figures are supposed to be submitted as separate files. Always take in a citation in the text for each figure using Arabic numbers, e.g. Fig. 4. Artwork must be submitted online in electronic form by e-mailing them.

Preparation of Electronic Figures for Publication

Even though low quality images are sufficient for review purposes, print publication requires high quality images to prevent the final product being blurred or fuzzy. Submit (or e-mail) EPS (line art) or TIFF (halftone/photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Do not use pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings) in relation to the imitation size. Please give the data for figures in black and white or submit a Color Work Agreement Form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution (at final image size) ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs): >350 dpi; figures containing both halftone and line images: >650 dpi.

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6. AFTER ACCEPTANCE

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6.1 Proof Corrections

The corresponding author will receive an e-mail alert containing a link to a website or will be attached. A working e-mail address must therefore be provided for the related author.

Acrobat Reader will be required in order to read this file. This software can be downloaded (Free of charge) from the following website:

www.adobe.com/products/acrobat/readstep2.html. This will facilitate the file to be opened, read on screen, and printed out in order for any corrections to be added. Further instructions will be sent with the proof.

Proofs must be returned to the dean at dean@globaljournals.org within three days of receipt.

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6.4 Author Material Archive Policy

Please note that if not specifically requested, publisher will dispose off hardcopy & electronic information submitted, after the two months of publication. If you require the return of any information submitted, please inform the Editorial Board or dean as soon as possible.

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You must strictly follow above Author Guidelines before submitting your paper or else we will not at all be responsible for any corrections in future in any of the way.

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Before start writing a good quality Computer Science Research Paper, let us first understand what is Computer Science Research Paper? So, Computer Science Research Paper is the paper which is written by professionals or scientists who are associated to Computer Science and Information Technology, or doing research study in these areas. If you are novel to this field then you can consult about this field from your supervisor or guide.

**TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:**

1. **Choosing the topic:** In most cases, the topic is searched by the interest of author but it can be also suggested by the guides. You can have several topics and then you can judge that in which topic or subject you are finding yourself most comfortable. This can be done by asking several questions to yourself, like Will I be able to carry our search in this area? Will I find all necessary recourses to accomplish the search? Will I be able to find all information in this field area? If the answer of these types of questions will be "Yes" then you can choose that topic. In most of the cases, you may have to conduct the surveys and have to visit several places because this field is related to Computer Science and Information Technology. Also, you may have to do a lot of work to find all rise and falls regarding the various data of that subject. Sometimes, detailed information plays a vital role, instead of short information.

2. **Evaluators are human:** First thing to remember that evaluators are also human being. They are not only meant for rejecting a paper. They are here to evaluate your paper. So, present your Best.

3. **Think Like Evaluators:** If you are in a confusion or getting demotivated that your paper will be accepted by evaluators or not, then think and try to evaluate your paper like an Evaluator. Try to understand that what an evaluator wants in your research paper and automatically you will have your answer.

4. **Make blueprints of paper:** The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

5. **Ask your Guides:** If you are having any difficulty in your research, then do not hesitate to share your difficulty to your guide (if you have any). They will surely help you out and resolve your doubts. If you can’t clarify what exactly you require for your work then ask the supervisor to help you with the alternative. He might also provide you the list of essential readings.

6. **Use of computer is recommended:** As you are doing research in the field of Computer Science, then this point is quite obvious.

7. **Use right software:** Always use good quality software packages. If you are not capable to judge good software then you can lose quality of your paper unknowingly. There are various software programs available to help you, which you can get through Internet.

8. **Use the Internet for help:** An excellent start for your paper can be by using the Google. It is an excellent search engine, where you can have your doubts resolved. You may also read some answers for the frequent question how to write my research paper or find model research paper. From the internet library you can download books. If you have all required books make important reading selecting and analyzing the specified information. Then put together research paper sketch out.

9. **Use and get big pictures:** Always use encyclopedias, Wikipedia to get pictures so that you can go into the depth.

10. **Bookmarks are useful:** When you read any book or magazine, you generally use bookmarks, right! It is a good habit, which helps to not to lose your continuity. You should always use bookmarks while searching on Internet also, which will make your search easier.

11. **Revise what you wrote:** When you write anything, always read it, summarize it and then finalize it.
12. **Make all efforts:** Make all efforts to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in introduction, that what is the need of a particular research paper. Polish your work by good skill of writing and always give an evaluator, what he wants.

13. **Have backups:** When you are going to do any important thing like making research paper, you should always have backup copies of it either in your computer or in paper. This will help you to not to lose any of your important.

14. **Produce good diagrams of your own:** Always try to include good charts or diagrams in your paper to improve quality. Using several and unnecessary diagrams will degrade the quality of your paper by creating "hotchpotch." So always, try to make and include those diagrams, which are made by your own to improve readability and understandability of your paper.

15. **Use of direct quotes:** When you do research relevant to literature, history or current affairs then use of quotes become essential but if study is relevant to science then use of quotes is not preferable.

16. **Use proper verb tense:** Use proper verb tenses in your paper. Use past tense, to present those events that happened. Use present tense to indicate events that are going on. Use future tense to indicate future happening events. Use of improper and wrong tenses will confuse the evaluator. Avoid the sentences that are incomplete.

17. **Never use online paper:** If you are getting any paper on Internet, then never use it as your research paper because it might be possible that evaluator has already seen it or maybe it is outdated version.

18. **Pick a good study spot:** To do your research studies always try to pick a spot, which is quiet. Every spot is not for studies. Spot that suits you choose it and proceed further.

19. **Know what you know:** Always try to know, what you know by making objectives. Else, you will be confused and cannot achieve your target.

20. **Use good quality grammar:** Always use a good quality grammar and use words that will throw positive impact on evaluator. Use of good quality grammar does not mean to use tough words, that for each word the evaluator has to go through dictionary. Do not start sentence with a conjunction. Do not fragment sentences. Eliminate one-word sentences. Ignore passive voice. Do not ever use a big word when a diminutive one would suffice. Verbs have to be in agreement with their subjects. Prepositions are not expressions to finish sentences with. It is incorrect to ever divide an infinitive. Avoid clichés like the disease. Also, always shun irritating alliteration. Use language that is simple and straightforward. put together a neat summary.

21. **Arrangement of information:** Each section of the main body should start with an opening sentence and there should be a changeover at the end of the section. Give only valid and powerful arguments to your topic. You may also maintain your arguments with records.

22. **Never start in last minute:** Always start at right time and give enough time to research work. Leaving everything to the last minute will degrade your paper and spoil your work.

23. **Multitasking in research is not good:** Doing several things at the same time proves bad habit in case of research activity. Research is an area, where everything has a particular time slot. Divide your research work in parts and do particular part in particular time slot.

24. **Never copy others’ work:** Never copy others’ work and give it your name because if evaluator has seen it anywhere you will be in trouble.

25. **Take proper rest and food:** No matter how many hours you spend for your research activity, if you are not taking care of your health then all your efforts will be in vain. For a quality research, study is must, and this can be done by taking proper rest and food.

26. **Go for seminars:** Attend seminars if the topic is relevant to your research area. Utilize all your resources.
27. Refresh your mind after intervals: Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

28. Make colleagues: Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

29. Think technically: Always think technically. If anything happens, then search its reasons, its benefits, and demerits.

30. Think and then print: When you will go to print your paper, notice that tables are not be split, headings are not detached from their descriptions, and page sequence is maintained.

31. Adding unnecessary information: Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

32. Never oversimplify everything: To add material in your research paper, never go for oversimplification. This will definitely irritate the evaluator. Be more or less specific. Also too, by no means, ever use rhythmic redundancies. Contractions aren’t essential and shouldn’t be there used. Comparisons are as terrible as clichés. Give up ampersands and abbreviations, and so on. Remove commas, that are, not necessary. Parenthetical words however should be together with this in commas. Understatement is all the time the complete best way to put onward earth-shaking thoughts. Give a detailed literary review.

33. Report concluded results: Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

34. After conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium though which your research is going to be in print to the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects in your research.

**Informal Guidelines of Research Paper Writing**

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form, which is presented in the guidelines using the template.
- Please note the criterion for grading the final paper by peer-reviewers.

Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.

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Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

**General style:**

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear

- Adhere to recommended page limits

**Mistakes to evade**

- Insertion a title at the foot of a page with the subsequent text on the next page
- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

- Use standard writing style including articles ("a", "the," etc.)
- Keep on paying attention on the research topic of the paper
- Use paragraphs to split each significant point (excluding for the abstract)
- Align the primary line of each section
- Present your points in sound order
- Use present tense to report well accepted
- Use past tense to describe specific results
- Shun familiar wording, don’t address the reviewer directly, and don’t use slang, slang language, or superlatives
- Shun use of extra pictures - include only those figures essential to presenting results

**Title Page:**

Choose a revealing title. It should be short. It should not have non-standard acronyms or abbreviations. It should not exceed two printed lines. It should include the name(s) and address(es) of all authors.
Abstract:

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript—must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing references at this point.

An abstract is a brief distinct paragraph summary of finished work or work in development. In a minute or less a reviewer can be taught the foundation behind the study, common approach to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Yet, use comprehensive sentences and do not let go readability for briefness. You can maintain it succinct by phrasing sentences so that they provide more than lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study, with the subsequent elements in any summary. Try to maintain the initial two items to no more than one ruling each.

- Reason of the study - theory, overall issue, purpose
- Fundamental goal
- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

Approach:

- Single section, and succinct
- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

Introduction:

The Introduction should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.
Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.

Shape the theory/purpose specifically - do not take a broad view.

As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

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This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that’s all.

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer’s interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.

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Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report.
- If you desire, you may place your figures and tables properly within the text of your results part.

Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts.
- Despite of position, each figure must be numbered one after the other and complete with subtitle.
- In spite of position, each table must be titled, numbered one after the other and complete with heading.
- All figure and table must be adequately complete that it could situate on its own, divide from text.

Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a argument should be. Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly described. Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved with prospect, and let it drop at that.

- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work.
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information.
- Submit to work done by specific persons (including you) in past tense.
  - Submit to generally acknowledged facts and main beliefs in present tense.
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