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OF MANAGEMENT AND BUSINESS RESEARCH: E

## Marketing

The Emperical Determinants

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Highlights

Marketing in Building Brand

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Discovering Thoughts, Inventing Future

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# The Emperical Determinants of Aggregate Demand and its Effect on the Nigerian Populace

By Past. Dr. Abomaye-Nimenibo, Williams Aminadokiari Samuel

*Obong University*

*Abstract-* This study was carried out to examine the determinants of aggregate demand in Nigeria during the period 1970 to 2014. The paper traced the fiscal policy and noted in fiscal policy, the government uses taxation and its own expenditure factors of aggregate demand to steer up the economy in its desired direction. It was observed that the federal Government and the other tiers of government operated consisted huge deficit budgets for this period by relying on the two major factors. The objective of this study is to investigate and ascertain the determinants of aggregate demand in Nigeria between 1970 and 2014 given the argument that Government spending and not tax reduction that determines aggregate demand. The ultimate aim was to ensure adequate use of all factors responsible for stimulating the economy and increase aggregate demand. Our study in five segments, was an attempt at trying to know where Nigeria has been going wrong in her use or application of the Aggregate Demand stimulants to fine tune the economy. An Econometrical approach was adopted in analyzing the data collected. Ordinary least squares (OLS) and cointegration methods have been employed specified in a functional notation form relating Aggregate demand (AD) as dependant variables to seven (7) determinant stimulants.

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THE EMPERICAL DETERMINANTS OF AGGREGATE DEMAND AND ITS EFFECT ON THE NIGERIAN POPULACE

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# The Empirical Determinants of Aggregate Demand and its Effect on the Nigerian Populace

Past. Dr. Abomaye-Nimenibo, Williams Aminadokiari Samuel

**Abstract-** This study was carried out to examine the determinants of aggregate demand in Nigeria during the period 1970 to 2014. The paper traced the fiscal policy and noted in fiscal policy, the government uses taxation and its own expenditure factors of aggregate demand to steer up the economy in its desired direction. It was observed that the federal Government and the other tiers of government operated consisted huge deficit budgets for this period by relying on the two major factors. The objective of this study is to investigate and ascertain the determinants of aggregate demand in Nigeria between 1970 and 2014 given the argument that Government spending and not tax reduction that determines aggregate demand. The ultimate aim was to ensure adequate use of all factors responsible for stimulating the economy and increase aggregate demand. Our study in five segments, was an attempt at trying to know where Nigeria has been going wrong in her use or application of the Aggregate Demand stimulants to fine tune the economy. An Econometrical approach was adopted in analyzing the data collected. Ordinary least squares (OLS) and cointegration methods have been employed specified in a functional notation form relating Aggregate demand (AD) as dependant variables to seven (7) determinant stimulants.

The aggregate model therefore is:

$$AD = f (\Delta CS, \Delta IS, \Delta GS, \Delta ES, \Delta PP, \Delta PX, \Delta IR)$$

Where:

- $\Delta CS$  = Change in consumer spending
- $\Delta IS$  = Change in investment spending
- $\Delta GS$  = Change in Government spending
- $\Delta ES$  = Change in Export spending
- $\Delta PP$  = change in population
- $\Delta PX$  = price level
- $\Delta IR$  = interest rate

We therefore examine the relationship between aggregate demand and the explanation variables were obtained from CBN Statistical bulletin, 2005. A null hypothesis:  $H_0: \alpha_1 = 0$ , that is AD has no relationship with each of the seven (7) independent determinants the model has used.

The summary of findings revealed that there exist a positive and strong relationship between aggregate demand and change in government spending, change in population, change in investment spending, change in consumer spending, change in export investment. The parsimonial error correction model shows that the model is a good fit and the coefficient of determination was significantly high. An Econometrical approach was adopted in analyzing the data collected. Ordinary least squares (OLS) and cointegration

methods have been employed in our investigation. A growth model was therefore specified in a functional notation form relating Aggregate demand (AD) as a dependant variable to the seven (7) determinant stimulants. The aggregate model therefore is:

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- ❖  $\Delta PP$  = change in population
- ❖  $\Delta PX$  = price level
- ❖  $\Delta IR$  = interest rate

AD = Aggregate Demand

$b_0$  = autonomous determinant factor or intercept

$B_1$ - $b_5$  = coefficients of the determinant stimulants

- $\Delta CS$  = Change in consumer spending
- $\Delta IS$  = Change in investment spending
- $\Delta GS$  = Change in Government spending
- $\Delta ES$  = Change in Export spending
- $\Delta PP$  = change in population
- $\Delta PX$  = price level
- $\Delta IR$  = interest rate
- $\mu$  = stochastic or random term.

The explanatory variables explained 98.7% change in aggregate demand. The overall regression was significant at 1%. The error correction coefficient was relatively high, to this; we find that the teeming population is non productive and is sensitive to inflationary trends. Nigeria need to engage her teeming population in productive activities, and employ all the economic tools together in order to make fiscal policy effective.

## I. INTRODUCTION

Scholars have always stated that the sum total of the expenditures of all goods and services produced within an economy is known as aggregate demand. According to McConnell & Brue (1999:221), aggregate demand is a schedule or a curve showing the various amounts of goods and services-the amounts of real output- that domestic consumers, business, government, and foreign buyers collectively desire to purchase at each possible price level. Aggregate demand is subject to change due to change in government spending or a reduction in taxes. This is so because a reduction in taxes, for example, leads to increase in disposable income, which stimulates

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aggregate demand. This is also true of increase in government expenditures.

Yet within the Keynesian school of thought there is no consensus as to which of these actions clearly affect the aggregate demand in an economy, whether an increase in government expenditure or a reduction in taxes. Conservatives in U. S. believe that the Government should play a small role in the economy, whereas Liberals believe that government should play an active role. However, President John Kennedy was the first US President to accept Keynesian economics with open arms. He set about to use tax and spending policy to "fine tune" the economy (Henderson & Poole, 1991:296). But according to Gbosi (1993:16), it is the government expenditure that affects aggregate demand more than a reduction in taxes. This is so because it is not easy to predict that when the disposable income is increased due to reduction in taxes that all the increase in income will be spent. In his words:

"A reduction in taxes is just like dragging a horse to the water but cannot force it to drink. Also, in the case of reduction in taxes even though people now have more disposal income, you cannot force them to spend it".

The level of aggregate demand in an economy also determines capacity utilization in the industries within an economy. This is because if, for instance, aggregate demand is low, there will be a fall in capacity utilization in the industries within an economy. That is to say, that aggregate demand either limits or expands specialization of labour.

Population (labour) is important in an economy because it manipulates other factors of production to produce goods and services that are in demand within and outside an economy. Thus, a country with many people can produce and enjoy more goods and services given abundant resources than a country with small number of people (Engelman 1997:25). On the other hand, a country with more people will suffer greatly, if it cannot utilize its abundant resources properly. Hence, population had received increasing attention from both governments and Non Governmental Organization (NGO's) since 1798 when Malthus published his essay on population and the consequences of overpopulation. He has postulated that population was growing at a geometrical progression while food supply was growing at an arithmetic progression. His fear was that in the future, population will outrun food supply and there will be starvation (Okeke 1992).

## II. STATEMENT OF PROBLEM

Malthus theory on population is still a problem in both developed and developing nations. Engelman (1997:6) stated that population growth influences many areas of human affairs, not merely food, security or

health or environmental quality or economic growth, but all these and more. It is still a source of concern especially in the developing countries, where a good percentage of the population is not engaged in productive activities. Birth rate is on the increase due to increase in fertility whereas death rate is reduced due to improvement in the medical services, Engelman (1997:27).

According to Henderson and Poole (1991:109), in most markets, rising population shifts demand curves out and that total demand in a country with a large population is greater than in a country with a small population. Henderson and Poole further stated that, so many demand studies are based on per-capita data that is, breaking down the population by age group and/or other characteristics and selecting a particular group appropriate to the study.

Thus in developing countries, one may ask whether high population growth can result to excess demand for goods and services. Can it be safely argued then that population affects aggregate demand? We also find in literatures two schools of thought saying that aggregate demand is subject to change due to change in government spending or a reduction in taxes. Within the Keynesian school of thought there is no consensus as to which one of these actions clearly affects the aggregate demand in an economy, whether an increase in government expenditure or a reduction in taxes.

Jhingan (2003:712) also stated that economists do not agree that cutting tax rate will lead to high growth rate and more tax revenue. Proponents of tax cut pointed out that high growth rates generate higher incomes which, in turn, generate higher tax revenues. Therefore, it is not reduction in tax rates that leads to the high growth rate of the economy. He further stated that, supply-side economists emphasise reduction in social (government) spending, subsidies, grants and budget deficit with reduction in taxes. Such policy of reducing social (government) spending, subsidies and grants adversely affects the poor and unemployed and fails to bring social justice.

The question one is poised to ask is that, will government spending stimulate the economy and increase aggregate demand? Will it also be true that aggregate demand determines capacity utilization in our industries?

Generally, what major factor(s) should be responsible for stimulating the economy and increase aggregate demand?

Taking all these issues together, therefore, this work seeks to investigate the relationships that exist between population and aggregate demand in Nigeria between 1970 and 2005.

Generally, what major factor(s) should be responsible for stimulating the economy and increase aggregate demand?

These issues need to be investigated and it is the desire to investigate these issues that prompted this research.

### III. RESEARCH HYPOTHESES

The study was guided by the following hypotheses:

- i) There is no significant relationship between aggregate demand and population growth.
- ii) There is no significant relationship between aggregate demand and government spending.
- iii) There is no significant relationship between aggregate demand and investment spending.
- iv) There is no significant relationship between aggregate demand and net export spending.
- v) There is no significant relationship between aggregate demand and consumption spending.
- vi) There is no significant relationship between aggregate demand and price.
- vii) There is no significant relationship between aggregate demand and interest rate.

### IV. SIGNIFICANCE OF THE STUDY

Aggregate behaviour studies or models attempt to predict demand behaviour characteristics for an aggregate population, such as residents of a census tract or area.

Aggregate behaviour models had been contrasted with disaggregate models, which predict an individual's behaviour and then aggregate individual decisions across a population to obtain overall demand characteristics.

Aggregate models can be used to:

- i) Identifying which factors influence overall levels of various demands in an area.
- ii) Predicting the change in levels of demands caused by a change in one of these factors.
- iii) Predicting the amount of demand in other areas, based on data collected in one area.
- iv) Developing data for use in a particular demand model.

Of course, aggregate demand behaviour is not devoid of the characteristics of the population and of the area.

However, not much impact had been felt in these areas of aggregation. Aggregate models have not yet been developed which have been demonstrated to be transferable to other situations or areas outside the developed countries. A lot has been said on some aspect of aggregate demand as it concerns itself with Fiscal policies of other nations and had not been able to tell us the level of cointegration between the aggregate demand and the determinant variables. Hence, a knowledge gap was created to be filled. Therefore, this study seeks to fill this knowledge gap.

The study is expected to awaken the interest of policy makers to come up with laws and regulations that

will to a large extent stimulate the economy and increase aggregate demand with a view to improving the living standards of the people.

It is therefore necessary to look at the determinants of aggregate demand with a view to proffer solutions to handle population explosion in Nigeria in order to manage our teeming population and propel prospective investors in the country to invest in the areas of agriculture, housing, purchasing, marketing, distribution of essential commodities, transportation, manufacturing, funding of small scale industries and scientific inventions.

Furthermore, it is believed that this study will address a very important subject of addressing the issue of government either cutting down taxes in order to stimulate aggregate demand or government spending to stimulate the economy and increase aggregate demand through capacity utilization in our industries.

According to Ashley and Banister (1989); Epperson, Hendricks, and York (1995); Ridgeway (1995); and Nelson and Allen (1997), aggregate models have not yet been developed which have been demonstrated to be transferable to other situations or areas.

Therefore, this study will be relevant, if its findings provoke further academic inquiries into other sub units of aggregate demand. This will no doubt, enhance further knowledge in the field of study and improve the national economy. This study will contribute to existing literature in Economics as a whole.

### V. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

#### a) Introduction

There have been persistent arguments over what stimulates aggregate demand in any country, of which Nigeria is one. Scholars also argue that aggregate demand either limits or expands specialization of labour.

Early economic development proponents have also argued that aggregate demand is subject to change due to change in government spending or a reduction in taxes. This is so because a reduction in taxes, for example, leads to increase in disposable income, which stimulates aggregate demand. This is also true of increase in government expenditure.

Yet there is no consensus as to which of these actions clearly affect the aggregate demand in an economy, whether an increase in government expenditure or a reduction in taxes.

It has been argued that the fiscal operations of the government were not effective in restoring macroeconomic stability. Osakwe (1983) points specifically at the increasing Federal Government expenditure as a major factor which, via its effects on money supply causes price instability. Ojo and

Okunroumu (1992) attribute the observed persistent economic problem of the period to inappropriate fiscal management. Akpakpan (1994) argues that the failure of the government to reactivate the economy through the use of fiscal policy means that the government never used fiscal policy as an instrument of economic management. This implies that change in government spending does not determine or affect aggregate demand. These views have not been thoroughly investigated. But we need concrete facts to be able to guide future policies. This study is an attempt to contribute toward this.

The general debate is that aggregate demand in any economy determines capacity utilization in industries within and outside an economy. This is because if, for instance, aggregate demand is low, there will be a fall in capacity utilization in the industries within an economy. That is to say, that aggregate demand either limits or expands specialization of labour. It is therefore, necessary to have a glimpse of the tripod upon which aggregate demand pivots. Man is the nucleus of aggregate demand and supply. Hence, the study of the behaviour of the population is very vocal.

The tripod upon which aggregate demand pivots is the fiscal policies of the government, capacity utilization and the relative population of any country. This does not limit the fact that there are other supportive variables that stimulate aggregate demand. Since 1980's, the Nigerian economy has been facing serious economic depressions resulting in both domestic and external instability whereby aggregate demand becomes too low. This development led to the adoption of the structural adjustment programme (SAP) in 1986 by the Federal Government. SAP was intended to restructure the economy, by introducing a market oriented financial system for effective and efficient production and distribution of goods and services. Despite the various measures of SAP, the economic problems have persisted.

Population (labour) is important in an economy because it manipulates other factors of production to produce goods and services that are in demand within an economy. Thus, a country with many people can produce and enjoy more goods and services given abundant resources than a country with small number of people (Engelman 1997:25). On the other hand, a country with more people will suffer greatly, if it cannot utilize its abundant resources properly; hence, population studies have received increasing attention from both governments and NGOs since 1798 when Malthus published his essay on population and the consequences of overpopulation. He postulated that population grew at a geometrical progression while food supply grew at an arithmetical progression. His fear was that in the future, population will outrun food supply with its attendant effect of starvation (Okeke 1992: 4).

## b) Theoretical Framework

We discuss two basic economic theories of aggregate demand. The first is the aggregate demand function and the second being the fiscal policies.

According to McConnell and Brue (1999), aggregate demand is a schedule or a curve showing the various amounts of goods and services - the amounts of real output — that domestic consumers, businesses, government, and foreign buyers collectively desire to purchase at each possible price level. Other things being equal, the lower the price level, the larger the real gross domestic product (GDP) or output these buyers will purchase. Conversely, the higher the price level, the smaller the real GDP (aggregate demand) they will buy. Thus, the relationship between the price level and the amount of real GDP demand is inverse or negative. Hence,

$$AD = f(CS, IS, GS, ES, PP, PX, IR) \dots \dots \dots 1$$

Where AD defines aggregate demand, CS Consumption spending, IS Investment spending, GS government spending, ES Net export spending, PP population, PX price and IR Interest rate are as defined. Changes in the price level change the level of aggregate spending. The usual assumption is that changes in the quantity of real output demanded (caused by changes in the price level) and call for changes in aggregate demand caused by changes in one or more of the determinants of aggregate demand. These determinants determine the location of aggregate demand curve. So change in aggregate demand equals all the changes in the determinant variables.

Fiscal policy is broadly defined as the package of adjustments in government revenues and expenditures in support of economic stability and a desired rate of economic growth (Ojo and Okunroumu, 1993). Fiscal policy is described as being neutral, expansionary, or contractionary. Expansionary fiscal policy will increase the output, which will increase interest rates. Contractionary will slowdown the economy and reduce interest rates.

Akpakpan(1994) defines fiscal policy as the deliberate use of government income and government expenditure to influence the level of economic activities in the economy. Due and Friedlaender (1977) outlined three broad objectives of fiscal policy to include: (a) allocation - securing adjustments in the goods and services available between and within the private and public sectors of the economy; (b) distribution - adjustments in the distribution of income and wealth; and (c) stabilization - securing a high level of employment, stability in price level and economic growth. In fiscal policy the government uses its spending and taxation to steer the economy in the desired direction.

The government can use its expenditure to stimulate the economy or to contract the level of

economic activities. If at a particular point in time, the government observes that aggregate demand and level of output as well as employment with investment in the economy have declined below the desired levels, the government can stimulate the economy by increasing its expenditure and also decrease the interest rate. The result will be increase in output, aggregate demand and employment.

Alternatively, if the government observes that the economy is over-stimulated; it could deal with the situation by reducing its own expenditure and increase the interest rate. Aggregate demand, income and total government spending will fall. All things being equal, prices of goods and services will tend to go down.

A number of empirical studies have been carried out in the area of aggregate demand and its effect on the economy of the people (populace); how aggregate demand is determined and managed; and that of fiscal deficits and growth.

A number of empirical studies have been carried out in the area of aggregate demand and its effect on the economy of the people (populace); how aggregate demand is determined and managed; and that of fiscal deficits and growth.

Using Cross Country regressions, Ram (1986) reports that growth in general is positively correlated with the rate of change in total public expenditure. Similarly, Ram (1986) and Grossman(1988), reported positive relationships between government fiscal deficits and economic growth. But to what extent is the relationship between government and fiscal policies was not clearly stated. It is therefore necessary to make individual country recommendations. This means that the policy relevant to these countries may not work for Nigeria. It should be noted that cross-country or cross sectional studies do not address the problems specific to a given region or country. Hence, the relevance of this study.

Ariyo (1993), evaluates the desirability of Nigeria's fiscal deficit profile between 1970 and 1990. He suggest that the structure of government expenditure is inherently unsustainable by the country's resource profile. The major cause attributed to this was the phenomenal increase in government expenditure financed through debt raised from both internal and external sources. This has consequently led to persistent and unsustainable annual deficits. The results also suggest that the Structural Adjustment Programme (SAP) implemented in 1986 has so far not been of much assistance in addressing the problem. This study does show indirectly that the effect of government spending on aggregate demand is negative.

Also, Kouassy and Bohoum (1993), examines the determinants of fiscal deficit of Cote d' Ivoire over two decades. The study also investigated the impact of public investment cuts and tax rate manipulation on the fiscal deficit over the short and medium terms. The

study adopted a model that was based on disaggregation of the different components of fiscal deficits. The regression (OLS) results show that public investment is positively linked with fiscal deficits.

Furthermore, Ekpo (1994), investigates the impact on government expenditure on economic growth in Nigeria between 1960 and 1992. The study examines the contribution of government expenditure, particularly capital spending on the growth process in Nigeria. He also examines the relationship between private and government expenditure. The study adopts an empirical approach to investigating the relationship between public(government) expenditure as it affects aggregate demand vis-a-vis economic growth. A modified Denison-style growth accounting methodology was used for his analysis. He used the ordinary least square (OLS) technique in estimating the equations that link public sector investments with private sector investment initiatives. The results from the study confirm that government spending on infrastructure as well as investments spending on agriculture crowd in private investment while public spending on manufacturing and construction crowds out private investment. Although the results from this study are insightful, the study was based on the assumption that variables which affect private investment will affect growth (aggregate demand). One therefore wonders what role government spending and investment spending should play in the determination of aggregate demand vis-à-vis GDP. Hence, there is the need to investigate the determinants of aggregate demand which study is lagging.

The study by Ekpo (1994) only estimates private investment model with the assumption that all the factors affecting private investment will automatically affect growth of the economy. It is assumed that there is a direct link between private investment and GDP growth. This is seen as an indirect approach to linking fiscal policy with aggregate demand. A more direct approach is to link fiscal policy variable to aggregate demand. Therefore, this study puts the assumption to empirical testing. Besides, this study estimates an aggregate demand (AD) model (which is missing in most studies including Ekpo's study) and identifies the major determinant variables of aggregate demand.

Jappelli and Meana (1994), studied public(government) expenditures on investment and consumption which have different impact on economic activity. Public investment stimulates output and so increases government revenues and, in turn, allows the government to spend more. So based on cross-country data, the study analyses the determinants of public expenditures that are allocated to public investment. The implication of findings from the study is that specific spending promotes output (growth); that is, specific revenue sources can be allocated to specific expenditures which in turn promotes output growth (aggregate demand). Economic theory justifies

earmarking, which assigns revenues from specific taxes to specific activities. To what extent does tax cut affects aggregate demand is missing and calls for an indept study.

El-Khoury (2002), provides a general framework through which the stabilisation function of fiscal policy works. The study begins with the traditional IS-LM aggregate supply and aggregate demand model to assess the short run effects of fiscal policy on output, prices, and the current account of the balance of payments and to explore the interactions between fiscal policy and monetary and exchange rate policies. It then addresses issues specific to fiscal policy and macroeconomics management, including methods for measuring fiscal balance, cyclical and structural defects, the sustainability of the fiscal deficit, and policies for managing debt and fiscal surpluses. It concludes by exploring how the three primary instruments of fiscal policy, tax policy, expenditure policy and overall budgetary policy, can affect a country's long term growth.

Chete and Adeoye (2002), in their paper, explore the human capital/economic growth connection for Nigeria. The study provides a quatitative evaluation of the effects of human capital on economic growth in Nigeria. A lot of methodological approaches were employed to examine this link. Specifically, the study employs Granger causality tests. Variance decomposition analysis, impulse response analysis and econometric techniques. The results that emanates from the study suggest an anticipated positive impact of human capital on growth. The results also provide evidence to support the submission that the development of skills and knowledge, combined with their effective utilisation, is important for growth and development of an economy.

William Barber (1997) in his article published in an economic journal, stated that price is a, human volition, the human subject, was "brought to the centre of the stage" by marginalist economics, as a bargaining tool. Neoclassical economists sought to clarify choices open to producers and consumers in market situations, and thus "fears that cleavages in the economic structure might be unbridgeable could be suppressed".

Without denying the applicability of the Austrian theory of value as *subjective* only, within certain contexts of price behavior, the Polish economist Oskar Lange (1936) felt it was necessary to attempt a serious *integration* of the insights of classical political economy with neo-classical economics. This would then result in a much more realistic theory of price and of real behavior in response to prices. Marginalist theory lacked anything like a theory of the social framework of real market functioning, and criticism sparked off by the capital controversy initiated by Piero Sraffa (1960), revealed that most of the foundational tenets of the marginalist theory of value either reduced to tautologies, or that the theory

was true only if counter-factual conditions applied. One insight often ignored in the debates about price theory is something that businessmen are keenly aware of: in different markets, prices may not function according to the same principles except in some very abstract (and therefore not very useful) sense. From the classical political economists to Michal Kalecki according to Williams Babber (1997), it was known that prices for industrial goods behaved differently from prices for agricultural goods, but this idea could be extended further to other broad classes of goods and services. This calls for an in-dept study.

### c) Literature Review

According to Bobo The Ninja contribution to Fiscal Policy on 21<sup>st</sup> March 2007 in the Wikipedia, the free encyclopedia, Fiscal policy is the economic term that defines the set of principles and decisions of a government in setting the level of public expenditure and how that expenditure is funded. Fiscal policy and monetary policy are the macroeconomic tools that governments have at their disposal to manage the economy. Fiscal policy is the deliberate change in government spending, government borrowing or taxes to stimulate or slow down the economy. It contrasts with monetary policy, which describes the policies about the supply of money to the economy.

#### i. Method of Raising Funds

Governments spend money on a wide variety of things, from the military and police to services like education and healthcare, as well as transfer payments such as welfare benefits.

This expenditure can be funded in a number of different ways:

- Taxation of the population
- Seignorage, the benefit from printing money
- Borrowing money from the population, resulting in a fiscal deficit.

#### Funding of Deficits

A fiscal deficit is often funded by issuing bonds, like Treasury bills or consols. These pay interest, either for a fixed period or indefinitely. If the interest and capital repayments are too great, a nation may default on its debts, most usually to foreign debtors.

#### ii. Economic Effects of Fiscal Policy

Fiscal policy is used by governments to influence the level of aggregate demand in the economy, in an effort to achieve economic objectives of price stability, full employment and economic growth.

Keynesian economics suggests that adjusting government spending and tax rates, are the best way to stimulate aggregate demand. This can be used in times of recession or low economic activity as an essential tool in providing the framework for strong economic growth and working toward full employment. However,

such policies have commonly resulted in deficit spending.

During periods of high economic growth, a budget surplus can be used to decrease activity in the economy. A budget surplus will be implemented in the economy if inflation is high, in order to achieve the objective of price stability. The removal of funds from the economy will, by Keynesian Theory, reduce levels of aggregate demand in the economy and contract it, bringing about price stability.

Despite the importance of fiscal policy, a paradox exists. In the case of a government running a budget deficit, funds will need to come from public borrowing (the issue of government bonds), overseas borrowing or the printing of new money. When governments fund a deficit with the release of government bonds, an increase in interest rates across the market can occur. This is because government borrowing creates higher demand for credit in the financial markets, causing a lower aggregate demand (AD) due to the lack of disposable income, contrary to the objective of a budget deficit. This concept is called crowding out. However, the effects of crowding out are usually not as large as the increase in GDP stemming from increased government spending.

Another problem is the time lag between the implementation of the policy, and visible effects seen in the economy. It is often contended that when an expansionary Fiscal policy is implemented, by way of decrease in taxes, or increased consumption (keeping taxes at old level), it leads to increase in aggregate demand; however, an unchecked spiral in aggregate demand will lead to inflation. Hence, checks need to be kept in place.

### iii. Interest Rate

According to CBN monetary policy circular (NO. 33: 1999), the adoption of market-based technique of monetary management requires a flexible and dynamic interest rate policy. Thus, the deregulation of interest rates which came into effect in October 1996 shall continue. In this regard, the CBN would indirectly influence interest rate changes through its intervention rate on various money market instruments, especially the Minimum Rediscount Rate (MRR) as well as the cut-off rate at the weekly tender for treasury bills. The MRR, which is the nominal anchor of CBN's interest rate policy, shall be used more actively in 1999.

The large spread between bank deposits and average lending rates has been a matter of concern to the authorities, as it tends to discourage savings and borrowing to the detriment of the economy. In order to further address this problem, a more competitive financial environment shall be established where banks freely compete for funds.

### iv. Price

Fried Milton (2006) came up with answers to three interesting questions: How does the amount you buy depend on price? How much do you benefit by being able to buy something at a particular price? What is the relation between price and value? He says that first, the consumer is to choose among the various bundles of goods and services you could purchase or produce with your limited resources of time and money. There are two elements to the problem--your preferences and your opportunity set. Your preferences could be represented by a gigantic table showing all possible *bundles*--collections of goods and services that you could conceivably consume--and showing for every pair of bundles which one you prefer. We assume that your preferences are consistent; if you prefer A to B and B to C, you also prefer A to C. Your *opportunity set* can be thought of as a list containing every bundle that you have enough money to buy. Your problem as a consumer is to decide which of the bundles in your opportunity set you prefer.

The first is that the value of something is whatever we are (just) willing to give up for it. Two things have the same value if gaining one and losing the other leaves us neither better nor worse off--meaning that we are indifferent between the situation before the exchange and the situation after the exchange. This is an application of the principle of revealed preference discussed in the previous chapter--our values are defined by the choices we make.

A second lesson is that the value of goods (to you) depends not only on the nature of the goods and your preferences but also on how much of those goods you have. The third lesson is that the price (or cost) of a good is the amount of something else you must give up to get it. This is called *opportunity cost*--the cost of getting one thing, whether by buying it or producing it; or it is what you have to give up in order getting it. The cost of living in a house that you already own is not, as you might think, limited to expenditures on taxes, maintenance, and the like; it also includes the interest you could collect on the money you would have if you sold the house to someone else instead of living in it yourself. Opportunity cost is not a particular kind of cost but rather the correct way of looking at all costs. The money you spend to buy something is a cost only because there are other things you would like to spend the money on instead; by buying A, you give up the opportunity to buy B. Not getting the most valuable of the B's that you could have bought with the money--the one you would have bought if A had not been available--is then the cost to you of buying A. That is why, if you were certain that the world was going to end at midnight today, money would become almost worthless to you. Its only use would be to be spent today--so you would "spend as if there were no tomorrow."

The final lesson is that you buy something if and only if its cost is less than its value. A drop in the price of everything you consume has the same effect on what you can buy as an increase in income. We are used to thinking of prices and incomes in terms of money, but money is important only for what it can buy; if all prices go down and my income stays the same, my *real income*--my ability to buy things--has risen in exactly the same way as if prices had stayed the same and my money income had gone up. If income and prices all change at once, how can we say whether my real

income has gone up, gone down, or stayed the same? Income is useful for what it can buy; the value to me of the bundle of goods that I buy is indicated, on an indifference curve diagram, by what indifference curve it is on. It therefore seems natural to say that a change in money income and prices that leaves me on the same indifference curve as before has left my real income unchanged. A change that leaves me on a higher indifference curve has increased my real income; a change that leaves me on a lower indifference curve has lowered my real income.

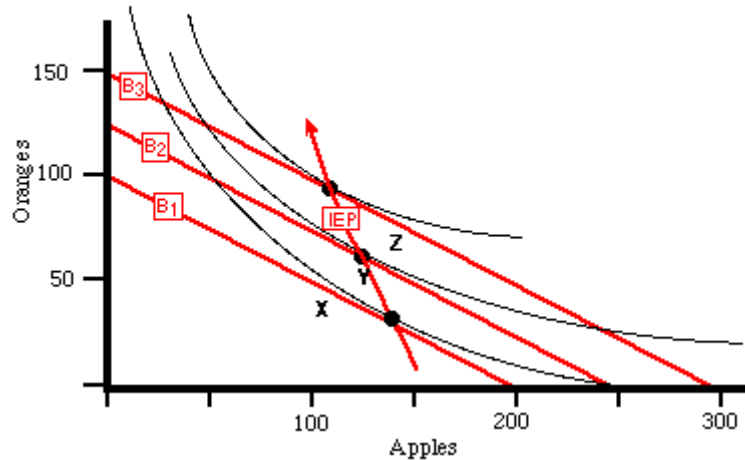


Figure 3.5

Optimal bundles for three different incomes--a normal good and an inferior good. As income increases, consumption of oranges increases but consumption of apples decreases; so apples are an inferior good. IEP is the income expansion path.

The prices that are important are *relative prices* i.e. how much of one good I must give up to get another. The price of one good in terms of another corresponds to (minus) the slope of the budget line. So a change in money income and money prices that alters the slope of the budget line while leaving one on the same indifference curve is a pure change in prices meaning that prices have changed and (real) income has not. A change that leaves the slope of the budget line the same but shifts it so that it is tangent to a different indifference curve is a pure change in income i.e. real income has changed but (relative) prices have not.

A pure change in price occurs when:

- a) a pure change in income occurs and
- b) Relative prices change, but real income does not, since the individual ends up on the same indifference curve after the change.

A drop in the price of one good without any compensating change in income or other prices produces both a substitution effect and an income effect. The substitution effect always increases the consumption of the good whose price has fallen; the

income effect may increase or decrease it. This suggests the possibility of a good so strongly inferior that the income effect more than cancels the substitution effect as its price falls, and its consumption goes down. Imagine, for example, that you are spending most of your income on garri. If the price of garri falls by 50 percent while your income and all other prices remain the same, your real income has almost doubled. Since you are now much richer than before, you may decide to buy some rice and reduce your consumption of garri. The substitution effect tends to make you consume more garri; at the lower price of garri, the money required to buy a cup of rice would buy twice as much garri as before the price change; so rice is more expensive in terms of garri than before. But you are now much richer, so you may choose to eat more rice in spite of its higher relative cost.

A good whose consumption goes down instead of up when its price goes down is called a *Giffen good*. It is not clear whether any such goods actually exist. The reason is that most of us consume many different goods, spending only a small part of our income on any one. A drop in the price of one good has a large effect on its relative price (hence a large substitution effect) but only a small effect on our real income. A giffen good must either consume a large fraction of income or be so strongly inferior that the effect of a small change in



income outweighs that of a large change in relative price.

For most economic problems, the relevant demand curve is the Marshallian one, since there is generally no reason to expect a change in the price of one good to cause a compensating change in income or other prices. Since raising the price of one of them makes the consumer significantly worse off, his behavior (the amount of the good he buys) is substantially different according to whether we do or do not compensate him for the change. But in the real world, as I pointed out earlier, we divide our expenditure among many goods. If I spend only a small fraction of my income on a particular good, a change in its price has only a small effect on my real income. In such a case, the difference between the two demand curves is likely to be very small. For this reason, we will generally ignore the distinction between ordinary and income-compensated demand curves in what follows:

You have just bought a house. A month after you have concluded the deal, the price of houses goes up. Are you better off (your house is worth more) or worse off (prices are higher) as a result of the price change? Most people will reply that you are better off; you own a house and houses are now more valuable.

On the other hand, the house you just bought a month ago have just changed price which goes down. Are you worse off (i.e. your house is worth less) or better off (prices are lower)? Most people, in my experience, will reply that you are worse off. The answers seem consistent, even to those who are not sure what the right answer is. It appears obvious that if a rise in the price of housing makes you better off, then a fall must make you worse off, and if a rise makes you worse off, then a fall must make you better off. Although it appears obvious, it is wrong. The correct answer is that either a rise or a fall in the price of housing makes you better off. If the price of housing stayed the same, so would the amount of housing you may want to have. You are not, in other words, planning to have children and move to a bigger house or planning to retire, sell your house, and move to somewhere else. To simplify the argument, we will ignore all costs of buying, selling, or owning housing other than the price--sales taxes, realtor's or estate vendors commissions, and the like. Finally, we will assume that the change in price was unexpected; and when you bought the house you were assuming that the price of housing, like everything else, was going to stay the same forever.

#### v. *Fiscal Policy and Aggregate Demand*

Aschauer (1985) carried out an investigation of the effects of fiscal policy on private consumption and aggregate demand within an explicit inter-temporal optimization framework. In his empirical study the following questions formed his hypothesis:

- o Is consumption sensitive to the choice of tax versus debt financing of current government expenditure?

- o To what extent, if any, does government spending directly substitute for private consumer expenditure?

Other researchers as listed below also carried out similar empirical studies. Thus, the first question has stimulated a considerable amount of research since Barro's (1974) revival of the "Ricardian equivalence" proposition.

The second question has also been touched upon in recent empirical studies. Feldstein's (1982) results detract from the proposition of "fiscal neutrality" whereby an increase in government spending induces an ex ante crowding out of an equal amount of private consumption expenditure. However, Kormendi obtains support for his "consolidated approach" to fiscal policy by finding a substantial degree of substitutability between government spending and private consumption.

The argument advanced is that probable misspecification bias in these previous studies renders the results suspect and may account for the fact that minor changes in the empirical models lead to radically different conclusions regarding the potency of fiscal policy. In place of the conventional methodology, an alternative approach is presented which exploits restrictions placed on the data by the first-order necessary conditions for inter-temporal optimization in consumption. The empirical evidence is supportive of the joint hypothesis of rational expectations and Ricardian equivalence as well as of the proposition that government spending substitutes poorly for private consumption in utility.

#### vi. *Methods of Raising Funds*

Governments spend money on a wide variety of things, from the military and police to services like education and healthcare, as well as transfer payments such as welfare benefits.

This expenditure can be funded in a number of different ways:

- Taxation of the population
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#### *Funding of Deficits*

A fiscal deficit is often funded by issuing bonds, like Treasury bills or consols. These pay interest, either for a fixed period or indefinitely. If the interest and capital repayments are too great, a nation may default on its debts, most usually to foreign debtors.

#### vii. *Economic Effects of Fiscal Policy*

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Keynesian economics suggests that adjusting government spending and tax rates, are the best way to stimulate aggregate demand. This can be used in times of recession or low economic activity as an essential tool in providing the framework for strong economic growth and working toward full employment. However, such policies have commonly resulted in deficit spending.

During periods of high economic growth, a budget surplus can be used to decrease activity in the economy. A budget surplus will be implemented in the economy if inflation is high, in order to achieve the objective of price stability. The removal of funds from the economy will, by Keynesian Theory, reduce levels of aggregate demand in the economy and contract it, bringing about price stability.

Despite the importance of fiscal policy, a paradox exists. In the case of a government running a budget deficit, funds will need to come from public borrowing (the issue of government bonds), overseas borrowing or the printing of new money. When governments fund a deficit with the release of government bonds, an increase in interest rates across the market can occur. This is because government borrowing creates higher demand for credit in the financial markets, causing a lower aggregate demand (AD) due to the lack of disposable income, contrary to the objective of a budget deficit. This concept is called crowding out. However, the effects of crowding out are usually not as large as the increase in GDP stemming from increased government spending.

Another problem is the time lag between the implementation of the policy, and visible effects seen in the economy. It is often contended that when an expansionary Fiscal policy is implemented, by way of decrease in taxes, or increased consumption (keeping taxes at old level), it leads to increase in aggregate demand; however, an unchecked spiral in aggregate demand will lead to inflation. Hence, checks need to be kept in place.

#### viii. *Fiscal Policy*

According to David N. Weil (2002), fiscal policy is the use of the government budget to affect an economy. When the government decides on the taxes that it collects, the transfer payments it gives out, or the goods and services that it purchases, it is engaging in fiscal policy. The primary economic impact of any change in the government budget is felt by particular groups—a tax cut for families with children, for example, raises the disposable income of such families. Discussions of fiscal policy, however, usually focus on the effect of changes in the government budget on the overall economy—on such macroeconomic variables as GNP and unemployment and inflation.

The state of fiscal policy is usually summarized by looking at the difference between what the

government pays out and what it takes in—that is, the government deficit. Fiscal policy is said to be tight or contractionary when revenue is higher than spending (the government budget is in surplus) and loose or expansionary when spending is higher than revenue (the budget is in deficit). Often the focus is not on the level of the deficit, but on the change in the deficit. Thus, a reduction of the deficit from \$200 billion to \$100 billion is said to be contractionary fiscal policy, even though the budget is still in deficit.

The most immediate impact of fiscal policy is to change the aggregate demand for goods and services. A fiscal expansion, for example, raises aggregate demand through one of two channels. First, if the government increases purchases but keeps taxes the same, it increases demand directly. Second, if the government cuts taxes or increases transfer payments, people's disposable income rises, and they will spend more on consumption. This rise in consumption will, in turn, raise aggregate demand.

Fiscal policy also changes the composition of aggregate demand. When the government runs a deficit, it meets some of its expenses by issuing bonds. In doing so, it competes with private borrowers for money lent by savers, raising interest rates and "crowding out" some private investment. Thus, expansionary fiscal policy reduces the fraction of output that is used for private investment.

In an open economy, fiscal policy also affects the exchange rate and the trade balance. In the case of a fiscal expansion, the rise in interest rates due to government borrowing attracts foreign capital. Foreigners bid up the price of the dollar in order to get more of them to invest, causing an exchange rate appreciation. This appreciation makes imported goods cheaper in the United States and exports more expensive abroad, leading to a decline of the trade balance. Foreigners sell more to the country than they buy from it, and in return acquire ownership of assets in the country. This effect of fiscal policy was central to discussions of the "twin deficits" (budget and trade) of the eighties.

Fiscal policy is an important tool for managing the economy because of its ability to affect the total amount of output produced—that is, gross domestic product. The first impact of a fiscal expansion is to raise the demand for goods and services. This greater demand leads to increases in both output and prices. The degree to which higher demand increases output and prices depends, in turn, on the state of the business cycle. If the economy is in recession, with unused productive capacity and unemployed workers, then increases in demand will lead mostly to more output without changing the price level. If the economy is at full employment, by contrast, a fiscal expansion will have more effect on prices and less impact on total output.

This ability of fiscal policy to affect output by affecting aggregate demand makes it a potential tool for economic stabilization. In a recession the government can run an expansionary fiscal policy, thus helping to restore output to its normal level and to put unemployed workers back to work. During a boom, when inflation is perceived to be a greater problem than unemployment, the government can run a budget surplus, helping to slow down the economy. Such a countercyclical policy would lead to a budget that was balanced on average.

One form of countercyclical fiscal policy is known as automatic stabilizers. These are programs that automatically expand fiscal policy during recessions and contract it during booms. Unemployment insurance, on which the government spends more during recessions (when the unemployment rate is high), is an example of an automatic stabilizer. Unemployment insurance serves this function even if the federal government does not extend the duration of benefits. Similarly, because taxes are roughly proportional to wages and profits, the amount of taxes collected is higher during a boom than during a recession. Thus, the tax code also acts as an automatic stabilizer. But fiscal policy need not be automatic in order to play a stabilizing role in business cycles. Some economists recommend changes in fiscal policy in response to economic conditions—so-called discretionary fiscal policy—as a way to moderate business cycle swings. These suggestions are most frequently heard during recessions, when there are calls for tax cuts or new spending programs to "get the economy going again."

Unfortunately, discretionary fiscal policy is rarely able to deliver on its promise. Fiscal policy is especially difficult to use for stabilization because of the "inside lag"—the gap between the time when the need for fiscal policy arises and when it is implemented by the president and Congress. The tax cut proposed by President Kennedy to stimulate the economy in 1962, for example, was not enacted until 1964. If economists forecast well, then the lag would not matter. They could tell Congress in advance what the appropriate fiscal policy is. But economists do not forecast well. Most economists, for example, badly under predicted both the rise in unemployment in 1981 and the strength of the recovery that began in late 1982. Absent accurate forecasts, attempts to use discretionary fiscal policy to counteract business cycle fluctuations are as likely to do harm as good.

The case for using discretionary fiscal policy to stabilize business cycles is further weakened by the fact that another tool, monetary policy, is far more agile than fiscal policy. Even here, though, many economists argue that monetary policy is too prone to lags to be effective, and that the best countercyclical policy is to leave well enough alone.

Whether for good or for ill, fiscal policy's ability to affect the level of output via aggregate demand wears

off over time. Higher aggregate demand due to a fiscal stimulus, for example, eventually shows up only in higher prices and does not increase output at all. That is because over the long run the level of output is determined not by demand, but by the supply of factors of production (capital, labor, and technology). These factors of production determine a "natural rate" of output, around which business cycles and macroeconomic policies can cause only temporary fluctuations. An attempt to keep output above its natural rate by means of aggregate demand policies will lead only to ever-accelerating inflation.

The fact that output returns to its natural rate in the long run is not the end of the story, however. In addition to moving output in the short run, fiscal policy can change the natural rate, and ironically, the long-run effects of fiscal policy tend to be the opposite of the short-run effects. Expansionary fiscal policy will lead to higher output today but will lower the natural rate of output below what it would have been in the future. Similarly, contractionary fiscal policy, though dampening the level of output in the short run, will lead to higher output in the future.

Fiscal policy affects the level of output in the long run because it affects the country's saving rate. The country's total saving is composed of two parts private saving (by individuals and corporations) and government saving (which is the same as the budget surplus). A fiscal expansion entails a decrease in government saving. Lower saving means, in turn, that the country will either invest less in new plant and equipment or increase the amount that it borrows from abroad, both of which lead to unpleasant consequences in the long term. Lower investment will lead to a lower capital stock and to a reduction in a country's ability to produce output in the future. Increased indebtedness to foreigners' means that a higher fraction of a country's output will have to be sent abroad in the future rather than being consumed at home.

Fiscal policy also changes the burden of future taxes. When the government runs an expansionary fiscal policy, it adds to its stock of debt. Because the government will have to pay interest on this debt (or repay it) in future years, expansionary fiscal policy today imposes an additional burden on future taxpayers. Just as taxes can be used to redistribute income between different classes, the government can run surpluses or deficits in order to redistribute income between different generations.

Some economists have argued that this effect of fiscal policy on future taxes will lead consumers to change their saving. Recognizing that a tax cut today means higher taxes in the future, the argument goes; people will simply save the value of the tax cut they receive now in order to pay those future taxes. The extreme of this argument, known as Ricardian Equivalence, holds that tax cuts will have no effect on

national saving, since changes in private saving will offset changes in government saving. But if consumers decide to spend some of the extra disposable income they receive from a tax cut (because they are myopic about future tax payments, for example), then Ricardian Equivalence will not hold; a tax cut will lower national saving and raise aggregate demand. The experience of the eighties, when private saving fell rather than rose in response to tax cuts, is evidence against Ricardian Equivalence.

In addition to its effect on aggregate demand and on saving, fiscal policy also affects the economy by changing incentives. Taxing an activity tends to discourage that activity. A high marginal tax rate on income reduces people's incentive to earn income. By reducing the level of taxation, or even by keeping the level the same but reducing marginal tax rates and reducing allowed deductions, the government can increase output. The "supply-side" economists who were prominent early in the Reagan administration argued that reductions in tax rates would have a large effect on the amount of labor supplied, and thus on output. Incentive effects of taxes also play a role on the demand side. Policies such as the investment tax credit, for example, can greatly influence the demand for capital goods.

The greatest obstacle to proper use of fiscal policy—both for its ability to stabilize fluctuations in the short run and for its long-run effect on the natural rate of output—is that changes in fiscal policy are necessarily bundled with other changes that please or displease various constituencies. A road in Congressman X's district is all the more likely to be built if it can be packaged as part of countercyclical fiscal policy. The same is true for a tax cut for some favored constituency. This naturally leads to an institutional enthusiasm for expansionary policies during recessions that are not matched by a taste for contractionary policies during booms. In addition, the benefits from such a policy are felt immediately, whereas its costs—higher future taxes and lower economic growth—are postponed until a later date. The problem of making good fiscal policy in the face of such obstacles is, in the final analysis, not economic, but political.

#### ix. *Price*

According to Lange (1936), price in economics and business is the assigned numerical monetary value of a good, service or asset. The concept of price is central to microeconomics where it is one of the most important variables in resource allocation theory (also called price theory). Price is also central to marketing where it is one of the four variables in the marketing mix that business people use to develop a marketing plan.

In ordinary usage or conventional terms, price is the quantity of payment or compensation for something. People may say about a criminal that he has 'paid the

price to society' to imply that he has paid a penalty or compensation. They may say that somebody paid for his folly to imply that he suffered the consequence. Economists view price as an exchange ratio between goods that pay for each other. In case of barter between two goods whose quantities are  $x$  and  $y$ , the price of  $x$  is the ratio  $y/x$ , while the price of  $y$  is the ratio  $x/y$ . This however has not been used consistently, so that old confusion regarding value frequently reappears. The value of something is a quantity counted in common units of value called numeraire, which may even be an imaginary good. This is done to compare different goods. The unit of value is frequently confused with price, because market value is calculated as the quantity of some good multiplied by its nominal price.

Theory of price asserts that the market price reflects interaction between two opposing considerations. On the one side are demand considerations based on marginal utility, while on the other side are supply considerations based on marginal cost. An equilibrium price is supposed to be at once equal to marginal utility (counted in units of income) from the buyer's side and marginal cost from the seller's side. Though this view is accepted by almost every economist, and it constitutes the core of mainstream economics, it has recently been challenged seriously. There was time when people debated use-value versus exchange value, often wondering about the Diamond-Water Paradox (paradox of value). The use-value was supposed to give some measure of usefulness, later refined as marginal benefit (which is marginal utility counted in common units of value) while exchange value was the measure of how much one good was in terms of another, namely what is now called relative price.

The difference between nominal price and relative or real price (as exchange ratio) is often made. Nominal price is the price quoted in money while relative or real price is the exchange ratio between real goods regardless of money. The distinction is made to make sense of inflation. When all prices are quoted in terms of money units, and the prices in money units change more or less proportionately, the ratio of exchange may not change much. In the extreme case, if all prices quoted in money change in the same proportion, the relative price remains the same.

It is now becoming clear that the distinction is not useful and indeed hides a major confusion. The conventional wisdom is that proportional change in all nominal prices does not affect real price, and hence should not affect either demand or supply and therefore also should not affect output. The new criticism is that the crucial question is why there is more money to pay for the same old real output. If this question is answered, it will show that dynamically, even as the real price remains exactly the same, output in real terms can change, just because additional money allow additional

output to be traded. The supply curve can shift such that at the old price, the new higher output is sold. This shift is not possible without additional money.

From this point of view, a price is similar to an opportunity cost, that is, what must be given up in exchange for the good or service that is being purchased. For example, if  $x=1$  and  $y=2$ , the relative price of  $x$  in terms of  $y$  is  $2$ , and the price of  $y$  in terms of  $x$  is  $0.5$ .

The price of an item is also called the price point, especially where it refers to stores that set a limited number of price points. For example, Dollar General is a general store or "five and dime" store that sets price points only at even amounts, such as exactly one, two, three, five, or ten dollars (among others). Other stores (such as dollar stores, pound stores, euro stores, 100-yen stores, and so forth) only have a single price point (\$1, £1, €1, ¥100), though in some cases this price may purchase more than one of some very small items.

Lange (1936) further stated that in Marxian economics, it is argued that price theory must be firmly grounded in the *real history of economic exchange* in human societies. Money-prices are viewed as the monetary expression of exchange-value. Exchange-value can however also be expressed in trading ratios between quantities of different types of goods. In Marxian economics, the increasing use of prices as a convenient way to measure the economic or trading value of labor-products is explained historically and anthropologically, in terms of the development of the use of money as universal equivalent in economic exchange. However, in an anthropological-historical sense, Marxian economists argued that a "price" is not necessarily a sum of money; it could be whatever the owner of a good gets in return, when exchanging that good. Money prices are merely the most common form of prices.

Marxian economists distinguish very strictly between *real* prices and *ideal* prices. Real prices are actual market prices realized in trade. Ideal prices are hypothetical prices which would be realized *if* certain conditions would apply. Most equilibrium prices are hypothetical prices, which are never realized in reality, and therefore of limited use, although notional prices can influence real economic behavior. However, Marxian economists stressed that all labor-products existing in an economy have economic *value*, only a minority of them have *real* prices; the majority of goods and assets at any time are not being traded, and they have at best a *hypothetical* price. Six criticisms Marxian economists make of neoclassical economics are that - neoclassical price theory:

a) Is not based on any substantive, realistic theory of economic exchange as a social process, and simply assumes that exchange will occur;

- b) Simply assumes prices can be attached or imputed to all goods and services;
- c) Assumes equilibrium prices will exist and that markets tend spontaneously to equilibrium prices;
- d) Fails to distinguish adequately between actual market prices; administered prices; and ideal, accounting, or hypothetical prices;
- e) Disconnects price theory from the real economic history of the use of prices.
- f) Is unable to provide a coherent explanation of the relationship between price and economic value.

Most marginalist economists dismiss Marxian theories of price, arguing that those theories require a method of converting from labour values into monetary prices, and that the method given in Marx's *Capital* (Volume 3) is mathematically flawed. Marxian economists themselves argue that it is *impossible* to convert values into prices because that attempt involves a conceptual confusion. In certain abstract models, Marx compares quantities of value with price quantities but he does so, only because of the reality that goods may be traded above or below their value, and the reality that a quantity of value is produced before it is known how much of that value will be realized as income through sales. It would be more correct to say that Marx lacked a theory of short-term price movements.

The last objection is also sometimes interpreted as the paradox of value, which was observed by classical economists Adam Smith described what is now called the *Diamond – Water Paradox* diamonds command a higher price than water, yet water is essential for life, while diamonds are merely ornamentation. One solution offered to this paradox is through the theory of marginal utility proposed by Carl Menger, the father of the Austrian School of economics.

The bulk of Lange's contributions to economics came during his American interlude of 1933-1945. Despite being an ardent socialist, Lange deplored the Marxian labor theory of value, being very much a believer in the Neoclassical theory of price. In the history of economics, he is probably best known for his work *On the Economic Theory of Socialism* published in 1936, where he famously put Marxian and neoclassical economics together.

Lange (1936) advocated the use of market tools (especially the neoclassical pricing theory) in economic planning of socialism and Marxism. He proposed that central planning boards set prices through "trial and error," making adjustments as shortages and surpluses occurred rather than relying on a free price mechanism. If there were shortages, prices would be raised; if there were surpluses, prices would be lowered. Raising the prices would encourage businesses to increase production, driven by their desire to increase their profits, and in doing so eliminate the shortage. Lowering

the prices would encourage businesses to curtail production in order to prevent losses, which would eliminate the surplus. Therefore, it would be a simulation of the market mechanism, which Lange thought would be capable of effectively managing supply and demand. Proponents of this idea argue that it combines the advantages of a market economy with those of socialist economics.

By this idea, Lange also argued that a state-run economy could at least be as efficient as — if not more efficient than — a free market economy. He argued that this was possible if the government planners used the price system as if in a market economy and instructed state industry managers to respond parametrically to the state-determined prices (minimize cost, etc.). Lange's argument was one of the pivots of the Socialist Calculation Debate with the Austrian School.

VI. METHOD OF STUDY

The data set for this work consists of the annual time series spanning 1970 through 2014. The variables under consideration are:

- i) Aggregate Demand (AD)
- ii) Consumption Expenditure (CS)
- iii) Investment Expenditure (IS)
- iv) Government Expenditure (GS)
- v) Net Export Expenditure (ES)
- vi) Population (PP)
- vii) Price (PX) and
- viii) Interest Rate (IR)

The required secondary data was collected from the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), The International Monetary Funds (IMF), The World Bank and some published journal articles, textbooks etc.

a) Model Specification

The functional relationship between the dependent and the independent variables in our study are established as follows:

$$AD = f(CS, IS, GS, ES, PP, PX, IR) \dots\dots\dots 3.1$$

Where AD, CS, IS, GS, ES, PP, PX and IR are as defined in section 3.1.

The equation 3.1 above would be tried with both linear and log linear specification and the one that suits our specification, judged in terms of goodness of fit, precision of estimates and a tolerable level of multicollinearity will be chosen. Thus transforming the argument in equations 3.1 into log equations we have:

$$\log AD = \alpha_0 + \alpha_1 \log CS + \alpha_2 \log ES + \alpha_3 \log GS + \alpha_4 \log IS + \alpha_5 \log PP + \alpha_6 \log PX + \alpha_7 \log IR + \mu \dots\dots 3.2$$

The aggregate model therefore is:

$$AD = f(\Delta CS, \Delta IS, \Delta GS, \Delta ES, \Delta PP, \Delta PX, \Delta IR)$$

i. Variables in the Model

(i) Dependent Variable:

AD = Aggregate demand (a schedule showing the various amounts of goods and services—the amounts of real output— that domestic consumers, business, government, and foreign buyers collectively desire to purchase at each possible price level at a given time).

(ii) Explanatory Variables:

a. Change in consumer spending

The amount of consumer's assets consumed. A sharp decline in the real value of consumer assets such as stocks and bonds as well as physical assets such as houses and land, encourages people to save more (buy fewer products) to restore their wealth. The resulting decline in consumer spending will decrease aggregate demand – that is, shift the aggregate demand curve leftward. In contrast, an increase in the real value of consumer wealth will increase consumption spending at each price level; the aggregate demand curve will shift rightward.

This assumes a fixed aggregate demand curve and results from a change in the price level. In contrast, the change in real wealth addressed here is independent of a change in the price level; it is a non-price-level factor which shifts the entire aggregate demand curve. An example would be a rocketing boost in stock prices which increases consumer wealth, even though the price level has not changed. Similarly, a sharp decline in the real value of houses and land reduces consumer wealth, independent of changes in the general price level. The relationship is positive.

b. Change in Investment Spending

Investment spending is the purchase of capital goods. A decline in the amount of new capital goods desired by businesses at each price level will shift the aggregate demand curve leftward. An increase in the desired amount of investment goods will increase aggregate demand. Alternatively, if the profit outlook on possible investment projects dims because of an expected decline in consumer spending, investment spending will decline. Consequently, aggregate demand will also decline. The relationship is positive.

c. Change in Government Spending

This is government's desire to buy goods and services. An increase in government purchases of real output at each price level will increase aggregate demand as long as tax collections and interest rates do not change as a result. An example would be a decision by government to expand the interstate highway system. In contrast, a reduction in government spending, such as a cutback in orders for military hardware, will reduce aggregate demand.

d. Change in Export Spending

When foreign consumers change their purchases of Nigerian goods independently of changes

in the Nigerian price level, the nation's aggregate demand curve shift position. We specify "independently of changes in price level" to distinguish these changes from spending changes arising from the foreign purchases effect. That effect helps explain why a change in the Nigerian price level moves the economy along its existing AD curve.

First, a higher level of Nigerian exports constitutes an increased foreign demand for Nigerian goods. Secondly, a reduction of Nigerian imports implies an increased domestic demand for Nigeria's produced products.

The non-price-level factors which alter net exports are primarily national income abroad and exchange rates. Rising national income in a foreign nation increases the foreign demand for Nigerian goods, increasing aggregate demand in Nigeria. As income levels rise in a foreign nation, its citizens can afford to buy both more products made at home and more made at abroad. Nigeria's exports therefore rise in step with increases in the national income of Nigeria's trading partners. Declines in national income abroad have the opposite effect; Nigeria's net exports decline, shifting the Nigerian aggregate demand curve leftward.

Thus from the above discussion, the model can be presented as follows:

$$1. AD = f(\Delta CS, \Delta IS, \Delta GS, \Delta ES, \Delta PP, \Delta PX, \Delta IR) \dots\dots\dots 1$$

Where:

- $\Delta CS$  = Change in consumption spending
- $\Delta IS$  = Change in Investment Spending
- $\Delta GS$  = Change in Government Spending
- $\Delta ES$  = Change in Net Export Spending
- $\Delta PP$  = Change in Population.

$$\ln Y = \hat{\alpha}_0 + \hat{\alpha}_1 \ln X_1 + \hat{\alpha}_2 \ln X_2 + \hat{\alpha}_3 \ln X_3 + \hat{\alpha}_4 \ln X_4 + \hat{\alpha}_5 X_5 + \hat{\alpha}_6 X_6 + \hat{\alpha}_7 X_7 \dots\dots\dots 4$$

c) *Method of Data Analysis*

Econometric investigation techniques of Ordinary Least Squares (OLS), Cointegration methods were employed in the analysis using secondary data. Some statistical test such as Log likelihood, Durbin-Watson statistics and coefficient of determination test ( $R^2$ ), were conducted to examine the relationship between aggregate demand and the explanatory variables. According to Onuchuku and Adoghor (1999), when regression analysis involves only two variables, one dependent or regressand, the other independent or explanatory; then Simple Regression is used to determine the relationship while Multiple Regression analysis is used to determine the relationship between three or more variables, one dependent and the others explanatory.

d) *Estimation Techniques and Procedures*

This study employed cointegration and error correction technique to estimate the model (Johansen

- $\Delta PX$  = Change in Price
- $\Delta IR$  = Change in Interest Rate

2. The assumed mathematical form of the model is lineal. Thus:

$$AD = b_0 + b_1 \Delta CS + b_2 \Delta IS + b_3 \Delta GS + b_4 \Delta ES + b_5 \Delta PP + b_6 \Delta PX + b_7 \Delta IR + u_1 \dots\dots\dots 2$$

Where  $b_1 > 0, b_2 > 0, b_3 > 0, b_4 > 0, b_5 > 0, b_6 > 0, b_7 > 0$ ;  $b_0$  is a coefficient of the intercept,  $b_1, b_2, b_3, b_4, b_5, b_6,$  and  $b_7$  are coefficients of explanatory variables,  $u_1$  is the random variable.

b) *Mathematical Form of the Model*

The estimated mathematical form of the model is as follows:

$$\ln Y_1 = \alpha_0 + \alpha_1 \ln X_1 + \alpha_2 \ln X_2 + \alpha_3 \ln X_3 + \alpha_4 \ln X_4 + \alpha_5 \ln X_5 + \alpha_6 \ln X_6 + \alpha_7 \ln X_7 + \mu \dots\dots\dots 3$$

Where

- $Y_1 = AD$
- $X_1 = CS$
- $X_2 = IS$
- $X_3 = GS$
- $X_4 = ES$
- $X_5 = PP$
- $X_6 = PX$
- $X_7 = IR$
- $\alpha$  = Parameters of the models
- $\mu$  = Stochastic Disturbance term.

It is believed that the stochastic disturbance term will capture the impact of the other variables that were not included in the models. Hence the estimated form of the model becomes

and Juselius, 1990). Most economic time series (variables) that exhibit strong trends are nonstationary, yet they are being treated as though they were stationary by most economists. Correct and appropriate specification and estimation of time series models require that we determine whether the time series are stationary or nonstationary. Since most time series encountered in applications are nonstationary, there is no need to analyse nonstationary time series since this might lead to spurious relationship, Granger (1969).

This leads to the coefficient of determination  $R^2$ , tending to unity (i.e. very high  $R^2$ ), or adjusted coefficient of  $R^2$ , together with highly auto-correlated residuals as indicated by low Durbin-Watson (DW) statistic. In the same way, the standard significance test (measured by the traditional T-test) will reject the null hypothesis of no trend or no relationship between the series on approximately three quarters of all occasions. Hence, there is a danger of accepting a close relationship between the series when they are almost independent.

Consequent upon the above, these macroeconomic variables were subjected to a unit root test to determine their time series characteristics. Unit root test is basically required to ascertain the number of times a variable has to be differenced to arrive at stationary (Yoshida, 1990). According to Maddala (1992), testing for unit root is a formalization of the Box-Jenkins approach of differencing the time series after a visual inspection of the correlogram.

The methods of testing for unit roots are by use of the Dickey-Fuller (DF) test and the Augmented Dickey-Fuller (ADF), but the ADF test is considered superior to the Dickey-Fuller test because it adjusts appropriately for the occurrence of serial correlation.

The analysis of and testing for Unit roots naturally lead to the theory of cointegration (Iyoha and Ekanem, 2002). This is because, basically, cointegration deals with methodology of modelling non stationary time series variables and the idea rest on the thesis that even though two time series may not themselves be stationary, a linear combination of two non stationary time series are said to be "cointegrated" (Iyola and Ekanem, 2002). Usually, for cointegration, the two time series have to be of the same "order" i.e., they should be stationary after the same number of differencing.

Economic variables are said to be integrated of order-zero, i.e. it is  $1(0)$ , if the original time series is stationary. Those that are differenced once to obtain stationarity are said to be integrated of order one i.e.  $1(1)$ . There are variables that have to be differenced more than once to achieve stationarity.

The theory of cointegration according to Granger (1981); and Engle and Granger (1987), address the issue of integrating short-run dynamics with long-run equilibrium. Basically, the theory demonstrates that if two variables are cointegrated, it implies that there is a meaningful long-run relationship between them, the short run dynamics can be described by the Error Correction Model (ECM).

The necessary condition for fitting an error correction representation is the existence of at least one cointegrating vector in the system. In other words, the error correction model is internally consistent only if at least one cointegrating vector exists. In order to determine the number of cointegrating equation in the Vector Error Correction Model (VECM), the Johansson (1988) approach will be adopted.

Economic software called E-View 5.1, which provides a sophisticated data analysis, was used to analyse the data. The following tests were also being conducted.

- (i) The coefficient of determination,  $R^2$  test. In this case,  $R^2$  was used purely as measure of the explanatory power of model.
- (ii) The estimated regression coefficient test, t-test. This was used to determine whether or not the estimated

coefficients of each of the selected explanatory variables are significantly different from zero.

- (iii) The F-test was used to determine the joint significant of the explanatory variables, that is, the overall test of significance of the model.

## VII. DETERMINANTS OF AGGREGATE DEMAND IN NIGERIA

### a) *The Concept of Aggregate Demand*

The sum total of the expenditures of all goods and services produced within an economy is known as aggregate demand. Begg et al (1994:364) noted that aggregate demand is the amount that firms and households plan to spend on goods and services at each level of income. Aggregate demand is simply household's consumption demand (C) plus firms' investment demand (I), hence the simple model. Aggregate demand is what households plan to spend on consumption and firms spend on investment. Assuming investment demand is constant, consumption is the only part of aggregate demand that increases with income. This vertically, adding the constant investment demand, to the consumption factors (C) gives the aggregate demand schedule AD. He went further to say aggregate demand determines the level of output and income.

When prices and wages are fixed, the output market is in short-run equilibrium when aggregate demand or planned aggregate spending just equals the output that is actually produced. Thus, spending plans are not being frustrated by a shortage of goods. Nor are firms producing more output than they can sell. In short run equilibrium, the output produced exactly equals the output demanded by households as consumption and by firms as investment.

When aggregate demand exceeds actual output there is either unplanned disinvestment (inventory reductions) or unplanned savings (frustrated customers). Actual investment always equals actual savings as a matter of national income accounting. Unplanned inventory reductions or frustrated customers act as a signal to firms to increase output when aggregate demand exceeds actual output. Similarly, unplanned additions to stocks occur when aggregate demand is less than actual output.

An increase in planned investment increases the equilibrium level of output by a larger amount. The initial increase in income to meet investment demand leads to further increases in consumption demand.

According to McConnell and Brue (1999:221) aggregate demand is a schedule or a curve showing the various amounts of goods and services-the amounts of real output- that domestic consumers, business, government, and foreign buyers collectively desire to purchase at each possible price level. Other things being equal, the lower the price level, the larger the real



GDP (Gross domestic product) these buyers will purchase. Conversely, the higher the price level, the smaller the real GDP they will buy. Thus, the relationship between the price level and the amount of real GDP demanded is inverse or negative.

With the inverse relationship between the price level and real output where the aggregate demand curve slopes downward as does the demand curve for an individual product. But these explanations do not work for aggregates.

When the economy moves down its aggregate demand curve, it moves to lower price levels. But our circular flow model tells us that when consumers pay lower prices for goods and services, less income is likely to flow to resource suppliers in the form of wages, rents, interests, and profits.

As a result, a decrease in the price level does not necessarily mean an increase in the nominal income of the economy as a whole. Thus, a decline in the price level need not produce an income effect (more of a product is purchased because a decline in its price leaves buyers with more real income).

Similarly, we also see in the figure above that prices in general are falling as we move down the aggregate demand curve, so the rationale for the substitution effect (more of a product is purchased because it becomes cheaper relative to all other products) is not applicable. There is no overall substitution effect when the price level falls.

If the substitution and income effects do not explain the down sloping aggregate demand curve, what else does? The rationale rests on the following factors.

#### i. *Wealth Effect*

The first reason for the down sloping aggregate demand curve involves the wealth effect. A higher price level reduces the real value or purchasing power of the public's accumulated financial assets. In particular, the real value of assets with fixed money values, such as savings accounts or bonds, diminishes. Because of the erosion of purchasing power of such assets, the public (population) is poorer in real terms and will reduce its spending. A household might buy a new car or a sailboat if the purchasing power of its financial asset balances, that is to say, N50, 000.00 but if inflation erodes the purchasing power of the asset balances to N30, 000.00; the family may defer its purchase.

Conversely, a decline in the price level will increase the real value or purchasing power of a household's wealth and increase consumption spending.

#### ii. *Interest-Rate Effect*

The interest-rate effect suggests that the aggregate demand curve is down sloping because of the impact of price-level changes on interest rates and, in turn, on consumption and investment spending.

*Elaboration:* The aggregate demand curve assumes that the supply of money in the economy is fixed. When the price level increases, consumers need more for money to meet their payrolls and to buy other needed resources. In short, a higher price level increases the demand for money.

With a fixed supply of money, this increase in the demand for money drives up the price paid for its use. That price is the *c*. Higher interest rates curtail interest-sensitive expenditures by businesses and households. A firm expecting a 10 percent return on a potential purchase of capital will find that purchase profitable when the interest rate is, say, only 7 percent. But the purchase is unprofitable and will not be made when the interest rate has risen to, say, 12 percent. Similarly, some consumers will decide not to purchase houses or automobiles when the interest rate rises.

*Conclusion:* A higher price level - by increasing the demand for money and the interest rate - reduces the amount of real output demanded.

#### iii. *Foreign Purchases Effect*

We found in national income accounting that imports and exports are components of total spending. The volumes of our import and exports depend on, among other things, relative price levels here and abroad. If the price level rises in the United States relative to the levels in foreign countries, U.S. buyers will purchase more imports and fewer domestic goods. Similarly, the rest of the world will buy fewer U.S. goods, reducing U.S. exports. In brief, a fall in the U.S. price level will increase our imports and reduce our exports, reducing the amount of net export (export minus import) spending on U.S. produced products.

More generally, the foreign purchases effect is this: A relative increase in a nation's price level reduces its net exports, resulting in a decline in the aggregate amount of domestic output demanded. Conversely, a relative decline in a nation's price level increases its net exports, thereby increasing the amount of domestic output demanded.

#### b) *Determinants of Aggregate Demand*

Changes in the price level change the level of aggregate spending; this, in turn, changes the amount of real GDP demanded by the economy. More specifically, an increase in the price level, *other things being equal*, will decrease the quantity of real GDP demanded; a decrease in the price level will increase the amount of real GDP demanded. The changes are represented graphically as movements along a fixed aggregate demand curve. However, if one or more of those "Other things" change, the entire aggregate demand curve shifts. We refer to those "Other things" as determinants of aggregate demand; they "determine" the location of the aggregate demand curve.

We must then distinguish between changes in the quantity of real output demanded (caused by

changes in the price level) and change in aggregate demand (caused by changes in one or more of the determinants of aggregate demand).

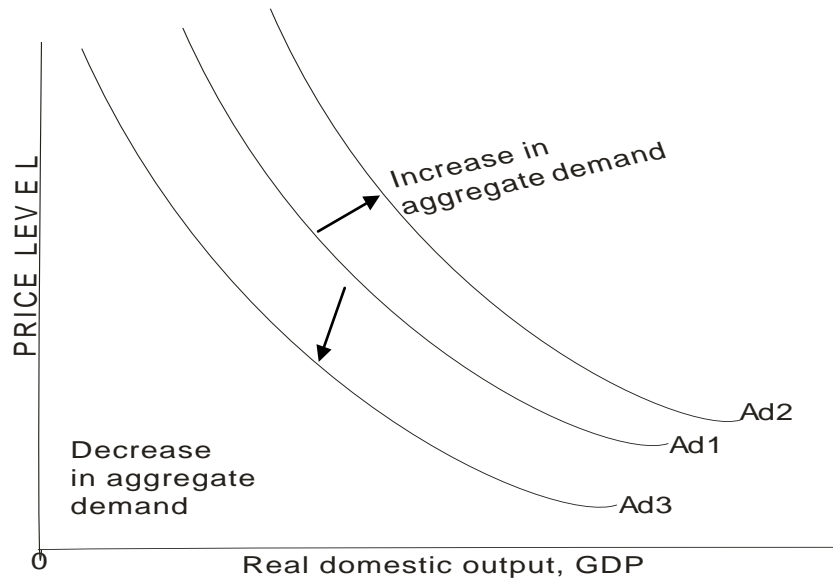


Figure 4.1: Change in Aggregate Demand

In Figure 4.1 above, an increase in aggregate demand is depicted by the rightward movement of the curve from  $AD_1$  to  $AD_2$ . This shift indicates that, at each price level, the desired amount of real goods and services is larger than before.

A decrease in aggregate demand is shown as the leftward shift of the curve from  $AD_1$  to  $AD_3$ , indicating that people desire to buy less real output at each price level.

The changes in aggregate demand shown in Figure 4.1 occur when changes happen in any of the factors we have assumed to be constant under the phrase “other things being equal”. These determinants of aggregate demand, or aggregate demand shifters, are listed below:

- i. *Change in Consumer Spending*
  - a. *Consumer Spending*

Even if the price level is constant, domestic consumers collectively may alter their purchases of produced real output. When this happens, the entire aggregate demand curve shifts. It shifts leftward, as from  $AD_1$  to  $AD_3$  in Figure 4.1, when consumers buy less output than before at each possible price level; it moves rightward, as from  $AD_1$  to  $AD_2$ , when they buy more at each possible price levels.

Several factors other than the price level may change consumer spending, thus shifting the aggregate demand curve. As indicated in Figure 4.1, these factors are real consumer wealth, consumer expectations, household indebtedness, and taxes.

- b. *Consumer Wealth*

Consumer wealth includes all consumer assets, both financial assets such as stocks and bonds and physical assets such as houses and land. A sharp decline in the real value of consumer assets encourages

people to save more (buy fewer products) to restore their wealth. The resulting decline in consumer spending will decrease aggregate demand – that is, shift the aggregate demand curve leftward. In contrast, an increase in the real value of consumer wealth will increase consumption spending at each price level; the aggregate demand curve will shift rightward.

This assumes a fixed aggregate demand curve and results from a change in the price level. In contrast, the change in real wealth addressed here is independent of a change in the price level; it is a non-price-level factor which shifts the entire aggregate demand curve. An example would be a rocketing boost in stock prices which increases consumer wealth, even though the price level has not changed. Similarly, a sharp decline in the real value of houses and land reduces consumer wealth, independent of changes in the general price level.

- c. *Consumer Expectations*

Changes in expectations of the future may alter consumer spending. When people expect their future real incomes to rise, they spend more of their current incomes. Thus present consumption spending increases (present saving falls), and the aggregate demand curve shifts rightward. An expectation that real income will decline in the future reduces present consumption spending and therefore shifts the demand curve leftward.

Similarly, a widely held expectation of surging future inflation increases aggregate demand today because consumers want to buy products before prices escalate. Conversely, expectations of lower prices in the near future may reduce present consumption. People may postpone some of their present consumption to take advantage of the future lower prices.

d. *Household Indebtedness*

Households with high levels of indebtedness from past buying financed by borrowing may be forced to cut present spending to pay off their existing debt. The result is a decline in consumption spending and a leftward shift of the aggregate demand curve. When household indebtedness is low, borrowing and present consumption tend to increase. The aggregate demand curve shifts to the right.

e. *Taxes*

A reduction in personal income tax rates raises take-home income and increases consumer purchases at each possible price level. So tax cuts shift the aggregate demand curve rightward. Tax increases reduce consumption spending and shift the aggregate demand curve to the left.

ii. *Change in Investment Spending*

a. *Investment Spending*

Investment spending is the purchase of capital goods which is a second major determinant of aggregate demand. A decline in the amount of new capital goods desired by businesses at each price level will shift the aggregate demand curve leftward. An increase in the desired amount of investment goods will increase aggregate demand. Let's consider the individual factors which can alter the level of investment spending, as listed in **Figure 4.1**

b. *Interest Rates*

All else equal, an increase in interest rates caused by a factor other than a change in the price level will lower investment spending and reduce aggregate demand. We are not referring here to the so-called "interest-rate effect" due to a change in the price level. Instead, we are identifying a change in the interest rate resulting from, say, a change in the nation's money supply. An increase in the money supply reduces the interest rate, increasing investment and aggregate demand. A decrease in the supply of money increases the interest rate, reducing investment and aggregate demand.

c. *Expected Returns on Investment Projects*

Higher expected returns on investment projects will increase the demand for capital goods and shift the aggregate demand curve rightward. For example, an anticipated rise in consumer spending can improve the expected returns of possible investment projects. Alternatively, if the profit outlook on possible investment projects dims because of an expected decline in consumer spending, investment spending will decline. Consequently, aggregate demand will also decline.

d. *Business Taxes*

An increase in business taxes reduces after-tax profits from corporate investment and reduces investment spending and aggregate demand.

Conversely, a tax reduction increases after-tax profits from corporate investment, boost investment spending, and pushes the aggregate demand curve rightward.

e. *Technology*

New and improved technologies stimulate investment spending and increase aggregate demand. Example: Recent advances in microbiology and electronics have spawned new labs and production facilities to exploit the new technologies.

f. *Degree of Excess Capacity*

A rise in excess capacity (unused existing capital) will retard the demand for new capital goods and reduce aggregate demand. Other things equal, firms operating factories at well below capacity have little incentive to build new factories. But when firms collectively discover their excess capacity is dwindling, they build new factories and buy more equipment. Thus investment spending rises and the aggregate demand curve shifts to the right.

iii. *Change in Government Spending*

a. *Government Spending*

Government's desire to buy goods and services is a third major determinant of aggregate demand. An increase in government purchases of real output at each price level will increase aggregate demand as long as tax collections and interest rates do not change as a result. An example would be a decision by government to expand the interstate highway system. In contrast, a reduction in government spending, such as a cutback in orders for military hardware, will reduce aggregate demand.

iv. *Change in Net Export Spending*

a. *Net Export Spending*

Another major determinant of aggregate demand is net export spending. When foreign consumers change their purchases of Nigerian goods independently of changes in the Nigerian price level, the nation's aggregate demand curve shifts. We specify "independently of changes in price level" to distinguish these changes from spending changes arising from the foreign purchases effect. That effect helps explain why a change in the Nigerian price level moves the economy along its existing AD curve.

In discussing aggregate demand shifters, we instead address changes in net exports caused by factors other than change in the price level. Increases in net exports caused by these other factors push the Nigerian aggregate demand curve rightward. The logic is as follows: First, a higher level of Nigerian exports constitutes an increased foreign demand for Nigerian goods. Secondly, a reduction of Nigerian imports implies an increased domestic demand for Nigeria's produced products.

The non-price-level factors which alter net exports are primarily national income abroad and exchange rates.

b. *National Income Abroad*

Rising national income in a foreign nation increases the foreign demand for Nigerian goods, increasing aggregate demand in Nigeria. As income levels rise in a foreign nation, its citizens can afford to buy both more products made at home and more made at abroad. Nigeria's exports therefore rise in step with increases in the national income of Nigeria's trading partners. Declines in national income abroad have the opposite effect; Nigeria's net exports decline, shifting the Nigerian aggregate demand curve leftward.

c. *Exchange Rates*

A change in the exchange rate between the naira and other currencies also affects net exports and hence aggregate demand. Suppose the naira price of dollar rises, meaning the naira depreciates in terms of the dollar. This is the same as saying the dollar price of naira falls – then dollar appreciates. The new relative values of naira and dollar means consumers in Nigeria can obtain more naira with any particular number of dollars. Consumers in Nigeria can obtain fewer dollars for each naira. Nigerian consumers therefore discover that Nigerian goods are cheaper in terms of dollar. They buy more of Nigerian goods. Consumers in Nigeria find that fewer U.S. products can be purchased with a set number of naira. They buy fewer U.S. goods.

With respect to Nigerian exports, a N300.00 pair of Nigerian made shirt now might be bought for \$2880 compared to \$3600 in U.S. And in terms of Nigerian imports, a U.S. watch might now cost ₦225.00 rather than \$180. In these circumstances Nigerian exports will rise and imports will fall. This increase in net exports translates into a rightward shift of the Nigerian aggregate demand curve.

You may be urged to think through the opposite scenario in which the naira appreciates (the dollar depreciates).

Aggregate demand is subject to change due to change in government spending or a reduction in taxes. This is so because a reduction in taxes, for example, leads to increase in disposable income, which stimulates aggregate demand. This is also true of increase in government expenditures.

Of course, aggregate demand behaviour is not devoid of the characteristics of the population of the area. Government is spending on behalf of the people and for the people. Hence, we cannot talk of aggregate demand without talking of the population of a given area.

v. *Population*

The Webster's Encyclopedia Unabridged Dictionary speaks of population as (i) the total number

of persons inhabiting a country, city, or any district or area. (ii) The body of inhabitants of a place. (iii) The number or body or inhabitants of a particular race or class in a place; such as the native population; the working population; (iv) Statistically, is any finite or infinite aggregation of individuals, not necessarily animate, subject to a statistical study.

It goes further to talk of population parameter as a quantity or statistical measure which, for a given population, is fixed and which is used as the value of a variable in some general distribution or frequency function to make it descriptive of that population; e.g. the mean and variance of a population are population parameters.

The Dictionary explains population pyramid as a graph showing the distribution of a population by sex, age, etc. A. E. Amaechi and C.R. Azubuike (2004:88) defined population as the number of people living in any defined geographical area e.g. a country or town or city. In the view of Gbosi (2005: 251-2), population is the total number of people who live in a country during a given period of time. Okeke (1994:110) defined population as the number of people living in a given geographical area at a particular time. Interest in population studies arose naturally from the existence of the fundamental economic problem of resource scarcity. Resource scarcity is an ever present problem in all economies. Why do we then border ourselves talking of population? The reason is that all the fruits of production in form of goods and services are ultimately for human consumption, and man is yet at the same time the source of all production. Man addresses the 'why', 'how' and whom questions in economics. Aggregate demand and supply functions are at the instance of man. Keen interest in population studies as it is the nation's source of strength and its responsibility.

People and resources have from the very beginning been in a keen competition. Whether people or resources outrun the other is very significant for human existence and general welfare.

Wonnacott/Wonnacott (1979:3) defining Economics tells us that Economics is the study of how people make their living, how they acquire the food, shelter, clothing, and other material necessities and comforts of this world. It is a study of the problems they encounter, and of the ways in which these problems can be reduced.

The first economist to view so seriously the problem of resource scarcity side by side with increasing population was a reverend gentleman Robert Thomas Malthus. Writing in 18<sup>th</sup> century England, he shocked and influenced the then academic community by painting a very gloomy picture of human race doomed to eternal misery.

Samuelson (1976:30) talking about Thomas Robert Malthus stated that he (Thomas Robert Malthus) used to argue at breakfast against his father's

perfectionist view that the human race was getting ever better. Finally, the younger Malthus became so agitated that he wrote a book, titled "Essay on the Principle of Population" (1798), which became an instantaneous best-seller. Going through several editions, for a century the book influenced the thinking of people all over the world (including Charles Darwin, the expositor of the doctrine of biological evolution). It is still a living influence today. Malthus' views depend directly on the law of diminishing returns, and continue to have reference. Malthus first took the observation of Benjamin Franklin that, in the American colonies where resources were abundant, population tended to double every 25 years or so. Malthus postulated, therefore, a universal tendency for population – unless checked by food supply – to grow at a geometric progression. Now, anyone with imagination knows how fast geometric progressions grow – how soon 1, 2, 4, 8, 16, 32, 64, 128, 256, 1,024 ..... becomes so large that there is no space in the world for all the people to stand. (At 6% compound interest, money doubles in value every 12 years. It has been estimated that the \$24 received by the Indians for Manhattan Island would, if deposited at compound interest, be today as much as all real property on the island. Malthus stated that food production was at arithmetic progression - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 .....

As population doubles and redoubles, it is exactly as if the globe were halving in size, until finally it shall shrunk so much that food and subsistence fall below the level necessary for life. Because of the law of diminishing returns, food tends not to keep up with the geometric progression rate of growth of population.

Malthus did not say that population would increase at these rates. This was only its tendency if unchecked. He considered it an important part of his argument to show that, in all places in all times, checks does operate to hold population down. In his first edition, he put emphasis on positive checks that act to increase the death rate: pestilence, famine and war. Later, he backed down from this gloomy doctrine and held out hope for the human race through preventive checks operating on the birth rate. Although the birth-control movement is called neo-Malthusianism, clergyman Malthus advocated only moral restraint with prudential postponement of early marriages until a family could be supported. In fact, he preached that the struggle for existence was an illustration of the wisdom of nature keeping poor people from getting soft and lazy.

Malthus ideas had widespread repercussion. His book was used to support a stem revision of the English poor laws, whereby destitution was considered a result of laziness and unemployment, a state to be made as uncomfortable as possible. His opinion also bolstered the argument that trade-unions could not improve the welfare of workers, since any increase in

their wages would only cause workers to reproduce until there was again barely subsistence enough for all. Even in the 1970s, the computer makes headlines when it spells at the "limits of growth" by a more elaborate simulation of Malthus geometric and arithmetic progressions.

Despite the statistics covering many countries incorporated in his editions, it is today recognized that his views were oversimplifications. In his discussion of diminishing returns, Malthus never fully anticipated the miracles of the Industrial Revolution. In the next century, technological innovation shifted production – possibility frontiers rapidly outward and made possible better standards of living for more people, even though at the same time medical advances were prolonging human life and further lessening the positive checks to population. Nor did he anticipate that after 1870 in most Western nation family fertility as measured by actual number of children would begin to fall far short of family fecundity, or biological reproductive capacity.

Nevertheless, the germs of truth in his doctrines are still important for understanding the population behaviour of India, Haiti, China, Africa and other parts of the globe where the balance of numbers and food supply is a vital factor.

The world population has increased tremendously. This increase was made possible mainly through the declining death rate, resulting from scientific advances in medicine and from the improved living standards made possible by the Industrial Revolution. Life expectancy of a Western baby has doubled since 1800 to over 206 years at present, and standards of living far exceeded those of any previous century. Fertility means population growth from the point of view of individual households. It further treats human beings in terms of their costs and benefits to the households associated with additional child, that is, the costs and benefits associated with adding one more child to the family. The growth rate is the rate at which the population increases per period of time, usually a year.

Tamuno (1999:45) speaking on Malthus population thesis says that, Malthus began by saying that the basic requirement of life is food and the second requirement is reproduction. Because of food and reproduction he argued that population grows geometrically whereas food supply increases arithmetically. He therefore, looked around the country and wanted to find out what the problem was. He saw land being limited but fail to consider about technological progress. To check population growth, he proposed both positive aspects which include death, war, famine, disease and the negative aspects which are lowering both rate through postponement of marriages.

However, in 1803, he published another book in which he started talking about moral restraint that is, no marriage and no promiscuity. He failed to say

something about contraception, relationship between marriage and number of children. So he sought ways to holding down the population. He seems to assume that sexual desire is more with children. He tied his population theory with the wage fund theory. With both theories he argued that more wages to labour will increase marriage and hence children.

On population growth, Mc Connell and Brue (1999:688) said, once a minimum income level is reached, each individual consumer's intake of food and fiber becomes relatively fixed. Thus subsequent increase in demand depends on growth in the number of consumers. In most advanced nations, the demand for farm products increases at a rate roughly equal to the rate of population growth, and this is the case in the United States. U.S. population growth unlike that of Nigeria has not been rapid. Therefore, the increase in U.S. demand for farm products has not kept pace with the rate of growth of farm output.

Begg et al (1994: 539) has this to say; living in a largely agricultural society, Malthus was worried about the fixed supply of land. As a growing population tried to work a fixed supply of land, the marginal product of labour would diminish and agricultural output would fail to increase in line with population.

A country should be concerned with both the size and growth rate of its population since they have implications for the standard of living and welfare of its citizens. This is why Nigeria had been concerned with getting an accurate population figure.

In 1963, Nigeria's population stood at 55.7m while efforts made to conduct population census in 1973 and 1983 all met with failures. However, the 1991 census figure put Nigerian population at 88 million.

The 2006 provisional population total census by sex revealed that there are 71,709,859 males and 68,293,683 females totaling 140,003,542 with a land size of 936,930 square meters.

#### vi. *Interest Rate*

Begg et al (1994: 434) stated that a fall in interest rates increases the level of investment demand by moving firms down their investment demand schedule. A fall in interest rates will also increase consumption demand by increasing household wealth and shifting the consumption function upwards. Similarly an increase in the money supply will reduce the equilibrium interest rate to increase the quantity of money demanded and maintain money market equilibrium. So an increase in the money supply shifts the aggregate demand schedule upwards and increases the equilibrium level of output and income. It is the equilibrium because aggregate demand or planned spending equals actual income and output. Supposing money supply increases, a reduction in interest rate is required to increase money demand in line with the higher money supply. However, lower

interest rates increases investment demand (or spending) and shift the consumption function upward. The aggregate demand schedule shifts from AD to AD<sub>1</sub>. Hence, an increase in the money supply lowers interest rates, shifts aggregate demand upwards, and increases income and output. The quantity of money demanded depends on interest rates and on the level of income.

If negative changes in consumption and investment demand (spending) completely offset higher government demand, aggregate demand would then be unchanged. With unchanged income, there would be no upward pressure on the demand for money and interest rates. Without higher interest rates, investment and consumption demand would not have been reduced. Hence, increased government spending must lead to some upward shift in the aggregate demand schedule, some increase in interest rates, and to only partially offsetting falls in consumption and investment.

## VIII. DATA PRESENTATION, ANALYSIS AND FINDINGS

Our main concern is the analysis of data. We proceed to examine the method applied in analyzing the data. We use the stationarity and Cointegration Error Model tests which seek to really establish a long-run relationship among the variables; and eliminate spurious or false regression. This does not mean relegating OLS to the background. In line with time series modelling, unit test, cointegration and error correction model is used to regress the variables using the available data. In testing for the stationarity of the variables, Augmented Dicky-Fuller (ADF) test is employed to determine the degree of integration of the variables. That is how many times a variable should be differenced to attain stationarity (Dickey and Fuller, 1979, 1981).

Table 5.1: Ols Short Run Results of the Determinants of Aggregate Demand, 1970- 2014 (Variables Measured At Levels)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15004.17	214039.1	0.070100	0.9446
CS	-0.062844	0.049936	-1.258479	0.2186
ES	-0.083144	0.042913	-1.937497	0.0628
GS	0.613271	0.465758	1.316715	0.1986
IS	5.712912	5.497116	1.039256	0.3076
PP	-0.000365	0.004093	-0.089205	0.9296
PX	244.1122	80.14541	3.045866	0.0050
IR	-827.2422	8934.104	-0.092594	0.9269
R-squared	0.853103	Mean dependent var		178572.3
Adjusted R-squared	0.816379	S.D. dependent var		298365.7
S.E. of regression	127852.7	Akaike info criterion		26.54828
Sum squared resid	4.58E+11	Schwarz criterion		26.90017
Log likelihood	-469.8690	F-statistic		23.23000
Durbin-Watson stat	2.144060	Prob(F-statistic)		0.000000

Table 5.1 above presents the OLS results. It is very clear that the regression is spurious. This is so because the  $R^2$  and  $R^2$  of 0.85 and 0.82 respectively show that variable in aggregate demand explained by the regressors is high, but t-values of the regressors indicate that none of them is significant. That is, the result shows very high  $R^2$  and  $R^2$  but none of the explanatory variables is significant. This weakness in the OLS result gave rise to the Unit root test as shown below:

a) Unit Root Test Result

As stated in the literature, most time series variables are non-stationary and using non-stationary variables in the model might lead to spurious regressions (Granger 1969). This is clearly shown in the OLS result above. The first or second differenced terms of most variables will usually be stationary.

We therefore proceed to carry out the stationarity test at ordinary level as shown below to see the stationarity of the variables.

Table 5.2: Stationarity test result at Ordinary Level ( 1970 – 2014)

Variable	ADF	P-value	Order of Integration
$\Delta$ LN(AD)	-1.102687	<u>0.505813</u>	<u>Not Stationary</u>
$\Delta$ LN(CS)	-0.203589	<u>0.187142</u>	<u>Not Stationary</u>
$\Delta$ LN(ES)	-0.153262	<u>0.717638</u>	<u>Not Stationary</u>
$\Delta$ LN(GS)	-1.951436	<u>0.014943</u>	<u>Not Stationary</u>
$\Delta$ LN(IS)	-1.734171	<u>0.004801</u>	<u>Not Stationary</u>
$\Delta$ LN (PP)	-1.711565	<u>0.00000</u>	<u>Not Stationary</u>
$\Delta$ LN (PX)	-0.023470	<u>0.024640</u>	<u>Not Stationary</u>
$\Delta$ LN (IR)	-1.281431	<u>0.178771</u>	<u>Not Stationary</u>
5% ADF Critical Values for the Test is -2.9499			

Source: Researcher's Computation

The stationary result as presented in Tables 5.2 above show that all the variables are non-stationary at ordinary level using 5% ADF critical value of -2.9499. Granger (1969) stated that most time series variables are non-stationary and using non-stationary variables in the model might lead to spurious regressions. Hence, we proceed to the first and second difference as shown below:

Table 5.3: Stationarity test result at 1<sup>st</sup> and 2<sup>nd</sup> difference (1970 – 2014)

Variable	ADF	P-value	Order of Integration
$\Delta$ LN(AD)	-6.566802	0.000000	1(1)
$\Delta$ LN(CS)	-4.023913	0.000910	1(1)
$\Delta$ LN(ES)	-4.775705	0.000002	1(1)
$\Delta$ LN(GS)	-6.444126	0.000000	1(1)
$\Delta$ LN(IS)	-5.700664	0.000000	1(1)
$\Delta$ LN (PP)	-4.474336	0.000001	1(2)
$\Delta$ LN (PX)	-3.729883	0.002803	1(1)
$\Delta$ LN (IR)	-5.465075	0.000000	1(1)
1% ADF Critical Values for the Test is -3.6422			

Source: Researcher's Computation

Running Augmented Dickey Fuller (ADF) test as shown in table 5.3 indicates that all the variables were integrated of order one (1(1)) except population which is integrated of order two (1(2)) at 1% level of significance. That is, all the variables were stationary at first difference but only population was stationary at second difference to attain stationarity.

b) Cointegration Test Result

We now turn to determine the existence of long run equilibrium relationship between our variables. As

indicated earlier, non-stationary time-series can be cointegrated if there is a linear combination of them that is stationary, that is, the combination does not have a stochastic trend. The linear combination is the cointegration equation.

The cointegration tests are based on the Johansen and Juselius (1989) test. Tables 5.4 present the cointegration test results.

Table 5.4: Johanson Integration Tests Results with Log Ad, Cs, Es, Gs, Is, Pp, Px And Ir from 1970 – 2014

Test assumption: Linear deterministic trend in the data				
Series: D(LOG(AD),2) D(LOG(CS),2) D(LOG(ES),2) D(LOG(GS),2) D(LOG(IS),2) D(LOG(PP),2) D(LOG(PX),2) D(LOG(IR),2)				
Lags interval: 1 to 1				
Eigenvalue	Likelihood Ratio	5 Percent Critical Value	1 Percent Critical Value	Hypothesized No. of CE(s)
0.969547	285.5061	124.24	133.57	None **
0.910047	191.2336	94.15	103.18	At most 1 **
0.713873	126.2050	68.52	76.07	At most 2 **
0.692100	92.41943	47.21	54.46	At most 3 **
0.614684	60.61399	29.68	35.65	At most 4 **
0.572568	34.86432	15.41	20.04	At most 5 **
0.457977	15.92367	5.87	13.12	At most 6 **
0.356807	11.91537	3.76	6.65	At most 7 **
*(**) denotes rejection of the hypothesis at 5%(1%) significance level				
L.R. test indicates 8 cointegrating equation(s) at 5% significance level				

Researcher's Computation

Using the MacKinnon (1996) critical values for cointegration test, we reject the null hypothesis of no cointegration and conclude that all the variables (Aggregate Demand, Consumer's Expenditure,, Export Expenditure, Government Expenditure, Investment Expenditure and Population) are cointegrated at 1% level of significance.

We therefore proceed to estimate our error correction model, in the most parsimonious specification.

c) Error Correction Model

The confirmation of the existence of a cointegrating vector among our series gives us enough background for carrying out short run dynamic

adjustment. Therefore adopting the general-to-specific framework, we proceed to estimate an over-parameterized error correction model from where a parsimonious error correction model is obtained as shown in tables 5.5.



Table 5.5: The Parsimonious Error Correction Model 1970 – 2014

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.511623	1.080057	2.325453	0.0530
D(LOG(AD(-1)))	-0.436091	0.364644	-1.195939	0.2707
D(LOG(AD(-2)))	-0.427084	0.234584	-1.820599	0.1115
D(LOG(CS))	0.034953	0.361961	0.096566	0.9258
D(LOG(CS(-2)))	-0.551097	0.467363	-1.179162	0.2769
D(LOG(ES))	-0.035041	0.114870	-0.305051	0.7692
D(LOG(ES(-1)))	0.254334	0.125055	2.033773	0.0815
D(LOG(ES(-2)))	0.152242	0.136603	1.114488	0.3019
D(LOG(GS))	0.270053	0.058377	4.625994	0.0024
D(LOG(GS(-1)))	0.348688	0.176618	1.974251	0.0889
D(LOG(GS(-2)))	0.341148	0.172761	1.974685	0.0889
D(LOG(IS))	-0.016690	0.054519	-0.306140	0.7684
D(LOG(IS(-1)))	-0.088596	0.040953	-2.163376	0.0673
D(LOG(IS(-2)))	-0.022877	0.043721	-0.523242	0.6170
D(LOG(PP))	-87.54700	36.87534	-2.374134	0.0493
D(LOG(IR))	0.292087	0.459766	0.635295	0.5454
D(LOG(IR(-1)))	0.723711	0.423373	1.709392	0.1311
D(LOG(IR(-2)))	0.698009	0.450588	1.549108	0.1653
D(LOG(PX))	-3.878380	0.583031	-6.652102	0.0003
D(LOG(PX(-1)))	3.554951	1.080786	3.289228	0.0133
D(LOG(PX(-2)))	1.261844	1.483034	0.850853	0.4230
ECM(-1)	-0.029694	0.347327	-0.085493	0.0943
R-squared	0.982344	Mean dependent var		0.166472
Adjusted R-squared	0.929376	S.D. dependent var		0.714241
S.E. of regression	0.189812	Akaike info criterion		-0.389714
Sum squared resid	0.252199	Schwarz criterion		0.647545
Log likelihood	27.65085	F-statistic		18.54586
Durbin-Watson stat	2.546925	Prob(F-statistic)		0.000303

Source: Researcher's Computation

The parsimonious error correction model above shows that the model is a good fit since the coefficient of determination is significantly high. That is, the explanatory variables included in the model explained 98.23% change in aggregate demand. The adjusted R<sup>2</sup> is 92.93% which is quite high, implying that changes in aggregate demand (dependable variable) is well explained by the explanatory variables included in the model. Also, the overall regression was significant at 1%. The error correction coefficient was relatively high, rightly signed (that is negative) and is significant at 1% level. Durbin-Watson statistics (DW) value of 2.55 is a reflection of minimal autocorrelation. The error correction coefficient was relatively low, significant and appropriately signed. This reveals that changes in aggregate demand adjusted fairly to changes in the explanatory variables. All the workings are attached as appendixes A – C.

i. *Examination of Key Determinants of Aggregate Demand in Nigeria from 1970 - 2014*

Some of the coefficients of the variables of interest have the expected signs while some do not. From the result, the accumulated (lag 1, 2 & 3) values of aggregate demand were positively related with the current value and were all significant at 5% level. This

means that there is a strong correlation between the dependent and independent variables. As stated earlier, 98.23% of the change in aggregate demand is explained by the variables – consumption spending, government spending, investment spending, net export spending and population.

ii. *Aggregate Demand and Consumer Spending*

The current consumer expenditure value is insignificant in explaining change in aggregate demand while the past (lag 1, 2, & 3) values of consumers expenditure were negatively related with aggregate demand. The apriori expectation was not met since economic theory has it that aggregate demand reflects a direct relationship with consumption expenditure and therefore it is expected that consumers will have a larger demand with a rise in disposable income, which increases with total national output. The negative spending of the public may be careless spending on unproductive goods and services such as ceremonies like birth day parties, etc. Such spending is geared towards moving the economy backward.

iii. *Aggregate Demand and Net Export Spending*

The past (lag 1,2 & 3) value of net export expenditure were positively related with aggregate demand and were significant at 5% level while current

net export expenditure position also did not meet the apriori expectation since it negatively affected aggregate demand. This may be as a result of the disposition of an average Nigerian in his preference to foreign goods and services which he feels to have more value and quality than Nigerian products and services. We may also attribute this behaviour to our tax system which places 10% VAT on virtually every good and services produced in the country. Whereas goods smuggled into the country are not detected and taxed. The Custom and Exercise duties are seen as too high on Nigerian goods produced and consumed in the country.

#### iv. *Aggregate Demand and Government Spending*

The apriori expectation of current government expenditure on aggregate demand is met while the past (lag 1) value is negatively related with aggregate demand. It should be noted that the negative effect of government expenditure on aggregate demand may be as a result of careless spending on the part of government especially on unproductive activities such as West African Peace Keeping Mission in Liberia etc as well as Ghana must go bags of money given to political office holders such as legislators for inducement. Thus this result confirms the conclusions of many cross-country studies conducted by Ram (1986) which finds a negative effect of public spending in some developing countries. Also, Amin (1998) finds a similar result for Cameroon.

#### v. *Aggregate Demand And Investment Spending*

The apriori expectation of both the current and the accumulated (lag 1&2) values of investment expenditure on aggregate demand were met since they were positively related to aggregate demand. This result indicates that the country is experiencing rising profits, increased sales and cash flow, and greater use of existing capacity. This usually implies that the country experienced a profit expectation and business confidence rise for the period under review. Although considerable efforts have been made by the immediate past and present administration to woo foreign investors to invest in the domestic economy, it is imperative that indigenous investors are also encouraged.

Since one of the fundamental challenges facing the Nigerian economy is how to attract foreign investment into the country, in order to achieve this, domestic investment must lead the way forward. Foreign investment is a very powerful mechanism for achieving technology transfer and must therefore be pursued vigorously.

#### vi. *Aggregate Demand and Population Growth*

The current and past (lag 1, 2 & 3) value of population were negatively related with aggregate demand. This may be a result of low per capita income, or/and the hyper inflationary trend in the economy. Population of a country is very important as it provides

ready markets for goods and services produced by her citizens. Low capital income may be as a result of a greater number of the population being unproductive. Our youths are not interested in developing themselves and therefore are not ready to work but will like to consume every thing. Government spending on education has remained relatively constant over the years. Government policy statement on making education compulsory for all citizens will change the orientation of an average Nigerian.

#### vii. *Other Findings that Affect Aggregate Demand*

The overall regression of the above model was significant at 1%. The error correction coefficient was low and highly significant. Also, the R-squared statistics indicates that the model explains 98.23% of the variability of aggregate demand. All the variables have the expected negative sign at first and second difference.

The model did not explain 1.77% of the variability of aggregate demand. Other factors that affect the aggregate demand may be tax, etc. Company income tax if too high or low will affect the aggregate demand. Tax incentives may be granted to companies like tax rebates, tax holidays and the like, will in turn increase productivity and will also reduce prices of goods and services. Prices of goods and services are also strong determinants of aggregate demand.

The inclusion of dummy variable (DUM) is meant to capture the effects of policy changes on aggregate demand before and after the introduction of Structural Adjustment Programme (SAP). The programme entails deregulation of prices (interest rates and exchange rates), lowering external tariffs, liberalising imports and exports, and so on. The coefficient of dummy variable appears to be negative. Also, it shows a significant impact on aggregate demand. However, one can deduce from the foregoing that economic policy changes occasioned by SAP which started in 1986 might have had negative impact on aggregate demand, but was significant in explaining the change behaviour.

## IX. SUMMARY

### a) *Summary of Findings*

Three models were built and five independent variables were estimated for influencing Aggregate demand. In line with econometric time series modelling, unit root test for cointegration, and Error Correction Modelling (ECM) were used in analysing the data obtained.

In the process of carrying out the work, it was found that all the variables were integrated of order 1(1) except population which was integrated of order 1(2). The result from the study showed that all the variables are significant at first and second order.

The current consumer expenditure value is insignificant in explaining change in aggregate demand

while the past values of consumer's expenditure were negatively related with aggregated demand. This does not agree with apriori expectation since it is expected that increase in spending on consumption should bring about increase in total demand. This might be unconnected with autonomous Spending that may be of less value to the economy. The value of export expenditure was positively related with aggregate demand. Current export expenditure position also did not meet the apriori expectation since it negatively affected aggregate demand. The apriori expectation of current government expenditure on aggregate demand is met while the past value is negatively related with aggregate demand. It should be noted that the negative effect of government expenditure on aggregate demand may be as a result of careless spending on the part of government especially on unproductive activities. Thus this result confirms the conclusions of many cross-country studies conducted by Ram (1986) which finds a negative effect of public spending in some developing countries. The apriori expectation of investment expenditure was met since both the current and the accumulated values of investment expenditure were positively related to aggregate demand. The current and past values of population were negatively related with aggregate demand. This may be as a result of low per capita income, or/and the hyper inflationary trend experienced in the economy. The federal government should reposition itself in the area of foreign direct investment from the upstream sector to the downstream sector of oil to agricultural and allied industries. The export of manufactured goods and primary products should be encouraged. If Nigeria increases the exports of primary commodities and manufactured goods; and reduces the importation of some consumer goods such as beans, rice, textiles, beverages etc, that can be produced locally, the net export spending will improve.

## X. RECOMMENDATIONS

The act of recommendation involves a process of proffering solutions to the already known problems by also taking cognizance of the environment or institution.

Given the fact that the population variable is significant, the study recommends that government policies should be geared towards improving the quality of the population to ensure increase in productivity. That is, there should be efforts to encourage capacity building in order to transform the high population to a very productive one. This will not only increase production and output, it will increase income and reduce inflation. Also, the population of Nigeria can be checked by enacting laws and definite policies to check population explosion without a corresponding productive labour. Given a growth of 3.2%, Nigeria could double her present population in two decades. This is unhealthy for the nation in the face of dwindling and

depleting resources, unimproved infrastructure etc. In order to check population explosion, the government should enact enabling laws to control population growth. Laws enacted countries with large population such as India and China include inter alia, removal of maternity leave, stipulating the number of children for a family, encouragement of celibacy, late marriages, legalisation of abortion, training of female children and birth control measures. Nigeria may also consider adoption of some of these policies.

From the regression result, government spending variable was significant and with high magnitude. The study recommends that government spending should be geared toward expanding and improving infrastructure, in order to create the necessary and enabling environment for private sector growth and hence economic growth. Emphasis should be placed on capital spending to improve and expand infrastructure such as uninterrupted electricity generation and supply, provision of good water supply, communication network, good medical care, education etc that increases aggregate demand and eventual growth of the economy.

Investment spending from the result is statistically significant and large in size. Effort should be made to encourage domestic investment in order to increase output. Foreign direct investment that could transfer technology should be encouraged. South African economy as we see in literatures and national dailies has improved tremendously as a result of foreign direct investment from developed countries like, USA, Britain and Japan just to mention but a few. Adequate monetary policy measure to lower interest rate should be pursued in order to increase investment in real sector. Tax policy should be such that can encourage domestic investment.

### a) *Other Recommendations*

One of the major impediments to the attainment of macroeconomic stability and sustainable growth, especially during the military era, has been reliance by the Federal Government on borrowing from the banking system, particularly the Central Bank of Nigeria (CBN), with the attendant negative macroeconomic consequences. This type of deficit financing can be minimized and a certain measure of fiscal discipline in the conduct of public affairs be adopted.

The debt overhang whereby Nigeria is unable to meet her external debt service obligation as been recognized as a major constraint to the use of tax and spending policy to "fine tune" the economy; hence, the non influx of fresh foreign investment into the country. A substantial and sustained reduction of the external debt service burden, on a cash basis, would speed up a return to a viable and stable macroeconomic framework in Nigeria. Made in Nigeria goods be patronized than

foreign goods so that our net export spending shall be favourable at all times.

There is also the need for good governance which relates to transparency in the handling of the set of principles and decisions of government in setting the level of public expenditure and how that expenditure is funded. Good governance is an important aspect of economic growth and development. When good government handles fiscal and monetary policies which are macroeconomic tools that governments have at their disposal to manage the economy, there will be growth. Good governance is therefore, a matter of the efficient and effective use of resources to ensure improved living standards. Efficiency and effectiveness in economic management imply the optimal use of resources to reduce the macroeconomic imbalances arising from deficit financing. This means that the choice of policy instruments that are less destabilizing to the economy should be welcomed at all times.

Government (at all tiers) should design unemployment insurance schemes, on which she should spend more during recessions (when the unemployment rate is high), as an example of an automatic stabilizer.

Government should ensure price stability of goods and services; in order to attain full employment and economic growth. Efficient Price Control Boards should be set up to fix prices of goods and ensure strict compliance.

Successive Governments should not abandon projects in favour of their own proposed projects, but rather should continue with existing ones and if the need arises, amendments should be made. Wasteful and extravagant projects should be avoided in the interest of our nation.

#### b) *Further Studies*

No amount of a single study is ever detail enough to embrace all variables required to explain a given phenomenon. Our study is not devoid of such shortcoming. The study considered the determinant factors of aggregate demand in Nigeria from 1970 to 2014 with such variables as consumption spending, investment spending, government spending, net export spending, population growth, price and interest rate. These factors are not the only determinant variables. Other variables such as inflation rate, tax rate, tariff, exchange rate, foreign direct investment spending, political stability, etc if added as variables will help not only to enlarge the scope of the work, but also assist in further search for knowledge in this area of study.

It is further suggested that, in view of the present changing world with new discoveries of new theories, further studies be carried out in this field of study.

## XI. CONCLUSIONS

For many years, the federal government had incurred fiscal deficits which were financed through borrowing from the banking system, particularly the CBN as contained in her 2003 Contemporary Economic policy book. This practice has had an adverse effect on domestic price and exchange rate stability. Other issues include: a high debt burden, low output, and a high unemployment rate. Also, the poor state of infrastructure, such as electricity and roads, has impacted negatively on the production costs of goods and services in the economy. Nonetheless, a large population of the economy has refused to work but rather engages themselves in cult groups to threaten the various tiers of Governments and business organisations; to violently resort to extorting money from them by force of arms. They are not gainfully employed and do not contribute to the growth of the economy. This part of the population is not productive but rather a burden on the economy. The youths being the majority of the unproductive population should be rehabilitated. Other problems which have constrained the growth and development of the economy are dearth of long-run loanable funds from the deposit money banks and an underdeveloped indigenous technology. These factors, among others, have been unhelpful in promoting the overall economic growth and development of the country. Consequently, all the major problems highlighted above call for drastic measures to address them, so that the desired level of economic growth and development can be realized.

It is in this context that the issues covered in this study become significant, relevant and timely. Despite the fact that the country is endowed with huge human and material resources, economic growth and development have remained below expectations for too long. The aspiration of every patriotic Nigerian is that the economy experience significant growth and development in the third millennium with goods and services in abundance at affordable prices. It is, therefore, necessary that contemporary economic issues be examined and appropriate strategies mapped out to address the problems inhibiting growth and development.

## XII. CONTRIBUTION TO KNOWLEDGE

1. The study is able to establish that there exist a strong relationship between aggregate demand and population, government spending and investment spending. Therefore, population, government spending, and investment spending were found to be strong determinants of aggregate demand.
2. The result of the error correction model indicates a long-run and stable relationship between aggregate demand and the explanatory variables.

3. The result also confirms the conclusions of many cross-country studies especially the ones conducted by Ram (1986) which finds a negative effect of public spending in some developing countries; and that of Amin (1998)'s similar result for Cameroon. That Nigeria has over the years been operating fiscal policies without adequate precautionary measures.

## REFERENCES REFERENCES REFERENCIAS

1. Abomaye-Nimenibo, W.A.S. (2008), Determinants of Aggregate Demand in Nigeria from 1976 to 2005, An Unpublished Ph.D Thesis, University of Port Harcourt, Rivers State, Nigeria.
2. Ashley, C. A. and Chris Banister (1989), Bicycling to Work from Wards in a Metropolitan Area. *Traffic Engineering and Control Journal*, Vol. 30, nos 6-8, June – September.
3. Aschauer, D. A (1985), Fiscal Policy and Aggregate Policy, *American Economic Review*, Vol.75, No. 1, March.
4. Amaech, A.E. and Azubuike, C.R.( 2004), Principles of Economics, Global Prints Ltd. Aba, Nigeria.
5. Amin, A. (1998). "Cameroon's Fiscal Policy and Economic Growth" AERC Research Paper 85, Nairobi.
6. Akpakpan, E. B. (1999), *The Economy Towards a new Type of Economics*, Belpot Publishers, Port Harcourt, Nigeria.
7. Anderson, D.J. (1997), *Commerce for West Africa*, Macmillan, London.
8. Ariyo, A. (1993). "An Assessment of the Sustainability of Nigeria's Fiscal Deficit, 1970 - 90" *Journal of African Economics*, vol.2, No.2, October; 263 – 282.
9. Babber, W.J(1997), *American Economic Review*, vol.87, Issue 2, May; 445-447.
10. Ball, L.. (1999), "Aggregate Demand and Long-Run Unemployment", *JSTOR Brookings Papers on Economic Activity* vol., No.2.
11. Barro, R.. ( 1989) "The Ricardian Approach to Budget Deficits." *Journal of Economic Perspectives* Vol.3, no. 2 Spring.
12. Begg, D., Stanley Fisher, and Dornbusch, R.(1984), *Economics*'4th edition, McGraw Hill, London.
13. Bobo The Ninja. "Fiscal Policy – Wikipedia, the free encyclopedia.
14. Central Bank of Nigeria. (2003), *Contemporary Economic Policy Issues in Nigeria*, edited by O.J. Nnanna, S.O. Alade and F.O.Odoko.
15. Central Bank of Nigeria: *Statistical Bulletin*, Volume 16, December 2005.
16. Chete, L.N. and B.W. Adeoye (2002). "Human Capital and Economic Growth: The Nigerian Evidence." In *Human Resources Development in Africa. Selected Papers for the 2002 Annual Conference*.
17. Dele, D.A., Bamidele, S. and Akande, B, (1991), *Local Institutions and National Development in Nigeria*, Obajemi Awolowo University Press, Ile-Ife.
18. Diamond, P.A. (1982), 'Aggregate Demand Management in search Equilibrium', *The Journal of Political Economy*: Vol. 90, No. 5, October.
19. Ekpo, A. (1994). "Public expenditure and Economic Growth in Nigeria 1960 -1992" Final Report, AERC, Nairobi.
20. El-Khoury, S. (2002). "Fiscal Policy and Macroeconomic Management". In M.S. Khan; S.M. Nsouli and C. Wong (ed.) *Macroeconomic Management – Programmes and Policies*.
21. Engelmann, R. (1997) 'Why Population Matters' *Population Action International*, Washington, D.C.
22. Engle, R. F., and C. W. J. Granger (1987), "Co-integration and Error Correction: Representation, Estimation, and Testing", *Econometrica*, *Econometric Society*, Vol.55, No.2, March
23. Epperson, Bruce, Sara J. Hendricks, and Mitchell York.(1995), *Estimation of Bicycle Transportation Demand from Limited Data*. (University of South Florida). *Compendium of Technical Papers from the Institute of Transportation Engineers 65th Annual Meeting*.
24. Friedman, Benjamin M. (1988), *Day of Reckoning: The Consequences of American Economic Policy*.
25. Gbosi, A.N. (1993), *Monetary Economics and the Nigerian Financial System*, Pam Unique Publishers, Port Harcourt. Nigeria Ashley, Carol A. and Chris Banister: *Bicycling to Work from Wards in a Metropolitan Area*. *Traffic Engineering and Control*, Vol. 30, nos 6-8, June – September 1989.
26. Gbosi, A.N. ( 2005, ), *Contemporary Issues in International Trade and Development Finance*, Sodek Associate, Port Harcourt. Nigeria.
27. Gbosi, A.N. (2005), *Modern Macroeconomics and Public Policy*, Sherbrooke Associate, Port Harcourt. Nigeria.
28. Granger, C. W.J.(1969), "Investigating Causal Relations by Econometric Models and Cross-Spectral Methods". *Econometric Society*, Vol.37, No.3, July.
29. Granger, C.W.J. (1981) "Some properties of time series data and their use in econometric model specification", *Journal of Econometrics*, Elsevier, Vol.16, No.1, May.
30. Grossman, P.J. (1988). "Government and Economic Growth: A Non-linear Relationship," *Public Choice*, Vol. 56, No 2, 193 – 200.
31. Henderson, J.V and Poole,W.(1991)'Principles of Macroeconomics', Health and Co., Massachusetts.

32. Henning, P. (1981)'Commercial Banking in Developing Countries'. Business Times of Monday, September 7.
33. Iyoha, M. A. and Ekanem, O.T. (2002). Introduction to Econometrics, March Publishers, Benin City, Nigeria.
34. Jhingan, M.L. (2003). Macro-Economic Theory, Vrinda Publications (P) Ltd. 11<sup>th</sup> edition, Delhi.
35. Johansen, S. (1988). "Statistical Analysis of Cointegration Vectors", Journal of Economic Dynamics and Control, Vol.12.
36. Johansen,S., and K. Juselius. (1990). "Maximum likelihood estimation and inference on cointegration with applications to the demand for money", Oxford Bulletin of Economics and Statistics, vol. 52,
37. Joint Committee on Taxation (1991), *Tax Policy and the Macroeconomy: Stabilization, Growth, and Income Distribution*. Report no. JCS-18-91. December 12,
38. Langer, Oskar (1936), *Economic Theory of Socialism*, RES.
39. Lawal, O.A. (1971), Economics for West Africa, Macmillan Press, Ibadan, Nigeria
40. Lindsey, L. ( 1990). *The Growth Experiment: How the New Tax Policy Is Transforming the U.S. Economy*.
41. Lipsey, R.G. and Steiner, P.O. ( 1981), 'Economics' 6th edition, Harper & Row Publishers, New York.
42. MacKinnon, J.G. (1996), "Numerical distribution functions for unit root and cointegration tests", Journal of Applied Econometrics, Vol.11, No.6, John Wiley & Sons Ltd.
43. Maddala, G.(1992):Introduction to Econometrics, 2nd Edition., Macmillan, New York.
44. Malthus, T. (1909), 'An Essay on the Principles of ', MacmillanCo. London.
45. Mankiw, N. Gregory.( 1990), "A Quick Refresher Course in Macroeconomics." *Journal of Economic Literature* Vol. 27 December:
46. McConnell, C. R. and Brue, S. L.(1999), 'Economics: Principles, Problems and Policies', 14th edition, Irwin McGraw-Hill.
47. Nelson, A. C. and Allen,D: (1997), If You Build Them, Commuters Will Use Them: Cross-Sectional Analysis of Commuters and Bicycle Facilities. City Planning Program, Georgia Institute of Technology, submitted to the Transportation Research Board, 76th Annual Meeting, Washington, DC (preprint), January.
48. Obioma, B.K. (1983), Rural Financial Services in Nigeria: Lesson from the Traditional Group Markets, Onitsha, Nigeria.
49. Okeke, C.C.S: (1992), 'Economics for Senior Secondary Schools', Fourth Dimension Publishers.
50. Onoh, J.K. (1980), "The Foundations of Nigeria's Financial Infrastructure, Groom Helm, London.
51. Onuchuku, O. and Adoghor, G. (1999), Econometrics: An Introduction to Ordinary Least Squares Regression Analysis, Springfield Publishers. Owerre, Nigeria.
52. Ram, R. (1986). "Government Size and Economic Growth: A New Framework and some Evidence from Cross-Sectional and Time-Series Data", American Economic Review, Vol. 76, No.1, March.
53. Ridgeway, M. D. (1995). Projecting Bicycle Demand: An Application of Demand Modeling Techniques to Bicycles. 1995 Compendium to Technical Papers, Institute of Transportation Engineers 65th Annual Meeting.
54. Rimmer, D. (1981), "Development in Nigeria", in the Political Economy of Income Distribution in Nigeria, Holmer and Meier, G., Oxford University Press, London.
55. Samuelson, P. A: Economics, ( 1976), 10th Edition, McGraw-Hill Book Company, New York.
56. Sraffa, Piero (1960), *Production of Commodities by Means of Commodities: Prelude to a Critique of Economic Theory*. Cambridge University Press.
57. Tamuno, S. O. (1999), 'A Synoptic View of Economic Theorists', African Heritage Publications, Lagos, Nigeria.
58. Umoh, P. N. (1993), Principles of Finance, Page Publishers, Lagos.
59. Webster Encyclopedic Unabridged Dictionary of English Language, (1989), Copyright by Dillithium Press Limited, Gramercy Books, New York/Avenel, New Jersey.
60. Weil, D. N. (2002), Fiscal Policy: The Concise Encyclopedia of Economics: Library of Economics and Liberty, Liberty Fund Inc.



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# The Role of a Social Media Marketing in Building Brand Equity- A Special Reference to Travel & Tourism Industry in Sri Lanka

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**Abstract-** Due to its dynamic and emergent nature, the effectiveness of social media as a marketing communication channel has presented many challenges for marketers. It is considered to be different to traditional marketing channels. Many organizations are investing in their social media presence because they appreciate the need to engage in existing social media conversations in order to build their brand equity. Social Medias are increasingly replacing traditional media, and more consumers are using them as a source of information about products, services and brands. On the other hand, brand equity is considered as a powerful mechanism to create the sustainable competitive advantage for the organizational concern. Thus, this study examined the research problem of whether the social media marketing (SMM) impacts on brand equity in Travel & Tourism Industry (TTI) in Sri Lanka. The objective of this study is to identify the impact of SMM on brand equity in Sri Lankan Travel & Tourism Industry (TTI). Furthermore, the conceptual model has been developed to link SMM and brand equity.

**Keywords:** *social media marketing, brand equity, travel & tourism industry in sri lanka.*

**GJMBR-E Classification:** *JEL Code: Z39*



THE ROLE OF SOCIAL MEDIA MARKETING IN BUILDING BRAND EQUITY AS SPECIAL REFERENCE TO TRAVEL & TOURISM INDUSTRY IN SRI LANKA

*Strictly as per the compliance and regulations of:*



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Dhanushanthini Ajanthan

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**Keywords:** social media marketing, brand equity, travel & tourism industry in sri lanka.

## I. INTRODUCTION

During different time era's different methods of communications has developed and changed the day by day life. Social media has become the method of statement in the 21<sup>st</sup> century, enabling us to express our belief, ideas and manner in an absolute new way. This way of message have also have a huge impact on corporation, where they have realize that without a correct plan and social media strategy they have no chance to stand out in the rapidly changing digital freedom. To guarantee a successful attendance on social media the companies need to take different

marketing theories into consideration so that they can boost their brand in different aspect. If this can be collective with original ways of consumer interaction the companies have a good chance to take the lead in social media marketing'. The meteoric growth of community websites, such as Twitter, Facebook and LinkedIn, have usher the world into a new era of social media. Social media marketing is also more sincere in its communication with the consumers, trying to show what the brand is rather than trying to control its image.

Consequently, more and more brands are incorporating social media marketing (SMM) into their marketing strategies to reap the benefits of the digital wave. Defined as the process that empowers promotion of websites, products and services via online social channels (Weinberg, 2009), SMM is related to relationship building and making connections with the consumers – current or potential (Erdogmus and Cicek, 2012). With activities such as blogging and sharing instructional videos and product photos on social media platforms, the focus of SMM activities are content generation, communication, outreach and referral to increase web traffic, awareness and popularity of brands (Kim and Ko, 2012). Moreover, the growth in the use of social media and emergence of social search is playing a central role in consumer-brand interactions and engagement (Kim and Ko, 2012; Laroche *et al.*, 2013).

Thus, firms and brands need to factor in the influence of social media on consumers and better understand the extent to which social media can and should play a role in consumer-brand engagement (Parent *et al.*, 2011; Schultz and Peltier, 2013). With the increased opportunity for consumers to talk to other consumers around the world, companies are no longer the sole source of brand communications (Bruhn *et al.*, 2014). This has made consumer-brand interactions more complex and transformed it into a multi-party conversation rather than a brand-dictated monologue (Deighton and Kornfeld, 2009). As a result, scholars have noted the necessity of research to fully account for the depth of consumer interactions with brands (Bowden, 2009) and examine the nature of brand equity-consumer engagement within interactive, online and social settings (Yazdanparast *et al.*, 2015).

On the otherhand "brand equity" is an important concept in business practice as well as in academic

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research because marketers can gain competitive advantage through successful brands.

Further brand equity exhibits the qualities required for creating a sustainable competitive advantage. It adds value for customers, helps to create defensible competitive positions, and cannot be easily transferred to other organizations (Pitta and Kastsanis, 1995). Thus organizations can use the brand equity as a powerful tool to create a sustainable competitive advantage. Hence organizations seek the ways to develop the brand equity. Advertising, sales force, public relations, slogans and symbols are used to develop the brand equity (Aaker, 1991). However a marketing strategy is often considered essential for establishing brand equity (Tong and Hawley, 2009). Aaker also (1991) emphasized that each brand equity dimension could be achieved by a variety of marketing strategies.

On the other hand Yazdanparast *et al.*, (2015) mentioned social media-based marketing activities can be used as a marketing strategy to build the brand equity. Further social media marketing is different than traditional methods of marketing; therefore, it requires special attention and strategy building to achieve brand image and loyalty.

There are several researches which had been undertaken in the social media perspective. Recently few studies have systematically investigated how to employ social media marketing strategies to build brand equity. Also rarely find researches which have been undertaken in the social media marketing on building brand equity perspective to compete effectively. Therefore deficiencies persist in the understanding the impact of SMM on brand equity in order to achieve the competitive advantage. So this research addressed the theoretical as well as empirical gap between the SMM and brand equity. Based on that, the ultimate objective of this study is to examine the ***“impact of SMM on customer based brand equity in Sri Lankan Travel & Tourism Industry”***.

At the same time, social media marketing in service industry is not an entirely new concept (Bruhn, 2012). Several researches were conducted in social media marketing perspective and brand equity perspective in service sector in many countries. In Sri Lanka also, many researchers studied the SMM in service sector by referring to Business to Business (B2B context). But hardly find researches which were undertaken social media marketing perspective and brand equity perspective in Travel & Tourism Industry.

Travel & Tourism Industry (TTI) is one of the fastest-growing and largest service industry globally in terms of gross revenue and foreign exchange earnings. It is generally consider that the major component of TTI are Travel Agents, Tour operators, Transportation, Hospital and Hotel Industry. The Hotel Industry revolves around providing accommodations for travelers and the

success in this industry relies on catering to the needs of the targeted clientele, creating a desirable atmosphere, and providing a wide variety of services and amenities. Hotels can interact with their guest/customers on Social Media (SM), by sharing information, watching for service failures to correct, and to refine their brand.

Furthermore, the SM plays a significant role in many aspects of TTI, especially in information search and decision-making behaviors, tourism promotion and in focusing on best practices for interacting with consumers. SM is a key factor in travel plans which enable hotels, restaurants, and other businesses to reach a worldwide audience at lower costs. For TTI's marketing professionals, SM is a new outlet that can potentially be used to help increase the interest in a product or service. Therefore, marketers are taking note of many different SM opportunities and beginning to implement new social initiatives at a higher rate than ever before.

For an example, large hotels like Hilton Hotels & Resorts, Hyatt Hotels & Resorts, Shangri-La Hotels & Resorts and InterContinental Hotels Group (IHG) have fully integrated Social Media Marketing (SMM) into their marketing strategy, but for most hotels the difficulty is not only where to begin, but who to use and what to do. Also, most hotels lack the resources required to effectively implement social marketing strategies. Sustainable TTI will gain popularity and strength by increased consumer awareness.

## II. LITERATURE REVIEW

### a) Social Media Marketing (SMM)

Aral *et al.* (2013) argue that social media is “fundamentally changing the way we communicate, collaborate, consume, and create”. Defined as “a group of internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content” (Kaplan and Haenlein, 2010).

In the marketing context, social media is seen as essentially different to other forms of digital media (Hoffman and Novak, 2012) and as potentially heralding a paradigm shift in marketing (Hanna *et al.*, 2011). It is a hottest new marketing concept and it is a form of Internet marketing which utilizes social networking sites as a marketing tool to achieve branding and marketing communication goals. SMM sometimes refer as or Viral marketing and Web 2.0 marketing. SM sites such as Facebook, Instagram, Twitter, Pinterest, Google+, LinkedIn, Tumblr, YouTube and numerous others have begun to revolutionize the state of marketing, advertising, and promotions. Also, it is use to communicate information about a company and its brands and products. Which social medium is most effective and how it can best be targeted depends in

part on the goal of SMM campaign and the product offered by the company. In general, most campaigns involved propagating an idea, creating brand awareness, increasing visibility, encouraging brand feedback and dialogue and, in some case selling a product or service.

Furthermore, SMM carries the advantages of low cost, rapid transmission through a wide community, and user interaction (Vance, Howe, & Dellavalle, 2009), and the five constructs of perceived SSM activities are (1) entertainment, (2) interaction, (3) trendiness, (4) customization, and (5) word of mouth (Kim and Ko, 2012; Kim & Ko, 2010). Finally, there are several tools and sites available to help marketers measure the effectiveness of their SMM efforts.

**b) Brand Equity**

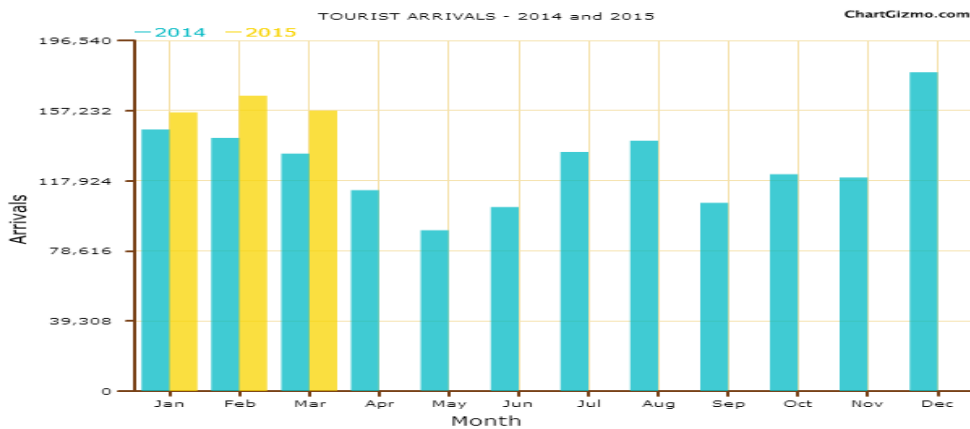
Brand equity is a multi-dimensional concept and a complex phenomenon. Some dimensions have been empirically tested in the literature. Among several brand equity models in the literature, researcher chosen concept of brand equity was developed by Aaker (1991), the most commonly cited. It has been probed in a number of empirical investigations (Eagle & Kitchen, 2000), the most critical parts of which involve the verification of the dimensions on which brand equity is based.

According to Aaker's (1991) definition, brand equity is a set of assets and liabilities and could be

classified into five categories: (1) brand loyalty; (2) brand awareness; (3) perceived quality; (4) brand image; and (5) other brand proprietary assets. Besides, each brand equity dimension could be achieved by a variety of marketing strategies (Aaker, 1991, 1996). Among the five brand equity dimensions proposed by Aaker (1991), the first four reflect customers' evaluations and reactions to a brand; thus, they are the most popularly adopted dimensions to explore the findings of marketing and consumer behaviour research in relation to brand equity (Barwise, 1993; Yoo & Donthu, 2001; Yoo et al., 2000).

**c) Travel & Tourism Industry in Sri Lanka**

The TTI is a key sector of the Sri Lankan economy. The arrival of tourists increased rapidly and passed the elusive one million mark in 2014 and increased further in 2015. Further, the TTI sector in Sri Lanka is highly optimistic with a large number of hotel chains having laid up their expansion plans. In addition to that, the policies and changes implemented by the Government of Sri Lanka have been instrumental in providing the necessary boost to the Sri Lankan TTI industry and attracting more and more foreign tourists every year. Following figure will illustrate (Figure: 1) the Tourist arrivals statics between 2014 up to March 2015.



Source: Sri Lanka Tourist Boards' Annual Statistical Report-2013

Figure 1: Tourist arrivals statics between 2014 up to March 2015

**d) Social Media Marketing and Brand equity**

SMM is a powerful for many brands to influence consumer spending power and buying habits beyond traditional methods. While, SM allows direct and real-time individualized interaction with consumers, businesses can promote products and services, provide instant support, and/or create an online community of brand enthusiasts through all forms of SM (Kaplan and Haenlein, 2009). In addition, SM activities of brands provide an opportunity to reduce misunderstanding and prejudice toward brands, and to elevate brand value by

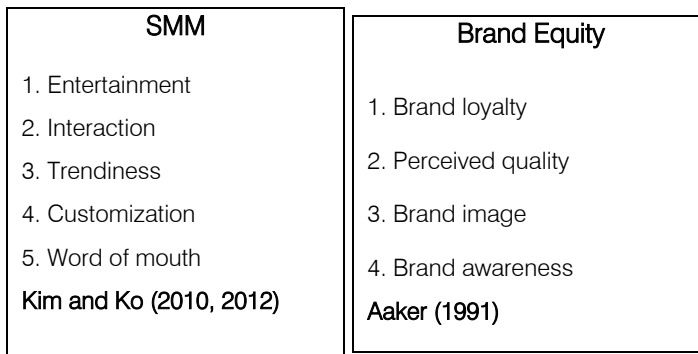
creating a platform to exchange ideas and information among people online (Kim, & Ko, 2012).

Further, marketing communication using SM evaluated as business take-off tools, where brands and customers are communicating with each other without any restriction in time, place, and medium so that old-fashioned one-way communication is changed to interactive two-way direct communication (Kim, & Ko, 2012). In addition to that, SM enables consumers to share information with their peers about the product and service brands (Mangold and Faulds, 2009), thus

conversations between the peers provide companies to another cost effective way to increase brand awareness. Finally, the rise of SMM forced marketers to wake up to the opportunities that are being created for their brands in the modern world. According to Kim and Ko (2010), SM have a dramatic impact on a brand's reputation and the brand's SM platforms offers venues for customers to engage in sincere and friendly communications with the brand and other users, so the brand's intended actions on the social communication scene were positively affecting relationship equity and brand equity as well (Kim, & Ko, 2012). Further Bruhn (2012) investigated in

Switzerland that the social media marketing has the positive impact on brand equity.

Moreover a theoretical argument for the relationship between social media marketing and brand equity is explained based on the main independent (exchanges) and dependent constructs (value and utility) through the social exchange theory (Son et al, 2005). Thus social exchange theory provides the theoretical base for the link between social media marketing and brand equity. The above justification through literature paved the way for developing the following conceptual model.



*Hypothesis*

H1: There is a positive impact of SMM on brand equity in Sri Lankan Travel & Tourism Industry.

**III. METHOD**

Quantitative methodology was applied and questionnaire was used to collect data. From fifteen hotels in Colombo district hundred and fifty customers were selected based on the quota sampling method. Before the final data collection pilot study was

undertaken. In this study questionnaire was developed with the support of previous studies carried out by experts in the relevant subject areas.

Prior to data analysis, data purification process was conducted to ensure suitability of measures (Churchill, 1979). For ensuring the reliability of scale, Cronbach's alpha was computed. Multiple regression analysis had been used as data analysis tools and used to test the hypothesis. In this case the stepwise method was used in testing the hypothesis one (H1).

Table 1: Cronbach's Alpha Coefficient for Variables

Variables	No. of items	Cronbach's Alpha Coefficient
Entertainment	6	0.733
Interaction	5	0.756
Trendiness	3	0.811
Customization	5	0.926
Word of mouth	3	0.913
Brand loyalty	6	0.777
Perceived quality	7	0.725
Brand image	11	0.833

Source: Survey Data

Table 2: Dimensions of SMM on brand equity

Hypothesis	Independent variable	Depend. variable	Standardized Coefficient Beta	Sig.	Adjusted R <sup>2</sup>
a	Constant Entertainment	Brand equity	0.630	0.00	0.613
b	Constant Interaction	Brand equity	0.440	0.00	0.451
c	Constant Trendiness	Brand equity	0.571	0.00	0.525
d	Constant Customization	Brand equity	0.314	0.00	0.310
e	Constant Word of mouth	Brand equity	0.211	0.00	0.216
H1	Constant Entertainment Interaction Trendiness Customization Word of mouth	Brand equity	0.612 0.408 0.312 0.552 0.120	0.00 0.00 0.00 0.00 0.00	0.734

Source: Survey Data

H1: There is a positive impact of SMM on brand equity in Sri Lankan Travel & Tourism Industry - According to the table 02, the fitted model encountered that the SMM has strong positive effects on the brand equity (i.e. R<sup>2</sup>=0.734). These predictions had been significant at the P-value of less than 5% (p < 0.05) and the regressed model was satisfactory fits to the data and the predictability power of the fitted model was high and residuals also followed a normal distribution.

#### IV. DISCUSSION AND CONCLUSION

The ultimate objective of the research is to examine the impact of SMM on brand equity in Sri Lankan Travel & Tourism Industry. The regression result shows that there is a strong positive impact of SMM on brand equity. It means that SMM has strong positive effects on the brand equity in Sri Lankan Travel & Tourism Industry and 73.4% of change in brand equity is explained by SMM in Sri Lankan Travel & Tourism Industry. These findings are in the line with Bruhn (2012) who stated that there is a relationship between relationship SMM and brand equity. Based on that, the first hypothesis (H1) has been accepted. Moreover this study tried to integrate the relationship between SMM and brand equity and found that "there is a strong positive impact of SMM on brand equity in Sri Lankan Travel & Tourism Industry. Thus, it filled the theoretical as well as empirical gap between SMM and brand equity. During this study, researcher encountered the following recommendations. This research has only been confined to the Travel & Tourism Industry. Therefore same research can be extended to other service sector entities such as hospital industry, banking industry, telecommunication industry etc. Furthermore this

research has been undertaken in different perspective in different context (B to B) context. Moreover the influence of moderating and mediating variables between SMM and brand equity also can be studied in future.

#### REFERENCES REFERENCES REFERENCIAS

1. Aaker, D.A. (1991), *Managing brand equity: Conceptualizing on the value of a brand name*, Free Press, New York, NY.
2. Aral, S., Dellarocas, C. and Godes, D. (2013), "Introduction to the special issue – social media and business transformation: a framework for research", *Information Systems Research*, Vol. 24 No. 1, pp. 3-13.
3. Barwise, P. (1993), "Brand equity: snark or boojum?", *International Journal of Research in Marketing*, Vol. 10 No. 1, pp. 93-104.
4. Bowden, J.L. (2009), "The process of customer engagement: a conceptual framework", *Journal of Marketing Theory and Practice*, 17 No. 1, pp. 63-74.
5. Bruhn, M., Schoenmueller, V. and Schafer, D. (2012), "Are social media replacing traditional media in terms of brand equity creation?", *Management Research Review*, Vol. 35 No. 9, pp. 770-790.
6. Deighton, J. and Kornfeld, L. (2009), "Interactivity's unanticipated consequences for markets and marketing", *Journal of Interactive Marketing*, Vol. 23 No. 1, pp. 2-12.
7. Churchill, G.A. (1979), "A paradigm for Developing Better Measures of Marketing Constructs", *Journal of Marketing Research*, 16(1), 64-73.
8. Eagle, L. and Kitchen, P. (2000), "Building brands or bolstering egos? A comparative review of the

impact and measurement of advertising on brand equity”, *Journal of Marketing Communications*, Vol. 6 No. 2, pp. 91-106.

9. Erdogmus, I.E. and Cicek, M. (2012), “The impact of social media marketing on brand loyalty”, *Social and Behavioral Sciences*, Vol. 58, pp. 1353-1360.
10. Hanna, R., Rohm, A. and Crittenden, V.L. (2011), “We’re all connected: the power of the social media ecosystem”, *Business Horizons*, Vol. 54 No. 3, pp. 265-273.
11. Hoffman, D.L. and Fodor, M. (2010), “Can you measure the ROI of your social media marketing?”, *MIT Sloan Management Review*, Vol. 52 No. 1, pp. 41-49.
12. Kaplan, A.M. and Haenlein, M. (2010), “Users of the world, unite! The challenges and opportunities of social media”, *Business Horizons*, Vol. 53 No. 1, pp. 59-68.
13. Kim, A.J. and Ko, E. (2010), “Impacts of luxury fashion brand’s social media marketing on customer relationship and purchase intention”, *Journal of Global Fashion Marketing*, Vol. 1 No. 3, pp. 164-171.
14. Kim, A.J. and Ko, E. (2012), “Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand”, *Journal of Business Research*, Vol. 65 No. 10, pp. 1480-1486.
15. Laroche, M., Habibi, M. and Richard, M.O. (2013), “To be or not to be in social media: how brand loyalty is affected by social media?”, *International Journal of Information Management*, Vol. 33 No. 6, pp. 76-82.
16. Mangold, W.G. and Faulds, D.J. (2009), “Social media: the new hybrid element of the promotion mix”, *Business Horizons*, Vol. 52 No. 4, pp. 357-365.
17. Parent, M., Plangger, K. and Bal, A. (2011), “The new WTP: willingness to participate”, *Business Horizons*, Vol. 54 No. 3, pp. 219-229.
18. Pitta, D.A. & Kastsanis, L.P. (1995), “ Understanding brand equity for successful brand extension”, *Journal of Cunsomer Marketing*, Vol. 12 No. 4, pp. 51-64.
19. Schultz, D.E. and Peltier, J. (2013), “Social media’s slippery slope: challenges, opportunities and future research directions”, *Journal of Research in Interactive Marketing*, Vol. 7 No. 2, pp. 86-99.
20. Son, JY., S. Narasimhan & F.J. Riggins. 2005. “Effects of Relational Factors and Channel Climate on EDI Usage in the Customer-Supplier Relationship”, *Journal of Management Information Systems*. Vol. 22 No. 01 pp 321-353.
21. Tong, X. & Hawley, J.M. (2009), “Creating brand equity in the Chinese clothing market: The effect of selected marketing activities on brand equity dimensions,” *Journal of Fashion Marketing and Management* Vol. 13 No. 4, 2009 pp. 566-581
22. Weinberg, T(2009), “ The New community Rules: Marketing on the Social web”, 1st Edition, O’Reilly: California.
23. Yazdanparast, A., Joseph, M. and Qureshi, A. (2015), “An investigation of Facebook boredom phenomenon among college students”, *Young Consumers*, Vol. 16 No. 4, pp. 468-480.
24. Yoo, B., Donthu, N. & Lee, S. (2000), “An examination of selected marketing mix elements and brand equity”, *Academy of Marketing Science*, Vol. 28 No. 2, pp. 195-212.

Table 2: Kolmogorov- Smirnov Test of Normality

Variables	Kolmogorov - Smirnov	
	Statistic	Sig.
Trust	0.150	0.083
Bonding	0.140	0.138
Communication	0.153	0.072
Shared Value	0.146	0.102
Empathy	0.157	0.056
Reciprocity	0.155	0.063
Brand equity	0.143	0.069

Source: Survey Data

Table 3: Tolerance and VIF values of independent variables.(Multi Collinearity test)

Variables	Collinearity Statistics	
	Tolerance	VIF
Trust	.249	4.013
Bonding	.127	7.356
Communication	.252	3.971
shared value	.135	7.401
Empathy	.394	2.536
Reciprocity	.146	6.839

*Table 4:* Dimensions of RMO on brand equity

Hypothesis	Independent variable	Depend. variable	Standardized Coefficient Beta	Sig.	Adjusted R <sup>2</sup>
Ha	Constant Trust	Brand equity	0.640	0.00	0.623
Hb	Constant Bonding	Brand equity	0.420	0.00	0.411
Hc	Constant Communi.	Brand equity	0.580	0.00	0.518
Hd	Constant Shared value	Brand equity	0.325	0.00	0.319
He	Constant Empathy	Brand equity	0.232	0.00	0.222
Hf	Constant Reciprocity	Brand equity	0.178	0.00	0.134
H1	Constant Trust	Brand equity	0.612	0.00	0.613
	Bonding		0.408	0.00	
	Shared value		0.312	0.00	
	Communic.		0.552	0.00	
	Reciprocity		0.120	0.00	
	Empathy		0.212	0.00	

*Source: Survey Data*





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## Analyzing Website Characteristics that Influences Consumer Buying Behavior

By Nashid Bintey Hayder

*Jahangirnagar University*

*Abstract-* The internet in Bangladesh has witnessed phenomenal growth. The Internet has developed into a new distribution channel and very soon the internet payment gateway will open for Bangladeshi people. This has created a need to understand how website factors influences consumer buying behavior.

The motivation for this research is the fact that numerous organizations in Bangladesh do not realize the importance of website to their consumer for better service delivery quality and ultimate impact on the organizations portability.

The purpose of this research was to examine if there are any particular factors that influence the online consumer. Six factors was identified Ease of use, Product information, Entertainment, Trust, Currency, Customer support. To address the research objective, surveys were administered to 150 university students from public and private universities. Primary data was collected through a survey that was conducted on students at the Jahangirnagar University, American International University – Bangladesh (AIUB) and North South University. Results indicate that all web site factors have influences on consumer buying behavior. These findings suggest that online retailers should emphasize site factors that best suit the involvement/experience profile of their primary users.

*Keywords:* customer, website, consumer behavior, characteristics.

*GJMBR-E Classification:* JEL Code: M37,D23



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# Analyzing Website Characteristics that Influences Consumer Buying Behavior

Nashid Bintey Hayder

**Abstract-** The internet in Bangladesh has witnessed phenomenal growth. The Internet has developed into a new distribution channel and very soon the internet payment gateway will open for Bangladeshi people. This has created a need to understand how website factors influences consumer buying behavior.

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**Keywords:** customer, website, consumer behavior, characteristics.

## 1. INTRODUCTION

The internet in Bangladesh has witnessed phenomenal growth. Although facing many constraints in expanding internet access and use, development of the internet and information Technology are high government priorities. In April 2010, Akhtaruzzaman Manju, president of Internet Service Providers' Association of Bangladesh, said "we've estimated that nearly 10 million people in the country are using 800,000 internet connections on sharing basis", adding the number of internet users in the country is increasing roughly 15-16 percent a year ("Roundup: Internet use," 2010). According to the Pew internet and American Life Project, it takes one to three years for most internet browsers to begin to use online stores (Green and Hof 2002). This means that a large number of consumers can be expected to turn into online buyers in a short period of time. This increased internet penetration will result in a 2.6 per cent contribution to the country's GDP by 2020 (Boston Consulting Group) (FE Report, 2010). Recently, the Bangladesh Bank (BB) has given permission to Online Payment Gateway Service

Providers (OPGSPs) to facilitate repatriation of remittance against small value service exports in non-physical forms, such as data entry/processing, off-shore IT service, and business process outsourcing etc. (Uddin, 2012).

Who will capture this profitable market? Certainly businesses, which are able to identify the preferences and concerns of these consumers and then utilize this information to design effective online strategies, should benefit most.

The internet is considered a mass medium that provides the consumer with purchase characteristics as no other medium. Certain characteristics are making it more convenient for the consumer, compared to the traditional way of shopping, such as the ability to at any time view and purchase products, visualize their needs with products, and discuss products with other consumers (Joines et al. 2003). Oppenheim and Ward (2006) explain that the current primary reason people shop over the internet is the convenience. They also recognize that the previous primary reason for shopping online was price, which has now changed to convenience.

To help online Bangladeshi marketers to build effective websites achieve the goal, the objective is to learn about the factors of websites that influences consumer behavior.

### a) Problem

At any given time there are millions of people online and each of them is a potential customer for a company providing online sales. Due to the rapid development of the technologies surrounding the internet, a company that is interested in selling products from its web site will constantly has to search for an edge in the fierce competition. Since there are so many potential consumers, it is of the out most importance to be able to understand what the consumer wants and needs. The importance of analyzing and identifying factors that influence the consumer when he or she decides to purchase on the internet is vital. As the internet is a new medium for there have been new demands set by the consumer. That is why it is crucial for the online retailers to know what influences the online consumer.

Analyzing consumer behavior is not a new phenomenon. There are many theories that have been used for many years not only to understand the

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consumer, but also create a marketing strategy that will attract the consumer efficiently. Hence, understanding and identifying the consumer is closely related to the directions a company will take with their marketing strategy. These theories can also be applied to identify the online consumer and to create certain consumer segments. However, some distinctions must still be made when considering traditional consumer behavior and online consumer behavior. Since online retailing is a new retailing medium and online consumer behavior is diverse from traditional consumer behavior, one must identify what influences the online consumer. Analyzing the process that the online consumer goes through when deciding and making a purchase over the Internet, shows some factors that consumers consider. These factors need to be identified and taken into account by online retailers in order to satisfy consumer demands and compete in the online market.

#### b) *Research Purpose*

The purpose of this research is primarily to identify and get insight into what main factors the online consumer takes into consideration when visiting a website. Further, the study has investigated how the targeted segments related to the identified factors. The findings of this research would be outlined as implications for future Bangladeshi online retailers in order to enhance their consumer knowledge and increase their online marketing strategy effectiveness.

#### c) *Research Questions*

1. What are the factors that affect the consumer when considering a website for information to purchase a product/service?
2. What is the connection with the identified factors?
3. What is the level of computer and internet experience of the target group for searching product/service information.

## II. LITERATURE REVIEW

The consumers' buying behavior has been always a popular marketing topic, extensively studied and debated over the last decades while no contemporary marketing textbook is complete without a chapter dedicated to this subject. The predominant approach, explaining the fundamentals of consumer behavior, describes the consumer buying process as learning, information-processing and decision-making activity divided in several consequent steps:

- 1) Problem identification.
- 2) Information search.
- 3) Alternatives evaluation.
- 4) Purchasing decision.
- 5) Post-purchase behavior (Bettman, 1979; Dibb et al., 2001; Jobber, 2001; Boyd et al., 2002; Kotler, 2003; Brassington and Pettitt, 2003).

A distinction is frequently made between high and low involvement purchasing, implying that in practice the actual buying activity can be less or more consistent with this model, depending on the buyer's perceived purchasing risks. High or low degree of involvement is also a question of buyer experience; products purchased for the first time, in general, require more involvement than frequently purchased products (Boyd et al. 2002).

The web experience as a major parameter of customer influence is crucial for dot.com-type firms but also for multi-channel vendors. For traditional firms expanding their business with internet presence, the quality of online experience they deliver is an issue requiring special attention: poorly designed and dysfunctional Web sites are a potential threat not only to the company's virtual aspirations but also a hazard for their physical activities. The primary means of delivering the Web experience is the corporate Web site. Sites delivering superb Web experience are designed in a way not only addressing the client's product needs and expectations but also assisting the customers through the steps of the buying process. In that respect the back-office e-commerce infrastructure (O'Keefe and McEachern, 1998) is also of crucial importance. Web sites must be seen therefore as vital instruments of customer service and persuasion rather than simply as online brochures or catalogues of the company's products.

Several academics and practitioners have identified the "online shopping experience" or "virtual experience" as a crucial e-commerce marketing issue. Tamimi et al. (2003) define the online shopping experience as a process of four stages describing the successive steps of an online transaction. Considering that an online customer is not simply a shopper but also an information technology user (Cho and Park, 2001) one can argue that the online experience is a more complicated issue than the physical shopping experience: the Web experience can be defined as the consumer's total impression about the online company (Watchfire Whitepaper Series, 2000) resulting from his/her exposure to a combination of virtual marketing tools "... under the marketer's direct control, likely to influence the buying behavior of the online consumer" (Constantinides, 2002, p. 60). The Web experience embraces elements like searching, browsing, finding, selecting, comparing and evaluating information as well as interacting and transacting with the online firm. Past research identifies several candidates (Chen and Wells 1999; Szymanski and Hise 2000; Donthu 2001; Zeithaml, Parasuraman, and Malhotra 2002) considers six website factors that have been widely researched:

1. Ease of use
2. Product information
3. Entertainment
4. Trust

5. Currency
6. Customer support

**Ease of use** implies uncluttered screens, clear organization, logical flow, and ease of navigation, in short, a web design that facilitates one's efficient and effective use of the site. Ease of use should enhance ability to process product and purchase information, reduce cost of search, permit faster search, increase likelihood of a successful search, and increase attitude toward the site. Several studies report a positive relationship between ease of use and attitude toward a web site (Chen and Wells 1999; Stevenson, Bruner, and Kmnar 2000; Kwon, Kim, and Lee 2002; Bellman and Rossiter 2004). Ease of use also appears to increase site credibility (Fogg et al. 2001), attitude to online shopping (Jarvenpaa and Todd 1997 ;Vijayasarathy and Jones 2000), intention to shop online (Limayem, Khalifa, and Frini 2000; Lynch, Kent, and Srinivasan 2001), level of online shopping (Wirm and Beck 2002), and satisfaction with online shopping (Syzmanski and Hise 2000; Yang, Peterson, and Huang 2001).

**Product information** includes the amount, accuracy, and form of information about the product and services offered on a website. Since e-consumer cannot examine a product, they depend on information to identify, compare and select products. Online information includes text, tables, graphs, photos, audio, and video. Better product information should help online shoppers make better decision feel more confident about their decisions, increase satisfaction with the shopping experience, and improve attitude toward a site. Several studies report a positive association between product information and attitude toward website (Chen and Wells 1,999; Donthu 2001; Kwon, Kim and bee 2002). Product information also appears to increase attitude to online shopping (Vijayasamhy and Jones 2000), amount of online shopping (Kwak, Fox and Zinkhan 2002), online spending (Belhnan, Lohse, and Johnson 1999; Korgaonkar and Wolin1999), and satisfaction with online purchases (Szyrmanski and I-hise 2000).

**Entertainment** involves all web site elements that promote enjoyment while using a site. These include sensory and hedonic stimuli, like color, music, action, and interactivity. Site designs that promote fantasy or suspense can also provide entertainment, as might games, puzzles, streaming video, and virtual tours. Like conventional shoppers, e-shoppers should prefer experiences that create positive feelings. Past research suggests that entertainment-related factors (vividness, aesthetically pleasing design elements, and engaging material) have positively related to attitude to a web site (Chen and Wells 1999; Coyle and Thorson 2001; Donthu, 2001; Kwon, Kim, and Lee 2002; McMillan, I-Iwang and Lee 2003).

Entertainment also appears to increase attitude to online shopping (Jarvenpaa and Todd 1997; Vijayasarathy and Jones 2000), invention to shop online (Lynch, Kent, and Srinivasan 2001), frequency of online purchases (Korgaonkar and Wolin 1999), and e-loyalty (Childers et al. 2001).

**Customer support** complements ease of use. Both factors support the shopping process (search, comparison, choice, ordering, and tracking). But while ease of use involves design elements that directly support the process, customer support has to do with contingent resources that are drawn upon only when normal shopping processes prove inadequate. By analogy, in-store shoppers look for help from salespeople (or other shoppers) when something impedes their shopping process. We suggest that online customer support plays a similar role. It allows disrupted e-shoppers to continue shopping. This use of customer support is similar to the definition of "recovery service" proposed by Zeithaml, Parasuraman, and Malhotra (2002). It is not clear whether good customer support would actually enhance attitude toward a site or only reduce the likelihood of frustration, failure, and unfavorable attitudes. That may depend on whether the support provided merely meets or exceeds one's expectation. In either case, customer support is associated with a stronger attitude to the site. Jarvenpaa and Todd (1997) reports that customer support positively affects intention to shop online. Srinivasan, Anderson, and Ponnnavolu (2002) find that customer support positively effects online customer loyalty.

**Trust** is critical for financial transactions. Many e-shoppers fear that personal data will be misused, that undesirable cookies will be planted, and that endless spam will rain down on them from cyberspace. Seventy-one percent of US web users distrust online vendors (Pew Foundation 2003). What site factors can help overcome this? According to Chen and Dhillon (2003), the site factors that drive trust most are likability, credibility, situational normality, and structural assurances. Likability and credibility are well known from the sales and advertising literature. Sites achieve situational normality by adopting a "professional look" (the web's version of a business suit). Structural assurances include return policies, privacy policies, and third party assurances. Such policies and assurances imply that a vendor is trustworthy. If retailers fail to provide them, shoppers are more likely to leave without completing a transaction. Zeithaml, Parasuraman, and Malhotra (2002) and Chen and Dhillon (2003) suggest that trust is an important dimension for retail web sites. Donthu (2001) reports that trust is related to attitude toward a web site. Trust also appears to increase attitude to online shopping (Jarvenpaa and Todd 1997), intention to shop online (Limayem, Khalifa, and Frini 2000; Vijayasarathy and Jones 2000), intent to purchase online (Lynch, Kent, and Srinivasan 2001), level of online

shopping activity (Korgaonkar and Wolin 1999; Miyazaki and Fernandez 2001), e-service quality (Yang and Jun 2002), and e-customer satisfaction (Szymanski and Hise 2000).

**Currency** implies that everything on a site is up-to-date. Currency implies accuracy, an information dimension discussed by Yang, Peterson, and Huang (2001). It also helps to establish normality. That is, if a site looks up-to-date, it is assumed to be in proper order, a precondition for credibility and trust (Chen and Dhillon 2003). Currency is more than updated data. It includes news, special promotions, and announcements of coming events, anything that refreshes the content or appearance of the site. New page designs, new photos and new headlines can all signal a vendor's commitment to stay current. To be effective, salesmen must look and sound current. To remain effective, traditional retail establishments update their inventory and their shopping environments. By analogy, web content that affirms the up-to-date status of the site should bolster one's confidence in the site and reduce switching.

Anything that calls a site's currency into question should reduce the vendor's perceived credibility and the shopper's attitude toward the site. Fogg et al. (2001) reports that currency increases web site credibility, but no previous research explicitly considers the effect of currency on attitude toward a retail web site.

Twenty studies investigate the relationship between website quality and consumers online shopping attitudes and behavior from different point of view. Zhang, Von Dran, Small and Barcellousmake an attempt to evaluate website quality from user satisfaction and dissatisfaction perspectives. Their studies showed that website design features can be regarded as hygiene and motivation factors that contribute to user dissatisfaction and satisfaction with a website. Hygiene factors are those whose present make a website functional and serviceable, and whose absence causes user dissatisfaction. Some of hygiene factors were: Privacy and Security, Technical Aspect, Navigation, Impartially and Information Content.

### III. CONCEPTUAL FRAMEWORK AND HYPOTHESIS

#### a) Conceptual Framework

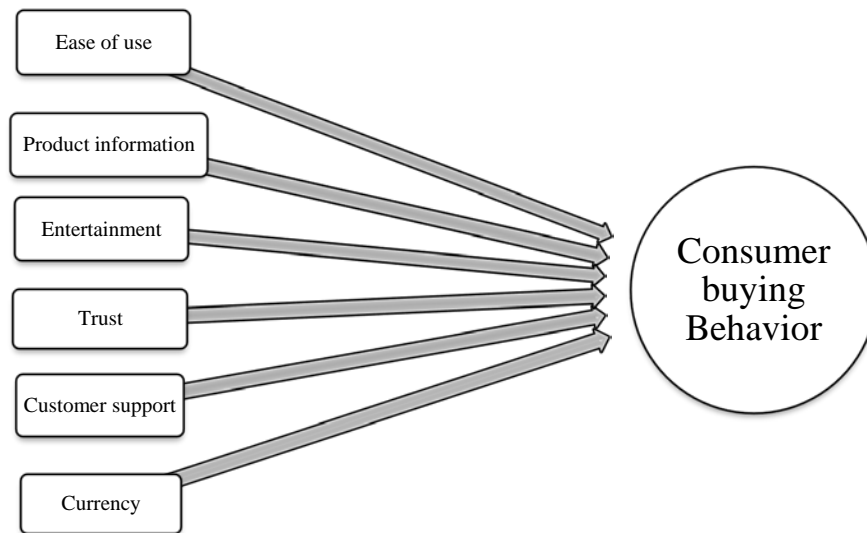


Fig. 1: Conceptual framework of consumer buying behavior

#### b) Hypothesis

Based on the discussion of the relevant website factors, the following hypotheses' is proposed:

*H1:* Consumers' website visit is influenced by web site's ease of use.

*H2:* Consumers' website visit is influenced by product information available on the website

*H3:* Consumers' website visit is influenced by trust generated by the website

*H4:* Consumers' website visit is influenced by up-to-date features of the website.

*H5:* Consumers' website visit is influenced by entertainment facilities/options available in the website

*H6:* Consumers' website visit is influenced by customer support of the website

### IV. THE RESEARCH METHODOLOGY

#### a) Research Type

Descriptive.

#### b) Primary data source

Structured questionnaire survey.

c) *Secondary data source*

Journals, Internet etc.

d) *Data analysis tools*

Simple Liner Regression.

e) *Data analysis techniques*

Frequency distribution, Bi-variate Regression.

f) *Variables and Scale*

There were seven variables of this study. Variables were:

- Ease of use, Product Information, Entertainment, Trust, Currency, and Customer Support are independent variable; and
- Consumer buying behavior of university students as dependent variable.

g) *Sample*

In order to investigate the influence of website characteristics on consumer behavior, students of Jahangirnagar University, American International University and North South University were targeted. Both male and female students were selected on the basis of the convenience of the surveyor. A questionnaire was developed contained thirty two questions regarding factors of website characteristics and students' buying behavior. The response rate was 84.44% because total distributed questionnaires were 180 out of which 151 were retrieved.

## V. ANALYSIS & FINDINGS

### a) Respondents Profile

Table 01: Respondents' Demographics

Demographics	Items	N	Percentage (%)
Gender	Male	103	68.67
	Female	47	31.33
Total		150	100
Age	18 - 20 yrs old	46	30.67
	21 - 23 yrs old	84	56
	24 - 26 yrs old	20	13.33
	27 yrs +	0	
Total		150	100
Level of Education	Undergraduate	135	90
	Post Graduate	15	10
Total		150	100

### b) Reliability Tests

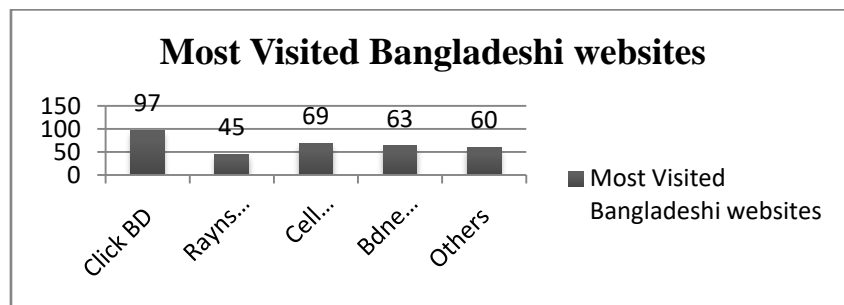
A composite score for each section of the questionnaire was obtained by summing the scores of individual statements. Reliability tests were run to determine how strongly the attributes were related to each other and to the composite score. The internal consistency reliability test is deemed to be acceptable

for basic research when the reliability coefficient exceeded Nunnally's reliability criterion of 0.70 levels (Nunnally, 1978). All dimensions in both sections (expectations and perceptions) of the questionnaire were tested and the Cronbach alpha ranged from 0.733 to 0.84.

### c) Descriptive Statistics

#### i. Most Visited Bangladeshi websites among the respondents

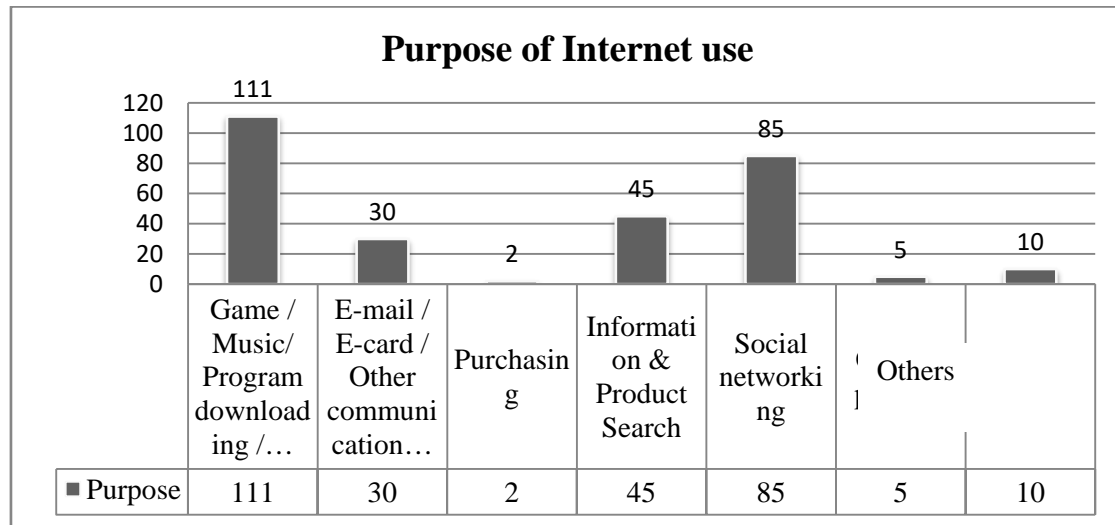
Table 02



The table shows that the respondents visit e-commerce and some retailer's website. The table results give an idea that after the payment gateway opens then retailers website may get more traffic.

## ii. Purpose of Internet use among the Respondents

Table 03



The table shows that the students use internet mainly for games, music and program and movies downloading secondly for social networking.

## d) Results of Regression Analysis

*H1: Consumers' website visit is influenced by web site's ease of use:* The result of the regression analysis demonstrates that the independent variables

significantly influence the consumer behavior (table 05) (Appendices). The high adjusted  $r^2$  value (.578) reflects the significance of these variables in the model. The adjusted R-square of the model indicates 59% variation in consumer behavior can be explained by the regression model. The unexplained part of the model is the error term.

Table 04: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	628.562	1	628.562	214.745	.000 <sup>a</sup>
	Residual	433.198	148	2.927		
	Total	1061.760	149			
a. Predictors: (Constant), Ease of use						
b. Dependent Variable: Consumer Behavior						

*F test:*

From the table 06 above we see that, the critical value of F-statistic at Degree of Freedom of numerator 1 and Degree of Freedom of denominator 148 is 3.9051, and the calculated value of F-statistic is 214.745. The

calculated value > the critical or tabulated value. From this we can conclude that, there is a statistically significant relationship between consumer behavior and Ease of use.

Table 05: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.891	.507		7.669	.000
	Ease of use	.924	.063	.769	14.654	.000
a. Dependent Variable: Consumer Behavior						

*t-Test:*

The critical value of t-statistic at degree of freedom  $df=148$  and level of significance 0.05 is 1.9761. Calculated value of t-statistic of independent variable is less than the critical value. Therefore, we can conclude that Ease of use (.000) have a highly significant relationship with consumer behavior. Correlation is significant at the 0.01 level (2-tailed).

Ease of use have a positive and significant impact on the behavior of the consumers towards website visit because the P value is less than .05 which means that Consumer's website visit is influenced by web sites ease of use, this is support **H1**.

H2: Consumers' website visit is influenced by product information available on the website

The result of the regression analysis demonstrates that the independent variables significantly influence the consumer behavior (table 10) (Appendices). The high adjusted  $r^2$  value (.678) reflects

the significance of these variables in the model. The adjusted R-square of the model indicates 68% variation in consumer behavior can be explained by the regression model. The unexplained part of the model is the error term.

*Table 06: ANOVA<sup>b</sup>*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	721.696	1	721.696	314.091	.000 <sup>a</sup>
	Residual	340.064	148	2.298		
	Total	1061.760	149			
a. Predictors: (Constant), Product information						
b. Dependent Variable: Consumer Behavior						

*F test:*

From the table 10 above, we can see that, the critical value of F-statistic at Degree of Freedom of numerator 1 and Degree of Freedom of denominator 148 is 3.9051, and the calculated value of F-statistic is

314.091. The calculated value > the critical or tabulated value. From this we can conclude that, there is a statistically significant relationship between consumer behavior and Product Information.

*Table 07: Coefficients<sup>a</sup>*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.290	.454		7.238	.000
	Product info	.760	.043	.824	17.723	.000
a. Dependent Variable: Consumer Behavior						

*t-Test:*

The critical value of t-statistic at degree of freedom  $df=148$  and level of significance 0.05 is 1.9761. Calculated value of t-statistic of independent variable is less than the critical value. Therefore, we can conclude that Product Information (.000) have a highly significant relationship with consumer behavior. Correlation is significant at the 0.01 level (2-tailed).

Product Information have a positive and significant impact on the behavior of the consumers towards website visit because the P value is less than .05 which means that Consumer's website visit is influenced by web sites Product Info, this is support **H2**.

H3: Consumers' website visit is influenced by trust generated by the website

The result of the regression analysis demonstrates that the independent variables significantly influence the consumer behavior (table 15) (Appendices). The high adjusted  $r^2$  value (.555) reflects the significance of these variables in the model. The adjusted R-square of the model indicates 56% variation in consumer behavior can be explained by the regression model. The unexplained part of the model is the error term.

*Table 08: ANOVA<sup>b</sup>*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	592.625	1	592.625	186.958	.000 <sup>a</sup>
	Residual	469.135	148	3.170		
	Total	1061.760	149			
a. Predictors: (Constant), Trust						
b. Dependent Variable: Consumer_Behavior						

*F test:*

From the table 16 above, we can see that, the critical value of F-statistic at Degree of Freedom of numerator 1 and Degree of Freedom of denominator 148 is 3.9051, and the calculated value of F-statistic is

186.958. The calculated value > the critical or tabulated value. From this we can conclude that, there is a statistically significant relationship between consumer behavior and Trust.

*Table 09: Coefficients<sup>a</sup>*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.607	.563		6.411	.000
	Trust	.933	.068	.747	13.673	.000
a. Dependent Variable: Consumer_Behavior						

*t-Test:*

The critical value of t-statistic at degree of freedom  $df=148$  and level of significance 0.05 is 1.9761. Calculated value of t-statistic of independent variable is less than the critical value. Therefore, we can conclude that Trust(.000) have a highly significant relationship with consumer behavior. Correlation is significant at the 0.01 level (2-tailed).

Trust have a positive and significant impact on the behavior of the consumers towards website visit because the P value is less than .05 which means that Consumer's website visit is influenced by web sites Trust, this is support **H3**.

*H4: Consumers' website visit is influenced by up-to-date features of the website*

The result of the regression analysis demonstrates that the independent variables significantly influence the consumer behavior (table 20) (Appendices). The high adjusted  $r^2$  value (.693) reflects the significance of these variables in the model. The adjusted R-square of the model indicates 69% variation in consumer behavior can be explained by the regression model. The unexplained part of the model is the error term.

*Table 10: ANOVA<sup>b</sup>*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	737.830	1	737.830	337.107	.000 <sup>a</sup>
	Residual	323.930	148	2.189		
	Total	1061.760	149			
a. Predictors: (Constant), Currency						
b. Dependent Variable: Consumer_Behavior						

*F test:*

From the table 21 above we can see that, the critical value of F-statistic at Degree of Freedom of numerator 1 and Degree of Freedom of denominator 148 is 3.9051, and the calculated value of F-statistic is

337.107. The calculated value > the critical or tabulated value. From this we can conclude that, there is a statistically significant relationship between consumer behavior and Currency.

*Table 11: Coefficients<sup>a</sup>*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.714	.417		8.908	.000
	Currency	.964	.053	.834	18.360	.000
a. Dependent Variable: Consumer_Behavior						

*t-Test:*

The critical value of t-statistic at degree of freedom  $df=148$  and level of significance 0.05 is 1.9761. Calculated value of t-statistic of independent variable is less than the critical value. Therefore, we can conclude that 337.107 Currency (.000) have a highly significant

relationship with consumer behavior. Correlation is significant at the 0.01 level (2-tailed).

Currency have a positive and significant impact on the behavior of the consumers towards website visit because the P value is less than .05 which means that Consumer's website visit is influenced by web sites Currency, this is support **H4**.



*H5: Consumers' website visit is influenced by entertainment facilities/options available in the website*

The result of the regression analysis demonstrates that the independent variables significantly influence the consumer behavior (table 25) (Appendices). The high adjusted  $r^2$  value (.666) reflects

the significance of these variables in the model. The adjusted R-square of the model indicates 67% variation in consumer behavior can be explained by the regression model. The unexplained part of the model is the error term.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	709.117	1	709.117	297.608	.000 <sup>a</sup>
	Residual	352.643	148	2.383		
	Total	1061.760	149			
a. Predictors: (Constant), Entertainment						
b. Dependent Variable: Consumer_Behavior						

*F test:*

From the table 26 above we see that, the critical value of F-statistic at Degree of Freedom of numerator 1 and Degree of Freedom of denominator 148 is 3.9051, and the calculated value of F-statistic is 297.608. The

calculated value > the critical or tabulated value. From this we can conclude that, there is a statistically significant relationship between consumer behavior and Entertainment.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.236	.470		6.890	.000
	Entertainment	1.007	.058	.817	17.251	.000
a. Dependent Variable: Consumer_Behavior						

*t-Test:*

The critical value of t-statistic at degree of freedom  $df=148$  and level of significance 0.05 is 1.9761. Calculated value of t-statistic of independent variable is less than the critical value. Therefore, we can conclude that Entertainment (.000) have a highly significant relationship with consumer behavior. Correlation is significant at the 0.01 level (2-tailed).

Entertainment have a positive and significant impact on the behavior of the consumers towards website visit because the P value is less than .05 which means that Consumer's website visit is influenced by web sites Entertainment, this is support **H5**.

*H6: Consumers' website visit is influenced by customer support of the website*

The result of the regression analysis demonstrates that the independent variables significantly influence the consumer behavior (table 30) (Appendices). The high adjusted  $r^2$  value (.648) reflects the significance of these variables in the model. The adjusted R-square of the model indicates 65% variation in consumer behavior can be explained by the regression model. The unexplained part of the model is the error term.

Table 14: ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	690.386	1	690.386	275.133	.000 <sup>a</sup>
	Residual	371.374	148	2.509		
	Total	1061.760	149			
a. Predictors: (Constant), Customer support						
b. Dependent Variable: Consumer Behavior						

*F test:*

From the table 31 above we can see that, the critical value of F-statistic at Degree of Freedom of numerator 1 and Degree of Freedom of denominator 148 is 3.9051 and the calculated value of F- statistic is

275.133. The calculated value > the critical or tabulated value. From this we can conclude that, there is a statistically significant relationship between consumer behavior and Customer Support.

Table 15: Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
		1	(Constant)	3.247		
	Customer support	.988	.060	.806	16.587	.000
a. Dependent Variable: Consumer Behavior						

*t-Test:*

The critical value of t-statistic at degree of freedom  $df=148$  and level of significance 0.05 is 1.9761. Calculated value of t-statistic of independent variable is less than the critical value. Therefore, we can conclude that Customer Support  $t(.000)$  have a highly significant relationship with consumer behavior. Correlation is significant at the 0.01 level (2-tailed).

Customer Support have a positive and significant impact on the behavior of the consumers towards website visit because the P value is less than .05 which means that Consumer's website visit is influenced by web sites Customer Support, this is support **H6**.

## VI. CONCLUSION & RECOMMENDATION

### a) Conclusion

In summary, the study shows that respondent have positive perceptions about company's website. The findings indicate that in order to influence these consumer companies should carefully design secure and easy to use web sites with a rich with up to date product information and easy to reach customer service. Bangladeshi Online marketers should also be very receptive to personal consumer characteristics. This study, past research, and advancements in technology suggest that many of these concerns may be addressed now, for instance, with a more careful design of online stores, more effective marketing and online selling processes that take into consideration the needs and

expectations of today's online browsers. Future research should help online vendors develop and test most effective ways that address these concerns.

### b) Recommendation

In Bangladesh there is very limited websites are present for giving information for their product. But as internet user increases local website traffic will increase. As all the hypotheses were accepted, it is suggested that...

a. The identified factors should be concerned while designing the website for a company to promote online depending company's businesses.

All the factors have influence on consumer buying behavior. So for any kind of online store these factors should be present.

## REFERENCES REFERENCES REFERENCIAS

1. Bellman, S.&Rossiter J. (2004). The Website Schema. *Journal of interactive Advertising*, 4(2).
2. Bellman, S. Lohse, G. L & Johnson E.J (1999) Predictors of online buying behavior. *Association for Computing Machinery: Communication of the ACM*, 42(12), 32-38.
3. Bettman, J.R. (1979), *An Information-Processing Theory of Consumer Choice*, Addison-Wesley, Glen View, IL.
4. Boyd, H.W., Walker, O.C., Mullins, J. and Larre' che', J-C. (2002), *Marketing Management*, A

- Strategic Decision-Making Approach*, McGraw-Hill/Irwin, Columbus, OH.
5. Brassington, F. and Pettitt, S. (2003), *Principles of Marketing*, 3rd ed., Prentice-Hall/Financial Times, Englewood Cliffs, NJ.
  6. Chen, Q., & Wells, W.D. (1999) Attitude toward the site. *Journal of Advertisement Research* 40(5), 27-37.
  7. Chen. Q., Clifford, S. L., & Wells, W. D. (2002). Attitude toward the site II: New information. *Journal Advertising Research*, 12(3), 33-45.
  8. Childers, T. L., Cur, C.L., Peck, 3.& Canon, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77(4), 511-539.
  9. Cho, N. and Park, S. (2001), "Development of electronic commerce user-consumer satisfaction index (ECUSI) for Internet shopping", *Industrial Management & Data Systems*, Vol. 101 No. 8, pp. 400-6.
  10. Cockburn, A. and McKenzie, B. (2001), "What do Web users do? An empirical analysis of Web use", *International Journal of Human-Computer Studies*, Vol. 54, pp. 903-22.
  11. Constantinides, E. (2002), "The 4S Web-marketing mix model, e-commerce research and applications", Elsevier Science, Vol. 1 No. 1, pp. 57-76.
  12. Dibb, S., Simkin, L., Pride, W.P. and Ferrell, O.C. (2001), *Marketing Concepts and Strategies*, 3rd ed., Houghton-Mifflin Company, Boston, MA.
  13. Donthu, N. (2001). Does your web site measure up? *Marketing Management*, 10(4), 39-32.
  14. FE Report. (2010, January 22). Internet subscribers may reach 18.3m by 2020. *The Financial Express*. Retrieved from <http://www.thefinancialexpress-bd.com/2010/01/22/90219.html>
  15. Fogg, B.J., Marshall, J., Laraki, O., Osipovich, A., Varma, C., Fang, N., Paul, J., Rangnekar, A., Shon, J., Swani, P., Treinen, M. (2001). What makes web sites credible? A report on a large quantitative study. *Persuasive Technology Lab*, 61-68.
  16. Green, H. and Hof, R.D. (2002), "Lessons of the Cyber Survivors," *Business Week*, April 22, 4.
  17. Jarvenpaa, S. L., & Todd, P. A. (1997). Is there a future for retailing on the Internet?" In R. S. Peterson, (Ed.), *Electronic Marketing and the Consumer* (pp. 139-156). Thousand Oaks, CA: Sage Publications.
  18. Jobber, D. (2001), *Principles & Practice of Marketing*, McGraw-Hill International (UK) Limited, New York, NY.
  19. Joines, L. J., Scherer, W.C. and Scheufele A. D. (2003) 'Exploring motivations for consumer Web use and their implications for e-commerce', *Journal of Consumer Marketing* 20: 2, 90 -108.
  20. Korgaonkar, P.K., & Wolin, L.D. (1999). A multivariate analysis of web usage. *Journal of Advertising Research*, 39, 53-68.
  21. Kotler, P. (2003), *Marketing Management*, 11th ed., Prentice-Hall International Editions, Englewood Cliffs, NJ.
  22. Kwak, H., Fox, R. J., & Zinkham, (3.M. (2002). What products can be successfully promoted and sold via the internet? *Journal of Advertising Research*, 42(1), 23-38.
  23. Kwon, B., Kim, C., & Lee, E. (2002). Impact of website information design factors on consumer ratings of web-based auction sites. *Behaviour & Information Technology*, 21(6), 387-402.
  24. Limayem, M., Khalifa, M., & Frini, A. (2000). What makes consumers buy from internet? A longitudinal study of online shopping. *IRE Transaction on Systems, Man, and Cybernetics*, 30(4), 421-432.
  25. Lynch, P. D., Kent, R.J., & Srinivasan, S.S. (2001). The global internet shopper: evidence from shopping tasks in twelve countries. *Journal of Advertising Research*, 41(4), 15-23.
  26. Marcus, A., & Gould, E.W. (2000). Cultural dimensions and global web user-interface design. *Interactions*, July/August, 33-46.
  27. Nah, F.F.-H. and Davis, S. (2002), "HCI Internet research issues in e-commerce", *Journal of Electronic Commerce Research*, Special Issue: Human Factors in Web-based Interaction, Vol. 3 No. 3, available at: [www.csulb.edu/web/journals/jecr/issues/20023/paper1.pdf](http://www.csulb.edu/web/journals/jecr/issues/20023/paper1.pdf)
  28. O'Keefe, R.M. and McEachern, T. (1998), "Web-based customer decision support systems", *Communications of the ECM*, Vol. 41, pp. 71-8.
  29. Oppenheim, C. and Ward, L. (2006) 'Evaluation of web sites for B2C e-commerce', *Aslib Proceedings: New Information Perspectives* 58: 3, 237-260.
  30. Osterbauer, C., Ko" hle, M., Grechenig, T. and Tscheligi, M. (1999), "Web usability testing: a case study of usability testing of chosen sites (banks, daily newspapers, insurances)", *Proceedings of 5th Australian World Wide Web Conference*, available at: <http://ausWeb.scu.edu.au/aw2k/papers/osterbauer/>
  31. Preece, J., Rogers, Y., Sharp, H., Benyon, D., Holland, S. and Carey, T. (1994), *Human-Computer Interaction*, Addison-Wesley, Wokingham.
  32. *Roundup: Internet use on rise in bangladesh*. (2010, April 29). Retrieved from <http://www.istockanalyst.com/article/view/StockNews/articleid/4072376>
  33. Stevenson, LS., Bruner, (i.C. II, & Kumar, A. (2000). Website background and viewer attitudes. *Journal of Advertising Research*, 40(1), 29-34.
  34. Szymanski, D.M., & Hise, R. T (2000). E-Satisfaction: An initial examination. *Journal of Retailing*, 76(2), 309-322.

35. Tamimi, N., Rajan, M. and Sebastianelli, R. (2003), "The state of online retailing", *Internet Research, Applications and Policy*, Vol. 13 No. 3, pp. 146-55.
36. Uddin, M. J. (2012, March 15). *Int'l payment gateway services start operation in bd*. Retrieved from [http://www.thefinancialexpress-bd.com/more.php?news\\_id=123544&date=2012-03-15](http://www.thefinancialexpress-bd.com/more.php?news_id=123544&date=2012-03-15)
37. Vijayasathy, L. R., & Jones, J. M. (2000). Print and internet catalog shopping: assessing attitudes and intentions. *Internet Research*, 10(3), 191-202.
38. Watchfire Whitepaper Series (2000), "Bad things shouldn't happen to good Web sites: best practices for managing the Web experience", available at: [www.watchfire.com/resources/search-and-ye-shall-find.pdf](http://www.watchfire.com/resources/search-and-ye-shall-find.pdf)
39. Winn, W., & Beck, K. (2002). The persuasive power of design elements on an e-commerce web site. *Technical Communication*, 49(1), 7-35.
40. Yang, Z., & Jun, M. (2002). Consumer perception of e-service quality: from internet purchaser and non-purchaser perspective. *Journal of Business Strategies*, 19, 19-41.
41. Yang, Z., Peterson, R.T., and Huang, L.. (2001). Taking the pulse of internet pharmacies. *Marketing Health Services*, 21(2), 4-10.
42. Zeitha, I, V., Parasuraman, A., & Malhotra, A (2002). Service quality delivery through web sites: a critical review of extant knowledge. *Academy of Marketing Science Journal*, 30(4), 362-375.



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## The Lethargic Government Public Expenditure Torpedoring Economic Development in Nigeria from 1970-2014

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**Abstract-** The essence of this study was basically to examine objectively the lethargic nature of Public (government) expenditure leading to slow economic development in Nigeria. An ex-post facto research was carried out to ascertain the nature of Nigerian economic development, using judgmental sampling technique from the period 1970 - 2014. We utilized data on government capital expenditure, and recurrent expenditure sourced from CBN. Our data collection instrument for this study was the non-probabilistic sampling technique. We hypothesize and analyse our data using t-test, F-test and other statistical tools using the variables of Government Recurrent expenditure (GREX), and Government Capital Expenditure (GCEX) as indicators of economic development.

**Keywords:** *public (government) expenditure, economic development, government recurrent expenditure (GREX), government capital expenditure (GCEX), fiscal policy, gross domestic product, public expenditure, investment, taxation and government spending.*

**GJMBR-E Classification:** *JEL Code: F63*



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# The Lethargic Government Public Expenditure Torpedoring Economic Development in Nigeria from 1970-2014

Past. Dr. Abomaye-Nimenibo, Williams Aminadokiari Samuel<sup>α</sup>, Barister, Miss Abomaye-Nimenibo, Comfort Tamunobarasinpiri<sup>σ</sup>, Miss Abomaye-Nimenibo, Glory Bomasime Tamunopiri<sup>ρ</sup> & Mr. Abomaye-Nimenibo, Richman Alapakasam<sup>ω</sup>

**Abstract-** The essence of this study was basically to examine objectively the lethargic nature of Public (government) expenditure leading to slow economic development in Nigeria. An ex-post facto research was carried out to ascertain the nature of Nigerian economic development, using judgmental sampling technique from the period 1970 - 2014. We utilized data on government capital expenditure, and recurrent expenditure sourced from CBN. Our data collection instrument for this study was the non-probabilistic sampling technique. We hypothesize and analyse our data using t-test, F-test and other statistical tools using the variables of Government Recurrent expenditure (GREX), and Government Capital Expenditure (GCEX) as indicators of economic development. Unit root test was used along with some other econometric statistics. Our findings revealed that Government Public expenditure has a weak or slow significant effect on economic development of Nigeria. We recommend that government should increase its Capital expenditure on infrastructure especially on construction of rural roads, electrification, and manufacturing industries, as this will accelerate the rate of growth in the productive sector of the economy as well as raise the standard of living in Nigeria. The provision of basic infrastructures is the bane of development in any nation which must be pursued vigorously so as to move the nation forward developmentally. Lethargic or low expenditure is directed at developmental strides that torpedoes economic development.

**Keywords:** public (government) expenditure, economic development, government recurrent expenditure (GREX), government capital expenditure (GCEX), fiscal policy, gross domestic product, public expenditure, investment, taxation and government spending.

## I. INTRODUCTION

Economic development is said to be the sustained, concerted actions of public policy makers and communities that promote the standard of living and economic health of a particular area or nation. Economic development measures the expansion of a country's potential national output or potential real GNP; and the expansion of economic power to produce according to Ukwu (2004). This is a generally upheld view of most economists. However, how true is this

assertion, is a thing of controversy that needed to be investigated. Without some kinds of economic development and growth, developing countries cannot extricate themselves from the quagmire of ancient poverty. It is imperative that, these countries usually pursue fiscal policy to achieve accelerated economic development. However, the question that readily comes to mind is that, can this assertion be true or applicable to Nigeria? If our country promotes expansion of economic powers to produce goods and services, will our economy grow? This and other factors have to be investigated; hence, this research.

The relationship between public expenditure and economic development has been a fertile ground for series of debate among scholars. Keynes (1936) argued that the solution to economic depression is to induce the firms to invest through some combination of variables such as the reduction in interest rates and government capital investment especially in the area of infrastructure.

Scholars hardly alienate on this claim that increased public expenditure promotes economic development. A number of prominent authors especially of the neoclassical school argue that increased public expenditure may slow down the aggregate performance of the economy because, by raising expenditure, government may have to increase taxes and/or go into borrowing. The higher income tax may discourage or may be a disincentive to additional work which in turn may reduce income and aggregate demand. In the same vein, high corporate tax leads to increase in production costs and reduce profitability of firms and their capital to incur investment expenditure. On the other hand, increased government borrowing to finance its expenditure, may compete and crowd-out private sector inducement and this will in turn reduce private investment in the economy. Sachs (2006) argues that among the developed countries, those with high rates of taxation and high social welfare spending perform better on most measures of economic performance compared with countries with, low rates of taxation and low social spending. Hayek (1989) however countered this argument by saying that high levels of government spending in addition to harming, does not in any way promote social welfare engendered fairness, economic equality and international competitiveness. This

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argument is in line with Sudha (2007) who pointed out that those countries with large public sector expenditure have grown slowly. Thus, there is no general consensus among scholars on the impact of increasing public expenditure on economic development.

Government performs among others, two crucial functions of protection (security) and provision of certain public goods (Abdullahi et al, 2000) and (Nurudeen et al, 2008). Protection function consists of the creation of the rule of law and enforcement of property rights. This helps to minimize criminality, protect lives and properties and the nation from external aggression, carry out defense, build roads, oversees education, health, power and communication, just to mention but a few.

In Nigeria, revenue receipts from oil revenue (Petroleum profit tax and royalties) and non-oil revenue (company income tax, custom and excise duties, value added tax [VAT] and others) keep on increasing (CBN Statistical Bulletin Vol.23, Dec. 2012); with a corresponding increase in demand for public (utility) goods like roads, communication, power, education and health but the economy seems not to respond positively. Besides, there is an increasing need to provide both internal and external security for the people of this nation. The increased demand calls for Government spending to provide the needs of the people but the question is whether the corresponding Government expenditure is speeding up the economic development of the country? However, it is pertinent to say that Scholars hardly agree on the assertion that public expenditure brings about economic development. Others are of the opinion that no matter the increase in public expenditure, there shall not be any economic growth. It is therefore, the determination of the researcher to find out whether public expenditure brings about economic development and if so at what speed.

The Revenue Mobilization Allocation and Fiscal Commission (RMFC) (2011), an arm of the Federal Government reported that, the federal government of Nigeria spends 52.2% of total government revenues. The remaining revenues are shared among the Federating States and Local Government Areas (LGAs) on the basis of detailed sharing formula that is in place. The level of increase of government revenue from oil revenue and non-oil revenues including borrowing from internal and external sources have significantly affected the level of public expenditure in Nigeria over the years under review. For instance, table 1 shows the total recurrent expenditure which increased from ₦716,100,000 million in 1970 to ₦4,805,200,000 Billion in 1980 and further to ₦ 3,325,178,000,000 Trillion in 2012. The government capital expenditure rose from ₦ 187,800,000 million in 1970 to ₦10,163,400,000 billion in 1980 and further to ₦874,800,000,000 Billion in 2012 (CBN Statistical bulletin vol.18 page 105-106, Dec.2007; Vol.23, page 97, Dec. 2012). In 2013, the total

government recurrent expenditure increased to ₦3,689,148,100,000 Trillion and the total government capital expenditure increased to ₦1,108,377,000,000 Trillion (see appendix 1).

The Gross Domestic Product (GDP) per capita of Nigeria expanded by 132% between 1960 and 1969 and further rose to a growth rate peak of 283% between 1970 and 1979 (CBN Statistical Bulletin 50 years special Anniversary Edition Dec. 2008). The high levels of inflation and unemployment rates resulted in fiscal imbalance between 1979 and 1983 with negative consequences on balance of payment. The level of increase in external loans further accelerated the debt burden and other problems which became so severe that restructuring of the economy was inevitable. A comprehensive economic reform programme called the Structural Adjustment Programme (SAP) was therefore introduced in 1986. Within the SAP period i.e. between 1988 and 1997 the GDP responded to economic adjustment policies and grew at a positive rate of 4% (Onakaya et al, 2013). The real GDP growth measured by the Real Gross Domestic Product (RGDP) shows a growth rate of 7.9% in 2010 (CBN Annual Report page 114, 31<sup>st</sup> Dec. 2010).

The government total expenditure over the years which raises a critical question on its role in promoting economic growth and development shows the performance of the economy which is in a snail moving pace. Some authors contend that the link between public expenditure and economic growth is weak while others report varying degree of causality relationship in Nigeria (Onokaya et al, 2012). The question which arises therefore is what is the relative contribution of capital expenditure and recurrent expenditure to economic development in Nigeria? This work was therefore, aimed at investigating the impact of public expenditure (recurrent expenditure and capital expenditure) on economic development in Nigeria from 1970 – 2014.

This study therefore stands out to ascertain the validity of the statement that public expenditure has significant impact in inducing economic development in Nigeria. Specifically, this study sought to examine objectively the lethargic nature of Public (government) expenditure leading to slow economic development in Nigeria; as well as finding out the effect of public investment expenditure on economic growth in Nigeria. Accordingly, We are to further concert efforts to find out the effect on economic development in Nigeria of public investment expenditure on human capital development.

## II. REVIEW OF RELATED LITERATURE

Economic development can be referred to as the quantitative and qualitative changes in the economy. Such actions can involve multiple areas including development of human capital, critical infrastructure,

regional competitiveness, social, health, safety, literacy, and other initiatives. Economic development differs from economic growth in that whereas economic development is a policy intervention endeavoured with aims of economic and social well-being of people, economic growth is a phenomenon of market productivity and rise in GDP. Consequently, as economist Amartya Sen points out that, "economic growth is one aspect of the process of economic development."

a) *Model Specification*

The models adopted for this research are presented below to show the impact of capital government expenditure and recurrent government expenditure on gross domestic product in Nigeria as follows:

$$GDP = F (GREX, GCEX,) \dots\dots\dots Eq 1$$

$$GDP = \beta_0 + \beta_1 GREX + \beta_2 GCEX + \epsilon \dots\dots\dots Eq 2$$

$$\beta_0 > 0, \beta_1 > 0, \beta_2 > 0$$

Where:

GDP = Gross Domestic Product

GREX = Government Recurrent Expenditure

GCEX = Government Capital expenditure

$\beta_0$  = Constant intercept

$\beta_1$  and  $\beta_2$  = Slopes of the regressions (co-efficient of the variables)

$\epsilon$  = Error term

The model is estimated using the ordinary least square (OLS) method of analysis, as it is considered the best linear unbiased estimator.

Also, since the data was increasingly large, we take the log function of the variables to reduce the variance. So that, we rewrite the new statistical linear model as:

$$\text{LOG}(GDP) = \beta_0 + \beta_1 \text{LOG}(GREX) + \text{LOG}(GCEX)\beta_2 \text{ Eq.3}$$

b) *Theoretical Literature Review*

Public expenditure theory, traditionally, is explained by a general acceptance of the philosophy of laissez-faire and is a belief in the efficacy of free market mechanism. However, with the advent of welfare economics the role of the state has expanded especially in the area of infrastructural provision and theory of public expenditure which is attracting increasing attention. This tendency has been reinforced by the widening interest of economists in the problems of economic growth, planning, regional disparities, distributive justice and the like (Bhatia, 2002).

The theory of public expenditure may be discussed in the context of increasing public expenditure, on different items like recurrent and capital expenditure. The two parts may also be conceived in terms of allocation of the economy's resources between

providing public goods on the one hand and private goods on the other.

i. *Theory of Increasing Public Expenditure*

There are two important and well-known theories of increasing public expenditure. The first is traced to Wagner (1890), while the second to Wiseman and Peacock (1979). Wagner revealed that there are inherent tendencies for the activities of different layers of governments such as central, state and local governments to increase both intensively and extensively. He maintained that there was a functional relationship between the growth of an economy and government activities with the result that the governmental sector grows faster than the economy. However Nitti (1903) not only supported Wagner's thesis but also concluded with empirical evidence that it was equally applicable to several other governments which differed widely from each other's. For all kinds of governments, irrespective of their levels (be it the central or state or local government), has its intentions (peaceful or warlike), and size, etc., had exhibited the same tendency of increasing public expenditure. On the other hand, Wiseman and Peacock (1961) in their study of public expenditure in UK for the period 1890-1955 revealed that public expenditure does not increase in a smooth and continuous manner, but in jerks or step like fashion. At times, some social or other disturbance takes place creating a need for increased public expenditure which the existing public revenue cannot meet.

ii. *Peacock and Wiseman's Theory of Expenditure*

Peacock and Wiseman (1961)'s study is probably one of the best known analyses of the time pattern of public expenditures. They founded their analyses upon a political theory of public determination namely that governments like to spend more money and citizens do not like to pay taxes, and that government need to pay some attention to the wishes of their citizens. The duo saw taxation as setting a constraint on government expenditure. As the economy and thus incomes grew, tax revenue at constant tax rate would rise, thereby enabling public expenditure to show a gradual upward trend even though within the economy there might be a divergence between what people regarded as being desirable level of public expenditure and the desirable level of taxation. However, during periods of social upheaval, this gradual upward trend in public expenditure would be distorted.

These periods would coincide with war, famine or some large-scale social disaster, which would require a rapid increase in public expenditures; and the government would be forced to raise taxation levies. The raising of taxation levels would be regarded as acceptable to the people during the period of crisis. Peacock and Wiseman (1961) referred to this as the "displacement effect". Public expenditure is displaced



upwards and for the period of the crisis displaced private for public expenditure does not however fall to its original level.

No nation has such large taxable capacity to fund a war. Countries therefore borrow to fund a war which debt charges have to be funded after the event. Another effect that they thought might operate was the "imperfection effect" thus they suggested that a rise or improvement from the people created awareness of social problems during the period of upheaval. The government therefore, expands its scope of services to improve these social conditions and because peoples' perception to tolerable levels of taxation does not return to its former level, the government is able to finance these higher levels of expenditures originating in the expanded scope of government and debt charges.

### iii. Ernest Engel's Theory of Public Expenditure

Ernest Engel a German economist wrote almost the same time as Adolph Wagner in the 19<sup>th</sup> century. Engel pointed out that the composition of the consumer budget changes as family income increases. A smaller share comes to be spent on certain goods such as work clothing and larger share on others, such as for coats, expensive jewelries etc. As average income increases, smaller charges in the consumption pattern for the economy may tend to occur also.

At the earlier stages of national development, there is need for overhead capital expenditure on such things as roads, harbours, power installations, pipe-borne water etc. But as the economy develops, one would expect the public share in capital formation to decline over time. Individual expenditure pattern is thus compared to national expenditure and Engel findings is referred to as the declining portion of outlays on foods.

### iv. Wagner Law of Increasing State Activities

Thus, Wagner was emphasizing long-term trend rather than short-term changes in public expenditure. He was not concerned with the mechanism of increase in public expenditure since such is based on historical experience, while the precise quantitative relationship between the extent of increase in public expenditure and time taken by it was not fixed; hence, could not be used to predict its rate of increase in the future.

In consonant with the Wagner's law of the state activities in future, the state expenditure will increase at a rate slower than the national income though, it had increase at a faster rate in the past. Thus, in the initial stage of economic growth, the state finds out that it has to expand its activities quite fast in several fields like education, health, civil amenities, transport, communications, and so on. But when the initial deficiency is removed, then the increase in state activities many be slowed down. The factors, which contribute to the tendency of increasing public expenditure, relate to a growing role of the state which is said to be ever-increasing socio-economic

complexities of modern society, leading to economic development at the tail end. However, the rate of development also rests on the kind of expenditure made by both government and the private sector.

### c) The Second National Development Plan

The Second National Development plan (1970-1974) accorded a leading role of development to government just as it considered public enterprise as crucial to growth and self-reliance due to capital scarcity, structural defects in the private sector and perceived danger of foreign dominance of the private sector. The third National Development plan (1975-1980) advocated some shift in resources allocation in favour of rural areas, which were said to have benefited little from the economic growth of 1970's. Thus, small farmers and the rural population were expected to benefit from public expenditure.

However, against the background of the austere fiscal outlook of the government, under the Third National Plan (1981- 1985), the role of fiscal policy was viewed mainly as the generation of revenue through increased tax effort and the control of public spending. The structural adjustment programmed (SAP) introduced in July 1986 under the Babangida's administration, recognized that the financial resources for public expenditure for the rest of the 1980s and beyond were likely to be less than was previously envisaged, given the uncertainty in the oil market and substantial debt repayment falling due, there was need to curtail government expenditure, especially those involving foreign exchange.

### i. The Nature and Constituents of Public Expenditure

Public expenditures refer to the expenses that government incurs for its own maintenance, for the society and the economy as a whole (Weil, 2009). Public spending reflects the policy choices of government. Once government has decided upon the type and quantity of goods and services to provide, government spending represents the cost of carrying out these policies (Weil, 2009).

The rationale behind the need for expenditure is associated with the existence of externality or market failures; there is no reason to assume that additional public sector investments would be more productive than the private sector investments (Tanzi, 1997).

Government spending on public services has profound effect on the citizens' standard of living and opportunities. Government spending on public services has the objectives of giving the citizens a chance to realize their full potential (through education, training and work), building an inclusive and fair society and strengthening a competitive economy (Lin, 1994). Thus the objectives of public expenditure encompasses both equity and efficiency elements.

It is argued by some economists that efficiency improvement must be achieved at the expense of

equity. However, inefficiency in the provision of public services has shown that opportunities for improved equity are lost because of wasteful use of resources (Bailey, 2002). This point is exacerbated to the point that both the provision and financing of public services crowds out the private sector and leads to reduced economic growth. Lower economic growth results to fewer resources being available for the pursuance of social programmes.

Public expenditure can be classified as functional (sectorial) categories of expenditure. Sectorial classification can further be decomposed into recurrent and capital expenditures. On the other hand, functional or sectorial expenditure include general public service, defense, public order and safety, education, health, agriculture, manufacturing and construction, mining and quarrying, water supply, transport and communication, electricity, environmental protection etc (Akrani, 2011; IMF, 2001; Heller and Diamond, 1990).

#### ii. *Public Expenditure Growth*

The classical economists believe in the doctrine of non-state intervention in the economy and self-correcting mechanism of an economic system. Despite this believe, it is observed that public expenditures have risen tremendously in absolute terms over the years, indicating state expanding roles or activities in the economy. Even after making allowances for population and price increase, it is observed that public expenditures at all levels of government rose over a long period of time (Musgrave, 1889; Bailey 2002; Bhatia, 2008). This means that the classical belief in the doctrine of the state non- intervention and self-correcting mechanism of an economic system has not hold in practice, hence increase in government expenditures in all countries.

There are some macro models of public expenditure that help to explain how government expenditure has expanded over a long term period (Brown and Jackson: 1996). The first model can be described as the development models of public expenditure growth; and the second model is based on Wagner's law of expanding state activities; while the third model is referred to as Peacock and Wiseman's (1961) model of public expenditure growth.

Development models of public expenditure growth can be represented by the works of Musgrave (1919) and Rostow, (1960). Their views are generalizations gathered from examination of a number of different cases (histories) of developed economies. In the early stages of economic growth and development, public sector investment as a proportion of the total investment of the economy is found to be high since public capital formation is of particular importance at this stage. The public sector is therefore, seen to provide social infrastructure overhead such as roads, transportation systems, sanitation systems, law and

order, health and education, provision of social amenities and other investments. It is argued that this public sector expenditure is necessary to increase productivity and stimulate the economy for a take-off into the middle stages of economic and social development. Up to the middle stage of growth, the government continues to supply investment goods but this time public investment is complementary to the growth in private investment. During all the stages of development, market failure exist which can frustrate the push towards maturity hence the need for increase in government involvement (spending) in order to deal with this market failure.

Musgrave (1959) argued that, over the development period, total investment as a proportion of GNP increases the relative share of public investment falls. This is because as the economy develops, a larger flow of savings becomes available; the capital stock in the private industry and agriculture must be built up. The basic stock of social overhead capital, similar to public utilities becomes a declining share of net capital formation.

Rostow (1960) argued that once the economy reaches the maturity stage, the mix of public expenditures will shift from expenditures on infrastructure to increasing expenditure on education, health and welfare services. In the mass consumption stage, income maintenance programmes, and policies designed to redistribute welfare, will grow significantly relative to other items of public expenditure and also relative to GNP.

Wagner (1890) posit that the law of rising public expenditure by analyzing trends in the growth of public expenditure and the size of public sector in many countries of the world. Wagner's law of public expenditure postulates that:

- (i) The extension of the functions of the state leads to increase in public expenditure on administration and regulation of the economy;
- (ii) The development of modern industrial society would give rise to increasing political pressure for social progress and calls for increasing allowance for social consideration in the conduct of industry and;
- (iii) The rise in public expenditure will be more than proportional increase in the national income and will thus result in a relative expansion of the public sector.

The analysis of Peacock and Wiseman has established the displacement effect. They found that public expenditure increases during a war or a period of social crisis. When the war ends or the crisis is resolved, public expenditure falls, but not to the original level at the start of the emergency, with the result that growth in public expenditure occurs in stages. The increase in war-related expenditures displaces both the government and private expenditures. This means that, while total

public expenditures rise dramatically, the increase is less than the increase in war related expenditure.

There have been criticisms of Peacock and Wiseman model which often times have asked the question - what happens to the increase in government expenditure in the post war period? There has been no long run displacement effect even when the private civilian makes expenditures in the post war period which did return to their original growth path or in the case where there is only a temporal increase in post war civilian public expenditures until the old trend line is reached. There is evidence that after deferred civilian public spending has taken place following the war, public outlays return to the pre-war trend level (Brukhead and Mrinal, 1979).

Beyond these macro models discussed above, demographic change has been cited as a factor that contributes to the growth of public expenditure. As population increases, it is expected that there has to be a corresponding level of activity produced in the public sector to serve the larger population. On the part of government, expenditure pattern has to fall in line with the demographic trends such as changes in the structure of the population notably the age and sex as well as the geographical distribution.

### iii. *The Impact of Government Spending on Economic Growth and Development*

The classical economists are known to favour the doctrine of laissez-faire in the workings of the economy. Smith (1776) argued that governments are always and without exception the greatest spend thrifths of the society as they spend public money. He believes that individuals, acting in self-interest, will promote public good under the guidance of the invisible hand of the market forces, maintaining that people should be left unhindered to pursue their best interests and in the process they would benefit the society. This implies minimal level of government expenditure for accelerated economic growth. The question is will the minimal government expenditure bring about accelerated economic growth instead of torpedoing the growth?

Unemployment to the classical economists is a theoretical impossibility, which not only proved possible, but became a major international problem as the great depression of the 1930s has shown. The work of Keynes (1936) had a profound and pervasive influence on economists and governments for many years. He argued that government should use public expenditure as a tool of economic policy to manage the national economy so as to counteract unemployment. This requires an expansive fiscal policy, in which government would deliberately aim at a budget deficit by spending more money (through borrowing) than it raised in taxation. The multiplier effect of public expenditure would counteract unemployment. By increasing public expenditure, government was seen to be doing

something about unemployment while the public was getting something (additional state benefits) for nothing, as it appeared, since there was no increase in taxation. Thus, such fiscal policy was attractive to governments since it provides a rationale for spending more money.

This Government spending accompanied by deficit financing to promote economic recovery concept known as "Pimp Priming" did not mean that government should be big, rather the Keynesian theory asserts that government spending, especially deficit spending could provide short-term stimulus to help the economy from a depression or recession. The Keynesians even argued that government should be ready to reduce spending once the economy recovered in order to prevent inflation that might result from the economic growth process. This means that excessive spending will retard economic growth as inflation sets in.

The guidance as to how government will spend to bring positive impact on economic growth was provided by Krueger (1990), in which he listed the following conditions. First, any decision on government spending can be undertaken only when there is a specified set of procedures for deciding what fits within the scope of the outlined policy and also an administrative apparatus for implementation of the policy. He went on to say that even when it appears that government action would actually be effective; there is something of a presumption in favour of policies and programmes requiring a minimum administrative and bureaucratic input. Furthermore, policies directly controlling private activity are likely to be less efficacious in terms of achieving their objectives than policies that provide incentives for individuals to undertake the activities which are deemed desirable. Hence, a presumption exists in favour of choosing a mechanism which provides least scope for rent-seeking. Finally, there is a question of transparency when the costs of a policy are obscured. Special interests in the private sector and government have a greater opportunity to use those policies for their own advantage without the consent of voters. Thus, choosing the policy with lower information costs is usually preferable and this will eventually lead to retardness in economic growth.

### d) *Empirical Literature*

A number of studies have been carried out empirically to examine the relationship between government spending and economic growth. Vedder and Gallaway (1998), discussing the relationship between government spending and economic growth, maintain that the output enhancing futures of government spending dominates when government taxes is very small. At a low level, the productive effects of public spending are likely to exceed the social costs of raising funds. As government expenditure grows, however, the law of diminishing returns begins to operate and beyond some point, further expansion of

government spending no longer lead to output expansion, as the growth reducing aspects of government grow larger and the growth-enhancing aspects of government diminish. Further expansion of government spending contributes to economic stagnation and decline. These negative effects may be more glaring where financing relies heavily on more distortionary taxes (direct taxes) and where public expenditure focuses on unproductive activities. They further buttress their argument, by explaining that while the construction of roads and initial assets output expands, the construction of secondary roads and upgrading primary roads start to have less added positive impact per dollar spent. Moreover, the taxes and/or borrowing levied to finance higher government expenditure impose increasing burdens, (low tax rates become higher). New taxes such as income taxes are added to low consumption levels, with increasing adverse effect on human economic behaviour. Tariffs are raised, thwarting trade. Consequently, new government spending no longer enhances economic growth.

Mitchell (2005) pointed out a number of reasons that makes government spending have negative impact on economic growth. First, the extraction cost. All the options used to finance government spending have adverse consequences. High taxes on work; saving and investment discourage productive behaviour. Borrowing consumes capital that otherwise be available for private investment and may lead to higher interest rates. Inflation debases a nation's currency, resulting in widespread economic distortions.

Second, the rate of economic growth may be adversely affected by the transfer of resources from use in manufacturing of the private sector, to the public sector for provision of social services. This is referred to as displacement cost (where government spending displaces private sector activities). This dampens economic growth since the market forces of demand and supply guide allocation of resources in private sector, and whereas political forces dominate when politicians and bureaucrats decide how money is spent. The political process is much less dynamic than the market with less incentive for increased productivity.

Third, there is negative multiplier cost as government spending finances harmful intervention. Portion of the federal budget are used to financing activities that generate negative effect on economic activities. For example, many regulatory agencies have comparatively small budgets but they impose large costs on the economic productive sector.

Fourth, creative discovery enhances economic growth. Because of competition and the desire to increase income and wealth, individuals and entities in the private sector constantly search for new options and opportunities. Government programmes are inherently

inflexible, both because of centralization and because of bureaucracy – thus causing stagnation.

Finally, government spending involves inefficiency. Government directly provides services and activities such as education, postal services, airports, ports etc. However, there is evidence that private sector could provide these important services at higher quality and at lower cost. If public sector has less scope for productivity improvement than the private sector and yet to grow at the latter's expense due to under linking of public expenditure, then the productive potential of the economy is reduced.

However, based on the above argument, Mitchell, (2005) warned that small government that fails to provide legal system, a stable monetary regime and other core functions effectively and efficiently will most likely not promote economic growth. Therefore, a small government does not by itself promote economic growth.

Ram (1986) commented on the impact of government size on economic growth. One point of view suggests that a larger government size is likely to be detrimental to efficiency and economic growth because government operations are conducted inefficiently. The regulatory process imposes excessive burdens and costs on the economic system and many of the government fiscal and monetary policies tend to distort economic incentives and lower the productivity of the system. At the other extreme, there are other points of views that assigned to the government a critical role in the process of economic growth, and could argue that a larger government size is likely to be a powerful engine of economic development. The latter point of view is based on the role of the government in harmonizing conflicts between private and social interests, prevention of exploitation of the country by foreigners and securing an increase in productive investment and providing a socially optimal direction for growth and development.

Another approach in explaining and analyzing the impact of government spending on economic growth is made by classifying government spending into productive and unproductive classes. Barro (1990) maintains that productive government spending would include the resources devoted to property right enforcements as well as activities that enter directly into production function. It is this productive role that creates a potentially positive linkage between government and economic growth. For example, if government expenditure is held fixed, an increase in the average marginal tax rate or an exogenous worsening of property rights would tend to lower the growth or saving rates. An increase in the share of nonproductive government expenditure, (consumption, for example) lowers the growth and savings rates. These effects arise because higher nonproductive government expenditure has no direct effect on private sector productivity, but does lead to higher income tax rate. Since individuals retain a

smaller fraction of their returns from investment, they have less incentive to invest and thus the economy tends to grow at a lower rate.

Barro (1990) subscribes to the fact that there are quite high returns to increase public spending when it is starting from a low base, without the imposition of rule of law or adequate health and education.

According to the World Bank Development Report (1988), the expanded role of public sector carries with it risks and opportunities. The risks come from the ineffective use of public resources and from the over extension of government into areas that are better left to private markets. In this case much of government interventions may be inappropriate because the bureaucracy is ill equipped to intervene. In the market system of efficient civil services, high market failures, and lower distortionary effect of tax, greater government involvement may be appropriate. It is the task of the public finance to balance the opportunities and risks, and thus improve the quality of government. The important aspects of public finance within which pragmatic policies should be pursued are the management of public deficits, revenue mobilization, and allocation of public spending and decentralization of functions.

e) *Structure of Government Expenditure (Capital versus Recurrent Expenditure)*

Capital expenditure is broadly defined as an outlay on acquisition of fixed assets to enhance production of goods and services. Such outlay include spending on land development, construction of power plants, buildings, dams, roads, schools, health, and purchase of plants and equipment (Bhatia, 2008).

Recurrent expenditure comprises expenditure items which are recurring in the process of delivering government economic and social services such as wages, subsidies, operation and maintenance services, pension and debt services are among the major components of recurrent expenditure (CBN Statistical Bulletin vol.21 Dec. 2010).

In 1976, General Olusegun Obasanjo emphasized the policy of direct state participation in business activities in the economy. This led to increase in investment and capital projects which increased capital expenditure. From 1975 to 1983, capital expenditure as percentage of total government expenditure increased more than recurrent expenditure.

The democratically elected government of Shehu Shagari in 1979 carried out public expenditures on Federal Capital Territory development, on housing scheme and River Basin development around the country (Ukwu 2004). All expenditures within the regime up to 1983 when the Shagari administration was toppled in a military coup in December, 1983 increased rapidly.

### III. METHOD OF STUDY

This study makes use of time series data from 1970 to 2014, using data collected for analysis since there was a perceived causal relationship between government expenditure (Recurrent and Capital) and economic development in Nigeria.

We are guided by the following research questions and/or hypotheses as follows:

Does public capital expenditure exert any significant impact on economic development in Nigeria? Has government investments spending on economic services contributed to economic development in Nigeria? Does government investment on social community services influenced economic development? Does government transfer expenditure in Nigeria impact significantly on economic development in Nigeria and at what pace? These encompassing questions has led the formulation of some hypotheses such as - Capital Investment Spending has no significant effect on economic development in Nigeria; Public Recurrent expenditure has no significant impact or influence on economic development in Nigeria.

The dependent variable is Gross Domestic Product (GDP) while the independent variables are Government Recurrent Expenditure (GREX) and Government Capital Expenditure (GCEX). The study is an empirical study design to show how government expenditure, which is classified into Government Recurrent Expenditure and Government Capital Expenditure impact on economic development of Nigeria within the period under review. The characteristics of this study on the effect of government (public) expenditure was on Administration, Economic Services, Social and Community Services and Transfers in the development of the economy. Variables that enter the model are gross domestic product (GDP) as explained variable, and government recurrent and capital expenditures on Administration (GREXAD and GCEXAD), Economic Services (GREXES and GCEXES), Social and Community Services (GREXSCS and GREXSCS) and Transfers (GREXTR and GCXETR), as explanatory variables. The explained variable (GDP) is the dependent variable while the explanatory variable is the independent variable which is classified into two groups: Government Recurrent Expenditure (GREXAD, GREXES, GREXSCS, GREXTR) and Government Capital Expenditure (GCEXAD, GCEXES, GCEXSCS, GCEXTR) are as shown on table 1.

The regression output includes other relevant statistics that enhance further analysis and evaluation. Estimates of model coefficients are evaluated for partial and joint significance of their effects on economic development. Basis of evaluation are the t- and F statistics respectively at 0.05 level of significance and relevant degrees of freedom.

Explanatory power of the model, as a measure of goodness of fit, is determined using the coefficient of determination (R-Square and adjusted R-Square). These statistics enhance insight into the extent to which the various government expenditures explain economic development in Nigeria for the period under review. Empirical econometric approach being adopted was to analysing data considered relevant components of government expenditure and economic development.

a) *Data Analysis*

The values of Gross domestic product maintained an increasing trend during the period under study. In the year 1970, GDP was ₦5,281,100,000 and it rose to ₦267,550,000,000 in 1990. It further increased from ₦4,582,127,300,000 in 2000 to ₦33,984,773,000,000 in 2010; and to ₦42,396,846,000,000 in 2013 and declined to ₦40,116,920,000,000 in 2014.

However, the values of Capital government expenditure had an irregular trend of movement. In the

year 1981, CGEXP was ₦6,567,000,000 and it rose to ₦24,047,800,000 in 1990 and ₦498,027,600,000 in 1999 which later decreased to 241,688,600,000 in 2003. The Capital government expenditure later rose and steadily increased to 1,152,800,000,000 and 3,754,370,000,000 in 2009 and 2014 respectively.

The values of Recurrent government expenditure (RGEXP) had an increasing trend as it stood at 4846700000 in 1981 and steadily rose to 36219600000 in 1990 and to 461608500000 in 2000 and finally rose to 1238893310000 in year 2014.

The values of Gross fixed capital formation had an irregular flow trend. In the year 1981, GFCF was 133,217.52 and it declined to 40,121.31 in year 1990. Later, in year 2000, it further rose to 41,342.64; and then to 77,438.02 and 106,574.57 in 2010 and 2013 respectively.

b) *Interpretation of Regression Result*

*Appendix V1: Error Correction Mechanism Over Parametarized Error Correction Model*

Dependent Variable: DLOG(GDP)  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:47  
 Sample (adjusted): 1971 2011  
 Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(GDP(1))	-0.543196	0.138268	-3.928556	0.0005
DLOG(GDP(2))	-0.400587	0.143333	-2.794796	0.0091
DLOG(GDP(3))	-0.297344	0.129263	-2.300300	0.0288
DLOG(GCEX)	0.246543	0.064979	3.794227	0.0007
DLOG(GCEX(1))	0.251060	0.057499	4.366314	0.0001
DLOG(GCEX(2))	0.206878	0.062611	3.304166	0.0025
DLOG(GCEX(3))	0.128997	0.053600	2.406655	0.0227
DLOG(GREX)	0.622866	0.091207	6.829174	0.0000
DLOG(GREX(1))	0.316564	0.113380	2.792066	0.0092
DLOG(GREX(2))	0.225529	0.116134	1.941970	0.0619
DLOG(GREX(3))	0.151510	0.076807	1.972609	0.0581
ECM(-1)	-0.865075	0.122678	-7.051609	0.0000
R-squared	0.722423	Mean dependent var	0.216233	
Adjusted R-squared	0.617135	S.D. dependent var	0.193532	
S.E. of regression	0.119750	Akaike info criterion	-1.167729	
Sum squared resid	0.415863	Schwarz criterion	-0.666195	
Log likelihood	35.93844	Hannan-Quinn criter.	-0.985098	
Durbin-Watson stat	0.720375			

c) Parsimonious Error Correction Model

Dependent Variable: DLOG(GDP)  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:50  
 Sample (adjusted): 1971 2011  
 Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(GDP(1))	-0.437372	0.144372	-3.029471	0.0049
DLOG(GDP(2))	-0.251151	0.145336	-1.728077	0.0939
DLOG(GDP(3))	-0.090785	0.111227	-0.816212	0.4206
DLOG(GCEX)	0.229129	0.070270	3.260677	0.0027
DLOG(GCEX(1))	0.283502	0.061603	4.602079	0.0001
DLOG(GCEX(2))	0.192758	0.067999	2.834739	0.0080
DLOG(GREX)	0.577275	0.098356	5.869231	0.0000
DLOG(GREX(1))	0.251101	0.121153	2.072599	0.0466
DLOG(GREX(2))	0.096797	0.117540	0.823522	0.4165
ECM(-1)	-0.761114	0.128437	-5.925952	0.0000
R-squared	0.643087	Mean dependent var	0.216233	
Adjusted R-squared	0.539467	S.D. dependent var	0.193532	
S.E. of regression	0.131336	Akaike info criterion	-1.013895	
Sum squared resid	0.534724	Schwarz criterion	-0.595951	
Log likelihood	30.78485	Hannan-Quinn criter.	-0.861703	
Durbin-Watson stat	0.903211			

MODEL ONE

GDP = F (CGEXP, RGEXP)  
 $GDP = b_0 + b_1CGEXP + b_2RGEXP + u$   
 $GDP = -127832.8 + 0.832CGEXP + 11.138RGEXP$   
 T-Stat = (-0.358) (0.449) (18.790)  
 $R^2 = 0.9883$   
 $R^2 = 0.9876$   
 F-Stat = 1276.797  
 D.W = 1.132

The estimate of  $a_0$  is -127832.8, meaning that if the independent variables are zero, the dependent variable will autonomously become -127832.8.

The estimate of  $a_1$  is 0.832; meaning that there is a direct relationship between CGEXP and GDP. It also implies that a unit change in CGEXP will lead to 0.832 changes in GDP.

The estimate of  $a_2$  is 11.138, means that there is a positive relationship between RGEXP and GDP. This implies that a unit change in RGEXP will lead to 11.138 increases in GDP.

The t-ratio for the estimate of  $a_0$  is -0.358. At 5% level of significance with a degree of freedom of 31, (where degree of freedom is  $N - 2 = 33 - 2 = 31$ ); the critical t-ratio from the statistical table is 2.021. The empirical t-ratio is lesser than the critical t-ratio (i.e.  $-0.358 < 2.021$ ). This implies that the estimate of  $a_0$  is not statistically significant.

The t-ratio for the estimate of  $a_1$  is 0.449. At 5% level of significance with a degree of freedom of 31, the critical t-ratio from the statistical table is 2.021. The

empirical t-ratio is lesser than the critical t-ratio (i.e.  $0.449 < 2.021$ ). This implies that the estimate of  $a_1$  is not statistically significant, meaning that capital government expenditure has no significant impact on economic growth.

The t-ratio for the estimate of  $a_2$  is 18.790. At 5% level of significance with a degree of freedom of 31, the critical t-ratio from the statistical table is 2.021. The empirical t-ratio is less than the critical t-ratio (i.e.  $18.790 > 2.021$ ). This implies that the estimate of  $a_2$  is statistically significant, meaning recurrent government expenditure has significant impact on economic growth.

The coefficient of determination ( $R^2$ ) is 0.9883. This means that the independent variables were able to explain 98.83% of the total variations in the dependent variable, while the 1.17% unexplained were due to the stochastically or error term.

The adjusted coefficient of determination ( $R^2$ ) is 0.9876. This implies that the explanatory variables were able to explain 98.76% of the total variation in the dependent variable while the 1.24% unexplained was captured by the error term after taking cognizance of the degree of freedom.

The value of F-statistics is 1276.797. At 5% level of significance with a degree of freedom of  $v_1 = 1, v_2 = 31$ , (where degree of freedom,  $v_1 = K - 1 = 2 - 1 = 1, v_2 = N - K = 33 - 2 = 31$ ). The critical f-ratio from the statistical table is 4.08. The empirical f-ratio is greater than the critical f-ratio (i.e.  $1276.797 > 4.08$ ). This implies that the coefficient of determination is statistically significant; hence we accept the alternative

hypothesis that states; government expenditure has significant impact on economic growth in Nigeria.

The value for Durbin Watson statistics is 1.132. At 5% level of significance, with thirty three observations, and two independent variables, the upper and lower limits of Durbin Watson from the statistical table are  $d_U = 1.577$ ,  $d_L = 1.321$ . These satisfies the relation  $0 < DW < d_U$ , that is,  $0 < 1.132 < 1.321$ . This implies that there is presence of positive autocorrelation.

#### IV. CONCLUSION AND RECOMMENDATIONS

##### a) Summary

We have empirically examined the impact of government expenditure on economic development in Nigeria using secondary data which were obtained from the Central bank of Nigeria Statistical Bulletins for a period of forty-five years (i.e. 1970-2014).

The result of the regression analysis in the first model reveals that government recurrent expenditure (GREX) and government capital (GCEX) expenditure were positively related to gross domestic product (GDP) as government expenditure has significant impact on economic development in Nigeria. The two explanatory variables GREX and GCEX being regressed have a value of 0.9942 being able to explain 99.42% of the total variation in gross domestic product after taking into cognizance the degree of freedom. It is our conclusion that government expenditure has significant impact on the economic development in Nigeria. Government consumption expenditure was found to have depression on economic growth in Nigeria which results corroborated the findings of Barro (1990) who hypothesizes that unproductive government expenditure is liable to depress economic development. Therefore, government should reduce its recurrent expenditure on wasteful ventures in order to stimulate economic development and growth.

The study was also able to establish that government capital expenditure stimulates economic development in Nigeria. This finding is in line with the theoretical postulation that government productive expenditure promotes economic development. So, the current poor performance of Nigeria's economy is attributable to improper distribution of government expenditure to areas of needs and not considering the direction of economic indicators.

The followings are our recommendations based on the conclusions:

1. Government should be able to manage her capital expenditure judiciously and prudently so enhance economic growth and development in Nigeria.
2. Government should direct her investment to areas of profitable ventures to stimulate the economy.
3. Government to maximally avoid wasteful expenditures and if she must then, it should be absolutely minimized.
4. Government should minimize huge foreign borrowing unless for private investment in order not to incur excessive debt will lead to higher interest rates that will eventually result in widespread economic recession and distortions.
5. Government should increase its Capital expenditure in the area of infrastructure development such as provision of rural roads, power generation and building up of the manufacturing sector by building industries to accelerate growth in the productive sector of the economy with the view of raising the standard of living in the country.
6. Government should endeavour to abstain from virement of funds from manufacturing sector to the public sector for whatever purpose even for the provision of social services in order not to strangle the economy of the nation.
7. Our political leadership should not be clouded with domineering governance by allowing political stalwarts and bureaucrats to dictate the fate of the economy without consulting renowned economists of the nation.
8. Developmental strides should be the governing factor of Political leadership of the Federal Government of Nigeria while considering budgetary expenditures.
9. The country's political leadership should allow the anti-graft or anti-corruption agencies such as the Economic and Financial Crime Commission (EFCC), the Independent Corrupt Practices Commission (ICPC) any other such bodies to always administer due processes in every strata of the economy in order to sanitize the nation of corruption sparing no sacred cows.
10. EFCC, ICPC, the Judiciary and any other like body should discharge their duties creditably with no blind eyes in fighting corruption so as to forestall sanity in the country.



Appendix I: Research Data

YEARS	GDP	GREX	GCEX
1970	5281100000	715200000	187800000
1971	6650900000	823600000	173600000
1972	7187500000	1012300000	451300000
1973	8630500000	963500000	565700000
1974	8823100000	1517100000	1223500000
1975	21475200000	2734900000	3207700000
1976	26655800000	3815400000	3786600000
1977	31520300000	3819200000	5004600000
1978	34540100000	2800000000	5200000000
1979	41974700000	3187200000	4219500000
1980	49632300000	4805200000	10163400000
1981	47619700000	4846700000	6567000000
1982	49069300000	4885700000	6420200000
1983	53107400000	5278800000	4885700000
1984	59622500000	5827500000	4100100000
1985	67908600000	7576200000	5464700000
1986	69147000000	7696900000	8526800000
1987	105222800000	15646200000	6372500000
1988	139085300000	19409400000	8340100000
1989	216797500000	25994200000	15034100000
1990	267550000000	36219600000	24047800000
1991	312139700000	38243500000	28340900000
1992	532613800000	54072200000	39763600000
1993	683869800000	82143600000	54501800000
1994	899863200000	85918900000	70918300000
1995	1933211600000	132899700000	121138300000
1996	2702719100000	124291300000	158678300000
1997	2801972600000	158563500000	269652500000

1998	2708430900000	178097800000	309015600000
1999	3194015000000	449662400000	498027600000
2000	4582127300000	461608500000	239450900000
2001	4725086000000	579329100000	438696500000
2002	6912381500000	867336500000	321378100000
2003	8487031600000	984250100000	241688600000
2004	11411066910000	1032741300000	351259900000
2005	14572239120000	1223730000000	519510000000
2006	18564594730000	1485198200000	720768300000
2007	20657317670000	1589300000000	759281500000
2008	24296329290000	2117389000000	960890100000
2009	24712669900000	2127971500000	1152800000000
2010	33984773000000	3109378510000	883870000000
2011	37409862000000	3314513330000	918500000000
2012	40544052000000	3325178000000	874800000000
2013	42396846000000	3689148100000	1108377000000
2014	40116920000000	1238893310000	3754370000000

Source: CBN Statistical Bulletin (Various Issues)

### Appendix II: Regression Results

#### Linear Regression Result

Dependent Variable: GDP  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:14  
 Sample: 1970 2014  
 Included observations: 45

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.28E+11	2.44E+11	-2.166107	0.0360
GCEX	7.398352	0.407087	18.17387	0.0000
GREX	9.222649	0.246153	37.46710	0.0000
R-squared	0.989332	Mean dependent var		7.79E+12
Adjusted R-squared	0.988824	S.D. dependent var		1.30E+13
S.E. of regression	1.37E+12	Akaike info criterion		58.79423
Sum squared resid	7.89E+25	Schwarz criterion		58.91468
Log likelihood	-1319.870	Hannan-Quinn criter.		58.83913
F-statistic	1947.545	Durbin-Watson stat		0.910961
Prob(F-statistic)	0.000000			

b) Log-Linear Regression Result

Dependent Variable: LOG(GDP)  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:15  
 Sample: 1970 2014  
 Included observations: 45

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.657470	0.328369	2.002231	0.0517
LOG(GCEX)	0.280998	0.057759	4.864989	0.0000
LOG(GREX)	0.790066	0.055148	14.32637	0.0000
R-squared	0.993859	Mean dependent var		27.09934
Adjusted R-squared	0.993567	S.D. dependent var		2.937895
S.E. of regression	0.235644	Akaike info criterion		0.011354
Sum squared resid	2.332186	Schwarz criterion		0.131798
Log likelihood	2.744535	Hannan-Quinn criter.		0.056254
F-statistic	3398.648	Durbin-Watson stat		1.082528
Prob(F-statistic)	0.000000			

Appendix III: Unit Root Test

Gdp at Level

Null Hypothesis: LOG(GDP) has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.822054	0.8029
Test critical values:		
1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

\*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation  
 Dependent Variable: D(LOG(GDP))  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:18  
 Sample (adjusted): 1971 2014  
 Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(GDP(-1))	-0.008403	0.010222	-0.822054	0.4157
C	0.429990	0.277582	1.549057	0.1289
R-squared	0.015835	Mean dependent var		0.203078
Adjusted R-squared	-0.007597	S.D. dependent var		0.193629
S.E. of regression	0.194363	Akaike info criterion		-0.393793
Sum squared resid	1.586628	Schwarz criterion		-0.312693
Log likelihood	10.66344	Hannan-Quinn criter.		-0.363717
F-statistic	0.675773	Durbin-Watson stat		1.817288
Prob(F-statistic)	0.415689			

*GDP 1<sup>ST</sup> Diff.*

Null Hypothesis: D(LOG(GDP)) has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.779831	0.0000
Test critical values:		
1% level	-3.592462	
5% level	-2.931404	
10% level	-2.603944	

\*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation  
 Dependent Variable: D(LOG(GDP),2)  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:18  
 Sample (adjusted): 1972 2014  
 Included observations: 43 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOG(GDP(-1)))	-0.919305	0.159054	-5.779831	0.0000
C	0.185565	0.044880	4.134653	0.0002
R-squared	0.448973	Mean dependent var		-0.006649
Adjusted R-squared	0.435533	S.D. dependent var		0.263044
S.E. of regression	0.197628	Akaike info criterion		-0.359467
Sum squared resid	1.601327	Schwarz criterion		-0.277551
Log likelihood	9.728540	Hannan-Quinn criter.		-0.329259
F-statistic	33.40645	Durbin-Watson stat		1.957003
Prob(F-statistic)	0.000001			

*Gcex at Level*

Null Hypothesis: LOG(GCEX) has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.110560	0.7034
Test critical values:		
1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

\*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation  
 Dependent Variable: D(LOG(GCEX))  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:19  
 Sample (adjusted): 1971 2014  
 Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(GCEX(-1))	-0.026048	0.023455	-1.110560	0.2731
C	0.858133	0.573203	1.497084	0.1418

R-squared	0.028528	Mean dependent var	0.225069
Adjusted R-squared	0.005397	S.D. dependent var	0.399976
S.E. of regression	0.398895	Akaike info criterion	1.044154
Sum squared resid	6.682939	Schwarz criterion	1.125254
Log likelihood	-20.97140	Hannan-Quinn criter.	1.074230
F-statistic	1.233344	Durbin-Watson stat	2.000070
Prob(F-statistic)	0.273075		

*GCEX 1<sup>ST</sup> Diff.*

Null Hypothesis: D(LOG(GCEX)) has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.475518	0.0000
Test critical values:		
1% level	-3.592462	
5% level	-2.931404	
10% level	-2.603944	

\*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation  
 Dependent Variable: D(LOG(GCEX),2)  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:20  
 Sample (adjusted): 1972 2014  
 Included observations: 43 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOG(GCEX(-1)))	-1.084263	0.167440	-6.475518	0.0000
C	0.249147	0.070484	3.534794	0.0010

R-squared	0.505621	Mean dependent var	0.030201
Adjusted R-squared	0.493563	S.D. dependent var	0.569872
S.E. of regression	0.405546	Akaike info criterion	1.078229
Sum squared resid	6.743160	Schwarz criterion	1.160145
Log likelihood	-21.18192	Hannan-Quinn criter.	1.108437
F-statistic	41.93233	Durbin-Watson stat	1.696133
Prob(F-statistic)	0.000000		

*GreX at Level*

Null Hypothesis: LOG(GREX) has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.313078	0.6153
Test critical values:		
1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

\*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation  
 Dependent Variable: D(LOG(GREX))  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:21  
 Sample (adjusted): 1971 2014  
 Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(GREX(-1))	-0.021106	0.016074	-1.313078	0.1963
C	0.691184	0.399751	1.729037	0.0911
R-squared	0.039433	Mean dependent var		0.169481
Adjusted R-squared	0.016562	S.D. dependent var		0.294849
S.E. of regression	0.292397	Akaike info criterion		0.422982
Sum squared resid	3.590839	Schwarz criterion		0.504082
Log likelihood	-7.305615	Hannan-Quinn criter.		0.453058
F-statistic	1.724173	Durbin-Watson stat		1.686539
Prob(F-statistic)	0.196286			

*GREX 1<sup>ST</sup> Diff.*

Null Hypothesis: D(LOG(GREX)) has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.132865	0.0001
Test critical values:		
1% level	-3.592462	
5% level	-2.931404	
10% level	-2.603944	

\*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation  
 Dependent Variable: D(LOG(GREX),2)  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:21  
 Sample (adjusted): 1972 2014  
 Included observations: 43 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LOG(GREX(-1)))	-1.065084	0.207503	-5.132865	0.0000
C	0.183079	0.061778	2.963501	0.0050
R-squared	0.391206	Mean dependent var		-0.028658
Adjusted R-squared	0.376358	S.D. dependent var		0.381862
S.E. of regression	0.301560	Akaike info criterion		0.485701
Sum squared resid	3.728480	Schwarz criterion		0.567617
Log likelihood	-8.442570	Hannan-Quinn criter.		0.515909
F-statistic	26.34631	Durbin-Watson stat		1.561891
Prob(F-statistic)	0.000007			

Appendix IV: Granger Causality Test

Pairwise Granger Causality Tests  
 Date: 12/10/16 Time: 08:23  
 Sample: 1970 2014  
 Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
GCEX does not Granger Cause GDP	43	9.15751	0.0006
GDP does not Granger Cause GCEX		8.38343	0.0010
GREX does not Granger Cause GDP	43	3.19725	0.0521
GDP does not Granger Cause GREX		6.88889	0.0028
GREX does not Granger Cause GCEX	43	7.13098	0.0023
GCEX does not Granger Cause GREX		12.3661	7.E-05

Appendix V: Johansen Cointegration Test

Date: 12/10/16 Time: 08:24  
 Sample (adjusted): 1972 2014  
 Included observations: 43 after adjustments  
 Trend assumption: Linear deterministic trend  
 Series: GDP GCEX GREX  
 Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.666245	100.9352	29.79707	0.0000
At most 1 *	0.521639	53.74914	15.49471	0.0000
At most 2 *	0.401058	22.04136	3.841466	0.0000

Trace test indicates 3 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)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.666245	47.18602	21.13162	0.0000
At most 1 *	0.521639	31.70778	14.26460	0.0000
At most 2 *	0.401058	22.04136	3.841466	0.0000

Max-eigenvalue test indicates 3 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\*S11\*b=I):

GDP	GCEX	GREX
-8.32E-14	9.91E-12	-1.62E-12
-6.47E-13	-6.84E-13	9.05E-12
-1.04E-12	5.29E-13	1.10E-11

Unrestricted Adjustment Coefficients (alpha):

D(GDP)	1.00E+12	3.73E+11	4.32E+11
D(GCEX)	-1.26E+11	1.44E+11	-1.80E+11
D(GREX)	2.33E+11	-1.21E+11	1.24E+11

1 Cointegrating Equation(s):      Log likelihood      -3601.800

Normalized cointegrating coefficients (standard error in parentheses)

GDP	GCEX	GREX
1.000000	-119.1493 (13.6923)	19.41035 (4.38545)

Adjustment coefficients (standard error in parentheses)

D(GDP)	-0.083493 (0.01501)
D(GCEX)	0.010458 (0.00485)
D(GREX)	-0.019383 (0.00412)

2 Cointegrating Equation(s):      Log likelihood      -3585.946

Normalized cointegrating coefficients (standard error in parentheses)

GDP	GCEX	GREX
1.000000	0.000000	-13.69231 (0.39149)
0.000000	1.000000	-0.277825 (0.01914)

Adjustment coefficients (standard error in parentheses)

D(GDP)	-0.324504 (0.11081)	9.693146 (1.68864)
D(GCEX)	-0.082806 (0.03478)	-1.344733 (0.53003)
D(GREX)	0.058939 (0.02968)	2.392291 (0.45222)

*Appendix VI: Error Correction Mechanism Over Parametarized Error Correction Model*

Dependent Variable: DLOG(GDP)

Method: Least Squares

Date: 12/10/16 Time: 08:47

Sample (adjusted): 1971 2011

Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(GDP(1))	-0.543196	0.138268	-3.928556	0.0005
DLOG(GDP(2))	-0.400587	0.143333	-2.794796	0.0091
DLOG(GDP(3))	-0.297344	0.129263	-2.300300	0.0288
DLOG(GCEX)	0.246543	0.064979	3.794227	0.0007
DLOG(GCEX(1))	0.251060	0.057499	4.366314	0.0001
DLOG(GCEX(2))	0.206878	0.062611	3.304166	0.0025



DLOG(GCEX(3))	0.128997	0.053600	2.406655	0.0227
DLOG(GREX)	0.622866	0.091207	6.829174	0.0000
DLOG(GREX(1))	0.316564	0.113380	2.792066	0.0092
DLOG(GREX(2))	0.225529	0.116134	1.941970	0.0619
DLOG(GREX(3))	0.151510	0.076807	1.972609	0.0581
ECM(-1)	-0.865075	0.122678	-7.051609	0.0000
<hr/>				
R-squared	0.722423	Mean dependent var	0.216233	
Adjusted R-squared	0.617135	S.D. dependent var	0.193532	
S.E. of regression	0.119750	Akaike info criterion	-1.167729	
Sum squared resid	0.415863	Schwarz criterion	-0.666195	
Log likelihood	35.93844	Hannan-Quinn criter.	-0.985098	
Durbin-Watson stat	0.720375			

*Parsimonious Error Correction Model*

Dependent Variable: DLOG(GDP)  
 Method: Least Squares  
 Date: 12/10/16 Time: 08:50  
 Sample (adjusted): 1971 2011  
 Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(GDP(1))	-0.437372	0.144372	-3.029471	0.0049
DLOG(GDP(2))	-0.251151	0.145336	-1.728077	0.0939
DLOG(GDP(3))	-0.090785	0.111227	-0.816212	0.4206
DLOG(GCEX)	0.229129	0.070270	3.260677	0.0027
DLOG(GCEX(1))	0.283502	0.061603	4.602079	0.0001
DLOG(GCEX(2))	0.192758	0.067999	2.834739	0.0080
DLOG(GREX)	0.577275	0.098356	5.869231	0.0000
DLOG(GREX(1))	0.251101	0.121153	2.072599	0.0466
DLOG(GREX(2))	0.096797	0.117540	0.823522	0.4165
ECM(-1)	-0.761114	0.128437	-5.925952	0.0000
<hr/>				
R-squared	0.643087	Mean dependent var	0.216233	
Adjusted R-squared	0.539467	S.D. dependent var	0.193532	
S.E. of regression	0.131336	Akaike info criterion	-1.013895	
Sum squared resid	0.534724	Schwarz criterion	-0.595951	
Log likelihood	30.78485	Hannan-Quinn criter.	-0.861703	
Durbin-Watson stat	0.903211			

Gross Domestic Product (GDP), Total Government Recurrent Expenditure (GREX) and Total Government Capital Expenditure (GCEX) in Naira (₦)

YEARS	GDP	GREX	GCEX	LOGGDP	LOGGREX	LOGCEX
1970	5281100000	715200000	187800000	9.72	8.85	8.27
1971	6650900000	823600000	173600000	9.82	8.92	8.24
1972	7187500000	1012300000	451300000	9.86	9.01	8.65
1973	8630500000	963500000	565700000	9.94	8.98	8.75
1974	8823100000	1517100000	1223500000	9.95	9.18	9.09
1975	21475200000	2734900000	3207700000	10.33	9.44	9.51
1976	26655800000	3815400000	3786600000	10.43	9.58	9.58
1977	31520300000	3819200000	5004600000	10.5	9.58	9.7
1978	34540100000	2800000000	5200000000	10.54	9.45	9.72
1979	41974700000	3187200000	4219500000	10.62	9.5	9.63

1980	49632300000	4805200000	10163400000	10.7	9.68	10.01
1981	47619700000	4846700000	6567000000	10.68	9.69	9.82
1982	49069300000	4885700000	6420200000	10.69	9.69	9.81
1983	53107400000	5278800000	4885700000	10.73	9.72	9.69
1984	59622500000	5827500000	4100100000	10.78	9.77	9.61
1985	67908600000	7576200000	5464700000	10.83	9.88	9.74
1986	69147000000	7696900000	8526800000	10.84	9.89	9.93
1987	105222800000	15646200000	6372500000	11.02	10.19	9.8
1988	139085300000	19409400000	8340100000	11.14	10.29	9.92
1989	216797500000	25994200000	15034100000	11.34	10.41	10.18
1990	267550000000	36219600000	24047800000	11.43	10.56	10.38
1991	312139700000	38243500000	28340900000	11.49	10.58	10.45
1992	532613800000	54072200000	39763600000	11.73	10.73	10.6
1993	683869800000	82143600000	54501800000	11.83	10.91	10.74
1994	899863200000	85918900000	70918300000	11.95	10.93	10.85
1995	1933211600000	132899700000	121138300000	12.29	11.12	11.08
1996	2702719100000	124291300000	158678300000	12.43	11.09	11.2
1997	2801972600000	158563500000	269652500000	12.45	11.2	11.43
1998	2708430900000	178097800000	309015600000	12.43	11.25	11.49
1999	3194015000000	449662400000	498027600000	12.5	11.65	11.7
2000	4582127300000	461608500000	239450900000	12.66	11.66	11.38
2001	4725086000000	579329100000	438696500000	12.67	11.76	11.64
2002	6912381500000	867336500000	321378100000	12.84	11.94	11.51
2003	8487031600000	984250100000	241688600000	12.93	11.99	11.38
2004	11411066910000	1032741300000	351259900000	13.06	12.01	11.55
2005	14572239120000	1223730000000	519510000000	13.16	12.09	11.72
2006	18564594730000	1485198200000	720768300000	13.27	12.17	11.86
2007	20657317670000	1589300000000	759281500000	13.32	12.2	11.88
2008	24296329290000	2117389000000	960890100000	13.39	12.33	11.98
2009	24712669900000	2127971500000	1152800000000	13.39	12.33	12.06
2010	33984773000000	3109378510000	883870000000	13.53	12.49	11.95
2011	37409862000000	3314513330000	918500000000	13.57	12.52	11.96
2012	40544052000000	3325178000000	874800000000	13.61	12.52	11.94
2013	42396846000000	3689148100000	1108377000000	13.63	12.57	12.04
2014	40116920000000	1238893310000	3754370000000	13.60	12.09	12.57

Source: Cbnstatistical Bulletins (Various Issues)

## REFERENCES REFERENCES REFERENCIAS

1. Abdullahi H.A, (2000).The Relationship between Government Expenditure and Economic Growth in Saudi Arabia. *Journal of Administrative Science*, 12(2): 173-191.
2. Abomaye-Nimenibo, W.A.S. and Inimino, Edet E. (2016). An Empirical Analysis of Fiscal Policy Measures and Unemployment in Nigeria, *Journal of Social Sciences and Public Policy*, Vol.8, No.2, 2016 pp 1 -25.
3. Akrani G. (2011 Feb. 11). Kalyan City Life Law of Increasing State Activity–Public Expenditure. Retrieved from <http://www.kalyan-city.blogspot.com>
4. Bailey, S. J. (2002). *Public Sector Economics: Theory, Policy and Practice*. 2<sup>nd</sup> Edition, Great Britain.

5. Barro, R. J. (1990). Economic Growth in a Cross-section of Countries. *Quarterly Journal of Economics*, 106(2): 407-443.
6. Barro, R. J. (1990). Government Spending in a Simple Model of Endogenous Growth. *Journal of Political Economy*, 98(55): 103-125. Doi:10.1086/1267726.
7. Bhatia H.L. (2002). Public Finance, 25th Edition, Vikas Publishing House, PVT Ltd, India.
8. Carlos H.O. (2004). An Economic Growth Model Showing Government Spending with reference to Colombia and Learning-by-doing: *Colombia Economic Journal*, Vol. 2, No. 1, 2004.
9. Bhatia, H.L. (2008). Public Finance (26<sup>th</sup> ed.). Vikas Publishing House PVT Ltd, New Delhi.
10. Bhatia, H. L. (2008). *British Journal of Economics, Management & Trade* 2(4): 309-326, 2012
11. Brown, C. V. and Jackson P. M. (1996), Public Sector Economics. 4<sup>th</sup> Edition Blackwell Publishers Ltd. U.K.
12. Brukhead, J. Mrinal, J. (1979), Public Expenditure. Aldine publishing Co, Ltd. U.S.A.
13. CBN (2009): "Statistical Bulletin". www.cenbank.org. CBN Statistical Bulletin, (2008), "Annual Report and Statement of Accounts" Pp.97-99
14. Central Bank of Nigeria (2008). Statistical Bulletin (Golden Jubilee Edition).
15. Central Bank of Nigeria (CBN) Statistical Bulletin (2007). Retrieved from www.cenbank.org/documents/statbulletin.asp.
16. Central Bank of Nigeria (CBN) Statistical Bulletin (2008). Retrieved from www.cenbank.org/documents/statbulletin.asp.
17. Central Bank of Nigeria (CBN) Statistical Bulletin (2009). Retrieved from www.cenbank.org/documents/statbulletin.asp.
18. Central Bank of Nigeria (CBN) Statistical Bulletin (2010). Retrieved from www.cenbank.org/documents/statbulletin.asp.
19. Engel, R. F. and Granger G. W. J. (1987). *Estimation and Testing, Econometrica*. 55, 257-276.
20. Gbanador C. (2007). Modern Macroeconomics; Port Harcourt, Peal Publishers.
21. Granger, C. W. J. & Weiss, A. A. (1983). Time-Series Analysis of Error Correction Models: In Studies in Econometrics, Time-Series and Multi-Variate Statistics in Small or T. W. Anderson, ed. S. Karlim, T. Amemiya and L. A. Goodman. San Diego: Academic.
22. Granger, C.W. (1986), Development in the Study of Cointegrated Variables, *Oxford Bulletin of Economics and Statistics*, Pp 214 – 227.
23. Gujarati, D. N. (2004). Basic Econometrics.(4<sup>th</sup> ed.). New Delhi: Tata McGraw Hill,748, 807
24. Hayek, Friedrich (1989). The Collected Works of F. A. Hayek. University of Chicago Press.,202. ISBN 978-0-226- 32097-7.
25. Heller, Peter S., and Jack Diamond, (1990). "International Comparisons of Government Expenditure Revisited - The Developing Countries, 1975-86," IMF Occasional paper, No.69 (Washington International Monetary Fund, April).
26. Keynes, J. M. (1936). The General Theory of Employment, Interest and Money, New YORK: Harcourt Brace.113-115.
27. Krueger, A. O. (1990). *Government Failures in Development: The Journal of Economic Perspectives*, 4 (3) 9-23.
28. Lin, S. A. Y. (1994), Government Spending and Economic Growth: Applied Economics. Volume 26:83-94.
29. Mitchell, D. (2005). The Impact of Government Spending on Economic Growth. Heritage Foundation 1831, Washington DC.
30. Musgrave, A.R. and P.B. Musgrave, (1989). Public Finance in Theory and Practice. 5th Edn., New York, McGraw-Hill.
31. Musgrave, R. A. (1919). Public Finance in Theory and Practice, Mc-Graw Hill, New York, Second edition.
32. Musgrave, R. A. (1956). The Theory of Public Finance, McGraw-Hill Book Co., 1956, London.
33. Musgrave, R. A. (1959), The Theory of Public Finance. New York: McGraw-Hill.
34. National Bureau of Statistics (2010). Retrieved from: http://www.nigerianstat.gov.ng/index.php/sectorStatisticsNigeria, 1970-2008: A Disaggregated Analysis", *Business and Economics Journal*, Volume 4 pages 2-4
35. NITTI, F.S. (1903), *Scienza delle finanze*, Pierro, Napoli.
36. Nurudeen Abu and Abdullahi Usman(2008). *Government Expenditure and Economic Growth in Nigeria, 1979 – 2008: A Disaggregated analysis. Business and Economics Journal*, 2010: BEJ-4.
37. Onakaya, B. O. A., Fasanya, O. I. and Babalola, T. M. (2012). *Trade Openness and Manufacturing Sector Growth: An Empirical Analysis for Nigeria. Mediterranean Journal of Social Sciences*,3(11): 637-646.
38. Onakoya, A.B.Fasanya, O and Abdulrahman, H. D (2013), *Small and Medium Scale Enterprises Financing and Economic Growth in Nigeria.European Journal of Business and Management*, 5(4): 130-137
39. Owolabi, A.U. (2011). Econometric Evaluation of Government Spending, System of Government and Economic Growth in Nigeria, *Journal of Economics and Sustainable Development*, 2, (4).

40. Peacock, A. and J. Wiseman, (1961). *The Growth in Public Expenditure in the United Kingdom*. Allen and Urwin, London.
41. Peacock, A.T. and Wiseman, J. (1961) *The Growth of Public Expenditure in the United Kingdom*, Princeton: Princeton University Press.
42. Ram, R. (1986). Government Size and Economic Growth: A New Framework and Some Evidence from Cross-Section and Time-Series Data: *The American Economic Review*, 76 (1), 91-203.
43. Revenue Mobilisation Allocation and Fiscal Commission, (2011). *Revenue allocation formula in Nigeria: Issues and challenges*; being a paper presented at the retreat organised for members of the revenue mobilisation allocation and fiscal commission at *le meridien*, ibom hotel and golf resort, uyo, akwa ibom state, monday, 14th-friday, 18<sup>th</sup> February. Retrieved from <http://www.rmafc.ng.gov>
44. Rostow, W. W. (1960). *The Stages of Economic Growth*, Cambridge University press.
45. Sachs, J. (2006). *The Social Welfare State: Beyond Ideology*, *Scientific American*. <http://www.sciam.com/article.cfm?id=the-socialwelfare-state>.
46. Sen, A. (1983). *Development: Which Way Now?* *Economic Journal*, Vol. 93 Issue 372. pp. 745–762.
47. Sen, Amartya; Drèze, Jean (1998). *India, economic development and social opportunity*. Oxford England New York: Clarendon Press Oxford University Press. ISBN 9780198295280.
48. Smith, A. (1776). *The Wealth of Nations*, London.
49. Sudha R. S. (2007). Are High Taxes the Basis of Freedom and Prosperity? <http://www.thefreemanonline.org/featured/are-high-taxes-the-basis-offreedom-and-prosperity/>.
50. Tanzi, V. and Schuknecht, P. (1997). *Reconsidering the Fiscal Role of Government: The International Perspective*, *The American Economic Review*, 87(2) 164-168.
51. The Reform of the International Monetary Fund (October 2001).
52. This paper, by Rainer Falk and sponsored by *WEED, Global Policy Forum and the Heinrich Boell Foundation*, focuses on the renewal of tasks and institutional structure. It concludes that the IMF needs to be both strengthened and weakened, depending on the Fund's future role. The paper was presented at an NGO Strategy Workshop in Washington, October 2001.
53. Ukwu I. Ukwu (2004), *Government, Business and the People: Towards Partnership in Nigeria Development*, Delta Publication, Enugu.
54. Vedder, R. K. & Gallaway, L. E. (1998), *Government Size and Economic Growth*, Ohio University, Washington, D.C.
55. Wagner, Adolph (1883, 1890), 'Finanzwissenschaft' (2nd and 3rd editions). Leipzig. (Partly reprinted in *Classics in the Theory of Public Finance* (Eds), R.A. Musgrave and A.T. Peacock, MacMillan, London, 1958).
56. Weil, David N. (2009). *Economic Growth*, 2nd edition. Prentice Hall.
57. Wiseman J. & Peacock A. T. (1961), *The Growth of Public Expenditure in United Kingdom*, Princeton University Press.
58. World Bank (2012) "World Development Indicators" Available online at <http://data.worldbank.org/data-catalog/world-developmentindicators>
59. <http://www.thefreemanonline.org/featured/are-high-taxes-the-basis-offreedom-and-prosperity/www.cenbank.org/OUT/2011/>



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# Competitive Strategy Orientation and Innovative Success: Mediating Market Orientation a Study of Small-Medium Enterprises

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**Abstract-** In this paper, we investigate the mediating effects of market orientation in the competitive strategy orientation - product innovative success relationship. Quantitative approach was employed in the investigation. Instruments used to collect data was self-administered questionnaires. Finally, a series of hypotheses are posited to explore the relationships of the variables and to test the effects of mediator. A field survey administered to 425 workers of small to medium enterprise in the manufacturing and services sector were used to gather the data. Out of the 425 surveys sent, hypotheses were empirically tested using structural equation modelling software's AMOS to analysis regression and confirmatory factors of variables on a data set of 388 participants.

The various hypotheses posited in the study were empirically tested and found to be positively significant. According to the findings of this study shows that competitive orientation has significant positive effect on products innovative success.

**Keywords:** *market orientation, mediation, competitive strategy oriented, product innovative success and small to medium enterprise.*

**GJMBR-E Classification:** *JEL Code: L10*



COMPETITIVESTRATEGYORIENTATIONANDINNOVATIVESUCCESSMEDIATINGMARKETORIENTATIONASTUDYOF SMALLMEDIUMENTERPRISES

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# Competitive Strategy Orientation and Innovative Success: Mediating Market Orientation a Study of Small-Medium Enterprises

Chalchissa Amentie Kero<sup>α</sup> & Bertrand Sogbossi B.<sup>σ</sup>

**Abstract-** In this paper, we investigate the mediating effects of market orientation in the competitive strategy orientation - product innovative success relationship. Quantitative approach was employed in the investigation. Instruments used to collect data was self-administered questionnaires. Finally, a series of hypotheses are posited to explore the relationships of the variables and to test the effects of mediator. A field survey administered to 425 workers of small to medium enterprise in the manufacturing and services sector were used to gather the data. Out of the 425 surveys sent, hypotheses were empirically tested using structural equation modelling software's AMOS to analysis regression and confirmatory factors of variables on a data set of 388 participants.

The various hypotheses posited in the study were empirically tested and found to be positively significant. According to the findings of this study shows that competitive orientation has significant positive effect on products innovative success. Similarly, competitive orientation has significant positive effect on market orientation. In addition, market orientation has significant positive effect on products innovative success. The index of mediation indicated that product innovative success received only 48% of the indirect effect from competitive oriented through MO, leaving 52% unaccounted for. From this, it can be presumed that the balance of 52% may be accounted for by other mediating factors not considered in this study that necessitate further investigation.

Here, potentially, market orientation partially mediates the path between competitive oriented and product innovative success. Therefore, it is advisable for future researchers to incorporate other external and internal factors that can mediate the relationship between competitive orientation and product innovative success.

Generally, we suggest the development of market orientation is an important strategy for the small to medium enterprises to achieve a high level of product innovative success. So that practically, owners/managers of SMEs should focus on competitive oriented strategy and response (utilize) MO to improve their product innovative success (to increase sales volume and profits) in the short term.

**Keywords:** market orientation, mediation, competitive strategy oriented, product innovative success and small to medium enterprise.

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## I. INTRODUCTION

The role of small and medium scale enterprises (SME) has been critical and the sector is considered as "backbone" of much of economies (Wymenga et al.; 2012). However, the sector of SME in the developing countries faces many constraints such as the technological backwardness, and entrepreneurial capabilities, unavailability information and insufficient use of information technology and poor product quality. Consequently, the economic contribution of SMEs in the developing if far behind compared to developed countries (Altenburg and Eckhardt, 2006 ; Asian Productivity Organization, 2011; Emine, 2012).

Though Ethiopian Government has tried to create an environment that supports entrepreneurship since 1991, Micro, Small and Medium Enterprise (MSMEs) are still at their infancy stage regarding their economic contribution (Berihu, Abebaw and Biruk, 2014). Despite the efforts made by Ethiopian government to support Micro and Small Enterprises, transition from Micro to Small and then to Medium Enterprises is rarely happening which makes the onlooker to *vacillate the success of the Micro and Small Scale Enterprises development strategy* (Berihu, Abebaw and Biruk, 2014; Amare and Raghurama, 2017). Because the Growth and Transformation Plans (GTP I & II) of Ethiopia is seek to transform the economy toward an industrialized economy and to increase per capita income of its citizens by 2025. To this effect, the government has adopted policy focused on the development of the manufacturing sector through the use of industrial parks to attract Foreign Direct Investment and to support SMEs (FDREMI, 2013). Targeting SMEs is important, as they are an engine for jobs creation and blooming of economy. With this regard however, Ethiopia has not made significant progress in pulling labor out of agriculture into more productive and industrial jobs (FDREMI, 2013). The share of employment in the manufacturing sector has changed only slightly and is virtually unchanged since 1999 at below 5% of total employment (World Bank Group, 2015).

Furthermore, the result of studies on small and medium enterprise in Ethiopia by Abebe, Million and Ridgewell (2009) concluded the following problem in SMEs; low profitability, the quality and range of products produced were extremely low and majority of SMEs were entirely unaware of demand and did not attempt to advertise their products. But also, the result of study on innovation and barriers to innovation: small and medium enterprises in Ethiopia (Silashi, 2014) shows; lack of cooperation (network ties), lack of competitive strategic orientation & market information, inadequate R&D were obstacle to SMEs' technological and product innovation success.

Consequently, different studies have suggested that competitor orientation is critical for the long-term survival of the firm with higher level of innovative success (Hakala, 2011; Herath and Rosli, 2014; Henri, 2015).

A competitor orientation described as the ability and the will to identify, to analyze and to respond to competitors' actions (Kerin et al., 1990; Kohli and Jaworski, 1990). This includes the identification and construction of competitive advantages in terms of quality or specific functionalities, and allows the firm to position the new product well. Firms producing radical innovations perform better than firms producing mainly imitative innovations (Gatignon and Xuereb, 1997). Another factor which characterizes the competitive position of a product is its cost (Porter, 2000). The lower the cost, the greater the potential for profits, either by setting higher margins or by penetrating the market with a lower price which has positive effect on product innovation success (Muhammad, 2010; Mohammad, 2013).

Product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses (OECD, 2005). Examples of product innovation by a business might include a new product's invention; improvements in features, materials and components of an existing product, the development of new product and other aspects (OECD, 2005).

While product innovation success measured by various indicators, (Griffin and Page, 1993) identified 75 different measures of new product success used by academics or practitioners. Moreover, the research force identified 75 different measures, experts have found 16 common measures and these were considered to be core success measure (Erik, 2008; Fu, 2010) and Product Development Management Association (PDMA) uses the 16 criteria. However, for this study we have taken market and financial success. Because of the financial and market share objectives both were considered measures of commercial success (Erik, 2008).

Market success (its market share size in the market, acceptance of new product by customers) and

financial success (sales volume and net profit growth) (Erik, 2008, Fu, 2010, Mohammad, 2013; Theresia, 2015). Product innovation is probably one of the most important processes for many firms as it influences the revenues and margins that a firm can achieve and it has a positive impact on firm value (e.g. on growth and survival of individual firms) (Fu, 2010). One of the recent best practice study showed that, among the best performing firms, 48% of sales are derived from new products introduced in the last five years. Actually, there are lots of studies in the literature concerning product innovation success. For instance, successful innovation can be achieved through an integrated development of a firm's business strategy and market positioning, organization of work, technology and people (Ebru, Fulya and Sinan, 2014).

Furthermore, several studies have shown that the use of external information affect the competitive strategy of firms and has a positive effect on the success of new products (Atuahene-Gima, 1995; Ottum and Moore, 1997; Joshua, 2007). Effective market orientations has been identified as a sources of new knowledge (Erik et al.; 2008, Muhammad, 2010; Theresia, 2015), but many firms did not actively incorporate market information into their new products (Ottum and Moore, 2007).

In this study, to test the mediating effects of the market orientation in the competitive strategy and product innovative success relationship, we examine the relationship between (1) market orientation and competitive strategy, (2) competitive strategy and product innovative success, and (3) market orientation and product innovative success.

An additional problem has been that previous research on competitive strategy and market orientation was mostly conducted in western/developed countries. Recent studies have called for research of market orientation in non-western or developing countries settings. In particular, countries in transition to market-based economies are good candidates for market orientation research as customer sovereignty issues become increasingly important (Gloria and Daniel, 2005, Erik, 2008).

Therefore, the main objective of this study is to investigate the effects of competitive strategies on product innovation success: mediating market orientations of small to medium enterprises in context of Ethiopia.

## II. LITERATURE REVIEW AND CONCEPTUAL HYPOTHESIS DEVELOPMENT

### a) MSMEs definition and enterprises characterization in Ethiopia

Though Micro, Small and Medium Enterprises (MSMEs) constitute the major share in terms of number in Ethiopia, there is no consistently placed definition for



the sub sector by different bodies. In 1997, the Ethiopian Ministry of Trade and Industry (MoTI) defined MSEs in terms of capital investment and on the bases of establishment – *micro enterprises* are those small business enterprises with a paid-up capital of not exceeding Ethiopian Birr (ETB) 20,000, and excluding high tech consultancy firms and other high tech establishments. While *small enterprises* are those business enterprises with a paid-up capital of and not exceeding ETB 500,000, and excluding high tech consultancy firms and other high tech establishments (MoTI and FeMSEDA, 2004). However, it did not incorporate others attributes used by other countries and international organizations also it did not tell the size of the total asset for the MSE and did not differentiate between manufacturing (industry) and services.

As the revised definition in 2011, some of the attributes used by other countries and international organizations are addressed. In addition, the definition has segregated sectors as service and manufacturing. However, there is still confusion among different governmental organizations (e.g. Ministry of Trade, Central Statistics Agency, & Federal Micro and Small Enterprises Development Agency (FeMSEDA) in defining MSEs (Amare and Raghurama, 2017). According to FeMSEDA, the classification of enterprises into small, medium and large scale depends on a number of variables such as level of employment, turnover, capital investment, production capacity, level of technology and subsector.

However, since it only focus on *Micro and Small Enterprises*, the new definition does not put any demarcation between *Small and Medium*; and *Medium and large Enterprises*. Current definition considers human capital and asset as the main measures of micro and small enterprise to addresses the limitations of the old definition. Accordingly, the following scales are referred to the classification of enterprises in the Ethiopian context.

As Federal micro and small enterprises development, establishment councils of ministers of regulation No.201/2011:

**Micro enterprises** is enterprises having a total capital excluding building cost not exceeding 50,000 Birr in case of Service sector or not exceeding 100,000 Birr in case of industrial and engages 5 workers including owner and his family members and other employees.

**Small enterprises** is enterprise having a total capital excluding building cost 501,000 to 500,000 Birr in case of Service sector or 1001,000 Birr to 1,500,00 Birr in case of industrial and engage workers 6 to 30 including owner and his family members and other employees (FeMSEDA, 2011 cited in Negarit Gazeta, 2011).

Thus, there is no clear and agreed definition of a small firm. For the purposes of this study, the common criteria for both service and industrial definition term

*'Number of Employees'* has been taken to refer small enterprises with 6 to 30 workers in the context of study area Ethiopian definition.

b) *Competitive strategy oriented, market orientation and product innovative success*

A competitor orientation can be defined as the ability and the will to identify, to analyze, and to respond to competitors' actions. This includes the identification and construction of competitive advantages in terms of quality or specific functionalities, and allows the firm to position the new product well (Gatignon and Xuereb, 1997). Such an orientation makes it possible for the firm to understand "the short term strengths and weaknesses and the long term capabilities and strategies of both the key current and key potential competitors" (Narver and Slater 1990) and to react adequately.

A competitor orientation is both proactive (when, for example, a firm is looking for a "highly attractive market") and reactive (when it responds to a competitor's action). In a study of innovation processes in the computer industry, Xuereb (1993) shows that a large number of new product developments starts in response to a competitor's action and that product development is subject to the influence of competitors' innovation processes. Competitors do not remain passive when confronted by a competitive innovation but react in order to maintain their relative position (Gatignon, Anderson and Helsen 1989, Robinson 1988). Also, most successful innovative firms select certain types of new products as a function of market competitive characteristics (Cooper 1984). Following the portfolio analysis literature, successful firms avoid the "highly competitive markets" and prefer the "highly attractive markets" characterized by a large market potential, rapid growth, no dominant competitor, and a large number of customers (Cooper 1984). Consequently, a competitor orientation is required for the commercial performance of innovations.

In a particular target market, a firm can adopt innovation, quality enhancement or cost leadership strategies. The competitive strategies adopted by a firm reflect the positional advantages that the firm enjoys compared to its competitors (Gloria and Daniel, 2005). Atuahene-Gima (1995) found that market orientation has impacts that are more significant on incremental innovation than radical innovation, because the latter is more likely to be a function of technological expertise. Therefore, in this study product innovation strategy refers to those incremental product improvements or modifications that firms implement to satisfy changing customers' needs and to differentiate themselves from competitors. A quality enhancement strategy is considered to focus on enhancing and improving product and/or service quality. In a cost leadership strategy, firms typically attempt to gain competitive advantage by being the lowest cost producer.

Different researchers have identified many different aspects of the strategy construct (Kerin et al., 1990). In this study, strategy refers to the determination of the basic goals of the firm and identification of the long-term courses of action necessary to reach these goals (Hofer and Schendel, 1978). In this usage, strategy focuses on the allocation of resources and the development of organizational processes necessary to achieve the competitive advantage of firm. As a result, strategic competitive oriented is viewed as the process by which management analyses the environment, including competitive and customer-related factors and designs a strategy to achieve the firm's long-term goals (Day, 1994). Firms that achieve this strategic ability are said to have established a coherent strategy (Day, 1994). Two commonly seen strategies are the *differentiation strategy* and the *cost leadership strategy* (Porter, 1980). The differentiation strategy requires producing and marketing a superior product appealing to relatively price-insensitive buyers. The value created by this strategy stems from meeting customer needs better than non-differentiated rivals.

Competitive advantage for the differentiator arises from positioning the differentiated product to select target markets who are willing to pay a premium for superior need satisfaction (Day and Wensley, 1994). In contrast, the cost leadership strategy focuses on achieving the lowest cost position within an industry. This strategy is most effective where large groups of price-sensitive customers exist, as this strategy's effectiveness depends on maximizing efficiencies through investment in process technology (Day and Montgomery, 1994). Although the differentiator and cost leadership strategies are useful for theoretical purposes, recent research (Day, 1990) has focused on the ability of firms to adopt elements of both strategies at the same time. This is an important development, as Porter (1980) did not originally allow for this development. Firms attempting to implement both strategies were stereotyped as 'stuck-in-the-middle' with the implication being that they were doomed to underperform better-positioned rivals. To achieve success under this dual strategy the firm must create and maintain a *large market share by differentiating* products based on process improvements that lead to real success advantages. Furthermore, these products must be positioned appropriately, relative to competitor's products and must be offered at competitive prices.

The formulation of a business strategy appropriate to the demands of the business, including environmental factors, such as customer needs and competitor actions, as well as internal issues, such as process improvements and quality initiatives, is necessary to provide direction to the firm (Day, 1990; 1994). Based on the strategic direction provided by a coherent business strategy, marketing managers can develop functional marketing strategies and

implementation plans designed to achieve the goals of the strategy. To implement these plans, resources must be allocated according to the needs of the business, particularly as they relate to customers and competitors. In essence, the business strategy enables marketing managers to know how to allocate resources to create the marketing processes needed to implement the strategy (Day, 1994). As a result of these factors, the development of a coherent business strategy is seen as having a direct, positive impact on the development of product innovation success. A firm has a cost advantage if its cumulative cost of performing all value activities is lower than competitor's costs. Cost advantage leads to superior performance if the firm provides an acceptable level of value to the buyer so that its cost advantage is not nullified by the need to charge a lower price than competitors are. Differentiation will lead to superior performance if the value perceived by the buyer exceeds the cost of differentiation (Porter, 1980). Furthermore, the focus strategy is considered the most suitable entry strategy for small businesses because of resource constraints. Evidence for this contention is found in the Kodicara (2008) study that demonstrated that more small businesses that followed a focus strategy achieved higher growth than their counterparts that used other strategies also stressed the usefulness of "niche" marketing as a successful growth strategy for small businesses.

Market orientation is "the organizational culture that places the highest priority on the profitable creation and maintenance of superior value while considering the interest of other key stakeholders" (Slater and Narver 1995). Marketplace heterogeneities in customer preferences and product supply (Gloria and Daniel, 2005) make the information about customers and competitors more and more important for a company to survive and be superior in the market. Market orientation manifests in the abilities of a business to generate intelligence about customers and competitors, and to disseminate that intelligence widely throughout the organization and to utilize the cooperation of all the departments within the organization to create and deliver customer value (Jaworski and Kohli 1993; Narver and Slater 1990). *As such, market orientation is a valuable source of competitive advantage.* A market orientation leads to the market oriented behaviors of acquiring, disseminating and responding to market information (Langerak, Hultink and Robben, 2004; Kirca et al. 2005; Gotteland and Boulé 2006; Erik, 2008). It is the acquisition, dissemination; utilization of about both current and future customer needs as well as factors that may influence those needs in different phases of innovation processes (Hart et al.; 1999; Erik, 2008; Torsti et al.; 2009). Knowledge and information are strategic assets for the success of enterprises and nations worldwide. The utilization of, and access to, a versatile

pool of information sources is necessary in developing unique and novel ideas or inventions that differ essentially from existing and already invented ones that help to improve innovative success of firms (Erik et al.; 2008, Torsti et al.; 2009). However, how information is utilized, as well as its nature and when it is collected (acquired) may affect the innovation success of small firms.

Although some researchers caution that focusing on customers and competitors can lead to inertia and can discourage groundbreaking innovations (Jaworski and Kohli, 1996), others agree that focusing on changing markets gives rise to fresh ideas and innovative solutions, and that market orientation is one of the major factors distinguishing between successful and unsuccessful innovations (Gloria and Daniel, 2005) and found, in general, that future-oriented firms were more innovative success.

Vijande (2005) investigated the relationship between market orientation and six dimensions of competitive strategy developed by Venkatraman: Aggressiveness, Analysis, Defensiveness, Futurity, Proactiveness and Riskiness. The study suggests the acceptance of all of the above hypotheses except for the impact of market orientation to encourage taking risks in the organization (Muhammed, 2010). This result indicates that market orientation is associated with risk aversion. Organizational commitment to competitive analysis has been enhanced by innovations in products and services (Vijande (2005). Using current and potential rivals as the frame of reference, competitor oriented firms seek to identify their own strengths, weaknesses and capabilities. This approach will yield helpful insights into a firm's relative standing in the marketplace and also lead the firm to emphasize product innovation success (Gloria and Daniel, 2005).

Therefore, it is posited that:

*Hypothesis 1:* The higher level of competitive strategy oriented firm is the higher product innovative success.

*Hypothesis 2:* The competitive strategy are positively affects market orientation in SMEs.

*Hypothesis 3:* The market orientation positively affects product innovative success

*Hypothesis 4:* The market orientation mediating the relationships between competitive strategy and product innovative success.

### III. METHODOLOGY

#### a) *Research design and data collections method*

To test the posited hypotheses, a cross-sectional field study was used. For survey Quantitative approach were used. Data were collected from four hundred twenty five workers of the selected small to medium enterprises to test the hypothesis developed and model specification through self-administered questionnaires. Self-administered survey research

method is an efficient approach to specify the conceptual framework empirically; are relatively inexpensive and are useful for describing the characteristics of a large number of small firms (Erik et al.; 2007). For these reasons, direct questionnaires distribution approach were employed for gathering data in this study.

#### b) *Data Analysis*

To test the relationships between various variables of competitive strategy oriented, market orientation and innovative success, statistical technique for hypothesis testing specifically, regression analysis and structural equation modeling (SEM) were used. Structural Equation Modeling (SEM) is the one of the prominent method to fulfill the requirement of the necessary for most of the researchers nowadays. This method is performed to overcome the limitation of the previous method whereby are old version that initially are false assumption. According to (Afthanorhan et al.;2014) this application is the integrating of regression analysis and exploratory factor analysis to ascertain scholar provide surveys in a factual assumption. For an example, some of the scholars often use the computation of mean for each variable to analyze their empirical research and of course totally violate the assumption in which the mean of error should be zero.

In the nature of social science, the type of mediation effect is able to let the scholars identify the strength of each mediator variables and competent to capture an attention of scholars to implement particular method for their empirical study. In other words, type of mediator has become enjoyed for some researchers nowadays since this skill probable to expand the contribution of the research paper to present a good knowledge to the readers from a variety of fields and countries across the whole region. The founder namely Cohen allegation the strength of mediator variable is relies on correlation of coefficient or square multiple correlation(R) in the model developed. A square multiple correlation is exist once this variable has been exerted by other variables whereby independent or exogenous variables. In particular, the result provided in mediator variable comes upon the independent variable has a causal effect on the particular variables. In the accordance of Daniel Soper(2010), square multiple correlations (R<sup>2</sup>) higher than 0.80 consider high total variation.

#### c) *Sampling Technique and Sample Size*

A multi stage clustering and stratified sampling were used for the survey. In the first stage, selected region was selected conveniently, in second stage, industry area/zone in region as representative of the SMEs in Ethiopia was selected. Accordingly, at the first stage Oromia region has been selected. At the second stage, in Oromia region industrial zones (particularly, Finfine area) have been selected as sample

representative. The selection criteria of this area was based on high density of small to medium enterprise location in Ethiopia. For this study, more than 386 respondents (workers) from small to medium enterprises were targeted as sample size that has been determined by using the following formula (Saunders et al.; 2000).

$$n = \frac{z^2 pq}{E^2} = \frac{(1.96)^2 (.50)(.50)}{(.05)^2} = 386$$

Where:

$n$  = adequate number of sample size with a given amount of confidence level (95% confidence level) which is recommendable in social science.

$N$  = population size

$Z$  = table value of the confidence level from normal distribution table

$E$  = the researcher's tolerable amount of error

$p$  = the probability of success (the proportion of the study unit who may give adequate information)

$q$  = the probability of failure (the proportion of the study unit who may not give adequate information)

Accordingly, 386 plus 10% in order to offset an anticipated low response or unresponded rate percent 10% to 20% and to maximize the generalizability of the results (Remenyi et al., 1998), totally 425 respondents were selected proportionally from both manufacturing and service sectors. This sample size is hoped to generate the required information with relatively good precision for infinite or large populations (Saunders et al.; 2000). Also it is more than recommended size for applying statistics tools such as; factor analysis, AMOS, regression etc. (Julie, 2005; Field, 2013).

#### d) Sampling Frame

A sample was drawn from both manufacturing and services enterprises in order to derive new empirical insight into theory and to maximize the generalizability of the results (Michalisin et al., 1997). The justification for selecting a sample of manufacturing and services firms of various sizes is the fact that innovation theory, in general, is concerned more with resource-based advantages than monopoly power or specific industries within which resources may be applied (Fahy, 2002). Fahy (2002) argues that an important research agenda within the RBV stream should be to investigate what types of resources are associated with firm's innovation success in different contexts.

Furthermore, a primary purpose of this study is to generalize results beyond a particular industry or sector to the population of for-profit business firms operating in markets that are not particularly regulated, protected, or controlled by government. In this study, the unit of analysis is the product innovation success. Specifically, the small firms in Ethiopia were surveyed to

assess the relationship between competitive strategy, market orientation and product innovative success of firms. To develop the sample, the necessary parameters considered are as follows;

1. Only firms with at least 6 to 30 employees;
2. At least firms that had been in business for about three years; and
3. Firms within manufacturing and services classifications.

The justification of the above sample parameters is as follows. First, to ensure a minimum operating structure, only firms with 6 or more employees have been included based on small to medium firm definitions of Ethiopia (FeMSEDA, 2011 cited in Negarit Gazeta, 2011). Fahy (2002), for example, argues that the EO does not emphasize discrepancies between firm sizes, as its main concern is resource-based rather than monopoly-based (i.e., size-based) advantage. Second, only firms that had been in business for about 3 years are included (Helfat, 2000; Fahy, 2002). Previous product innovation research studies have used three years in order to approximate the sustainability of firm's innovation success (Spanos and Lioukas, 2001). Spanos and Lioukas argue that if researchers are going to pin-point the true sources of competitive advantage, examining only single year measurements of success may bias results. Finally, given the specific focus of the sample frame, only those firms classified as operating in either a manufacturing or services industry are included. Other organizations, such as agriculture, mining, public administration, and community services are excluded due to their lack of relevance to this study. Also, the inclusion of both manufacturing (metal and wood) and services (hotels) are considered necessary to ensure an adequate sample size and generalizability of the results (Spanos and Lioukas, 2001).

## IV. EMPIRICAL RESULTS

### a) Reliability and validity tests of a construct

In this study, to test the reliability of the constructs, Cronbach's alpha was used. One of the most commonly used indicators of internal consistency is Cronbach's alpha coefficient (Julie, 2005). Reliability can be measured with Cronbach's coefficient alpha which should surpass the .70 threshold (Nunnally, 1978, Field, 2013). High Cronbach's alphas refer to patterns of high inter-correlations among the items in a scale, indicating that they constitute a coherent whole in measuring a construct. However, other scholars (Slater, 1995; Sekaran, 2000; Muhammed, 2010) have suggested that Cronbach's alpha as low as .60 are acceptable for hypothesis testing. Moreover, inter item to total correlation values 0.3 or greater is acceptable for data analysis that indicates of the degree (strength) to which each item correlates with the total score (Julie, 2005).

In the current study the Cronbach alpha coefficient of all constructs are greater than 0.7 except extra cluster ties 0.607 which exceed the 0.60 minimum threshold and acceptable. This shows almost all constructs of current studies have good the internal consistency (inter--correlations) scale with the exception of few extra cluster ties are acceptable for hypothesis testing. Furthermore, to obtain unidimensionality of

constructs , we checked the inter-item correlation for all the scale items by using the confirmatory factor analysis; the values of *item to total correlation of all items are greater than 0.3 here indicated that the items have strong inter-correlation with their constructs and then factor analysis is appropriate*(Juile,2005; Field,2013).

Table 1 Displays each construct, item to total correlation and its associated reliability coefficient.

Table 1: Construct Reliability

Constructs	No. of Items	Item to Total Correlation	Chronbach Alpha (Reliability)
<b>Market orientation</b>	<b>12</b>		<b>0.824</b>
Information acquisition	4	.494	0.707
Information dissemination	4	.585	0.753
Information utilization	4	.471	0.743
<b>Competitive strategy oriente</b>	<b>9</b>		<b>0.889</b>
Differentiation	3	.558	0.760
Cost leadership	3	.630	0.743
Scope market	3	.619	0.818
<b>Product Innovative Success</b>	<b>5</b>		<b>0.760</b>
Market success	3	.469	0.872
Financial success	2	.495	0.865

Moreover, two statistical measures are also generated by SPSS to help assess the factorability of the data (i.e. **suitability of the dataset for factor analysis**): Bartlett’s test of sphericity should be significant ( $p < 0.05$ ) for the factor analysis to be considered appropriate and **Kaiser Meyer Olkin (KMO)** measure of sampling adequacy the value of KMO should be greater

than 0.5 if sample is adequate (Hair et al., 2007; Pallant, 2011; Field, 2005; Field, 2013) and to proceed with factor analysis.

For current study,the KMO test values for all of the factors was greater than 0.6 and the Bartlett’s test was significant ( $p = 0.000$ )as mentioned in table 2, indicated that the data were *suitable for factor analysis*.

Table 2: Factor Analysis Test of KMO & Bartlett's Test of Sphericity and communalities

	KMO	Bartlett's		Communality
		P-value	Sig.	
<b>Market orientation</b>				.644
Information acquisition	0.703	.000	Sig	0.662
Information dissemination	0.710	.000	Sig	0.641
Information utilization	0.746	.000	Sig	0.63
<b>Competitive strategy orientation</b>				0.694
Differentiation	0.688	.000	Sig	0.68
Cost leadership	0.680	.000	Sig	0.67
Scope market	0.689	.000	Sig	.733
<b>Product Innovation Success</b>				0.810
Market success	0.695	.000	Sig	0.818
Financial success	0.673	.000	Sig	0.80
<b>Case processed summary N=388</b>				

For further **communalities** of constructs are calculated to check reliabilities of data. Communalities indicate the amount of variance in each variable that is accounted for. There are two communalities (initial communalities and extraction communalities).

Initial communalities are estimates of the variance in each variable accounted for by all components or factors. Principal component analysis works on the initial assumption that all variance is common therefore, before the extraction the communalities are all 1. After extraction some of the factors are disregarded and so some information is lost.

The amount of variance in each variable that can be explained by the retained factors is represented by the communalities after extraction. Small values (average  $< 0.60$  at cases  $> 250$ ) indicate variables that do not fit well with the factor solution, and should possibly be dropped from the analysis. Average communality are found by adding communality after extraction and dividing by the numbers of communalities.

The Kaiser Criterion is said to be reliable when: a) the averaged extracted communalities is at least more than .70 and when there are less than 30 variables, or b) the averaged extracted communalities is equal or above

.60 and the sample size is above 250 cases (Field, 2009, 2013).

For current study, the communalities test values for all of the factors was greater than 0.6 of the recommended value as mentioned in table 2 above, indicated that the data were *suitable for factor analysis*.

**b) Convergent Validity**

Factor loadings are significant and greater than 0.5 and Average Variance Extracted (AVE) for each of the factors > 0.5 indicates good convergent validity assumption. Carmines and Zeller (1979) and Muhammed (2010, p.162) suggest that factor analysis provides a suitable means to examine convergent validity. In factor analysis, loadings are used to detect whether or not an item appropriately loads on its predicted construct. It shows the reliability of individual

items (indicators). Typically, loadings of 0.50 or greater are considered to be very significant (Field, 2013). KMO values > .60 indicated that the data were suitable for factor analysis. Then, Principal components analysis explored the unidimensionality of each scale using an *eigenvalue of 1.0 as the cutoff points* (Field, 2013). Using SPSS, all constructs have been forced into three factors and rotated using the **VARIMAX rotation** method to assess their loadings.

Accordingly, as result of current final study in table-3 below shows; all of items have greater than 0.50 load on their predicted construct that demonstrate a higher degree of association between the latent items and that constructs; thus, convergent validity is confirmed. For this data set, the evidence suggests support for convergent validity.

**Table 3:** Convergent Validity based on loading factors on constructs (Using SPSS)

Predicted Constructs	Indicators (Items)	Loading
Market Orientation	Acquisition	0.516
	Dissemination	0.851
	Utilization	0.654
Competitive Orientation	Differentiation	0.777
	Cost Leadership	0.815
	Market scope	0.762
Product Innovation Success	Level of customer acceptance of new product	0.926
	Growth rate of product market share	0.919
	New product causes' level of customer satisfaction	0.829
	Growth rate of firms' net profit	0.905
	Growth rate of total sales	0.904

\*all loadings are significant at the  $p < 0.01$

In addition, Average Variance Extracted (AVE) is used as measure of convergent validity in AMOS method. AVE was proposed by Fornell and Larcker (1981) as a measure of the shared or common variance in a Latent Variable (LV), the amount of variance that is captured by the LV in relation to the amount of variance due to its measurement error (Dillon and Goldstein, 1984; Gounaris and Dimitriadis, 2003). Their average variance extracted (AVE) for X with indicators  $x_1, x_2, \dots, x_n$  is

Thus, a compelling demonstration of convergent validity would be an AVE of 0.5 or above (Nunnally 1993; Gounaris and Dimitriadis, 2003).

The details of the current studies' results are provided in table 4 below. According to this data the AVE of all latent variables are greater than 0.5 (AVEs > 0.5) that shows the *convergent validity* is good (Gounaris and Dimitriadis, 2003). In other words, there is no violation of convergent validity for this data.

**Table 4:** Convergent Validity by Average Variance Extracted (Using AMOS)

LV	Standardized Regression Weights				R <sup>2</sup>	AVE
				Estimate (R)		
MO	Uti	<---	MIP	.633	.40	.45
	Diss	<---	MIP	.848	.72	
	Acqui	<---	MIP	.488	.24	
	Scope	<---	CO	.779	.61	
CO	Cost	<---	CO	.882	.78	.65
	Diff	<---	CO	.751	.56	
	MS	<---	PIS	.837	.70	
PIS	FS	<---	PIS	.845	.71	.50

MO-market orientation: Acqui-Acquisition, Uti-utilization, Diss-dissemination,  
 CO-competitive orientation : Diff-Differentiation, cost-cost leadership, scope- scope/focus strategy  
 PIS-product innovation success : MS- Market success, FS-financial success

Generally, by loading factors and AVE the convergent validity assumption is confirmed. All predicted constructs' factor loadings are significant and greater than 0.5 and the Average Variance Extracted (AVE) of MO that close to 0.5 and indicates that approximately good convergent validity assumption is achieved.

c) *Discriminant Validity*

There are two methods used to assess discriminant validity of data. One cross-factor loading method that expected each of block of indicators load higher on its respective latent variable than indicators for another latent variables (Churchill, 1991). If indicators has high correlations with other latent variables then the appropriateness of model may be reconsidered. This implies that if two or more constructs are *unique*, then valid measures of each *should not correlate too highly*.

The other method is Average variance extracted (AVE) also used to assess the discriminant validity of the

constructs. For this, a construct must have more variance with its indicators than with other constructs of the model. It is when square root of AVE ( $\sqrt{AVE}$ ) between each pair of factors greater than estimated correlation between those factors ( $\sqrt{AVE} > r$ ) in other word  $AVE > r^2$  (Fornell and Larcker, 1981; Gounaris and Dimitriadis, 2003) it is the more recommended method.

So for this study to assess discriminant validity, Average variance extracted is used. The details of the current studies' results are provided in table 5 below. We assessed the discriminant validity of each construct by AMOS. The values of all of the average variance extracted in table 5 are greater than all corresponding square of correlations. According to this data, the discriminate validity is good. In other word, there is no violation of discrimination validity. In general, the overall evidence suggests the existence of discriminant validity.

Table 5: Discriminant Validity (using AMOS)

Discriminant Validity		Factor Correlations	Correlation squared ( $r^2$ )	Should be $AVE_1 > AVE_2$		Discriminant Validity
1	2					
MO	<--> CO	.675	<b>.46</b>	<b>.45</b>	<b>.65</b>	<i>Established</i>
MO	<--> PIS	.599	<b>.36</b>	<b>.45.50</b>		<i>Established</i>
CO	<--> PIS	.574	<b>.33</b>	<b>.65.50</b>		<i>Established</i>

Multicollinearity exists if there is a high correlation between independent variables when regressed against each other i.e the correlation coefficients are below the level considered to be serious/harmful, which is generally accepted as **0.80 or higher as harmful** (Field, 2005). It was tested using tolerance value and Variance Inflation Factor (VIF) (Field, 2005). The results revealed tolerance values ranging from .645 and above which were supported by VIF values below 10. Thus, there is non-multicollinearity among the study variables.

The **Model Fit Indices** shows the chi-square result ( $\chi^2 = 13.003$ ,  $DF = 23$ ,  $P = .952$ ) is **not significant** that indicates a good model fit (James, 2011). In addition, the fit statistics for this model indicated a good fit:  $\chi^2/df = .565$ ;  $RMSEA = .000$  that shows that exact fit (Kaplan, 2000; James, 2011);  $GFI = .995$ ;  $AGFI = .980$ ;  $NFI = .984$ ;  $CFI = .997$ ;  $IFI = .997$ ;  $TLI = .991$  all of them are above the recommended 0.9. Also, the value of all constructs' squared multiple correlation are greater than zero ( $R^2 > 0.00$ ). Therefore, that the model is goodness fit is very well.

In general, from all of the validity and reliability tests there is no violation of validity and reliability. Therefore, the data is valid and reliable.

d) *Correlations*

A zero order correlation was conducted to test whether or not associations existed between the study

variables as hypothesized from the literature review. The correlation results indicated a positive significant relationship between competitive strategy and market orientation ( $r = 0.56$ ,  $p < 0.05$ ); market orientation and innovative product success ( $r = 0.491$ ,  $p < 0.05$ ); competitive strategy and innovative product success ( $r = 0.513$ ,  $p < 0.05$ ) respectively. Table-6 presents correlation between various constructs and multicollinearity.

Table 6: Correlation and multicollinearity

	MO	CO	PIS	Collinearity	
				Tolerance	VIF
Market orientation (MO)	1			.646	1.549
Competitive orientation (CO)	.560**	1		.683	1.464
Product innovation success (PIS)	.491**	.513**	1		
Mean	42.80	31.46	16.01		
Standard Deviation	7.704	7.662	4.677		

\*\*\*Correlation is significant at the  $p < 0.01$  (2-tailed),  $n = 388$

e) Mediation Tests

To establish mediation, the following three conditions must hold: **First**, the independent variable (IV) (tested at step1) must affect the mediator (M); **second**, the independent variable (tested at step2) must be shown to affect the dependent variable (DV) and **third**, the mediator must affect the dependent variable. If effect of independent variable (CO) on DV significant also after IV+M (eg. MO in this study) has significant, the mediator *partially mediates* the relationship between IV and DV but if effect of independent variable (CO) on DV not significant and after IV+M has significant, the *mediation fully mediates* the relationship between IV and DV (Baron & Kenny, 1986). When these conditions for mediation proposed by Baron and Kenny were examined, it appeared that the three conditions were met. Testing mediation effect using SEM requires *significant correlations* between independent variable, mediating variable, and the ultimate dependent variable (Hair et al. 2010). In the accordance of Baron & Kenny which inherits the Sobel (1982) technique, indirect effect should be higher than direct effect to indicate the mediator effect is occurs in a structural modeling.

For current study as finding of regression weight of unstandardized (in tables 7b and 7c) shows that competitive orientation has significant positive ( $\beta = .262, p < 0.001$ ) direct effect on products innovative success. This when competitive oriented goes up by 1, product innovative success approximately goes up by 0.26. So, this supports hypothesis-1 that the higher level of competitive strategy oriented firm is the higher product innovative success. In addition, market orientation positively significantly ( $\beta = .76, p < 0.001$ ) affects competitive strategy in SMEs. Similarly, market orientation positively significantly ( $\beta = .31, p < 0.001$ ) affects product innovative success. Additionally, hypothesizes 2 and 3 are also supported. Overall, the regression results support the conditions for mediation to be realized. It can be concluded that market orientation mediates the relationship between competitive oriented on product innovative successes.

Further analysis using AMOS, SEM was performed to establish the significance level of the

mediation effect. Therefore, we can analysis hypothesis-4 that examines the effect of mediator (market orientation) on the relationships between competitive strategy and product innovative success. Hence, to determine the mediator effect of MO, the model is run by SEM (AMOS). As the result, in regression equation without mediator the estimate of causal path from competitive oriented to product innovation was positively significant ( $r = .30, p < .001$ ). In addition, the effects of competitive oriented on market orientation were statistically positively significant ( $r = 0.68, p < 0.001$ ). The path diagram of Figure 1 of the mediation model includes the standardized estimates ( $r$ ) for the causal paths for the indirect ( $r = .24, p < 0.001$ ) and direct ( $r = 0.30, p < 0.001$ ) effects of CO on product innovative success. Both estimated paths for the direct and indirect effect of CO on product innovative success were statistically significant but also the estimate of the direct effect ( $r = .39, p < 0.001$ ) of market orientation on product innovation success statistically significant (Table 7b. and Fig. 1). The indirect (mediated) effect of competitive orientation on product innovative success is .24. That is, due to the indirect (mediated) effect of competitive oriented on product innovative success that shows when competitive oriented goes up by 1 standard deviation, product innovative success goes up by 0.24 standard deviation. This is in addition to any direct (unmediated) effect that competitive orientation may have on product innovative success.

Similarly, from (table 7b) the unstandardized estimate shows, the indirect (mediated) effect of competitive oriented on product innovative success is .23. That is, due to the indirect (mediated) effect of competitive oriented on product innovative success, when competitive oriented goes up by 1, product innovative success goes up by 0.23. This is in addition to any direct (unmediated) effect that competitive oriented may have on product innovative success.

The total (direct and indirect) effect of competitive oriented on product innovative success is .50. That is, due to both direct (unmediated) and indirect (mediated) effects of competitive oriented on product innovative success, when competitive oriented goes up



by 1, product innovative success goes up by 0.50 (see total effect table 7b). All results of the test of mediation effect using SEM have significant correlations between competitive oriented, market orientation (mediating variable), and the product innovative success. This finding supported by the recommendation of (Hair et al. 2010).

Further, the results showed the index ratio of 48% with partial mediation effect of market orientation, suggesting that without market orientation, competitive oriented could influence product innovative success in SMEs. This statement is far from (Hair et al.; 2010, Eugenie, John and Laura, 2016) who stated that in case of full mediation, the predictor variable loses its power to influence the dependent variable except through a mediator. Despite a full mediation, the index of mediation indicated that product innovative success received only 48% of the indirect effect from competitive oriented through MO, leaving 52% unaccounted for. Therefore, it can be presumed that the balance of 52% may be

accounted for by other mediating factors not considered in this study that necessitate further investigation.

Here after MO considered as mediator the effect of competitive oriented on product innovative success still exist but in smaller magnitude, therefore, potentially, market orientation partially mediates the path between competitive oriented and product innovative success. Therefore, **hypothesis 4 is supported**. In general, all of the hypothesized were accepted as follows:

Hypothesis	Findings	Decision
H1	Significant	Accepted
H2	Significant	Accepted
H3	Significant	Accepted
H4	Significant /supported	Accepted

Tables 7 Below Presents, the results of mediation conditions while Figure 1. Represents the structural model of the variables.

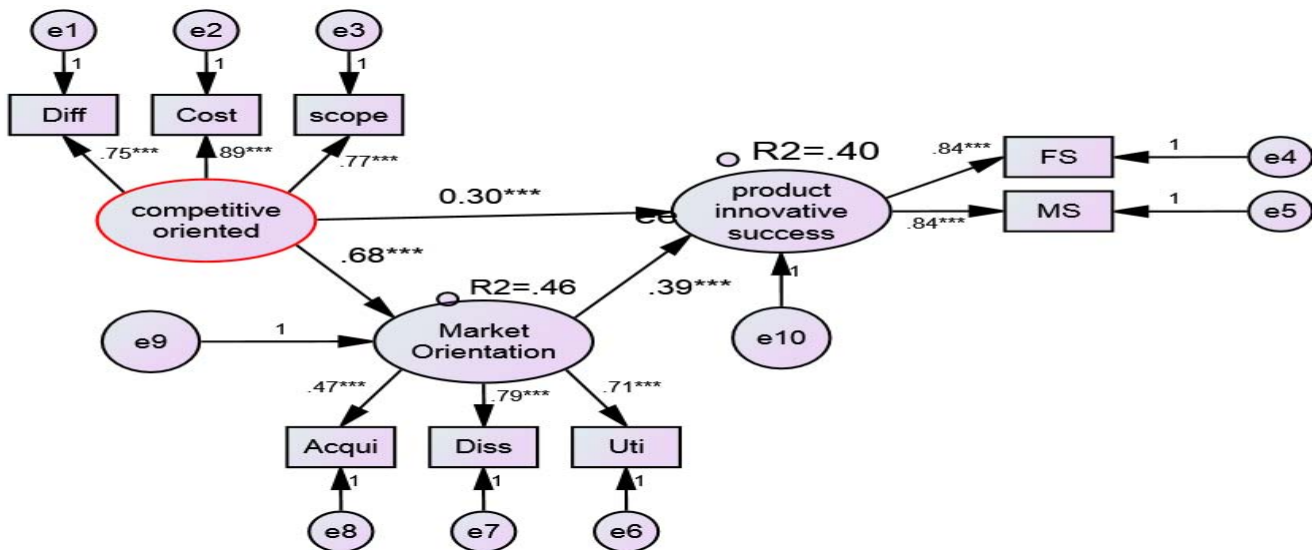


Figure 1: Structural regression model by AMOS(standardized estimates(r))

Table 7a: Standardized Effects (coefficients) (r)

	Standardized total effects	standardized direct effects	standardized indirect effects	indirect/Total
CO→MO	.68***	.69***		
CO→PIS	.56***	.30***	.27***	.27/.56=0.48
MO→PIS	.39***	.39***		

Table 7b: Unstandardized Effects (β)

	Unstandardized Total Effects	Unstandardized Direct Effects	Unstandardized Indirect Effects
CO→MO	.76***	.76***	
CO→PIS	.50***	.26***	.23***
MO→PIS	.31***	.31***	

\*\*\* is significant at the p<0.001 (2-tailed), n=388

*Table 7c: Regression Weights: (Group number 1 - Default model)  
Maximum Likelihood Estimates  
Regression Weights: (Group number 1 - Default model)*

			Estimate	S.E.	C.R.	P
Market orientation	<---	Competitive oriented	.755	.061	12.415	***
Product innovative success	<---	Competitive oriented	.262	.074	3.551	***
Product innovative success	<---	Market orientation	.311	.072	4.331	***
Diff	<---	Competitive oriented	1.000			
Cost	<---	Competitive oriented	1.000			
scope	<---	Competitive oriented	.953	.053	18.127	***
FS	<---	Product innovative success	1.000			
MS	<---	Product innovative success	1.000			
Uti	<---	Market orientation	1.000			
Diss	<---	Market orientation	1.000			
Acqui	<---	Market orientation	.587	.068	8.634	***

\*\*\* is significant at the  $p < 0.001$  (2-tailed),  $n = 388$

## V. CONCLUSIONS, IMPLICATIONS AND LIMITATIONS OF THE STUDY

Following the foregone finding, that competitive orientation has significant positive effect on products innovative success. Similarly, competitive orientation has significant positive effect on market orientation. In addition, market orientation has significant positive effect on products innovative success and mediates the relationship competitive orientation and products innovative success. So, it can be concluded that market orientation is pertinent to enhance product innovative success.

Furthermore, competitive orientation strategy remains a fundamental factor for market orientation since competitive oriented positively affects market orientation. The findings therefore contributes to the existing literature on market orientation and product innovative success by providing empirical evidence that market orientation is a powerful mediator in the relationship between competitive orientation and product innovative success.

The practical implications of this study are that owner/manager of SMEs should focus on competitive oriented strategy and response (utilize) MO to improve their product innovative success (to increase sales volume and profits) in the short term. This can be achieved by utilizing well-gathered market information. Besides, information-sharing culture within an enterprise must be strengthened. Finally, the acquired new market information must be effectively used to generate the best competitive strategy that will result in increased their product innovative success.

For policy makers the findings of this study will help them to formulate sound policies and support programmes which are necessary to enhance the product innovative success of SMEs especially in developing countries particularly Ethiopia.

This study provides also important information on SMEs for academic researchers working at higher learning institutions and other researchers involved in the business sector. However, the study has some limitations and further suggestions for future researchers. As this study used a cross-sectional research design combined with a quantitative research approach, future researchers should employ a longitudinal method to compare any variations in the results. Alternatively, qualitative studies could be conducted to supplement the quantitative findings because through methodological triangulation, it may be possible to gain a better understanding of the mediating effect of market orientation on competitive orientation and product innovative success. The index of mediation indicated that product innovative success received only 48% of the indirect effect from competitive oriented through MO, leaving 52% unaccounted for. From this, it can be presumed that the balance of 52% may be accounted for by other mediating factors not considered in this study that necessitate further investigation. Therefore, it is advisable for future researchers to incorporate other external and internal factors that can mediate the relationship between competitive orientation and product innovative success. Lastly, this study focused on service and manufacturing SMEs. Other studies might include other types of business.

## REFERENCES REFERENCES REFERENCIAS

1. Abebe H., Million B. and Ridgewell, A. (2009) Small and medium forest enterprises in Ethiopia. IIED Small and Medium Forest Enterprise Series No. 26. FARM-Africa and International Institute for Environment and Development, London, UK.
2. Afthanorhan A, Nazim A., Ahmad S. (2014). A parametric approach to partial least square structural equation modeling of multigroup Analysis:

- international Journal of Economics, Commerce and Management, UK, V. II, Issue 10, ISSN 2348 0386.
3. Altenburg, T., & Eckhardt, U. (2006). Productivity Enhancement and Equitable Development: Review of Economic Studies, 29, pp. 155-173.
  4. Amare A. and A. Raghurama (2017). Micro, Small and Medium Enterprises Development Strategies in Ethiopia: Retrospective and Prospective Analysis: IRACST– International Journal of Commerce, Business and Management, ISSN: 2319–2828, Vol. 6(1).
  5. Asian Productivity Organization. (2011). APO Productivity Data Book. Japan: Keio University Press Incorporation.
  6. Atuahene-G. (1995), Market orientation and innovation. Journal of Business Research, 35(2), 93-103.
  7. Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. Journal of Personality and Social Psychology, 51 (6), 1173-1182.
  8. Berihu A., Abebaw Z. and Biruk T. (2014), "Identifying key success Factors and Constraints in Ethiopia's MSE Development: An Exploratory Research Report 14," Ethiopian Development Research Institute, Addis Ababa, 2014.
  9. Day, G.S. (1990), Market-driven strategy: Processes for creating value, The Free Press, New York, NY.
  10. Day, G.S. (1994), "The capabilities of market-driven organizations, Journal of Marketing, 58, pp. 37-52.
  11. Day, George S. and Robin Wensley (1990, 1994) Assessing advantage: A framework for diagnosing competitive superiority." Journal of Marketing 52 (2): 1-20.
  12. Ebru B., Fulya T., Sinan A. (2014). A Research on Determining Innovation Factors for SMEs: 10th International Strategic Management Conference: Assessed on: 13/04/217 Available on: (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).
  13. Emine, D. (2012). Financial challenges that impede increasing the productivity of SMEs in Arab region. Journal Empirical Examination", Journal of Marketing, 2003, Vol. 62: 42-54.
  14. Erik V. (2008). Market intelligence for product excellence: Proefschrift Technische Universiteit Delft. - Met lit. opg. Met samenvatting in het Nederlands: ISBN 978-90-8559-359-1
  15. Eugenie B, John M, Laura O (2016) Knowledge Management and Business Performance: Mediating Effect of Innovation: Journal of Business and Management Sciences, 2016, Vol. 4, No. 4, 82-92.
  16. Fahy, J. (2000), "The resource-based view of the firm: Some stumbling-blocks on the road to understanding sustainable competitive advantage, Journal of European Industrial Training, 24, pp. 94-104.
  17. FDRE Ministry of Industry (2013), "Ethiopian Industrial Development strategic Plan (2013-2025)," Addis Ababa.
  18. FeMSEDA, (2011). Ethiopian Handloom Product Export Market Study. I and II. Ministry of Trade and Industry, Addis Ababa.
  19. Field, A. (2005,). Discovering statistics using IBM SPSS statistics (2nd, ed). London: Sage publication.
  20. Field, A.P. (2013). Discovering statistics using SPSS statistics 4th ed. London: Sage publication.
  21. Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", Journal of Marketing Research, Vol. 18, No. 1, pp. 39-50.
  22. Fu, Yan-Kai (2010). New Product Success among Small and Medium Enterprises (SMEs): An empirical study in Taiwan: The Journal of International Management Studies, V 5(1).
  23. Gatignon, H. and J. Xuereb (1997). "Strategic orientation of the firm and new product success." Journal of Marketing Research 34 (1): 77-90.
  24. Gloria L. and Daniel Z. (2005). Market Orientation, Competitive Strategy and Firm Performance: An empirical study of Chinese Firms. Journal of Global Marketing, Vol. 18(3/4) 2005.
  25. Gounaris, S., Dimitriadis, S., (2003). Assessing service quality on the web: evidence from business-to-consumer portals. Journal of Services Marketing 17 (4/5), 529–548.
  26. Griffin, Abbie and Albert L. Page (1993). "An interim report on measuring product development success and failure." Journal of Product Innovation Management 10 (4): 291-308.
  27. Hakala H. (2011). "Strategic orientations in management literature: three approaches to understanding the interaction between market, technology, entrepreneurial, and learning orientations," International Journal of Management Reviews, vol. 13, no. 2, pp. 199-217, 2011.
  28. Hair, J. Anderson, R. Tatham, R. and Black, W (2007), Multivariate data analysis (6th.), Macmillan, New York, NY.
  29. Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham and William C. Black (1995, 1998). Multivariate data analysis with readings. Englewood Cliffs, Prentice-Hall Inc.
  30. Hart, Susan, Erik Hultink, Nikolaos T, Harry (1999). "Industrial companies' evaluation criteria in new product development gates." Journal of Product Innovation Management 20 (1): 22-36.
  31. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2010). Multivariate Data Analysis with Readings, Upper Saddle River, NJ.: Prentice-Hall.
  32. Henri H. (2015). Entrepreneurial Strategy Orientation: Journal of Economics, Business and Management, Vol. 3, No. 2, February 2015.

33. Herath H. M. A & Rosli M (2014). Strategic Orientations and SME Performance: Moderating Effect of Absorptive Capacity of the Firm: Asian Social Science; Vol. 10, No. 13; 2014 ISSN 1911-2017 E-ISSN 1911-2025.
34. Hofer, C.W. and Schendel, D. (1978). Strategy Formulations: Analytical Concepts. St Paul, MN: West Publishing.
35. James L (2011). IBM SPSS Amos 20 User's Guide, (ed) U.S. Beverly Hills: Sage Publications.
36. Joanna E. (2014): Strategic orientation of small and medium size Enterprises: Economics And Management: 2014. 19 (4) ISSN 2029-9338.
37. Julie P. 2005. SPSS Survival Manual: A step by step guide to data analysis using SPSS: Second edition published in 2005 Allen & Unwin 83 Alexander Street Crows Nest NSW 2065: Australia.
38. Kerin, R.A., Mahajan, V. and Varadarajan, P.R. (1990), Contemporary Perspectives on Strategic Market Planning. Boston: Allyn and Bacon.
39. Kirca, Ahmet H., Satish Jayachandran and William O. Bearden (2005). "Market orientation: A meta-analytic review and assessment of its antecedents and impact on success." *Journal of Marketing* 69 (2): 24-41.
40. Kodicara A. (2008). Conceptualising a model to promote post start-up small business growth in Sri Lanka, PhD thesis at The University of Canterbury.
41. Kohli, A., K. and Jaworski, B., J. (1990), Market orientation: the construct, research propositions, and managerial implications, *Journal of Marketing*, 54, 1-18.
42. Langerak, F., Hultink, E. J., & Robben, H. S. (2004). The impact of market orientation, product advantage and launch proficiency on new product success and organizational success. *Journal of Product Innovation Management*, 21, 7994.
43. Leiponen, A., & Helfat, C. (2011). Location, decentralization, and knowledge sources for innovation. *Organization Science*, 22(3), 641-658.
44. Michalisin, M.D., Smith, R.D., and Kline, D.M. (1997), In search of strategic assets, *The International Journal of Organizational Analysis*, 5, pp. 360-387.
45. Mohammad A. (2013): The Effect of Entrepreneurial Orientation on the Firm Success through Strategic Flexibility: A Study on the SMEs Cluster in Malang: *Journal of Management Research* ISSN 1941-899X, 2013, Vol. 5, No. 3.
46. MoTI and FeMSEDA. (2004). Ethiopian Handloom Product Export Market Study. I and II. Ministry of Trade and Industry, Addis Ababa.
47. Muhammad Sh. (2010), Determinants and outcomes of marketing capabilities in new technology based firms in Berlin, Germany: an empirical study: *Tag der wissenschaftlichen Aussprache*: 20. April 2010.
48. Negaret Gazeta (2011): Reg No.201-2011-federal-micro-and-small-enterprises-development-agency-establishment, Ethiopia, Addis Abeba.
49. Nunnally, J.C. (1978), *Psychometric theory* (2nd ed.), McGraw-Hill, New York, NY. (1993), *Psychometric Theory*, 3rd Edition, New York, NY: McGraw-Hill.
50. OECD (1992, 1996, 2005) Organization for Economic Co-operation and Development, "Oslo Manual Product innovation data, Paris, 1st, 2nd, 3rd edition.
51. Pallant, J. (2011). *SPSS Survival Manual: guide to data analysis using SPSS*. Australia: Alle & Unwin.
52. Porter, E. M. (1998). *Competitive Strategy: Techniques for Industries and Competitors*, New York, The Free Press.
53. Porter, M (1980, 1998, 2000), *Competitive Strategy*, New York, NY: The Free Press.
54. Remenyi, D., Williams, B., Money, A., and Swartz, E. (1998), *Doing research in business and management*, Sage Publications, Thousand Oaks, CA.
55. Saunders M., P. Lewis, and A. Thornhil (2000), *Research Methods for Business Students*, Prentice Hall.
56. Silashi T. (2014), Innovation and Barriers to Innovation: SMEs in Addis Ababa : *Journal of Small Business and Entrepreneurship Development* March 2014, Vol. 2, No. 1, pp. 83-106.
57. Slater, S.F. (1995), Issues in conducting marketing strategy research, *Journal of Strategic Marketing*, 3, pp. 257-270.
58. Slater, Stanley F. and John C. Narver (1995). "Market orientation and the learning organization." *Journal of Marketing* 59 (July): 63-74.
59. Spanos. Y.E. and Lioukas, S. (2001), An examination of the causal logic of rent generation: Contrasting Porter's competitive strategy framework and the resource-based perspective, *Strategic Management Journal*, 22, pp. 907-934.
60. Theresia G. 2015 The Determinants of Innovative Success: A study of SMEs in a developing country Eindhoven: Eindhoven University of Technology, 2015: ISBN: 978-90-386-3800-3 Online: <http://www.tue.nl>: Accessed: Sept 11/2015.
61. Torsti L, Jari K, Jukka H, Laura R, Kirsi T, Mika W, Veli-Pekka H & Olli I. (2009): Acquisition, Utilisation and the Impact of Patent and Market Information on Innovation Activities: vtt research notes 2484 ISBN 978-951-38-7297-7 ISSN 1455-0865 (URL: <http://www.vtt.fi>)
62. Vijande, M. (2005). Market orientation. *Australian Journal of Management*, 25(2), 1-9.
63. World Bank Group (2015), "4th Ethiopia Economic Update: Overcoming Constraints in the Manufacturing Sector," World Bank group, Washington DC.

64. Wymenga, P., Spanikova, V., Barker, A., Konings, J., & Canton, E. (2012). European Union SMEs: Annual report on small and medium-sized enterprises in the European Union. Rotterdam: European Union.



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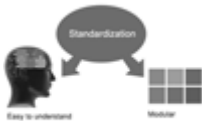
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Offline Submission: Author can send the typed form of paper by Post. However, online submission should be preferred.



# PREFERRED AUTHOR GUIDELINES

## MANUSCRIPT STYLE INSTRUCTION (Must be strictly followed)

Page Size: 8.27" X 11"

- Left Margin: 0.65
- Right Margin: 0.65
- Top Margin: 0.75
- Bottom Margin: 0.75
- Font type of all text should be Swis 721 Lt BT.
- Paper Title should be of Font Size 24 with one Column section.
- 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.
- Numbering of Second Main Headings (Heading 2) must be in Alphabets, Italic, and Font Size of 10.

**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.

### Scope

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## 2. ETHICAL GUIDELINES

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- 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.

Acknowledgements: Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

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

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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.

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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.



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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.*

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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  $1.4 \times 10^{-3} \text{ m}^3$ , or 4 mm somewhat than  $4 \times 10^{-3} \text{ m}$ . 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.

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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.

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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.*

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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).

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#### 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.

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**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.

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**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 straight forward. 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.



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.

#### **Procedures (Methods and Materials):**

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.



## 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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<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



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