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Highlights

E - Banking Reform

Factors Affecting Women

Micro Green Economy

Behavioral Equilibrium Approach

Discovering Thoughts, Inventing Future

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E – Banking Reform and National Development in Nigeria

By Idoko, Cletus Usman, Ibrahim Yusufu & Bala Pius Daniel
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Abstract- Until a decade or so ago, the banking industry in Nigeria had many kind of bank related problems. It was in realization of overcoming such problem that the Central Bank of Nigeria 2002 embarked on Bank's Consolidation and strengthening through financial reforms. Among the reforms is e-banking. This paper discusses the concept of e-banking, e-banking reform, the effects of e-banking reform on bank operation and management. It also examined the effect of e-banking reform on national development. Recommendations on how to instill good banking ethics in Nigeria such as, avoidance 0f break down in service delivery, the reliability test on both software and hardware should be constantly carried out. Also, activities of hackers and crackers must be nipped in the bud to avoid damage by installing appropriate "firewalls" that will guarantee access by only the authorized users and others.

Keywords: bank consolidation, financial reform, e-banking, software and hardware.

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EBANKINGREFORMANDNATIONALDEVELOPMENTINNIGERIA

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E – Banking Reform and National Development in Nigeria

Idoko, Cletus Usman [α], Ibrahim Yusufu [σ] & Bala Pius Daniel [ρ]

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Keywords: bank consolidation, financial reform, e-banking, software and hardware.

I. Introduction

E-banking is defined as the use of electronic devices through the internet to effect banking operation and management. It also involves the use of electronic devices .and other types of on-line banking transaction. Also the concept of e-banking according to Nanna (2003) is the execution of banking services by financial institutions and their customers through the use of electronic devices such as Internet banking. With the advancements in information technology, various banking industries in Nigeria were mandated to be connected to the Internet. Uba (2006) defined e-banking as the process of banking transactions without cost to the customers. This is done through internet-driven electronic banking. He opined that e-banking usually include the use of Automatic Teller Machine (ATMS) to perform retail banking. This means that the banking services can be performed by simply inserting one's card in the slot, type in one's PIN and let the user-friendly ATM screen guide one through the service. Bamidele (2006) described e-banking as the system of banking operation where information exchange is executed through the use of electronic devices(s) or the use of information and communication technology (ITC). In general terms therefore, e-banking involves the utilization of interest, intranet or electronic mail (e mail), smart cards/ electronic purse /digital purse of scales devices, Automatic Teller Machines (ATMS), telephone banking, among others to conduct banking service. This process is usually called e-commerce.

E-commerce is categorized into e-money and e-finance. E-money according to Nsoli and Schmecher (2002) is the stored, value of money or prepared mechanism which does not require keeping balance in financial accounts with the banks; while e-finance is the provision of financial services through electronic system. E-finance is also made up of e-banking and other financial services and products such as on-line brokering, capital market operations and insurance. This system of banking transaction is regarded as paperless system of banking, unlike the traditional system of banking that requires the customer to be physically present at the bank, for all transaction. This new approach to banking transformation and consolidation through the use of electronic device(s) is known as e-banking.

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II. E-Banking Reform

E-banking reform is a change from the traditional system of banking to the use of electronic device(s) via Information Technology (IT). The reform according to Uba (2006) was introduced into banking sectors to eliminate the crude banking habit that characterize banking system in Nigeria. This system of banking has made banking business very interesting and trustworthy. According to Nsoli and Shachter (2002) banking reform makes banks to deviate from old system of cash transaction or movement of cash from one place to another by customers to the use of credits. This is possible because of interconnectivity of banks through Information and Communication Technology (IT). E-banking as a reform in the banking sector enhances bank productivity by reducing over rowdiness in the banks, reducing hours of customers' transaction in banks, and enhances quick money transfer. It also reduces the stringent paper work involved in banking operation and reduces cost of transaction.

Despite the importance of e-banking as a reform in banking business, it has its own peculiar effects The effects according to Bamidele (2006) could be positive or negative depending on the approach one adopts to access the performance of e-banking.

III. Positive Effects of E-Banking

E-banking is a new phenomenon in Nigeria banking industry. Its effects on banking operations according to Uba (2006) are majorly felt in most cities and towns in Nigeria. This is because, with the bank consolidation exercise of the Central Bank of Nigeria, most banks in the country have gone internet to enable them cope with modernization of the industry; in view of this therefore, most customers in these areas where such services exist benefit from the reforms. Such benefits include the followings:

a) Performing bank transaction without physical presence

One of the positive effects of e-banking stems from the fact that banking operation in this new era enables the customers to withdraw cash or and perform other business transaction in banks without him or her being physically present. This is done through the use of Automatic Teller Machines (ATMS). The automatic teller machine according to Uba (2006) enables the customers to have a direct link to a wide variety of services in the bank. It also enhances operational efficiency and competency.

b) Assess to Account

Usually, the interactive nature of internet banking enables according to Soludo (2007) enable customers to access their accounts, and gather other information on the bank products/services through the use of personal computer (PC) or order devices such as cellular phones anywhere across the globe. Once the electronic device(s) is or are connected to the website, a customer can access up to 10 transactions within a period of time.

c) Transfer of fund

The use of e-banking enables customers to transfer funds from his account to any other account throughout the world (Nanna 2003, CBN (2004). This is done through the use of pay-in-slip and the account of the person or organization in which such fund is paid to. It also enables any bank connected to the website to pay her customers throughout its branches.

d) Bank Competition

E-banking promotes competition among banks as customers through this system can easily compare bank services / products as well as cost. The assessment of competitiveness enables customers to decide on which banks to operate so as to enjoy maximum utility (Nanna 2003).

e) Information assessment

The use of e-banking enables banks to access relevant information from the internet. This according to Adesida (2006) will enhance banking efficiency and competency thereby resulting to credible banking services.

f) Monetary policy

E-banking positively influences the effectiveness of monetary policy (CBN 2005). This is because with the system of e-banking, advanced and sophisticated payment system are provided, which usually improves the activities of monetary management in banks. This is done through reduction in the liquidity process and transfer cycle and the elimination of clerical processes of the paper based system.

In spite of the above benefits however, the negative effects of e-banking can never be under estimated. This is because, most things regardless as benefits could also be detrimental to both persons and organizations concern. Among such negative effects that can be witnessed by the use of e- banking according to Uba (2006) are as follows:

i. *Network failure*

Usually, computers are used on the internet by banks to acquire information and assist in providing customers services. But the use of computer on the internet to provide service could be problematic if there is network failure. Breakdown in service delivery due to network failure may erode public confidence on the banking system especially where critical time related transactions are involved.

ii. *Inadequate security to customers account*

The fact that banking business is based on trust and confidentiality, places a fiduciary burden on the bankers towards their customers. Hence, with e-banking, security threat to financial information and customers' net worth originates from within and outside banking systems. This may lead to money laundering and other types of frauds in the bank which are detrimental to the customers and the banks.

iii. *Inadequate infrastructural provision*

The operational efficiency of e-banking according Omoruyi, (1991) and Bamidele (2006) depends on the adequacy of the information and Communication Technology (ICT) Infrastructures in terms of quality, and volume. Consequently, provision of energy and power for the smooth operation and efficient functioning of the electronic device(s) is necessary. But in Nigeria, due to frequent system and power failure, the operation and the use of (ICT) is disrupted. Also, insignificant infrastructure for electronic devices protection may affect the payment system adversely. This is because; the exposure to hazardous environment may have serious effects on the operation of the system.

iv. *System integrity/ reputational risk*

Security breaches and disruptions to efficient functioning of e-banking can damage not only the bank's reputation but the entire banking system (Ebulu and Ajibade, 2008). The more electronic channels are utilized in banking services delivery system world wide the higher the risk of loss of confidence in incidence service disruptions. Also, the reputation of a bank is at risk if an electronic bank encounters problems that make its customers lose confidence in the electronic mode of service delivery.

v. *Liquidity and credit transfer*

The operation of e-banking usually involves payments through liquidly and credit transfer from one person to another in the functional system (Zarma 2001). It is used to minimize liquidity, system and operational risks. But in events where payment system is dominated by cash transactions against electronic and other non-cash instruments as is the case in Nigeria, the system is capable of hampering the efficiency functioning of e-banking.

Having explained the positive and negative effects of e-banking in the operation and management of banking system in Nigeria, it is important to point out the prospects of e-banking to national development. This is because the banking sector through the use of electronic device on the Internet facilitates can transfer positive ideas to other sectors of the economy which enhances national development.

IV. E-Banking and National Development

E—banking as a means of strengthening and bank consolidation is adapted in Nigeria banking system for efficient and effective banking services. This is because with e-banking, banks are connected to the internet and linked to global economy. E-banking also simplifies cash transaction since all transactions are online. Usually, the reform in banking operations and management according to Oluyemi (2001), lead to bank's productivity and hence, national development. Such development accruing from e-banking involves the followings.

a) *Training*

With e-banking, training of bankers with particular reference to international banking system is simplified through internet browsing (Soludo, 2007). This enhances the performance of staff on-line to international standard resulting to international reputation and hence national development.

b) *Monetary Policy*

E- Banking makes supervision and monitoring of banking activities easier. This has gone a long way to ensure the effective implementation of monetary policy which leads to national development.

c) *Reduction in Inflation*

The use of e-banking in bank transaction involves liquidity and credit transactions which help in mopping up excess cash in the economy thereby resulting in the reduction in inflation.

d) *Cash transfer*

E-banking enhances cash transfer from one person or organization to another. This type of transaction could be for business or/other purposes (Soludo, 2007). The system reduces the idea of carrying cash about and the incidence of stealing from the carriers of such fund. It therefore encourages business transaction and leads to national development.

e) *Internet Banking*

The advent of e —banking according to Bamidale (2006) has increased the potentials cross-border the velocity movements as well as capital flight. It has increases the velocity of money in short- to-medium term owing to internet banking. The internet banking no doubt bas encouraged banking effectiveness consequently leading to national development.

V. Recommendations

In order to guide against any hindrance to e — banking activities in Nigeria, the following recommendations are proffered.

Firstly, in order to avoid breakdown in service delivery, the reliability test on both software and hardware should be constantly carried out. Also, activities of hackers and crackers must be nipped in the bud to avoid damage by installing appropriate "firewalls" that will guarantee access by only the authorized users.

Secondly, to maintain the confidentiality of customers on their account, the regulators, supervisors and operators of the banks should put in place a standard practice to guarantee data and information confidentiality. This requires round the clock surveillance of the systems security including experts' review of network and vulnerability and recovery procedures. Also, effective customer education is necessary to guide against abuses, and negligence.

Thirdly, in order to ensure a hitch—fee operation of e—banking in the country, there is the need to have a national or shared switches and networks as opposed to standalone switches by individual operators to ensure cost-effectiveness services delivery. All information, communication and technological agencies should collectively operate on an effective national (ICT) development strategy. The frequent power failure in the country should be urgently ratified to ensure constant supply of electricity for (ICT) operations.

Fourthly, the reputation of the banks to be maintained and sustained, the supervisors/ regulators must ensure that standard on application and system software protocols as well as delivery channels are complied with by e-banking operator.

Fifthly, to ensure proper performance of e-banking especially as it affects liquidity and credit transfer, customers are expected to be well informed about good banking habit. This is because liquidity and credit transfer will help in mopping up excess cash in the economy thereby reducing inflations

VI. Conclusion

The study among other things examines the concept of e-banking and its approach to banking reform in Nigeria. The effects of *e*-banking on the activities of banking operation and management were equally discussed. The paper also pointed out the role of e-banking to national development; and advances recommendations on how e-banking could be managed to guide against mistrust in banking services in the country.

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Factors Affecting Women Contribution in Household Budget in Urban Informal Sector: An Analysis

By Prof. Dr. Abdul Ghafoor Awan, Dr. Muhammad Zahir Faridi & Muhammad Mujahid Abbas

Abstract- Woman share in formal and informal labor market has gained much importance at national and international level. It has become the main agenda of national and international organizations for last three decades. Data collected for those women whom are contributing in the household budget through their informal economic activities is a Herculean task. The raison d'etre of our research work is to measure those factors which are affecting woman's contribution in the household budget, particularly in the urban informal sector. Primary data were collected from urban councils of district Dera Ghazi Khan.

Keywords: women support to family, OLS method, women education, women profession, poverty status, number of dependents, household participation rate, women working hours, district dera ghazi khan.

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Keywords: women support to family, OLS method, women education, women profession, poverty status, number of dependents, household participation rate, women working hours, district dera ghazi khan.

I. Introduction

For growth of any country, labor and capital are the most important factors. The present economic thoughts about development and progress have evolved since 1950s. At that time, the relationship between physical capital and growth in the form of output was supreme. The concept of human capital as a major variable like physical capital came in front in 1960s. Later in 1970s oil price shocks, exposed the weakness of large economies to abrupt distortion in micro and macroeconomic policies. The concept of good governance with economic management, democratic values, equality and environmental protection was introduced in 1990s. Resultantly, structural adjustments gain very importance for long term development and growth of the economy (Hussain, 2000).

In the developed countries share of working women is equal in labor force, whereas, in developing countries situation is different and unsatisfactory. In developing countries like Pakistan women are not only deprived of basic amenities of life but also handicapped. They are facing poverty, low income, least equal opportunities, lack of resources, both in rural and urban areas of Pakistan. The incidence of poverty is more criminal in urban areas of Pakistan as compared to rural areas, particularly among women.

Woman labor force participation rate in Pakistan is exhaustively low. But in informal sector sixty five percent of women are economically active in order to support their families (LFS 2012-13). Many economic studies have focused rural informal sector. Few studies have focused on the factors which affects woman's contribution in the household budget. The main feature of our work is to measure urban woman's contribution in the household budget in informal sector. Self-employment and wage-employment both are included in the informal sector. But in developing countries like us, informally employed persons have no social, legal protection, job security, employment benefits and proper representation. Therefore, in least developed countries, many informally employed workers, particularly women as compare to formally employed workers are poor. In addition, that factor which affects their contribution requires the utmost attention to make policies to enhance their contribution. Thus, woman support of her family (household) makes a proxy for her efforts for family survival and up-gradation of lifestyle, which still has not been examined in Pakistan.

In countries like Pakistan women's labor force participation is largely explained by culture, norms, established by society, rising population, burden of daily life, unskilled occupations, gender differences, and hurdles on woman's outside work, male headship and many other factors. Now a day, it is very difficult for a single (male) bread earner to fulfill all amenities of household, therefore, the role of women for their survival has gained much importance. In addition, it is earnestly

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needed to give equal opportunities to women like men in education, technical training, advanced skills and professional approach.

According to latest (revised) data collection techniques, women involved in dress making, beauty parlor, embroidery, sewing, marketing, knitting, preparation of food, poultry breeding are considered as labor force. In fact, income from such informal types of works done by women as a source of household income (contribution) is not counted as part of GDP in Pakistan. Thus, the informal sector has a greater margin of employment, particularly for female *vis-à-vis*male, in least developing countries.

The main objective of the study is to explore the factors that affect the women contribution in family budget. The rest of the chapter is arranged as follows. Second section provides the review of the past studies. Data sources and methodology is discussed in the third section. Section four discusses the results of the study. Concluding remarks are offered in the last section.

II. Literature Review

Chen *et al.* (2014) explored the factors that influenced the labor force participation of female workers in rural and urban areas of China. National Survey database of the employment of married women in 2006 was used by the author. The Probit regression was used to estimate empirical evidences. This study proved that the individual factors, age have no significant association with women's laborious work both in rural and urban areas of China. Whereas, education proved to be significant for both rural an urban women. On the other hand, family factors like husband work and child care has a significant effect on urban female's participation in economic activity. But family scale has an insignificant association with urban female participation in labor work. Thus, the study concludes that both individual (age, education) and family factors (husband work, child care and family scale) played a more important role in determining female labor force participation in china.

Oginni *et al*. (2013) provided evidence that in Nigeria male headed families are poorer than female household. The author estimated, odd ratios by using Binary Logistic Analysis, of gender differentials of household poverty, age, education, residence and six regions (geographical location) in Nigeria, which proves to be significant. Male headed households are poorer than female headed household, unlikely as proved by Nigerian Demographic and Health survey (2008). The study concludes that without neglecting female headed families, focus of poverty reduction interventions should be more on male headed household to reach out more of the poor in order to reduce poverty in Nigeria.

Bano *et al.* (2012) investigated rural women's contribution in the family budget. Primary data were collected through field survey in District Layyah. The study concluded that per month wage rate, education level, poverty, significantly influence rural women, whereas; women's income per month, expenditures, number of persons at home and the number of children negatively impacts her contribution in the family budget. Empirical findings suggested that availability of scholarships, easy loans, monetary incentives and increase in per month wage rate can enhance women's contribution in the family budget.

Faridi (2011) focused rural women's efforts for family subsistence. This study was based on primary data source. Ordinary least square method was used for estimation. The main objective of the study was to explore the factors which determine the women's contribution in the family budget. Study concluded that age of working women, hourly wage, poverty status, women as head of household, permission for outside household are strongly associated with women's contribution in the household budget whereas; an increase in the number of children, hurdles to educational access, long working hours of spouse decreases the female contribution. The study suggests that a decrease in family size, control over population, increase in health facilities, permission for outside work and education, social security and old age benefits can increase women's participation in household earning.

Yasin *et al.* (2010) explored the determinants of gender wage discrimination in Pakistan. The study used primary data collected from four districts of Punjab. Ordinary least square regression analysis was adopted to estimate the parameters. Geographical location, experience, vocational education, level of schooling, occupational groups and marital status proved to be significant in effecting gender wage discrimination. The study concluded that current empirical results show that low literacy ratio, low level technical education, professional incompetency are more important deficiencies of the labor force in Pakistan, even more seriously prevalent in rural areas. Similarly, employer's preferences, socioeconomic and cultural values discourage women to participate in the labor market.

Rafi and Mallick (2010) investigated, are female–headed households more food insecure in Bangladesh within particular ethnic groups. Author used village-level survey to estimate food insecurity between male-headed families and female-headed families. The generalized threshold model was used to calculate elasticity. No social and cultural hurdles among ethnic groups were found and informal redistributive mechanism attributed low food insecurity among these ethnic groups. Food security was desegregated into four categories, sever (chronic), occasional (transitory), break even (food shortage), and food surplus. To clarify the household head, criteria of hardship were based on gender of household and main decision maker in the household. Descriptive analysis shows that Bengali was

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the only group that had a higher percentage of food insecure among female headed households. Gender of household, age of household head, years of schooling, occupation (form, non form), demographic dependency ratio, land ownership, production from land, location of the household were taken as independent variables, whereas; saving and asset accumulation were not used as independent in order to avoid endogeneity within the model. The study concludes that (on the basis of data collected through direct interview) there is no significant difference in food security between female headed and male headed household because of the absence of social and cultural restrictions on female to participate in the labor force secondly, informal redistributive mechanism. It also shows that non-economic variables have a significant impact on economic outcome such as food security.

Khan and Khan (2009) analyzed that how many women are struggling for family survival. The study focused that how socioeconomic factors that influenced women's contribution in the household budget in urban informal setting. Applying the OLS method to 937 observations, to get the estimates, primary data source was used. Household expenditure approach (ratio of women monthly expenditures to total monthly expenditures) was taken to measure the dependent (women's contribution to the household budget) variable. Unemployment, poverty and lower educational status of husband strongly encouraged women to participate. For these reasons, women through her informal work are contributing to meet family budget. On ther hand, the presence of adult male lessened women's contribution towards household budget. Whereas, woman age has a nonlinear relationship with women's involvement in household earning. The study concluded to prove that factors like family size, education, ownership of assets, head of family status, family size positively contributed to the household budget.

Khan *et al*. (2005) discussed the hazardous nature of women, children involved in a home based activity in Karachi. It was estimated that how a rise in household income brought changes in family health, nutrition and education level. For estimation, binary logistic model was used. The main research question was either female are engaged in home-based economic work or not. Three hundred households were surveyed where women were involved in making pawn peeling, carpet weaving, agar batti (incense stick) making and such stitching. In order to estimate women decision making power either to participate or not, the size of the household and living condition index was entertained. Estimates revealed that there was a strong positive association between household size and women participation decision. Similarly, schooling of children was analyzed through ratio of children to school going children age.

Eapen (2004) investigated the problem of female sex segregation for employment and its evolution with the passage of time as unfavorable for her work. Area of study was Indian state of Kerala and data was taken from several rounds of NSSO. The present study revealed that due to sex segregation mostly women, are involved in lower earning jobs, i.e., in urban areas, mostly female doing jobs as teaching, medical profession, clerical work and machine workers. On the other hand, mostly female are employed in informal works like, cooking, beauty parlor and house maids. Similarly, the author surveyed that in some particular areas 90 PC girl-children helped their mother at home-based activity for earning and also perform child care, which significantly affects their schooling. Finally, there are strong evidences to suggest that through the provision of child care centers and community based programs sex segregation can be mitigated to some extent.

Naqvi and Shahnaz (2002) identified the factors of women's participation in economic activities in case of Pakistan. The study was based on cross-sectional data obtained from the Pakistan Integrated Household Survey (1998-99). The study followed two methods of estimation; the normal probability model and multinomial logit model. The Probit model was used to estimate the relationship between women's participation and other social, economic and demographic variables. The multinomial logit model was used to capture the effects of social, economic and demographic variable on women's decision making regarding their own paid employment. The empirical findings revealed the significant link between women's economic participation and the variables like age, marital status, education, number of male family members, children age between 0-5 and the employment status of the head of the household. In a similar fashion, the findings argued a significant relationship between women decision making about paying employment and the variables like family size, financial status of the family, residential area, education and marital status.

Eapen (2002) analyzed Kerala's women's status and its correlation with her education, participation in the labor force, and structure of the family. Data were taken from a population census of India. Author found that women in Kerala are more literate as compare to other Indian states. But here in Kerala, these women fell in prey of social problems like the custom of dowry, gender based discrimination and mental health problems. These problems were increasing hurdle in women's outcomes. Even improved enrollment ratios (a measure of literacy) and higher education could not prove fruitful for weakened women's to get control over inherited resources and up rise women to defy gender role pretensions. In addition, the study found that there is clear cut indication that family structure significantly

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impacts the decision of women about her education and motivation towards marriage ability.

Mehrtotra and Biggeri (2002) surveyed five Asian countries, Pakistan, India (lower income) Philippine, Thailand and Malaysia (middle income) which constitutes a scattered home-based worker. Most workers living below and some of them slightly above the poverty line. The dichotomous dependent variable, i.e., health status of women worker was measured by Ordered Logit Model. Similarly, ordinary least square method was used to measure household production. Her age, education, health status, years of experience, provision of electricity and organizational membership were taken as independent, having significant impact on women's productivity whereas; woman earned income was dependent variable. The study concluded that such home based workers are working under substandard environment and especially peace rate workers are being exploited with meager wage rate and long working hours because they are scattered across the length and breadth of the country without having unanimous action. Thus, this study suggests that competition among subcontractors, provision of training and loans from government to these home based workers can increase women's productivity.

Azid *et al*. (2001) examined the impact of poverty status of female labor supply in a cottage industry in the case of district Multan (Pakistan). The authors collected primary data and applied ordinary least square technique for estimation. The authors gathered the information of three different characteristics of the family; workers' characteristics, family characteristics and social characteristics and estimated the impact of all these characteristics on female labor supply hours in a week. The results confirmed the presence of strong positive association between family status (below poverty line) and female labor supply hours. Similarly, age structure, education, income of the family, number of children below 5 years and family structure were also found positively linked with female labor supply. Besides this positive association; number of male adults, market distance and income of household head were found negatively related. The study suggested the need to review the public policy in order to provide better guidance and awareness to rural female workers.

Handa (1994) analyzed the expenditure (on alcohol, adult wear, tobacco) behavior and children (on health) welfare of female headed households in Jamaica. The study is based on primary data (household survey of 3500 families on over 100 goods). First, OLS regression analysis was used to measure point estimates of the former (expenditures on alcohol, adult wear, tobacco) in the presence of female household's head. Point estimates of children wear and adult wear proved to be significant (first hypothesis). Female headed households (un-partened) spent more on adult wear and relatively less on children wear. Secondly, the author estimated alternative hypothesis of female's allocation of resources; more on preventive care for children (aged, 8-14 years) in order to prove that female headed households allocate less budget for family (particularly children). The Probit model was used to measure the behavior. Where, coefficients of residuals (include demographic composition, region of residence, whether household rents, gender of the oldest household member and gender highest educated household member) proved to be significant. The study concludes that, female headed household in Jamaica allocate less to adult goods (alcohol and tobacco share decreases 50 PC and 115 PC respectively) and more for children wear, in addition, study also explores that female headed household spent less on health. Thus, for Jamaica, individual preference among household members can have a significant effect on the allocation of resources.

III. Data Source and Methodology

In the present study, data were collected through a survey of district D. G. Khan. A sample of 224 women (a household where minimum single women were found, engaged in informal economic activity) is randomly drawn from eight Urban Councils of D. G. Khan., Namely Urban Council No. 1, No. 2, No. 3, No. 4, No. 5, No. 6, No. 7 (from Tehsil, D. G. Khan) and single urban council of Tehsil Taunsa, named as Urban Taunsa.

The stratified random sampling technique was adopted. Every urban council was declared as strata. The Sample size, "$n = 224$" was equally divided on all urban councils. Therefore, $n_1, n_2, n_3 \ldots, n_k$ ($\sum n_i = n$), were drawn from independently from the strata, $1, 2, 3, \ldots\ldots, k$ respectively. The reason behind such sampling technique was better coverage and accuracy in our empirical analysis. The main characteristics of such sampling isequal allocation or equal number of sampling units is selected from every stratum. Thus, 'n' is equally divided among all the 'k' strata. Thus, our stratum sample size "n_i"is allocated as:

$$n_i = n / k, \qquad \text{for } i = 1, 2, 3, \ldots\ldots, k$$

Considering it as a simplest way of the sampling.

A survey was conducted by direct interview of female workers at their homes. All information was collected with the aid of an open ended questionnaire, including some multiple choice questions about, personal information, demographics of the household, family characteristics, fertility status and husband characteristics. Questions were asked in Urdu and Saraiki. The observations were noted on the spot.

a) *Methodology*

Many researchers used different methods and models to estimate factors affecting women's contribution in the household budget. Some of them used OLS model. For instance, Mehrotra and Biggeri (2002), Azid et al (2201), Handa S. (1994) have used ordinary least square method to determine women's productivity at home based work. Recently, Khan and Khan (2009) used the OLS method to analyze different factors of women's in their household budget. In the same way, in our regression analysis (of cross sectional data), we have adopted Ordinary Least Squares Method, which is attributed to the name of Carl Friedrich Gauss (1777-1855), a Mathematician, from Germany and Markov (1856-1922), based on linear estimation. The main characteristics of this method are finding the causal relationship and minimization of the sum of squares of squares of deviations.

By taking linear relation (for OLS) as:

$$E(Y) = \alpha + \beta x_i$$

Here α and β are unknown parameters, and 'y' is the random variable. Then the values of α and β are obtained by that minimizing the sum of squares of residuals as,

$$\sum [Yi - (\alpha + \beta x_i)]^2$$

In our analysis, women's support for the family (WSF) is the function of many controlled, exogenous, explanatory socio- economic variables affecting their contribution.

By taking the function as:

$$Yi = f(x_1, x_2, x_3, \ldots\ldots\ldots, x_k)$$

The function is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_1 X_1 \ldots\ldots\ldots, \beta_k X_k + \mu_i$$

$\beta_{1,\ldots\ldots}$ β_k the coefficients are known as the partial regression coefficients, μ_i is error term and α is a constant term showing the impact of all excluded or omitted variables.

b) The Specified Model

Our specified model is illustrated by the following function:

$$WSF = f[WGE, WAS, WED, WMS, WOP, WWH, NOA, HHS, HED, HEY, ICH, PAC, POS, NOD, HPR, OWP, HES]$$

$$WSF = \alpha + \beta_1 WGE + \beta_2 WAS + \beta_3 WED + \beta_4 WMS + \beta_5 WOP + \beta_6 WWH + \beta_7 NOA + \beta_8 HHS + \beta_9 HED + \beta_{10} HEY + \beta_{11} ICH + \beta_{12} PAC + \beta_{13} POS + \beta_{14} NOD + \beta_{15} HPR + \beta_{16} OWP + \beta_{17} HES + \hat{\mu}_i$$

The variable description is given in the following table1:

Table 1: Definition of Dependent and Explanatory Variables

Variables	Definitions
Dependent variable	
WSF (woman's support for the family)	Ratio of woman's monthly income for household to the total household income
Independent Variables	
WGE {woman's age}	Her age in completed years
WAS {woman's age square}	Square of a woman's age
WED {woman's education}	Her education in completed years
WMS {woman's marital status}	1 if she is married, 0 otherwise
WOP {woman's profession}	1 if performing beautician / embroidery work, 0 others
WWH {woman's working hours}	Number of hours worked per day
NOA {Number of adults}	Number of adults present in the household
HHS {Household size}	Number of all members of household
HED {Husband's education}	Husband's education in completed years
HEY {Husband's earned income}	Husband earned income in Rs. Per month
ICH {Infants, children}	Number of children (0-5years)
PAC {Prime-age children)	School going children (5-15 year age)
POS {Poverty status}	1 if household per head income equals Rs.6000, 0 otherwise
NOD {Number of dependents}	Number of dependents, includes infants (0-5years) and above 60 years age old household members
HPR {Household participation rate}	Ratio of number of working male and number of working females to the household size
OWP {Outside work permission}	1 if the woman has outside work permission, 0 otherwise
HES {Husband's employment status}	1 if employed, 0 otherwise

IV. Results and Discussion

a) Descriptive Analyses

b) Table 2 Descriptive Statistics of Selected variables

	HED	HES	HEY	HHS	HPR	ICH	NOA	NOD	OWP	PAC	POS	WAS	WED	WGE
Mean	7.04	0.396	14668.890	7.133	1.434	0.711	1.742	1.164	0.480	2.387	0.178	1544.249	6.809	38.116
Media	8.000	0.000	10000.00	7.000	1.182	0.000	1.000	1.000	0.000	2.000	0.000	1444.000	8.000	38.000
Std. Dev.	5.251	0.490	15382.920	2.740	0.735	1.165	2.452	1.416	0.501	1.933	0.383	772.972	5.450	9.584
Skewness	-0.158	0.427	2.827	0.901	3.082	3.596	1.732	2.622	0.080	0.685	1.686	0.873	0.029	0.380
Kurtosis	1.859	1.183	13.798	4.739	15.922	23.939	5.378	16.078	1.006	3.307	3.842	3.230	1.650	2.514
Maximum	18.00	1.00	100000.00	20.00	6.12	9.00	11.00	11.00	1.00	9.00	1.00	3844.00	16.00	62.00
Minimum	0.00	0.00	0.00	2.00	0.125	0.00	0.00	0.00	0.00	0.00	0.00	324.00	0.00	18.00

Table 2, shows that the mean value of husband's education (HED) is 7.04, with maximum 18 year of education, and minimum zero value of education. Whereas; standard deviation, the deviation of education from its mean is 5.25. In addition, the value of Skewness is, -0.15 proving series to be negatively skewed, with Kurtosis having the value of 1.85 which is Platykurtic Distribution. Similarly, household size (HHS) has a mean value of 7.13. Here, maximum value of household size is 20, with a minimum value of 2.00, having Standard deviation, deviation from its mean value is 2.74, Skewness' value is 0.90, which shows that the series is positively skewed, whereas, the value of Kurtosis is 4.73 which is proving that distribution is Leptokurtic. In the same way, the numbers of adults (NOA) have 2.45 values of dispersion from its mean of 1.74 in the series. With a maximum value of 11 and minimum value of zero. The value of Skewness is 1.73 which is positive, showing positively skewed series. Here the Kurtosis' value is 5.37 which is greater than 3, proving the leptokurtic distribution. Prime age children (PAC) showing the dispersion value of 1.93 from its mean value of 2.38. Its value of median is 2.00, having maximum value of 9.00 and minimum value of zero. The table shows the value of Skewness is 0.68, which is positive, showing positive distribution of the series. The value of Kurtosis is 3.30 which is larger than 3, indicating the Leptokurtic distribution. The mean value of women age (WGE) is 38.11, whereas, value of standard deviation is 9.58 in the series. Maximum age of working women was found to be 62.00 with a minimum value of female worker as 18.00. Here, Skewness is 0.38 which is positive. But the value of Kurtosis is 2.51 which is less than 3 showing Platykurtic distribution. For women working hours, the value of Skewness is 1.08 which is positive, showing that series is positively skewed. For women age square (WAS) value of Skewness is estimated at 0.87 which is positive. Here the value of Kurtosis is 3.23, which is greater than 3, showing the Leptokurtic distribution.

b) Correlation Matrix

Table 3 : Pair Wise Coefficients of Correlation Matrix

	HED	HES	HEY	HHS	HPR	ICH	NOA	NOD	OWP	PAC	POS	WAS	WED	WGE	WMS	WOP	WWH
HED	1.00																
HES	-0.23	1.00															
HEY	0.42	-0.07	1.00														
HHS	-0.13	0.09	-0.03	1.00													
HPR	-0.07	0.15	0.02	0.38	1.00												
ICH	0.01	0.00	-0.11	0.16	0.01	1.00											
NOA	-0.13	0.04	0.02	0.58	0.48	-0.02	1.00										
NOD	-0.04	0.02	-0.15	0.33	0.05	0.81	0.11	1.00									
OWP	0.09	-0.03	0.07	-0.01	-0.19	-0.10	-0.02	-0.04	1.00								
PAC	-0.01	0.04	0.04	0.38	-0.13	-0.07	-0.32	-0.07	-0.01	1.00							
POS	0.43	-0.11	0.63	-0.31	-0.08	-0.05	-0.14	-0.15	0.04	-0.13	1.00						
WAS	-0.26	-0.14	-0.01	0.19	0.10	-0.18	0.33	-0.09	0.03	0.04	-0.11	1.00					
WED	0.51	-0.04	0.22	-0.05	0.09	0.02	0.03	0.00	0.03	-0.17	0.27	-0.35	1.00				
WGE	-0.27	-0.14	-0.02	0.20	0.08	-0.18	0.321	-0.10	0.03	0.08	-0.12	0.99	-0.38	1.00			
WMS	0.08	-0.08	-0.03	-0.20	-0.19	-0.05	-0.28	-0.08	0.07	0.13	-0.02	-0.11	-0.14	-0.10	1.00		
WOP	-0.06	-0.05	-0.02	-0.08	-0.03	-0.04	0.01	0.00	0.10	-0.12	0.02	0.05	-0.01	0.05	-0.05	1.00	
WWH	-0.02	-0.08	-0.03	-0.01	-0.12	-0.09	-0.07	0.03	0.06	0.13	-0.01	-0.06	-0.02	-0.04	0.06	-0.15	1.00

Source: Calculated by author from sample using E Views.

In the present study, table 3, shows that there is no perfect pair wise correlation among all explanatory variable. It confirms that there is no problem of Multicollinearity with our model. So, variables used in our model are not exactly correlated.

c) Econometric Analysis

Table 4, is indicating the results regarding the OLS model of the factors affecting the women's contribution in the household budget in the urban informal sector. The two tailed t- statistics were applied. For analysis, 1 %, 5%, and 10%, levels of significance were used. The intercept term is positive and insignificant which indicates that the intercept term has less value. The intercept term shows the average, impact of all excluded or omitted variables, which affects the dependent variable.

Above table provides us the estimate of the factors affecting women's contribution in the household budget in the urban informal sector. The solidarity of our model mainly depends upon the measurement of variables, economic and statistical significance, consistency of data is included in our model. The F-statistic is used to see the overall significance of the model, which shows that our model is significant at the 1 % level of significance. Though, low value of R^2 and adjusted R^2 (0.44 and 0.40) is a typical phenomenon in cross sectional studies.

Education of woman, in the completed years of education, has a positive association with the women support to the household budget. The coefficient of WED is positive and statistically highly significant at the 1% level of significance. It shows that increase in woman education by 1 year, contribution or support of an urban woman in the household budget will be increased by 0.0126 rupees. The objective of including this important variable was to reach out policy recommendations to increase the support of an urban woman by positively increasing all facilities regarding education. Among all other individual characteristics of women, education is supreme. From the point of view of the Structuralist school (Benham,1980), that education causes an increase in labor force supply and its return from economic activities, particularly for women. Our analysis is consistent with neo- classical approach (Becker, 1980). In addition, Naqvi and Shahnaz (2002) estimated that more education increased the share of women in the labor.

Therefore, our results are justified by the theory. It proves that by the increase in woman's education, training and skill, she can be more productive. In addition, education enlightens the efficiency of women. It minimizes the time allocated in home productions and enables a woman to earn more, and perform paid work and support her family budget for their survival. Education improves quality of life. It enhances her control over income and gives her courage and confidence to perform better. Education motivates women to improve the health status of her family. It also gives her inspiration to spend more of her income on children's education. Our results are consistent with Khan and Khan 2009. In a nutshell, education improves women's productivity and her support to the family budget.

Woman's profession (occupation) is an important variable that affects urban women time allocation for the labor market, self or household enterprise. In an urban setting, profession of a woman very much explains her contribution in the household budget. Therefore, we included this binary variable in our analysis. The coefficient of WOP (woman profession) is positive and significant at the 10% level of significance. Thus, significant result proves that, this variable is important.

It was found that woman working hours and has a positive relationship with woman support to the family budget. The WWH has positive sign. It indicates that increase in working hours of urban women by 1 hour, her support to family budget increase by 0.019 rupees, considering the effect of other variables constant. The coefficient of woman working hours (WWH) is significant at the 1% level of significance.

Husband's education is an important factor which affects her contribution to the family budget. In our model, husband's education (HED) was taken in completed year of education, the results indicates that HED is significant at the 1% level of significance, showing HED negatively associated with the dependent variable. It clearly indicates that an increase in the level of education definitely increases the income of the person. Because a rise in the level of education is compatible with law of increasing return. In contrast, in our study, negative sign of HED points out that rise in husband's education negatively impacts the dependent variable, women support to family budget; and decreases her share in family income.

Another variable included in our model is monthly husband's income. The coefficient of husband earned income (HEY) is negatively related with women support to the family budget. It is statistically highly significant at the 1% level of significance. The coefficient of HEY is negative, which shows that as the monthly income of husband increases by 1 rupee, the women support to the family budget decreases by 6.34 rupees.

Presence of children in different age group, differently effects woman support to the family budget, particularly infants, 0-5 year's age children negatively impacts woman's contribution. The coefficient of ICH is significant at the 5% level of significance with negative sign indicates that an increase in infants by 1 children, contribution of woman decreases by -0.036 rupees. Similarly, in reality, women busy in child rearing and other different tasks of childcare devote less time to paid activities. There are empirical evidences to suggesting that in this phase, infants need much mother care, so, it is less likely for a mother from urban area to contribute to the family budget.

The poverty status ofthe household is an important factor that forces a woman to participate in the household budget for their survival, and allocate more time for earning through her participation in the labor market, self-employment or self-enterprise. In our analysis, during the survey it was observed that many families are highly vulnerable. So, poverty is the main reason which leads women to work in the informal sector to earn some money in order to fulfill basic needs of the household. In our analysis, we used poverty status of household as a binary variable. The coefficient of POS has a positive relationship with WSF. It is significant at the 5% level of significance. The families having per head income less than Rs.6000/- were considered as poor, and woman belonging to these households contribute more in the family budget in urban areas. Our results are consistent with Azid *et al.* (2001).

Another variable included in our analysis is number of dependents (NOD). It is positively related with women support (WSF), the dependent variable. The coefficient of NOD is significant at the 10% level of significance. An increase in numbers of dependent, as old and infants, household member in urban areas, forces women to generate income for their subsistence. An increase in the number of dependent by a 1 member will increase woman's contribution by 0.026 rupees.

The coefficient of household participation rate is negative and significant at the 10% level of significance. The relationship of HPR is negative with the dependent variable. In urban areas like our study area, when more persons of the household are involved in economic activity, it leads to decrease in female participation for earning at household level and outside, paid work. Women, particularly daughters and daughter-in- laws are not allowed to work outside home. The negative result shows that with an increase in 1 working person at home, female participation in household budget is decreased by 0.030 rupees.

Another important variable included in our analysis is outside work permission (OWP) which affects women's contribution in the household budget. Those women who have permission to go outside for paid work, contribute more to the family budget. We used a binary variable to estimate the relationship. The coefficient of OWP is positively related with women support to family and statistically highly significant at the 1% level of significance. Many social, cultural, religious and personal barriers create hindrance in the outside work permission, particularly in backward areas. Those women who observe veil are not permitted to go outside the home for earning. The results indicates that outside work permission is highly significant because it increases woman mobility and helpful in getting high wages. Our analysis proves that in our study area outside homework permission is a major factor which affects women's contribution in the household budget. If women are allowed to go outside home, it will definitely increase their participation in the labor market.

We used another binary variable, as husband employment status (HES) which affects women support to the family budget. The relationship of husband employment status negatively impacts women's contribution in the family budget. The coefficient of HES significant at 10% percent level of significance in our model.

Women age (WGE) and woman age square (WAS) are insignificant, having positive and negative sign respectively. The negative sign of WAS indicate that women's contribution declines after prime age. It shows a non- linear relationship. Similarly, our finding indicates that women's marital status (WMS), and prime age children (PAC) are insignificant but having positive sign. Woman marital status (WMS), shows that if WMS increases by one unit, her contribution in household budget will increase by 0.01rupees. Whereas, the number of adults (NOA) and household size (HHS) remained insignificant, but their sign is negative, respectively, proving that an increase in numbers of adults and household size reduces women's contribution in the household budget.

Table 4 : OLS results for, factors affecting women's contribution in the household budget in the urban informal sector

Variable	Coefficient	Std. Error	t- statistics
Constant	0.255593	0.184282	1.386966
WGE	0.004538	0.008935	0.507924
WAS	-3.15E-05	0.000110	-0.287960
WED	0.012661*	0.002536	4.991818
WMS	0.010425	0.016338	0.638107
WOP	0.013789***	0.007536	1.829789
WWH	0.019323*	0.004630	4.173022
NOA	-0.007393	0.009181	-0.805316
HHS	-0.011108	0.009107	-1.219674
HED	-0.008689*	0.002763	-3.144988
HEY	-6.34E-06*	1.02E-06	-6.213456
ICH	-0.036961**	0.017127	-2.158036
PAC	0.001758	0.010611	0.165677
POS	0.085436**	0.040370	2.113641
NOD	0.026855***	0.015336	1.751158
HPR	-0.030630***	0.017832	-1.717687
OWP	0.056556*	0.022528	2.510454
HES	-0.045157***	0.023895	-1.889809

Source: estimates are obtained by the author using E -Views

R-Square 0.448245 F-statistic 9.844373 Adjusted R-Squared 0.402712 Prob (F- statistic) 0.00000 Sample Size 224

,, *** indicates a significant level at 1 percent, 5 percent and 10 percent respectively.*

d) Diagnostic statistics

Table 5

Test	Statistics	Value	Probability
Heteroscedasticity: test: white	LM=n.R^2	182.94	0.1746
Ramsey RESET Test	F.statistics	22.038 (1,202)	0.1865

Above table 5, Provides diagnostic analysis of the study, we have used White LM test in order to examine the Heteroscedasticity in the model, the value of the statistics based on the probability indicates there is no sign of Heteroscedasticity. Secondly, we have applied Ramsey RESET Test for model specification; the finding shows that the model is correctly specified.

V. Conclusions and Policy Recommendations

The above summary of results (table 5) and our analysis concludes that financial support of the household in the shape of woman's contribution (particularly those who are engaged in the informal sector, for earning) is increased only because of household poverty. Husband unemployment, large household size, number of dependents, woman marital status puts a burden on the woman and forced her to share the family budget, in order to lessen unmet household budget. In the present era, woman's involvement in economic and earning activities in order to support her household budget has gained much importance. In a society like ours, male is considered as a main bread earner for the household. But now a day, an increase in family expenditure, inflation rate, high cost of living in urban areas, high educational expenditures for the child's education, poverty status demands higher share of women in household budget particularly in urban areas. Policy recommendations are discussed below.

To enhance the women support to the family budget, the government should take following measures:

- It is suggested that, women should be given equal employment opportunities in all spheres of employment.
- Many informally employed women (in the lower strata of urban areas) are bound to work because of the burden of poverty, unemployed spouse and low education, these women have no resources to start economic activities at household level, particularly in urban areas, therefore, it is recommended that through the provision of assets, their contribution can be positively increased. This is only possible through public private partnership programs.
- The Women's profession has been proven to absorb more of the women for their contribution in an urban household, for that reason women should be given more chances of training, skill, and provision of basic facilities/ resources to start their own enterprise. Therefore, the government should start new training and educational institutions for adult women.
- Large number of family members have also been identified as an important indicator, for an increase in contribution of female in the family budget. These types of families must be given social and health safety nets. Role of Department of Labor and Social Welfare is important in this regard.
- Government should keep the record of those women, who are engaged in informal work for earning. These women should be given benefits in form of employee's old age pension. It is the responsibility of The Department of Labor & Manpower, and Department of Employee's Old age Benefits (EOBI).
- The government should revise the policy of minimum wage rates, especially for women.
- Mother workers should be given benefits, during pregnancy and especial scholarships for infants, for their better health safety. Establishment of child home can increase women working hours, which has been proven important for enhancing their due share in the household budget.
- Outside work permission came in front as an important obstacle in the way of female labor force participation. For this, a lot hard work is required to change the mindset of family head/ husbands and society like ours. The role of mass media, religious scholars and social workers is important for changing broadening the mind of family heads. This problem can also be tackled by providing easy loans and grants to those females who are attached to home- based (informal) economic activity. In this way, these women can be brought on the same line as like outside workers and play their role in the growth of GDP.

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A Historical Perspective of Petroleum on Nigeria's Economic Crisis Since Independence

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Abstract- The study examines the intricacies that are inherent in the Nigeria's economic crisis since independence. The paradoxical state of Nigeria's economic as the giant of Africa attracts global attention. This study sheds light on the phases of economic development of the nation using historical methods. It surveys the place of agriculture in the Nigeria's economy before the discovery of petroleum in the 1950s. It is the central argument of this study that the transmogrification of Nigeria's economy from agric-based to petroleum-based that laid the foundation of the current economic crisis. The persistent flow of cheap petrodollars accruable from daily exploration of petroleum killed agriculture and led to massive rural-urban migration. Moreover, the problems of unemployment, corruption, wasteful and unrewarding execution of moribund projects by the government are products of petroleum economy in Nigeria.

Keywords: nigeria, economy, agriculture, petroleum, unemployment, corruption.

GJHSS-E Classification : FOR Code: 149999

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Strictly as per the compliance and regulations of:

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Keywords: nigeria, economy, agriculture, petroleum, unemployment, corruption.

I. Introduction

Nigeria has witnessed cocoon of economic crisis since independence. It is a matter of bewilderment to many people why Nigeria, despite of its enormous human and material resources, continues to groan in economic crisis. To some scholars, the matter is seen as a default while others view it as design. Thus, it becomes a *sine qua non* to historically investigate this matter by way of subjecting the scenario into serious academic scrutiny in order to deduce or advance possible effects of Petroleum on Nigeria's economy. This is done with stringent analogical mechanism through comparative index of economic apparatus using historical tool of analysis. The first question that bothers the minds in this context is, why is Nigeria still remains in economic comatose despite huge petrol-dollars accruable from daily exploration of the black gold since 1960s? Secondly, why are other nations of the world, like, Saudi Arabia, Indonesia, Qatar, Bahrain, Kuwait, Abu Dhabi, Libya, Iraq, Iran, Norway, Egypt and Oman which are also blessed with the same resources are able to transform from zero level to the level of international recognition with petroleum? (Lewis, 2007: 10-14) An attempt to situate the above has warranted a quest for pragmatic assessment of the economic situation of Nigeria before the discovery of petroleum.

II. Nigeria's Economy Before the Discovery of Crude oil

Agriculture was the dominant source of Nigeria's economy before the discovery of petroleum in 1956. Agriculture thrives in favourable climatic conditions. The climatic factor is significant, not only in relation to its effect on the character of the vegetation, but it also plays a dominant role in the ways of life, including the pattern of economic activities of the various people. As in other part of the tropics, rainfall is the most important element of climate in so far as agriculture, the main occupation of Nigeria's people. The rhythm of economic activity which is revealed in the farming calendar of the various parts of the country is controlled by the incident and distribution of rainfall as well as the rainy season, which decreases from south to north. Mangrove region of the southern Nigeria with high rainfall per annum supports the growth of palm trees, rubber, coffee and cocoa etc. The savannah grassland to the north supports the planting of cereal and leguminous crops such as sorghum, millet, ground nuts as well as animal rearing mostly for hide and skin (Ekundare 1973:56-56; Ake 1985:102-106). Agriculture was the mainstay of Nigeria's economy from the earliest time up to 1950s. Indeed, Nigerians had an enviable record of food sufficiency but the era did not last beyond the 1960s when its economy began a descent into an abysmal dependence on imports.

As part of the efforts to integrate Nigeria into global economy, cash crops were introduced to Nigeria by the Europeans from South America and India (Oluwasanmi 1960: 34-36). Palm oil became an export commodity in Nigeria as far back as 1558; and by 1830, the Niger Delta, which now produces crude oil, had become the major source of palm oil which dominated Nigeria's export list for more than 50 years (Olukoju 2009:105-125). Cotton joined the export list in 1856, while cocoa was introduced and became an export crop

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in 1895 (Olukoju 2009:117). Together with rubber, groundnut, palm kernel and Bennie-seed in later years formed the major valuable crops. These cash crops formed the main source of revenue, export and foreign exchange for the government (Udo 1967: 18). It is very important to note that the economy generally recorded tremendous self-sustaining growth and expansion before crude oil became the mainstay. Nigeria boasted of its groundnut pyramids in the north and Cocoa in the west. Palm oil also existed in commercial quantity in the east. Revenue from agriculture was appropriately used to build landmark social and economic infrastructure, providing basic services like education, health, water and electricity supply. This enhanced farm settlements and cottage industries to service agriculture, providing vast employment opportunities for the people. In respect of food, the nation was self-sufficient before the era of crude oil. Agriculture provided 95% of the food needed to feed Nigerians, contributed 64.1% Gross Domestic Product (GDP) and employed over 70% of Nigerian population before oil began to be exported (Oluwasanmi 1960: 23-29).

Evidently, there was no jobless person in Nigeria during this period as everybody had job to do in the farms. Both the young and old people carried out farm works. Even the government workers still engaged in farm businesses. They went to their various farms on Saturdays and during holidays or when they were on leaf. This helped them to complement as well as increasing their per capital incomes. As part of the social responsibility, this system of industry and commitment to farm duty were well inculcated into the lives of the young ones. For examples, schools at all levels acted as agent of socialization to uphold this social norm. For example, from Primary School, farming was put into practice. Every school had its farm in which all pupils/students participated during gratis usually once in a week. (Garba, 2014) Apart from serving as means of food production for the population, it also served as an avenue to impact the principles of farming to the pupils and students, which was expected to be part and parcel of their lives. Pupils and students sang songs on the assembly grounds and on gratis day to reflect as well as to instil the consciousness of farming as a national symbol. This song was translated in all languages across Nigeria:

Farming is our national occupation, he who does not work, will steal education without hoe and cutlass is incomplete.

In the first generation Nigerian tertiary institutions, these principles were keenly practiced. There were University Farms where foods were produced for the growing population of Nigeria and raw materials for agro-allied industries. We can argue conveniently that Nigerians universities served its purpose as research centres. Internally generated revenues for execution of university's projects without necessarily depending overwhelmingly on the Federal and State Governments abound.

III. The Discovery of Oil in Nigeria

The search for Petroleum in Nigeria started in 1908 at Araromi area of the present Ondo State by a German Company known as Bitumen Corporation (Afe 2008: 28-32). This made Araromi the first camp of oil exploration outfit in Nigeria. However, Nigerian Bitumen Corporation ceased exploration as a result of the outbreak of World War I, which broke out in 1914-1918. In 1937, the Shell 'D' Arcy, which later became Shell BP Petroleum Development Company of Nigeria Limited, entered the oil exploration scene in Nigeria. However, the outbreak of World War II forced the company to suspend activities in Nigeria in 1941, but resumed activities again in 1946 (Afe 2008: 30). The first deep exploration well was drilled in 1951 at Ihuo, 16 kilometres northeast of Owerri, to a depth of 11, 228 feet, but no oil was found (Bamigbon:2009). Oil was later discovered at *Akata* well, which was drilled in 1953 but was suspended in 1954 due to it few quantity.

However, in January 1956, oil was discovered in commercial quantity at Oloibiri, now in Bayelsa State, by Shell BP (Fregene 1998:64-72). Towards the end of the same year, a second discovery was made at Afam now in Rivers State. The first Cargo crude oil left Nigeria in February 1958, when production stood at 6,000 barrels per day with revenue accounted for about ₦122 million. This contributed 0.08% to the National Revenue. As a result of Shell's success in the mid 1950s and thereafter, other companies, notably, Mobil, Gulf (Chevron), Agip, Safrap, (later Elf), Tenneco (later Texaco), Philips Great Basins Texaco Overseas and Union, joined Shell in prospecting for oil (Fregene 1998:66). The number of both international and local companies prospecting for Nigerian oil increased tremendously over time. The table below shows the number of oil companies that operated in Nigeria up to 1998.

Company	Number of Oil Field	Average number of Production Well
Allied Energy	1	16
Agip	20	137
Ashland	8	89
Dubril/Philips	1	1
Elf	6	116

Chevron	17	220
Mobil	17	104
Pan Ocean	1	1
SPDC	83	748
Tenneco	1	1
Texaco	4	48
Total	159	1481

Figure I : Petroleum Companies in Nigeria up to 1990

Source: Department of Petroleum Resources, 1996; NDSE 1998.

The production in Bonny, Obolo (Andoni) and Ogoni, among others in the Niger Delta, between 1959 and 1960 raised the contribution of oil to 1.00% in 1960. Later the 606 oil producing field in the Delta region and its fringes from the second half of 1960s to 1975, led to crude oil replacing palm oil, cocoa and ground nuts in the national economy (Femi and Sesan 1968:83-94). As a result, petroleum became the dominant sources of the national revenue from 1974. The table below gives details of the oil exploration and revenue from 1958 to 1974.

Fiscal Year	Fed. Govt Current Revenue	Revenue from Petroleum	Share of Petroleum in Total Revenue %	Fiscal Year	Fed. Govt Current Revenue	Revenue from Petroleum	Share of Petroleum in Total Revenue
1958/59	154,632	122	0.08	1974/75	5,177,370	4,63,816	80.81
1959/60	177,648	1,776	1.00	1975/76	5,861,600	4,611,700	78.70
1960/61	223,700	2,452	1.10	1976/77	7,070,400	5,965,500	77.70
1961/62	228,962	17,070	7.46	1977/78	8,358,900	5,965,500	71.40
1962/63	231,638	16,936	7.31	1978/79	7,252,400	4,809,200	66.30
1963/64	249,152	10,060	4.04	1979/80	12,273,400	10,100,400	82.30
1964/65	299,132	16,084	5.38	1980/81	15,813,100	4,936,900	31.20
1966/67	321,870	29,175	9.06	1981/82	10,143,900	8,847,800	67.50
1967/68	339,196	44,976	18.26	1982/83	10,811,400	7,253,000	67.00
1968/69	300,176	41,884	13.95	1983/84	11,738,500	8,209,700	69.93
1969/70	299,986	29,582	13.95	1984/85	15,041,800	10,975,100	72.56
1970/71	435,908	75,444	17.31	1985/86	12,302,000	8,107,300	65.90
1971/72	755,605	196,390	25.99	1986/87	25,099,800	19,027,000	75.80
1972/73	1,410,811	720,185	52.46	1987/88	27,310,800	20,933,800	76.65
1973/74	1,389,911	576,151	41.45	1988/89	50,272,100	41,334,400	82.22
1974/75	2,171,370	1,549,383	71.36	1989/90	47,657,00	46,244,000	97.24

Figure II: Petroleum Sector's Contribution to Nigerian Government

Source: Contribution of Federal Ministry Government and Oil Companies to Oil Producing Areas, Vol. 1, Lagos : Nigeria National Petroleum Corporation, (NNPC), 1992.

The above shows an increase of oil production and revenue over a period of time. Between January and June 2003 for example, Nigeria had a financial wealth of ₦961.6 billion from crude oil. From July to December of the same year, the production of 405.09 million barrels, which sold at $28.10 a barrel, brought ₦1.57 trillion (US $11.38 billion) into the national treasury. Later, excess crude oil receipt gave Nigeria an additional ₦128.41 billion between May and December 2003 (Akintunde 2004:1&7). A monthly breakdown shows that in May, ₦7.65 billion was earned, June ₦13.67 billion, July ₦15.24 billion, August ₦9.7 billion, September ₦22.12 billion, October ₦14.17 billion, November ₦14.32 billion and ₦21.52 billion in December (Awajiokwaan 2004:15). There was an appreciable increase in the production of crude oil and it was sold at the high price on the world market since Nigeria's oil was preferred due to its high quality. Nigeria is rated among the leading exporters of crude oil to United States of America. The table below shows the details:

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Countries	Import Thousand Barrels per day	% of Total Import	% of Domestic Product Supplied
Canada	2,408	19.4%	11.3%
Mexico	1.487	12.0%	7.0%
Venezuela	1.485	12.0%	6.9%
Saudi Arabia	1.471	11.9%	6.9%
Nigeria	1.246	10.0%	5.8%
Angola	435	3.5%	2.0%
Algeria	405	3.5%	1.9%
Iraq	390	3.1%	1.8%
Virgin Islands	335	2.7%	1.6%
Ecuador	324	2.6%	1.5%
Others	2,422	19.5%	11.3%
Total	12,408	100%	58.0%
OPEC Countries	5,384	43.4%	25%
Persian Gulf Countries	2,166	17.5%	10.1%

Figure III : Petroleum Exportation index of some selected countries up to year 2000

Source: Wilbey, Nigeria's Rise as a Global power and its Geopolitical Implications (Port Harcourt: Institutes of Petroleum Studies, University of Port Harcourt, 2006, p.2.).

IV. The Effects of Petroleum on Nigeria's Economy

The effects of Petroleum exploration on Nigeria are multiple. This can be divided into two – positive and negative. Many scholars have argued that petroleum has brought great advancement to the Nigeria's economy. The discovery of petroleum according to Rilwan Lukman, one time Minister of Petroleum and former President, Organization of Petroleum Exporting Countries (OPEC), during the researcher's personal interview with him, asserted that petroleum has indeed brought good and evil things to Nigeria (Rilwan 2010). He believed that Oil has provided for the country considerable resources which have been deployed into various projects and have kept the economy going. In the first instance, according to him, more states and local governments have been created. Roads, air and sea ports were also constructed. Nigeria was able to execute two and half year civil war without indebted to any nation. Schools, primary, secondary, colleges of education, polytechnics and Universities were built across the nation through oil money. He however decried the discovery of oil and its poor management as being responsible for the decline of agriculture in Nigeria.

Even though, the above postulations were to a large extent correct, we cannot also overlook the problems that have come upon Nigeria due to the discovery and long exploration of oil. In the first instance, Nigerian government jettisoned agricultural that had been the main economic drive of Nigeria before the discovery of oil. This has turned Nigeria into a mono-cultural economy. For example, in the Niger Delta, the region that harbours the crude oil, men completely abandoned agriculture to women for menial jobs in the oil companies. Frank Kokori, a frontline trade unionist, corroborated this further when he noted during an interview that, "the advent of oil in Nigeria marked an unfortunate turning point in the nation's history as it led to the emergence of a crop of lazy citizens who lost the initiative to be productive." (Kokori 2010) He pungently pressed home his view when he lamented thus:

> "The country became a dumping ground for imported goods as cheap dollars flowed ceaselessly from petroleum… the sad commentary about Nigerian situation are that it is one of the few countries that pomp out more than two million barrel per day and still live in this primitive infrastructural situation… Oil boom has become oil doom." (Kokori 2010)

Other regions like in the north, which had been the major supplier of groundnut, and hide and skin; west for production of cocoa and coffee; and east for palm oil and kernels; all, have abandoned agriculture. The immediate implication is, the production of the afore-mentioned products have gone into outer oblivion. Not only that, Chief Arigbabu Solomon lamented that Nigeria's agriculture has fizzled out to the level that the nation is now a net importer of food where it was once known for its import of agriculture produce at the international market (Arigbabu 2013). The oil boom that started in 1973 prompted the Federal Government to embark on bogus but unrewarding projects at the expense of agriculture, which on the long run did not translate to any development or contributing any meaningful impact on the people.

Apart from this, petroleum has been the major factor responsible for the rural-urban migration in Nigeria. The youths, who are suppose to be the backbone of the workforce of the nation continue to migrate into the urban centres in search of white collar jobs that are not available. This has a great consequence on the Nigerian economy. In the first instance, it increased the population of unproductive in the urban centres, which in returns bears an unbearable force on the available infrastructure. The social menace of armed robbery, pick-pockets, prostitutions, gansterisms A good example is the moribund Ajaokuta Iron and Steel Company in Kogi State of Nigeria. The government proposed and spent billions of dollars for constructing the complex of the Steel Company. The first phase of the project covering an area of about 172 hectares of land at Ajaokuta was commenced in 1977 (Oyeyinka 1995:293). A similar project was the construction of three inland rolling mills with capacities of 210,00ty each was embarked on simultaneously in Jos, Katsina and Osogbo to complement as well as to enhance operations of the Ajaokuta Iron and Steel (Ajaokuta Project Report 1975). The projects were handled by German and Japanese firms. The first phase of these projects was commissioned in 1982 (Ajaokuta Project Report 1977). By 1986, they have become enclaves of wide animals because of economic crisis due largely to government mismanagement of resources and lack of vision. (Ojo, 2014) argued that if the government has sustained the project, it would have not only been an asset to Nigerians only, but all West Africa sub-region. He estimated that all core engineers in the field of Civil, Mechanical, Electrical, Metallurgic, Water and Mining in the whole of West Africa would have been insufficient as man-power capacity needed in the company.

Similarly, Petroleum has also led to the legalization, institutionalization and canonization of corruption in Nigeria. It is tacitly prophetic, when Juan Pablo Perez Alfonso, the former Venezuela Oil Minister, called oil, "the devil excrement" (Sachs and Wrner 2012:106). This seems to have captured the views of many Nigerians who despite millions of petrodollars accruing daily to the nation still perceive it as a curse. Antonio Maria Costa, The Executive Director, United Nations Office on Drug and Crime (UNODC) opened a Pandora box at a three-day national seminar organized by the Economic and Financial Crimes Commission (EFCC), in Abuja in 2007. According to him, between 1960 when Nigeria became an independent and 1999 when democracy was restored, a staggering sum of $400 billion was stolen and stashed away by a generation of corrupt rulers (Antonio Maria Coasta 2007:1). He went further to elucidate that, if $400 billion bills are put in a row, you could make a path from here to the moon and back not once but 75 times. Bakare had carried out Nigerian Corruption Perception Index, 1996-2010 in the table below:

Year	Perception Index	No. of Countries Evaluated	Rate
1996	1.20	54	54
1997	1.30	52	52
1998	1.90	85	81
1999	1.90	99	96
2000	1.90	90	90
2001	1.60	102	100
2002	1.70	91	90
2003	1.40	133	132
2004	1.60	145	144
2005	1.90	158	154
2006	2.20	163	142
2007	2.20	183	127
2008	2.20	183	127
2009	2.70	180	130
2010	2.40	178	134

Figure IV : Nigerian Perception Index of Corruption, 1996-2010

Source: Adewale S. Bakare, "The Crowding-out Effects of Corruption in Nigeria: An Empirical Study" E3 Journal of Business Management and Economics, Vol. 2(2), August 2011, pp.59-68.

The table shows persistent growth of corruption over the years. Maitama Sule, Nigeria's first Minister of Petroleum and one time Nigerians' Ambassador to the United Nations, targently hit the point when he argued that, "it is quite unfortunate that too many of Nigeria's leaders are not doing nearly enough to drag the followers into the 21st century that would enable them to enjoy the best possible existence." (Tajudeen 2008:26) He lamented on the ugly nature of the leaders thus:

"The majority of Nigeria's leaders are blatant thieves, incompetent morons, uninspiring mediocrities… and primitive, visionless or just plain lazy… too many of them squander their energies on ultimately futile political shenanigans or irresponsible partying… even the few who are smart, well-intentioned and willing to control their acolytes are too easily distracted and pretty disorganized and unproductive compared to their counterparts in the western world." (Kogbara 2013:1-4)

He averred that military incursion into the Nigeria's politics derailed the vision of the founding fathers of the nation… succeeding generations of leaders, he said, had done little to qualify as leaders…almost all… suffered the affliction of greed, corruption and immorality (Kogbara 2013: 5). On the same terrain, Chinua Achebe became worried about the menace of corruption and its possible danger for Nigeria when he reiterated that corruption has passed the alarming and entered the fatal stage, and Nigeria will die if the leaders continue to pretend that she is only slightly indisposed (Achebe 2012: 249).

From historical and empirical analyses, the over reliance on oil at the detriment of other sectors of the economy such as agriculture, mining and industry has far reaching effects that have brought the country into the state of socio-political and economic anomy. In the first instance, the implication of over dependent on oil and negligent of agriculture began to manifest from 1980, when the problem of unemployment began to gather momentum in Nigeria. As at today, the problem with its accompaniments of crimes such as, armed robbery, kidnapping and Boko Haram among others have risen to the point that the corporate existence of Nigeria is threatened. Crime has grown to almost unmanageable level to the government at all levels. It appears the government is bereft of the way out. Below is an estimation of unemployment rate, 1980-2009:

Year	Unemployment Rate	Year	Unemployment Rate	Year	Unemployment rate
1980	5.4	1990	5.5	2000	10.5
1981	7.1	1991	5.7	2001	3.6
1982	4.1	1992	7.5	2002	3.8
1983	10.2	1993	7.2	2003	3.3
1984	7.3	1994	8.8	2004	9.5
1985	6.1	1995	5.2	2005	6.4
1986	5.3	1996	8.3	2006	12.5
1987	7.3	1997	8.5	2007	12.5
1988	5.9	1998	7.8	2008	13.2
1989	4.0	1999	9.5	2009	13.7

Figure V : An Estimate of Unemployment Growth Rate in Nigeria, 1989-2009

Source: Central Bank of Nigeria Statistical Bulletin, 1980-2009, as at December, 2010.

Obviously, it is the problem of unemployment that gave rise to the unlawful business of human abduction for ransom in Nigeria today. In this phenomenon, the rich or wealthy personalities in the society are kidnapped and kept hostage in kidnappers' den. He is allowed to communicate with his family members or associates through phone call to pay a fixed ransom to a designated account provided by the abductors. At times the abductors made deal of bargains with the relatives or associates to pay a fixed price or they choose the option of losing the victim. The unbearable danger and suffering the victims are exposed to usually make them agree to whatever amount the abductors demand in order to regain their freedom from the kidnappers' gulags even if the ransom demanded is to be borrowed. Uche Igwe argued in support of the above opinion that the problem of unemployment and poverty are two major factors exacerbating the rising violence and insecurity in Nigeria society (Uche 2014:22). Nigeria with its enormous resources and potentials is currently ranked among the poorest countries in the world. This was confirmed by the United Nations Education Scientific Organization (UNESCO) in its 2010 Global Monitoring Report, which revealed that about 92% of the Nigeria's population survives on less than 2 dollars daily while about 75% survives on less than a dollar daily (Amaku, et al:6). This probably informed the World Bank report estimation that 70% of the Nigeria's population lives below the poverty line. Thus, it concludes that the greatest challenge besetting the country is poverty amidst plenty.

It is factual that over dependent on oil has over the years promoted political turbulent in Nigeria. The political system in Nigeria is structured in such a way that the power that controls the political systems also controls the economy. This has elicited the development of die-hard politicians and even occasioned military intervention in Nigerian politics since 1966. The inordinate desire of the politicians to stay in power indefinitely and the military quests to rule hinge principally on the desire to control the resources generally referred to as "national cake". The Nigeria's federation is structured in such a way that the formula for sharing the resources favours the central government while the component bodies of the system are mere appendages. This over the years had resulted in the struggle for the controls of the centre. The implication of this development in another dimension has given rise to the awakening of consciousness for struggle for resource control. In the case, the agitation in the Niger/Delta region, which harbours the petroleum resources, will surface. The crisis in the region followed when the petroleum became the basis of the fiscal existence of Nigeria since 1970. The successive institutionalization of revenue sharing and power distribution tended to reinforce the politicisation of ethnic identity, and its mobilization in the struggle for power. Apart from the exclusion from the mainstream politics in Nigeria, the people of Niger/Delta capitalized on the environmental degradation to attract internal and international attention. This is located in the realm of environmental pollution, which oil explorations have brought. The untold environmental pollution and degradation of their soil and water advertently necessitated the interest of their elite. It derives ideological impetus from the activities of the Ogoni and Ijaw people, who inhibited the area. The Ogoni people under late Ken Saro-Wiwa formed the Movement for the Survival of Ogoni People (MOSOP). Ken Saro Wiwa and his people were able to attract international sympathy to the plight of the people of Niger/Delta, using his own people, Ogoni, as a point of reference. The point of argument is located in the fact that, the advent of oil exploration seems to have brought nothing good to the people in the region but massive ecological devastation through oil spillage (Eboe 1985: 56; Naanen 1995:109; Claude 1985: 43). The perceived laxity demonstrated by the Federal Government to the plight of the people led to the formation of a militant group known as Movement for the Emancipation of the Niger Delta (MEND). The group indiscriminately targeted foreign multinational companies involving in the oil industry to destroy their installations blaming them for the poverty and exploitation of local people and associated pollution, which has turned many of the fish-rich creeks into stagnant pools. Similarly, the militant groups also harry and abduct expatriates exploring petroleum in the Niger Delta to collect ransom from their various companies.

One issue that appears to have spurred anti-oil protests in the Niger/Delta, was the question of derivation as a revenue allocation formula. Some scholars are of the views that a fixed proportion of the generated revenue in a local area should be retained for the development of the area. The people in the Niger/Delta saw the formula as a form of palliative measure that would relieve them of their plight. Some decades later, it would appear that the Federal Government budgets were becoming increasingly depended on oil revenue, Niger/Delta, the oil producing region was allocated small proportion of the generated revenue from the region. The improper handling of the situation by the government led to the increasing wave community unrests and protests which became intensified in the 1990s at the behest of the Movement for the Survival of Ogoni People (MOSOP) (Oketie, 2008:121-126). It appears from the last two decade, ethnic consciousness towards what is accruable to them from the government became topical in any national issue. This partly advertently or inadvertently fans the ember of corruption in Nigeria.

V. Conclusion

The prevailing Nigeria's economic challenges started shortly after independence. It foundation is however, traceable to the discovery of petroleum and its exploration and management overtime. Before independence, Nigeria's economy, although based on agric-economy was viable and self sustaining. However, the discovery of petroleum and its exploration enhanced cheap and consistent flow of foreign exchange earnings. It appears the persistent governments in Nigeria were bereft of what to do with the money. Instead of seizing the opportunity to stimulate economic diversification that could lay a solid foundation for the future, they embarked upon unrewarding projects for self aggrandisements. The weakness displayed by the successive governments both democratic and military in the past is having biting consequences on the present economy. Indeed, lack of admirable political aptitude demonstrated by the earliest political gladiators after independence, necessitated the military intervention in Nigerian political scene from 1966. It would appear the triumphant entry of the military into politics was eclipsed with great words of hope and transformation agenda. Instead of acting as stimulus for economic change they became social vampires. They did not only encourage corruption but logically legitimized it. In the midst of this balderdash, the Nigeria's economy collapsed giving way to the survival of the fittest and smartest in the usage of the apparatus of corruption (Egbogah, 2006: 37-43). The disillusioned youths in the system give solace to the option of violence, gangsterism and other social shenanigans to press home their grievances, which is a nucleus of the current unrests in the nation. The insecurity challenges currently facing the country cannot in anyway be detached from the economic challenges that have engulfed the nation for long. This paper advocates diversification of Nigeria's economy from mono- petroleum economy to economic diversification that embraces all economic sectors such as agriculture, mining and manufacturing.

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What Future for Africa's Manufacturing Sector in the New World Environment? Rethinking the Industrial Development Agenda in Sub-Saharan Africa

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Abstract- Since independence, Africa is not mistress of her destiny, particularly in terms of industrialization strategy. Development paradigms followed over the last fifty years by African states are not developmentalist. They revealed their limit in the socio-economic transformation. Today, more than ever before, Africa needs a development agenda driven from the bottom up. The objective of this article is to revive the debate on alternative policies of industrialization in Africa: an endogenous industrialization policy, inclusive and progressive. While there may be a specifically African way in development, it is clear that the small cottage industry could be a pivot of development. The new industrialization policy must do from informal sector a nursery or incubator of industrialization and therefore a catalyst for structural transformation of the continent.

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I. Introduction

As in most developing countries, one of the characteristic features of industrialization in Africa for decades is the technological dependence (Pereira, 1976; Ikonicoff, 1986). Industrialization in Sub-Saharan Africa in particular has marked by a lack of creativity in the production processes and even the nature of products. Equipments and engineering used in Africa already exist in industrialized countries. Products in many African states tend to reproduce the consumption model of western countries (Furtado, 1981). Thus, industrialization process of African countries lacks major innovations. The local market has relatively limited[1]; industrialization cannot face to external competition of manufactured goods. Obviously, the structure of imports and exports illustrates the forte vulnerability of the economic system of African countries[2].

Looking more closely at the statistics of recent years, the share of African countries in World Manufacturing Value Added (MVA) fell 1.2 percent in 2000 to 1.1 percent in 2008 when this share has increased from 13 to 25 percent in developing countries in Asia. Similarly, the share of MVA in GDP of Africa has dropped from 12.8 percent to 10.5 percent between 2000 and 2008. This situation seems problematic when compared to Asian developing countries, where it rose from 22 to 35 percent during the same period. In the Sub-Saharan Africa particularly, the share of MVA in the Gross Domestic Product (GDP) in the last five decades is about 15 percent; whether half that of the East Asian countries and the Pacific since the 70's (UNCTAD, 2008; CEA, 2011). Despite the fact that all third world countries have surpassed the 25 percent[3] of world industrial output in 2000, industrialization in SSA lags behind. Countries in this region account for only an insignificant part of the total while other developing countries have become industrial powers (China, Brazil, South Korea, Mexico, India ...). For this poor performance, we will agree with Samir Amin that the marginalization of Africa in the world results of the non-industrialization (Dembélé, 2011). Industrialization does not appear to have strengthened the search for cultural identity of African countries. On the contrary, it has contributed decisively to the homogenization the consumption model to world scale. However, the indigenous knowledge reactivation could lead to new techniques. Therefore, the endogenous core of creativity is lacking in Africa (Morazé, 1980; Ikonicoff, 1986).

Industrialization of SSA countries presents a paradox. The manufacturing sector, which reflects dynamism of industrialization, plays a very limited role in African countries. The share of manufactured products in total African exports dropped 43 percent in 2000 to 39 percent in 2008. However, primary products that have high capitalistic intensity account for about three-quarters of all African exports as step of the exporting primary economy[4]. In this context, to believe that African countries could grow by producing and exporting only primary products without transformation is a serious delusion[5]. Moreover, the share of Africa in the world intermediate products imports of remained unchanged to 2 percent since the 1990s (PEA, 2014).

The growth and development models based on raw materials export have clearly demonstrated their limitations. The few experiences of semi-industrialized

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peripheral countries like South Africa, Mauritius, Tunisia, Morocco and Egypt, seem to give positive results. These countries have privileged the promotion of manufacturing industry even when they were endowed with vast natural resources (Collier, 1997; Boungou Bazika and Bensaghir; Naciri, 2010). This modesty of industrial integration results for these authors was linked to economic context at those countries.

The economic thought today faces a great dilemma; that of providing real alternatives to African continent development and what in a global economic environment in the open transformation (Boungou Bazika and Bensaghir Naciri, 2010). Indeed, foreign aid to African countries is declining; preferential treatment whom these countries have at one's disposal had gradually gives way to a reciprocal and asymmetric treatment under provisions of the World Trade Organization (WTO) and Economic Partnership Agreements (EPAs); and the forte international competition intensified by the high capital mobility and relocation between countries. In relation to industrial redeployment strategies, it seems that African countries do not perceive better these current changes; either because the mains phenomena do not have understood or because their impact on the future of industrialization does not have evaluated properly (Ikonicoff, 1985). Difficulties to understand the significance of these mutations largely proceed from the overall vision of authorities in the development project elaboration of productive forces. In short, domestic developmentalist paradigm or endogenous development has marginally taken into account in Africa's countries development agendas.

A new strategy of industrialization is essential, i.e. the one which, in a context of globalization of economies and exacerbated international competition, ensure the structural transformation and strengthening the competitiveness of African enterprises (Bikoué, 2010; Dembele, 2011). The definition of such an agenda requires the thought and applied an endogenous development[6] program compatible with the local realities of African countries. Development paradigms followed over the last fifty years by African states are not developmentalist, some were quick to reveal their limits especially in terms of food dependency[7], socioeconomic inequality, poverty, etc. Today, more than ever before, Africa needs a development program driven from the bottom up. This model has based on more egalitarian local development practices affecting the entire poorest segments of the population.

In the literature, the dominant criterion in the elaboration of new strategies is the priority given to the development of endogenous core industry (Fajnsylber 1983; Ikonicoff , 1986). However, the endogenous core concept of industry is to variable geometry. For Villareal (1984), this core has composed of mass consumption goods and intermediate goods that the production depends little on imported inputs. Nieto (1981) and Tello (1981) on the other hand think that the endogenous nucleus must be based on the capital goods industry. Beyond the differences, the development of productive forces has a cultural dimension and should primarily be based on local potentialities. Endogenous core of the new industrialization strategy in Africa should capitalize potentialities of informal sector[8]. This is a vast area of small and medium enterprises of craft sector widespread in almost all African countries. Nowadays, this sector is the only fighting against poverty (Nkouika Ndigani Nkita, 2010) and revitalizes local development and regional integration by down (Njifen, 2014). Its dynamism is one of the cultural sources of entrepreneurship of young men and women on the continent. To receive dividends of those millions of young entrepreneurs, African countries need to make this sector a real base of endogenous development driven from the bottom up.

The purpose of this article is to revive the debate on new industrialization strategies in Africa: an endogenous industrialization policy, inclusive and progressive[9]. To achieve this objective, this study privileges an endogenous development process driven from the bottom up. While there may be a specifically African way in development, it is clear that the cottage industry could be a pivot of development. These production units, which constitute the informal sector[10], reflect the dynamism of the social body that reacts to the inability of traditional models contribute to the progress of society. The new policy of industrialization must take informal sector as nursery industrialization and therefore as a catalyst for structural transformation of the continent.

It is not superfluous to review in the second section different traditional strategies of industrialization face in their failure in socioeconomic development. The third section highlights some thoughts on the new policy of industrialization in African countries. The last paragraph presents some concluding remarks.

II. Industrialization Strategies and their Failure in Socioeconomic Transformation

Like most other developing countries in the 60s and 70s, the industrialization strategy was central to economic planning in African countries (Mkan-Dawire, 2001; Galal , 2008; Bikoué 2010)[11]. His first objective was to ensure the autonomy of national economy through the creation of industrial capacity of import substitution and transformation for export agricultural and mining products[12] beyond the continent. However, although there were differences between countries, this strategy has gradually shown its limits in the 1970s leading to deep questioning in the 1980s (Hugon, 1999; Bikoué, 2005; Galal El-Megharbel, 2008; Harabi, 2008).

Within the context of industrialization, several strategies have implemented in African countries over the past five decades.

a) Industrialization By Import Substitution And Rise Again Channels

The industrialization can be based on the strategy of import substitution, i.e. the replacement of imports of industrial products from local productions under the lee of protectionist barriers. For this it is necessary that the national market is sufficient and that the state plays an important role. Beyond the border protection policy, the state can lead a weak currency policy to restrict imports, encouraging new industries through investments, grants or subsidized loans. The substitution shall apply, first, to consumer goods; in a second step, capital goods are in turn involved in rise again channels logic[13].

The 1960s in sub-Saharan Africa has been characterized by a permanent state intervention in the industrialization process. The instruments of policy choices were the nationalization of strategic units, overall and sectoral planning and organization of the banking system to service industry (Jacquenot and Raffinot, 1993). In front of private investment anemia and necessity to mobilize production field and to economize foreign exchange on a few growth poles upstream, extension of the public sector has emerged as the key feature of the economic policy.

However, this strategy knows several failures from 1960s (Ikonicoff, 1986). First, protectionism reduces competition between low-productivity firms and promotes inflation. Then, the rise again channels runs against a lack of capital and/or increasing foreign debt that weighs, in the late 1970s, due to the appreciation of the dollar. The small size of the domestic market limits growth. The establishment of subsidiary companies led to capital outflows and input imports that can unbalance the foreign accounts.

For some authors, this strategy has been successful over a period of about two decades (Rodrik, 2004). Over the period 1960-1975, many countries have recorded an annual growth of at least three percent of GNP per capita. This list includes the North African countries (Morocco, Tunisia, Egypt) and nine sub-Saharan Africa (Gabon, Botswana, Lesotho, Swaziland, Nigeria, Togo, South Africa, Tanzania, Ivory Coast)[14]. However, the forte inequality in income distribution orientates the industrialization by import substitution towards the satisfaction of the demand coming from social classes with high incomes. These results lead to implantation industries producing the consumption dry goods that use the capitalistic techniques and increase foreign exchange needs. In this orientation of industrialization towards the satisfaction of a privileged few requirement, it agrees upon to note the existing collusion between multinational firms, the national bourgeoisie and the state apparatus (Norel, 1991). In other countries, policies have been oriented towards a strategy of openness and export.

b) Industrialization By Industrializing Industries

This strategy is the result of the most radical theories of underdevelopment. Its aim is to significantly reduce the dependence towards Northern countries and lead to economic independence, financial and technology in the country; necessary complements of political independence. Regarding Africa, Algeria has opened the way for this strategy. The creation of industrializing industries, i.e. of heavy industry, is the first condition of the industrial sovereignty so much desired (Dubos Paillard, 2010). This development model emphasizes basic industries that need to produce a spillover on other downstream industries. This model of industrialization follows the exact opposite path of the Industrialization by Substitution Imports model. Investments have focused initially on upstream industries then down the industrial sector: so one will heavy industry to light industry, intermediate goods industries and equipment to consumer goods industries.

This type of industrialization has heavily inspired by the Soviet example 1930: centrally planned economy. Algeria, which has opted for this industrializing process from 1966 favored the siderurgy and petro chemistry. The particularity of this choice is that it is very costly initial investment and industries in which the financial profitability can be expected at a relatively long term. In Algeria, the share of industry in GDP from 38 % in 1965 to 56% in 1981. However, this model of industrial development involves significant risks. First, economies of scale require from starting a reorganization of fittings exceeding the absorption capacity of the internal market. In countries such as Algeria and Nigeria, the financing of investment has based on oil export. The fall in price in the 1980s posed a real debt problem. Furthermore, the emphasis on heavy industry strangles the growth of light industry and agriculture.

From this point of view, the heavy industries have short and medium term effects, which many consider negative on other economic branches. Consumption industries are somehow overlooked the grounds that at a later stage they will experience a boom thanks to the productive capacity in the relevant branches upstream (Bret, 2006). With reference to Montoussé (2007), agriculture being sacrificed, African countries must import foodstuffs that induce an additional dependence on the continent outside. Thus, Algerian agriculture proves unable to provide consumption goods in sufficient quantity and quality to feed a rapidly growing population. Therefore, countries must import a large share of foodstuffs for its population.

c) Extrovert Industrialization By Exports And Alliance With Multinational Enterprises

This strategy, also called industrialization by export promotion, has advocated by neoclassical. This is to replace traditional exports by the new by taking profit of comparative advantages dynamic (low cost of labor, exploitation and valorization process of raw materials, etc.). The country uses its competitive workforce to produce and export low value added products. Then he began a diversification by sector and a rise back to the production of goods with higher added value (durable consumption products, intermediate goods, capital goods ...). This strategy refers to the experience of the newly industrialized countries of Asia whose success has based on a strategy of openness to international trade (World Bank, 1993). Obviously, these countries experienced in two decades a forte growth and made a success of diversify their industry and rise back channels.

According to the nature of products, there are two models of industrialization founded on exports: the first based on primary products exports, the second on manufactured goods export. Both models have experienced mixed fortunes. According to Montoussé (2007), the export of primary products has rarely promoted industrialization. Many developing countries have attempted to establish their economic development on primary products exports for finance investments in the industry sector and capital goods imports. The export of non-agricultural commodities should thus allow the development of a mining industry including spillover effects could encourage a more diversified industrialization. Many oil-exporter countries have adopted this strategy in the 1970s.

However, the worsening of exchange terms of exporter countries of non-oil primary commodities in the 1980s reduced the impact of this strategy: the decline in commodity prices has increased the cost of capital goods imports and increased foreign debt. According to Konate (2002), the growth model driven by primary products exports has greatly exacerbated the structural desequilibrium of the Maghreb countries. Not only, agricultural and industrial exports have fallen due to bad weather and the economic slowdown in European countries, but in addition, the fall in prices of major raw materials exported was brutal. For Morocco, the price of phosphate has halved from 1975 to 1978. As a result, deficits worsened while foreign exchange reserves touched their lowest level. To compensate for this situation, countries have resorted to massive debt. However, from the 1980s, the size of deficits and rising social demands has led to payment defaults (Morocco and Algeria) and governments had to gradually turn to the IMF.

In the early 80s, Structural Adjustment Program (SAP) has led governments to radically rethink their approach of industrialization on the continent. In the philosophy of the SAP, the markets are efficient in relation to government interventions. Consequently, all of industrialization by import substitution devices were dismantled as well as all measures taken to protect the domestic market[15]. However, it consensually appears that SAPs have caused a decline of African industries (Lall, 1995; Jalilian and al., 2000; Marti and Ssenkubuge, 2009; Chang, 2009). Of course, the evolution of manufacturing value added during the period of adjustment has not met expectations. Many Sub-Saharan African countries experienced the decline of industrialization which particularly harmful effects were observed on existing industries.

The latest post- structural adjustment decades are marked with a dramatic transformation of the world. On the one hand, globalization has increased the marginalization of African countries (Charmes, 1995; ECA, 2011). It has undermined development efforts of these countries, creating another fracture due to the marginalization of the informal economy in the economic planning. On the other hand, globalization has fostered the rise of major new actors such as China and India. This effect of globalization appears ambiguous on the Developing Countries because the integration of China and India in the global value chains has been conditionally that then African countries are integrated in this process unconditionally. In other words, contrary to African States, China and Indian have conditioned their entry into globalization through the establishment of sovereign national projects forcing the others countries to accommodate to their development needs.

The questioning of the liberal paradigm that followed the failure of self-centered strategies leads to rethink new ways for future development strategies. A deep thought has conducted both outside and within international development agencies to rethink development.

III. Informal Sector as Endogenous Core of the New Strategy for Industrial Development in Africa

In a globalized world, industrialization based on manufactured goods exports to developed countries appears more effective. However, the composition of exports from sub-Saharan Africa shows that the type of integration is very near to the primary exporter model, ie a model based on the export of primary products. In this context, according to Pereira (1976), Sub-Saharan Africa is still living in industrialized underdevelopment. To reorient this strategy, it would be necessary to redefine the endogenous core industry reactivating indigenous knowledge and make the industry a tool for integration into the world market. Small businesses also present in rural and urban areas may thus constitute a pivot of inclusive and sustainable industrialization. Despite the many advantages of informality, endogenous development theory until now was in reality very little developed theoretically. A question, which seems legitimate in the conception of development from below, resides in the real possibilities to promote local industrialization from only local potentials. After showing the extent and some assets of the informal sector in African countries, this section is also working to show that the informal sector can be a pivot or a nursery to the industrialization of the African continent.

a) Informal Sector In Africa: Scope And Performance

The informal sector as formal in Africa is a system of micro, small and medium enterprises (Dinh and Clarke, 2012). Large companies that play a vital role in the economic development of emerging countries and developed countries are few in Africa. According to surveys of manufacturing companies, they have an average of 47 employees in sub-Saharan Africa, against 171 in Malaysia, 195 in Vietnam, 393 in Thailand and 977 in China. The relatively small size of the large African companies is a real opportunity because it means they are not working at their optimum level. However, there are no comprehensive statistics, accurate and harmonized on countless small businesses that make up the informal sector in Africa.

The literature leads to classify the informal sector in two groups: large informal and small informal. Informal big companies are fairly comparable to modern businesses but retain informal behavior. They have similarities with entrepreneurs who started as small farmers. The development of their business has based on an entrepreneurial capacity and perseverance clearly above average and leans on social networks, ethnic and religious. Small informal enterprises have characterized most constantly by a self-employment system and structures registered with the municipalities, but rarely with the tax authorities.

Table 1 : Share of firms holding a sincere accounting according to informality level in French-speaking Africa (%)

	COTONOU	DAKAR	OUAGA	DOUALA	LIBREVILLE	YAOUNDE
Formel	100	100	100	97,22	100	90,16
Big informal	77,78	72,00	87,88	77,78	57,89	40,00
Small informal	48,09	51,09	65,20	44,14	30,23	19,35

Source : CREA, 2007, 2014

However, moving from macroeconomic scenarios to the micro foundations of entrepreneurship, there are defensive or necessity-driven entrepreneurs and opportunity-motivated entrepreneurs (Acs, 2008). The defensive or necessity entrepreneurs are those who form a new business because they need income to survive and not because of market opportunities and innovative ideas. According to Naudé (2010), this kind of survival-driven entrepreneurship has predominantly diffused in the developing countries, where poverty and lack of job opportunities in the wage sector regularly push a large number of people into entrepreneurial activities. These necessity-driven entrepreneurs are those who started their own firms as a result of personal situations such as failure to find a suitable role in formal employment, thus forming a new business was the best existing option (Reynolds et al. 2005).

Table 8 : Education level of manager according to informality level in French-speaking Africa

Education levels		COTONOU	DAKAR	OUAGA	DOUALA	LIBREVILLE	YAOUNDE
Primary	Formal	6,00%	9,00%	15,00%	24,84%	12,11%	38,54%
	Big informal	7,00%	16,00%	19,00%	11,26%	7,69%	19,78%
	Small informal	21,00%	30,00%	17,00%	34,70%	28,72%	33,45%
Secondary	Formal	35,00%	45,55%	55,00%	29,29%	44,24%	39,47%
	Big informal	38,00%	56,00%	50,00%	40,09%	70,77%	20,51%
	Small informal	42,00%	42,00%	58,00%	46,51%	49,35%	38,49%
Higher	Formal	47,00%	41,00%	18,00%	27,48%	33,39%	14,36%
	Big informal	44,00%	18,00%	9,00%	45,50%	20,00%	59,71%
	Small informal	28,00%	13,00%	8,00%	16,39%	18,54%	20,14%

Source : CREA, 2007, 2014

Economic theory including human capital indicates a strong correlation between the professional qualifications and performance of the workforce. The best trained workers are generally those who reach a higher level of productivity and income. This correlation holds true in the informal sector, despite low levels of

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profitability that have observed there. However, one observes large differences between the formal and informal in access to education and other basic social services, which lead to considerable divergences in skill levels, productivity and income.

The human factor is probably one of the most sensitive to the informal sector. Authors report that 90% of the African labor force are informal (see table 3). The informal sector accounts for over 80 % of total employment and 90% of newly created jobs in these countries (Mbaye, 2014). More specifically, the International Labour Organization (ILO) reports that the informal sector accounts for 48 percent of non-agricultural employment in northern Africa and 72 percent in Sub-Saharan Africa. Chen (2001) estimates that 93 percent of new jobs created in African during the 1990s were created by the informal sector. Xaba et al. (2002) find that, while formal sector employment and output are stagnant at best, informal sector employment and share in GDP are steadily increasing. Focusing on the rural economy, Otsuka and Yamano (2006) report a non farm informal income share of 13 percent in Ethiopia, 30 percent in Kenya and 38 percent in Uganda. In Burkina Faso, 80 percent of total employment has attributed to the informal sector (Calves and Schoumaker, 2004).

Table 3 : Percentage of informal employment in African countries

Countries	Years	Informal employment	Countries	Informal employment in the non farm sector
South Africa	2010	33,0	Algeria	41,3
Cameroon	2010	91,0	Benin	93,0
Congo	2005	46,0	Burkina-Faso	77,0
Gabon	2005	90,0	Egypte	46,0
Lesotho	2008	37,0	Guinea	86,7
Liberia	2010	60,0	Kenya	71,6
Madagascar	2005	74,0	Maroc	*67,1*
Mali	2004	82,0	Mauritania	*80,0*
Ouganda	2010	68,0	Mozambic	*73,3*
Central Africa Republic	2005	87,0	Niger	*62,9*
Chad	2005	93,0	Democratic Rep. Congo	*59,6*
Zambia	2008	69,0	Senegal	*76,0*
Zimbabwe	2004	54,0	Tunisia	*35,0*

Sources: BIT (2011), Jutting and de Laiglesia (2009), Njifen (2014).

Informality has reached the alarming proportion in some African countries. In an economy where informal activities have estimated at more than 50 percent of GDP, an improvement of the productive performance of this sector, even at the margin, would involve significant results on the growth of Gross Domestic Product (GDP). Thus, the informal economy represents today between 40 percent and 80 percent of GDP (Table 4). Specifically, the share of informal GDP in sub-Saharan Africa was 54.7 percent against 37.7 percent in North Africa (Charmes, 2000). Overall, it was estimated in 2002/2003 that this sector contributes 43% to GDP in Africa (Schneider, 2006; OECD, 2007). Steel and Snodgrass (2008) report that informal economy accounts for 50 percent to 80 percent of GDP in Africa.

Table 4 : Contribution of informal sector to GDP in percentage

Countries	Years	Percentage	Countries	Years	Percentage
Algeria	2003	38,0	Niger	2007	76,6
Tunisia	2004	42,0	Togo	2007	72,5
Egypte	2004	33,3	Benin	2007	71,6
Burkina-Faso	2000	55,8	Mali	2007	61,6
Senegal	2007	51,5	Nigeria	2006	20,0
Zimbabwe	2008	70,0			

Sources : Jutting and de Laiglesia (2009), Rapport CSI-Afrique.

While undergoing many constraints, the informal sector has numerous potentials that give it comparative advantages for development policies (Maldonado et al., 2004; Njifen, 2014). Indeed, this sector has a more flexible job creation since it does not have impeded by regulatory barriers. This sector is mobilizing own resources of various kinds to create and operate the business. It is also able to make technological adaptations and diversification of the supply by a rapid response to changes in demand. The informal sector also has the advantage of using local inputs in the manufacturing process. The establishment of informal production units throughout the country confers this strategic importance in the decentralization process. Goods and services produced in the informal sector have adapted to needs of populations, notably low-income households.

The informal sector makes possible the development of human resources excluded from formal training institutions thanks to apprenticeship and transfer of technical skills by doing on the job (Adams, De Silva and Razmara, 2013). This sector appears as a business incubator. Filipiak (2007), Haan (2006) and Liimatainen (2002) estimate that up to 70 percent of urban informal sector workers in Africa have been trained through the traditional apprenticeship system. Still, in countries such as Kenya, Tanzania and Zimbabwe, he finds large numbers of youths who are acquiring skills in informal enterprises under the guidance of a master (Haan, 2006).

Africa's informal economy is a source of entrepreneurship culture. This sector is a reservoir of know-how and expertise that provides apprenticeship and job creation related to its flexibility and adaptability. The craft sector in particular is now positioned in many African countries as an economic driver. In this context, it appears in the spirit of experts and observers warned as a laboratory or apprenticeship nursery. In this sector, many modern entrepreneurs today, particularly those of ECOWAS acquired the necessary entrepreneurship and business experience. However, the challenge is to evolve to become a modern private sector. The informal sector has moved from a presumed temporary phenomenon in developing countries, expected to diminish in size with industrialization, to one that is more permanent in light of today's development patterns. Although interest in the informal sector focuses largely on developing countries, the Organization for Economic Cooperation and Development has demonstrated the growing importance of this sector in industrial countries (OECD, 2009).

IV. The Informal Sector as a Nursery to the African Continent Industrialisation

The concept of informal sector has generated some controversy with some authors objecting to the concept of informality, arguing that it is judgmental and gives the impression that those in it are irresponsible and unreliable (Heintz 2012; Simpson 2010). Much of the controversy has centered on the reference to use of the word sector. Proponents of the informality concept prefer using the term informal economy, even though it still contains the conceptual weakness of denoting a distinct and separate entity (Kanyenze et al., 2003). This study avoids the term informal economy or sector and instead prefers to use the term micro and small enterprises or Handicraft industry.

While numerous theories have been put forward regarding the role of entrepreneurship in economic development, the best known is the view of Joseph Schumpeter (1883 – 1950). According to Schumpeter, an entrepreneur is an agent of change who introduces a new product or a new method of production. The entrepreneurship may be in the form of opening a new market or discovering a new source of supply (Ohyama et al. 2009), or in bringing about a new organizational structure of an industry. Schumpeter's creative destruction theory views entrepreneurial innovation as a process through which entrepreneurs bring about industrial mutation, where the economic structure is incessantly revolutionized from within; thereby destroying the old system while creating a new one. In recent years a strong belief has arisen among scholars and policy makers that entrepreneurship is a vital driver of employment and economic growth for both developed and developing nations (Branzei and Abdelnour, 2010; Thurik and al., 2008; Van Praag and al., 2007).

To become inclusive, economic development must go hand in hand with the socio-cultural development. The cultural development does not accompany by economic development, it is upstream and it is dynamic and innovative factor (Dupuis, 1991). Indeed, it is the culture, which constitutes the source and finality of development, which gives it momentum, quality, direction and duration (Cuellar, 1992). To each culture must match a particular style of development (Desjeux and Sanchez- Arnau, 1994). As for social development, it accompanies by an increase in employment and improvement of employment conditions of local workers in a value chain (Barrientos and al, 2011; Milberg and Winkler, 2013; Bernhardt, 2013). Informality represents an alternative to the development in that it would advertiser idyllic anti-corporations because reinventing the social link (Latouche, 1986). If the autonomy of the informal sector is far from unanimous, this sector has known to have an incubator of enterprises development and job creation (Maldonado, 1999; Kanté, 2002).

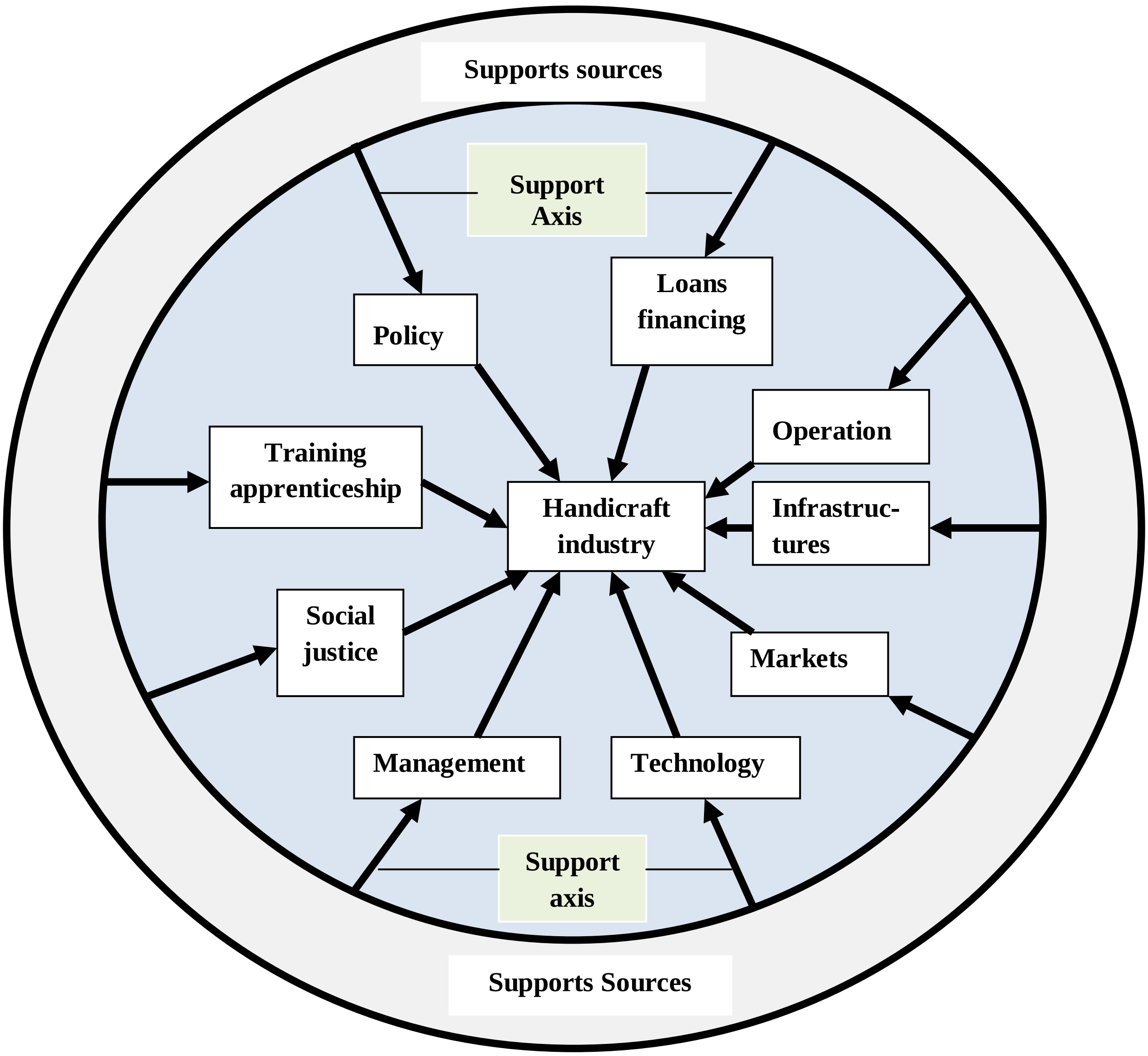
Both productive and redistributive, the informal sector has played and continues to play a significant role in the integration and social regulation; functions for which States have specifically found wanting or powerless. Capable of flexibility and adaptation, valuing the spirit of solidarity and individual initiative, this sector carries within it the seeds of its extraordinary vivacity that put down one's name to the antipodes of the development model from top to bottom.

Africa can learn many lessons from international experience. In other countries like India and Pakistan, the industrial informal sector produces between 70 and 75 percent of total industrial production of the country (ILO, 1996). Furthermore, in East Asia, particularly in Korea and China (Hong Kong and Singapore), we observed a decline in the informal economy with the expansion of the manufacturing and industrial sector and the resulting creation of job in the formal economy. These countries have managed to develop strategies that resulted in an effective transformation of the informal sector in structured sector. It has reported that in the USA, the informal sector has been a progressive and completely absorbed by the informal sector. In Japan, it seems that this sector has been the backbone of industrialization (Gbossa, 1997).

If according to the monetarists and Keynesians, the informal sector constitutes of sands into which lose the multiplier effects of capitalism (Charmes, 1985), it is appropriate to look for ways to capitalize on the sector in order to take advantage of the potential that is hidden there. In the present circumstances of aggravation of youth unemployment and poverty, it is very urgent to replace the small industry in the center of the new philosophy of industrialization in Africa. The industrialization process from the bottom is a different approach to the issue of development. Given its dynamism although debatable registered everywhere, it proves to be a promising alternative to the traditional pattern of development. This new development approach, what is the content? Staying on a global plan, let us say the content analysis of industrialization can be articulated around a few main areas, each the result of a break with the economic and social characteristics of the standard logical development.

The creation of a database of craft enterprises in each country is essential to facilitate the capitalization of the previous experiences, to use and valorize the established facts. It is the stage prior to any intervention in the informal crafts sector. Given the emergence of artisanal production units in Africa, the new strategy requires a global approach from an integration of support system (Maldonado and al., 2004). Similarly, the multidimensional nature of the problematic of artisanal business development requires that we seek more synergy between actors involved in the field (Figure 1). Imagine a project that invests a lot of resources and energy to form craftsmen to produce goods they can not sell thereafter, lack of outlets for production, or lack of transport infrastructure or adequate conservation systems, or simply because the beneficiaries of the training can not apply the knowledge gained lack of access to credit, etc.

Graphic : The support integration system in the artisanal informal sector



Source : Maldonaldo and al. (2004)

The integration of support system ensures a global consideration of the factors of competitiveness and therefore avoid any link is missing, as shown in the graphic 1. The integration has understood as search complementarities between the support structures in the context of simultaneous interventions reinforced by the coordination or consultation process open to ensure overall consistency.

V. Concluding Remarks

This study has permitted to show how informal activities have the capacity to reply to needs of development in consideration to their employment potential, income distribution and the satisfaction of basic needs. At the same time, it seems that the evolution of technology implemented in the informal sector cannot generate the expected economic performance. In addition, the structure of the informal sector depends on a set of economic and non-economic factors that conditions to a certain extent its relative, current and potential economic performance. Their potential ability to generate a class of smal entrepreneurs, this sector can be an essential pillar of economic transformation if its internal and external constraints have minimized. It is appropriate to make a pleading to do from the informal sector a real partner of the Africa development policy. It aims to raise awareness of the strategic importance of this sector, both economically and socially. This pleading is for various public from government officials departments that have an important role to play in promoting the informal sector, in passer-by NGOs and other local stakeholders to everyday realities of informal operators, to leaders of associations of informal sector producers themselves. It has hoped that it will help provide each concrete and useful elements for action.

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[1] Internal Markets are structurally limited by the low average income.
[2] Imports are often considered as a sign of inner weakness and exports as a force (Cattaneo and Mioudot , 2013).

[3] The United Nations Industrial Development Organization (UNIDO) Conference hold to Lima in 1975 sets the bar very high: 25% of global industrial production will be the result of the third world in 2000. This goal has been finally achieved in 2000.

[4] Commodity prices have fixed in the world, and often have wider fluctuations than manufactured goods. These arguments justify the fragility of African economies to external shocks.

[5] The production of these products does not relate to the economy and therefore weakly affects the long-term economic performance of countries (Hausmann and al., 2007; Lall et al., 2006).

[6] The literature opposes the concept of exogenous development based on the attractiveness of external forces to that of endogenous development based on support to internal forces.

[7] If one keeps in mind the issue of food production in the world , it is clear to see that industrialized countries with a rural population about 5 to 6 percent of the overall population, have not only food sovereignty but have the same an exportable surplus ; USA just as Europe. Moreover, if we look at the most industrialized countries of the third world, especially China, it has a proper food sovereignty. It supplies its population less correctly, not as rich Westerners, even though there still has poverty and misery pockets. As regards the semi- developed countries, they are heavily dependent on food. Egypt and Algeria are the models. The less industrialized countries finally are most dependent on food plan.

[8] African countries have in common the fact that their parallel economy is relatively forte. Although it is difficult to ascertain the size of the African informal sector, the focus is not exclusively on the economic dimension of progress, social regulation and nearby activities, which are governed by a mobile of local resource valorization in sight of satisfy the basic needs of the population.

[9] The point of importance in the Western science has always been to look at the thing from the outside even if it is a vacuum shell to inside (Zoual, 1996). This limit is at the heart of economic science that denies the consideration of the subjectivity of the actors.

[10] The informal sector should be clearly demarcated illegal economic activities such as the drug trade, organized crime and the black market.

[11] For developing countries, industrialization means more than simply increasing income and production volume. It is for him a means to modernize its primitive structure of production and transform all socioeconomic tradition associated with it (UNIDO, 1991).

[12] In all projects, plans and official statements made by the middle of the decade of 1975, this change is clearly stated: it is to pass from the stage of import substitution to step of local resources valorization. Branches covered by this strategy are old food industries that we will renew and strengthen (palm oil, canned) or new industries for adding some transformation to primary goods exported previously unprocessed (wood sawn veneers and plywood).

[13] According to the dictionary of socioeconomic sciences (Agostino et al., 2008), the rise again channels is a strategy consisting from the production of a given product to progressively develop national territory business units production intervening upstream of the production of the product, thereby constituting a supply chain consisting of complementary productive activities.

[14] The countries that experienced the forte growth before 1975 was not Singapore or South Korea, but Gabon. Botswana's growth rate over the period 1960-1975 was higher than that of Hong Kong and Taiwan (Rodrik, 2004).

[15] Tariff and import quotas, price controls and subsidies, credit ceilings, etc.

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An Assessment of the Real Exchange Rate Misalignments in Egypt: An Application of the Behavioral Equilibrium Approach

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Abstract- This paper estimates the equilibrium real effective exchange rate for the Egyptian economy during the period (1974-2012). The paper reviews the evolution of Egypt's exchange rate policy and the most significant developments of its real effective exchange rate during the same period. Using a behavioral equilibrium exchange rate (BEER) approach, it calculates the extent of real effective exchange rate misalignments in Egypt. There is evidence that the actual real effective exchange rate has deviated from the equilibrium real effective rate with various degrees during the estimation period. The Egyptian pound was overvalued before the launch of the ERSAP. The latter marked an undervaluation period that lasted till 1998. The findings indicate that the pound approached to its equilibrium level thereafter.

Keywords: egypt, real effective exchange rate, beer, exchange rate misalignment.

GJHSS-E Classification : FOR Code: C32, F31, F41, O55

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I. Introduction

Exchange rate stability is a major monetary policy goal in emerging countries. Particularly, the question of real exchange rate misalignments, perceived as a key economic indicator has a critical interest for policymakers. It represents an important link between the domestic economy and the rest of the world and reflects movements in relative prices of currencies. Real exchange rate misalignments – defined as the deviation of the actual real exchange rate from the equilibrium real exchange rate – are harmful for the economic performance of an economy.

This raises concerns about any potential departures of the actual exchange rate from its equilibrium level, especially if such departures are significant and/or persistent (Montiel, 1998). The theoretical and empirical research suggest that misalignments in the real exchange rate can potentially lead to serious economic repercussions on trade, competitiveness, inflation, investment and hence, economic growth and stability (see for instance, Willet (1986), Edwards (1987) and Rajan and Siregar (2002).

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Fears about such misalignments call for frequent evaluation of both the actual and equilibrium exchange rates so that policymakers can maintain a sustainable external position of their economies. However, the equilibrium exchange rate is not directly observable and appropriate models should be used to estimate it (Borowski and Couharde, 2003; Ajevskis et al., 2012).

Many empirical papers that focus on examining this concept of equilibrium exchange rate have been produced on the scale of developed countries. Only recently, there has been a prominent interest on exchange rate topics for developing and emerging countries. Several studies have tried to estimate the equilibrium real exchange rate and identify its link to the real economy.

The exchange rate literature has been witnessing a proliferation and development of many econometric and statistical techniques in this regard. Accordingly, it is an overriding research question to investigate whether the real exchange rate is misaligned in a given economy and adopt the needed measures to correct any misalignments.

The present study employs a behavioral equilibrium exchange rate approach to check if real exchange rate in Egypt is misaligned during the period (1974-2012). The paper is organized in eight sections. The next section provides an overview of the exchange rate policy in Egypt with particular attention to the most significant developments of the real effective exchange rate during the estimation period. Section IIIpresents a discussion of the theoretical background and empirical literature. Section IV describes the methodology used. Section V and VI provides some preliminary data analysis and the estimation results, respectively. Section VII shows an empirical estimate of the equilibrium exchange rate in Egypt between 1974 and 2012 based on the BEER methodology and section VIII concludes.

II. Exchange Rate Regime and Developments – A Historical Overview

The conduct of exchange rate policy has witnessed many shifts and developments in Egypt since launching the Economic Reform and Structural Adjustment Program (ERSAP) in the early 1990s.

Before the official launch of the ERSAP, several measures were undertaken to switch from a fixed parity to a flexible peg regime and from multiple rates to a unified rate. The Egyptian overall experience of exchange rate regimes until 1991 can be described as one of repeated failed trials to establish a unified exchange rate. During the 1970s, Egypt maintained a multiple exchange rate regime with a relatively appreciated or subsidized exchange rate for food imports[1]. The regime consisted of three main pools; an official Central Bank rate, a commercial bank rate, and an illegal yet tolerated parallel foreign exchange market; each had its own sources and uses of foreign exchange and with separate rates(Abdel-Khalek, 2001).

Egypt started the ERSAP in 1991, which was designed to achieve macroeconomic stability and create a decentralized open market oriented economy. At the heart of the program were a massive fiscal adjustment, a supportive monetary policy, exchange rate liberalization and unification, and price deregulation (Mohieldin and Kouchouk, 2003; El-Shazly, 2011).

A significant step was undertaken in February 1991 when the three-tier exchange rate regime was temporarily replaced by a dual exchange rate system consisting of a primary market and a secondary market. The two rates were finally merged and unified under ERSAP in October 1991. Since then, the Central Bank of Egypt intervened to maintain a stable foreign exchange rate against the US dollar using the pound/dollar exchange rate as a nominal anchor for monetary policy. This represented a new phase in the exchange rate management in Egypt (Kheir-El Din and El-Shawar by, 2000; Central Bank of Egypt, Economic Review, 2009/2010).

The development of the real effective exchange rate during the period (1988-1991) was affected by the several administrative adjustments (i.e. nominal devaluations) that occurred since1987, which resulted in a sharp depreciation of the real trade-weighted index of exchange rate. The trend had completely been reversed after the stabilization effort took place; between 1991 and 1996, the real effective exchange rate has appreciated by almost 27 (see appendix).

Due to the persistent pressures on the Egyptian pound and in an attempt to prevent extra drainage of the foreign reserves, a series of devaluations started in 2000 and 2001[2]. Such devaluations represented a gradual movement to a more flexible exchange rate regime in late 2000. In 2003, the objective of price stability was formally declared to be the main objective of the monetary policy (Mabrouk and Hassan, 2012). In addition, it was the prominent feature of the monetary policy up to 2003 to officially peg or manage the Egyptian Pound against the US Dollar. At the end of January 2003, the official exchange rate shifted to a free float (Moursi and Mossallamy 2010; Ahmed, 2012).

A free float of the Egyptian pound was announced on January 28, 2003, abandoning the managed peg exchange rate system. The floatation of the pound came as an attempt to resolve the policy inconsistency, originating from a combination of exchange rate rigidity, a reluctance to run down international reserves to support the peg to the dollar, and to reduce interest rates to activate the economy. Accordingly, the exchange rate ceased to be the nominal anchor of monetary policy in Egypt (Galal, 2003; Hassan, 2003). This caused the real effective exchange rate to lose nearly 69 percent of its value between 1999 and 2003.

In 2005, the CBE announced its intension to adopt the policy of Inflation Targeting (IT), which introduced a new framework for the monetary policy in Egypt. However, these developments were not sufficient to achieve the price stability objective under the lack of an official nominal anchor since 2003. On June 2, 2005, the CBE developed a new framework for the monetary policy, which replaced the overnight interest rate on interbank transactions as an operational target instead of the excess reserve balances of banks (Al-Mashat, 2008; Mabrouk and Hassan, 2012).

During 2006 and 2007, the Egyptian economy has witnessed several positive external factors such as favorable terms of trade, high external demand and an increase in foreign capital inflows. This had an appreciating effect on the real exchange rate during the same period. On the contrary, the Egyptian Pound exchange rate depreciated by roughly 4.7 percent against the US dollar during the FY 2008/2009 as a result of the global downturn caused by the global financial crisis and a parallel current account deficit (World Bank, 2009; CBE, External Position of the Egyptian Economy, FY 2008/2009).The period between 2005 and 2008 witnessed an appreciation of the real effective exchange rate of around 11 percent.

Furthermore, the Egyptian economy has suffered from unstable political and economic conditions since the outbreak of the January 25threvolution in 2011. Some adverse consequences included a rise in capital outflows, a decline in tourism receipts, an increase in the dollarization process and a

[1] In 1981 for instance, the official exchange rate for food imports was set at L.E. 1.43 per USD and L.E. 1.19 per USD for non-food imports (Huizinga, 1995).

[2] Toward the late 1990s, the Egyptian economy has started to show many signals of serious economic troubles. The Egyptian economy was hit by a succession of both internal and external shocks in 1997. The East Asian crisis, the Luxor tragedy and the decline in oil international price led to a deterioration in Egypt's external position triggered mainly by an outflow of capital and a decline in tourism receipts in addition to a widening current account deficit (Handy, 2001; Panizza, 2001).

downgrade in Egypt's credit rating. The CBE reacted by withdrawing from the net international reserves, which dropped by about USD 11 billion or nearly 42 percent between June 2011 and June 2012 (Central Bank of Egypt, 2011/2012). The CBE introduced a new system of dollar auctions through which domestic banks can buy or sell US dollars to avoid further declines in the net international reserves (Brixiova, Égert and Essid, 2013).

The improvement on the political spectrum in 2012 has led to a light deceleration in the dollarization process[3]and hence, affected the pattern of exchange rate evolution slightly (ALEXBANK, 2011; MoF Financial Monthly 2012; Central Bank of Egypt, Monthly Bulletin, 2012). The real exchange rate has appreciated by almost 27 percent between 2008 and 2012 in effective terms.

III. Theoretical Background and Empirical Literature

The BEER is one of the most popular approaches for estimating the equilibrium real exchange rate. It is based on the theoretical model developed in Edwards (1989) and Edwards (1994).Edwards' model is an intertem poral general equilibrium model, which defines the equilibrium real exchange rate as that relative price of tradables to non-tradables that, for given sustainable or equilibrium values of a number of variables (known as real exchange rate fundamentals), results in the attainment of simultaneous internal and external equilibrium. According to this model, the internal equilibrium reflects the case in which the non-tradable goods market clears in both the current and future periods while the external equilibrium occurs when the discounted flows of the current account balances is equal to zero (i.e. current and future values of the current account balances should be compatible with the long-run capital flows).

Edwards' model has been extended by Clark and MacDonald (1998) who introduced the BEER as a new framework for empirical analysis. They provided a comparison between the FEER and BEER estimates for the German mark, the Japanese yen, and the US dollar. The model they apply starts from the risk-adjusted uncovered interest parity (UIP) condition, which can be expressed by the following equation:

$$E_t(\Delta_k S_{t+k}) = (i_t - i_t^*) - c \qquad (1)$$

where S_t is the foreign currency price of a unit of home currency, $i_t$denotes a compounded nominal interest rate for k periods on a bond with the maturity horizon k and an asterisk denotes a foreign variable, Δ_k is the k-period difference operator so that $E_t(\Delta_k S_{t+k})$=$E_t(S_{t+k} - S_t)$, E_t is the rational expectations operator conditional on the information set at time t, and c is a constant risk premium.

Equation (1) can be expressed in real terms by subtracting the expected inflation differential, $E_t(\Delta_k P_{t+k} - \Delta_k P_{t+k}{}^*)$, from both sides of the equation. Thus, after rearrangement, we obtain the following equation:

$$q_t = E_t(q_{t+k}) - (r_t - r_t^*) + c \qquad (2)$$

whereq_t is the real exchange rate, $r_t = i_t - E_t\,(\Delta_k P_{t+k})$is the expected compounded real interest rate for k periods. Accordingly, equation (2) is a condition for the risk-adjusted real UIP such that the real exchange rate is determined by three components; the expectation of the real exchange rate, the real interest rate differential and the risk premium (Clark and Mac Donald, 2004; Nilsson, 2004). Assuming that the unobservable expectation of the exchange rate, $E_t(q_{t+k})$, is the long-run equilibrium exchange rate, $\bar{q}_t$, then the current equilibrium exchange rate defined as $\dot{q}_t$ (which is different from the actual rate q_t) will be expressed as a function of the component, $\bar{q}_t$, and the real interest rate differential[4];

$$\dot{q}_t = \bar{q}_t + (r_t - r_t^*) \qquad (3)$$

The long-run equilibrium exchange rate is mainly driven by three key fundamentals; the relative price of traded to non-traded goods as a proxy for the BS effect, the net foreign assets, which is explained by the determinants of national savings and investment (particularly, demographics and fiscal balances), and the TOT (MacDonald, 2000; Clark and MacDonald, 2004). Real interest rates are excluded since they are used to explain the currenct equilibrium exchange rate and not as a determinant of the long-run equilibrium rate (Dufrenot and Égert, 2005; Clark and MacDonald, 2004).

In practice, the BEER approach amounts to estimating a reduced-form relationship between the real exchange rate and some fundamental variables, which themselves should be at sustainable or equilibrium levels[5] (Ndlela, 2010). The "B" for "behavioral" in BEER means that the approach does not impose any particular functional form. Unlike the MB approach, it does not include certain normative assumptions and

[3] The dollarization ratio declined from roughly 21 percent in June 2011 to around 20.6 percent in June 2012. This was attributed to a decline in the proportion of foreign currency deposits in total deposits between the two time points. While local deposits comprised L.E.664.6 billion of a total of L.E.841.5 billion in June 2011, they went up to L.E.714.3 billion of 900.4 billion in June 2012 (Central Bank of Egypt, Monthly Bulletin, 2012).

[4] Clark and MacDonald (2004) clarify that equation (3) can be modified to include the risk premium term included in equation (2). However, in their empirical work, this term proved to be insignificant and thereby, was removed.

[5] The current equilibrium exchange rate ($\dot{q}_t$) is determined by the current values of the economic fundamentals. The long-run equilibrium exchange rate ($\bar{q}_t$), however, is determined by the long-run values of these fundamentals. The latter are obtained using the Hodrick-Prescott filter (Baak, 2012).

only searches for a significant econometric relationship between the real exchange rate and the fundamental variables with no specific conditions on the structure of that relationship[6] (Stein, 2003; Driver and West away, 2004; AlShehabi and Ding, 2008).

Below is a summary of the various possible determinants of the equilibrium real exchange rate ($\bar{q}$ in equation 3) that are used under the BEER approach.

a) Productivity Differential

The impact of productivity differential is expected to follow the BS theory. Hence, it is predicted that an increase in the productivity of the tradable goods sector of an economy will lead to a real currency appreciation resulting from the upward pressure on wages and prices of the non-tradable goods.

b) Investment to GDP Ratio

The effect of this variable can be ambiguous. On one hand, an increase in the investment to GDP ratio is expected to raise the productivity of an economy leading to real appreciation. On the other hand, this increase in the investment ratio can be driven by an increase in imports, which negatively affect the current account causing the opposite effect (Ajevskis et al., 2012).

c) Net Foreign Assets

An increase in the net foreign debt of a country (caused for instance by a deficit in the current account) has to be financed by capital inflows. This requires a depreciation of the debtor country's currency at the given interest rates. Moreover, the accumulated foreign debt, serviced with interest payments, can be financed by a surplus in the trade balance. Thus, a depreciation of the currency is needed to boost the country's exports.

d) Openness of the Economy

The effect of this variable on the real exchange rate is uncertain or unpredictable. Openness may lead to a decline in the domestic prices of the tradable goods resulting from a decrease in tariffs for instance. This leads, through the substitution effect, to an increase in the demand for importables causing a deteriorated trade balance and consequently, real currency depreciation. However, if openness is dictated by higher income effects and increased income is spent more on non-tradable goods, then it will lead to an appreciation of the real exchange rate (Tang and Zhou, 2013).

e) Government Consumption

Higher levels of government consumption, which are biased toward the non-tradable goods sector is expected to raise the relative price of non-tradable goods and hence, leads to a real exchange rate appreciation. However, if this increased consumption is financed through higher taxes, it may lead to the opposite effect (Dubas, 2009; Tang and Zhou, 2013).

f) Terms of Trade

It is expected that higher TOT will lead to an appreciation of the real exchange rate through the income effect of increased exports, which increases the demand for non-tradable goods. If the improvement in the TOT reflects a decline in import prices, however, then a demand shift from non-tradable goods to imports will drive the prices of non-tradable goods down causing a depreciation in the real exchange rate (Terra and Valladares, 2010; Tang and Zhou, 2013).

g) Fiscal Balance

An increase in the budget balance linked to contractionary fiscal policy should lead to an increase in national savings, lower levels of domestic demand and therefore, a depreciation of the real exchange rate (assuming that the nominal exchange rate does not change). Expansionary fiscal policy is expected to have the converse effect[7](Ajevskis, 2012).

Finally, it should be noted that once the economic fundamentals are identified, the BEER approach benefits from the co-integration technique to test for the existence of an equilibrium relationship between the real exchange rate and its main determinants, which can then be used to calculate the misalignments in the actual real exchange rate (Zhang, 2001).

A number of recent studies have applied the above methodology to explore the determinants of exchange rate and derive an estimate for its long-run path in various countries. Elbadawi (1994) estimated the long-run equilibrium exchange rate for Chile, Ghana and India. His set of economic fundamentals included economic openness, terms of trade, government expenditures ratio to GDP and a measure of excess money supply and covers the period from 1965 till 1990. Zhang (2001) uses the BEER methodology to calculate the real exchange rate misalignment of the Chinese RMB between the mid-1950s and 2000. He formulate the variable space such that investment ratio, government consumption, growth of China's exports and degree of economic openness are included. Clark and MacDonald (2004) analyze the real exchange rate misalignments of the US dollar, the Canadian dollar and

[6] The selection of these fundamental variables is based on sound theoretical foundations and hence, they vary as different theories are applied. This feature allow the BEER approach to be flexible enough to include various model specifications with different explanatory variables in estimating the equilibrium real exchange rate. Moreover, this makes it possible to design country specific relationships since countries may differ in the set of economic fundamentals that determine their equilibrium real exchange rate (AlShehabi and Ding, 2008; Tang and Zhou, 2013).

[7] These effects assume the absence of the Ricardian Equivalence. The Ricardian Equivalence proposition is an economic hypothesis holding that both budget deficits and taxation have equivalent effects on the economy. A decline the government savings will lead to an offsetting increase in the desired private savings and hence, the desired national savings do not change (Barro, 1989).

the pound sterling for the period (1960-1997) based on the BEER approach. Their economic fundamentals are real interest rate differential, net foreign assets and the relative price of non-traded to traded goods.

Using monthly data from January 1995 to December 2001, Kemme and Roy (2006) employ four economic fundamentals (terms of trade, economic openness, net capital inflows and government consumption) to estimate the extent of real exchange rate misalignments for Poland and Russia. Employing a sample of quarterly data that encompasses the period from 1995 to 2006, AlShehabi and Ding (2008) estimate the equilibrium exchange rate in both Armenia and Georgia. The BEER methodology is employed and four economic fundamentals are incorporated. Namely, terms of trade, government spending as share of GDP, openness to trade and net foreign assets.

Sidek and Yusoff (2009) employ the BEER approach to estimate the ringgit equilibrium exchange rate using quarterly data spanning from 1991 till 2008. They incorporate the productivity differential, government consumption, economic openness and net foreign assets in their model. Terra and Valladares (2010) examine periods of appreciations and depreciations for a sample of 85 countries using data from 1960 to 1998 by applying the BEER approach to exchange rate. Four economic fundamental are used; terms of trade, economic openness, government consumption and international interest rate. Cui (2013) uses monthly data from 1997 till 2012 to estimate the equilibrium exchange rate for China by applying the BEER approach. His model incorporated the productivity differential, economic openness, terms of trade and the ratios of foreign reserves and foreign direct investment to GDP.

Studies that include Egypt and country specific studies on Egypt are indeed scarce. These include (Mongardini, 1998) and (Mohieldin and Kouchouk, 2003). Mongardini (1998) uses monthly data from February 1987 to December 1996 to estimate the equilibrium exchange rate for Egypt. His model is in line with Edwards' model described above and include terms of trade, government consumption, technological innovation, Gulf war dummy, fiscal deficit and debt service ratio. The findings indicate that while the Egyptian pound was overvalued before 1993, it has converged to the equilibrium rate at the end of 1996. A model based on Edwards (1989) is developed and employed by Mohieldin and Kouchouk (2003) to be applied to the *bilateral* exchange rate. Their estimation covers the period between 1970 and 2001 and suggest terms of trade, gross capital formation, government consumption, real GDP growth, capital flows, economic openness and environmental stance as the main fundamental variables to be incorporated into the model. The study underscored the presence of high degrees of misalignment during the period under investigation.

This paper represents a recent estimation of the equilibrium real *effective*exchange rate in Egypt based on the BEER approach. Real effective exchange rate is used rather than the bilateral rate. The former constitutes a finer and more accurate index for the real exchange rate misalignment measurement. Moreover, the present paper covers a longer period covering annual data from 1974 till 2012.

IV. The Econometric Framework of the Beer Methodology

The exploratory stage of the regression results starts with the estimation of an unconstrained vector auto-regression (VAR) where the lag length is determined by Akaike Information Criterion (AIC). The VAR shows two lags in levels for the endogenous variables employed. The Johansen method is then used to test for the existence and number of co-integrating equations between the variables. In this context, the model variables are introduced to the estimation process without any adjustments such that the transitory and the permanent components are maintained. Afterwards, the estimated long-run coefficients for all variables are used to calculate the equilibrium exchange rate for Egypt through filtering the variables and excluding the transitory components using the Hodrick-Prescott (HP) Filter.

It is noteworthy that the first round of estimation included an initial set of seven fundamental variables[8]and resulted in the existence of at least three co-integrating relationships. Because the presence of more than one co-integrating vector complicates the identification process of an equilibrium relationship between the REER and its fundamental variables, one possibility is toconsider the combination of variables that incorporate the most important determinants of the REER through one co-integrating vector[9].

The relationship between equilibrium real exchange rate and the fundamentals is expressed as vector of variables;

[8] These variables are: the REER, GDP per capita, net foreign assets, openness of the economy, terms of trade, government consumption and capital inflows.

[9] Moreover, in the case of multiple co-integrating vectors, the restrictions on the estimated parameters (β_s) should be captured from the economic theory. Nevertheless, the theory did not tackle that issue.

$$X_t = (LREER, LGDPC, OPENGDP, INVESTGDP, LGOVCONS) \quad (4)$$

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Thus, in the application of the BEER approach, five endogenous variables are included. Apart from the LREER, which is the logarithm of the real effective exchange rate for Egypt, four fundamental variables serve to uncover the relationship and the extent of REER misalignment; LGDPC, the logarithm of the per capita GDP, OPENGDP, the economy's openness (measured as the sum of exports and imports) as a ratio of GDP, INVESTGDP, the investment ratio. All variables are composed as those for Egypt relative to its trading partners exactly as in the formation of the REER (appendix two describes the construction of data and data sources). The positive and negative signs underneath each of the explanatory variables in the parenthesis are the expected signs. Moreover, two exogenous dummy variables are suggested in the sense that one can control for the exchange rate floatation in 2003 (FLOATDUM), whereas the second one controls for the Global Financial Crisis, which took place in 2008 (CRISDUM).

a) Description of the Econometric Methodology

- *Non-Stationarity and Unit Root Tests*

Because most macroeconomic time series are trended, they tend to be non-stationary. The problem with non-stationary or trended data is that the standard OLS regression procedures can easily lead to incorrect conclusions. In other words, modelestimation in the presence of non-stationary variables yields misleading results. There fore, the analysis starts by testing for unit roots in all variables to determine whether the data series are stationary and avoid spurious regressions.

Two asymptotically equivalent tests are applied: the augmented Dicky-Fuller (ADF) test and the Phillips-Perron (PP) test.

As the error term is unlikely to be white noise, the Dickey-Fuller test was extended to an augmented version, which includes extra lagged terms of the dependent variable in order to eliminate autocorrelation. The lag length on the extra terms can bedetermined by data dependent methods such as the Akaike Information criterion (AIC) or Schwartz Bayesian criterion (SBC) The ADF test may include an intercept, trend and intercept, or none of the mdepending on the data series properties (Asteriou and Stephen, 2007).

In the present paper, the ADF test with intercept is applied by estimating the following equation for each of the time series:

$$\Delta y_t = \alpha_\circ + \alpha_i y_{t-1} \sum_{i=1}^{p} \beta_i \, \Delta\, y_{t-i} + \varepsilon_t \quad (5)$$

where y_t is the variable of choice: Δ is the first-difference operator; t is the time trend; α_i (fori = 1, 2… p) and β_i (for i = 1, 2… p) are parameters; and ε_t is a stationary stochastic process. The null hypothesis that series y_t is non-stationary can be rejected if β_i is statistically significant with negative sign. The PP testis a semi-parametric procedure that accounts for heteroskedasticity in the data series.

- *Time Series Co-integration*

If the economic series have become non-stationary at level and have the same integration order then co-integration becomes an over-riding requirement for any econometric model. The co-integration in multiple equations can be tested by Johansen (1988) method. The testing hypothesis is the null of nonco-integration against the alternative of co-integration. We use Johansen co-integration procedure to test for the presence of a co-integrating vector between capital account liberalization and economic growth in Egypt. When the variables or series are having co-integrated relationships then the linear combination of these series would be stationary and gives long relationship between the variables. Johansen's procedure proposes two test statistics for testing the number of co-integrated vectors; the trace (λ_{trace}) and the maximum eigenvalue (λ_{max}) statistics where

- ✓ The λ_{trace} statistic tests the null hypothesis that the number of co-integrating vectors is less than or equal to r against, the alternative hypothesis that there are more than r.
- ✓ The λ_{max} statistic tests the null hypothesis that the number of co-integrated vectors is r against the alternative of (r + 1) co-integrated vectors. Thus, the null hypothesis r = 0 is tested against the alternative that r = 1, r = 1 against the alternative r = 2, and so forth.

- *Vector Error Correction Model*

If the variables included in the model are found to be co-integrated, the next step is to specify and estimate a vector error correction model (VECM) including the error correction term to investigate the short-run relationship in the model. The VECM model describes how the examined model is adjusting in each time period towards its long-run equilibrium state. The size of the error correction term indicates the speed of adjustment of any disequilibrium towards a long-run equilibrium state. With an ECM specification, we can express the relationship as follows:

$$\Delta Y_t = \mu + \tau_1 \Delta Y_{t-1} + \tau_2 \Delta Y_{t-2} + \ldots + \tau_{k-1} \Delta Y_{t-(k+1)} + \pi Y_{t-1} + \varepsilon_t \quad (6)$$

where the matrixτ captures the short-run aspects of the relationship between the elements of Y_t and the matrixπ reflects the long-run information. There can be one or more co-integrating relations in a multivariate co-integration model depending on the number of linear combinations of Y_t. The rank of π, denoted by r, can determine the number of co-integration relations. The matrix πcan be decomposed in two matrices, α and β whereπ= αβ'. The speed of adjustment (the error correction coefficients) are contained in matrix α that force the series back towards their underlying equilibrium relations and the co-integrating vectors are contained in matrix β that summarize the underlying long-run relations (Johansen and and Juselius, 1990; Asteriou and Stephen, 2007).

The advantage of the Error Correction Model (ECM) is that it incorporates variables both in their levels and first differences. By doing this, ECM captures the short-run disequilibrium situations as well as the long-run equilibrium adjustments between variables. ECM term having negative sign and value between "0 and 1" indicates convergence of model towards long run equilibrium and shows how much percentage adjustment takes place every time unit in the analysis.

- *Generalized Impulse Response Function*

The generalized impulse response function (GIRF) is widely used in the empirical literature to uncover the dynamic relationship between macroeconomic variables within VAR models. GIRF is deployed to produce the time path of the dependent variable in the VAR in response to shocks from all the variable in the VAR in response to shocks from all the explanatory variables either immediately or with various lags (Koop, Pesaran and Potter, 1996).

- *Variance Decomposition Analysis*

Variance decomposition sheds further light on the dynamic interaction of variables in the VAR system. They give the proportion of the movements in the dependent variable that are due to their "own" shocks, versus shocks to the "other variables". In other words, it provides information on the relative importance of the economic variables in the model in accounting for variations in each data series (Maghyereh, 2004).

V. Estimation Results

a) *Univariate Characteristics of the Data*

In this section, we present the estimated results on the data set described above. A necessary condition of the co-integration and VECM analysis is that each of the variables should be stationary and integrated of same order. Hence, the first step of the empirical work is to check the degree of integration of each variable by using unit root (ADF and PP) tests for the levels and first differences of each variable. The estimated results of this part are reported in table (1).

Table 1: Unit Root Test Results

Unit Root Tests at:	Augmented Dicky-Fuller Test Results	Phillips-Perron Test Results
Levels Variables	Model Form: Trend and Intercept	Model Form: Trend and Intercept
LREER	-3.489972	-2.447663
LGDPC	-0.811132	-0.772468
OPENGDP	-0.643166	-0.717175
INVESTGDP	-1.702153	-2.266043
LGOVCONS	-2.436753	-1.653006
First Differences Variables	Model Form: Trend and Intercept	Model Form: Trend and Intercept
LREER	-4.235938*	-3.785989*
LGDPC	-3.594536*	-4.890056*
OPENGDP	-4.479195*	-6.433917*
INVESTGDP	-5.262540*	-10.18479*
LGOVCONS	-4.632161*	-6.673644*

* Denotes significance at the 5 percent level and the rejection of the null hypothesis of non-stationarity. Mackinnon (1991) critical values for rejection of hypothesis of unit root are applied.The critical values at 5 percent significance level are -3.5348 and -3.5312 for ADF and PP tests, respectively.

We find that each of the series is non-stationary when the variables are defined in levels. But first-differencing the series removes the non-stationary components in all cases and therefore, the null hypothesis of non-stationarity is clearly rejected at the 5 percent significance levels. Both the ADF and PP stationarity tests suggest that all the variables are integrated of order one [I (1)] in their levels and found stationary in their first differences [I (0)].

Since the variables are non-stationary and integrated of order one, the second task is to employ co-integration technique of Johansen to test whether there exist a long-run relationship among the variables. This provides a unified framework for estimation and testing of co-integrating relations in context of a VAR error correction model. The co-integration rank r of the time series was tested using two test statistics; λ trace and λ max. Denoting the number of co-integrating vectors byr_0, the maximum eigenvalue (λmax) test is calculated under the null hypothesis r_0 = r against an alternative hypothesis r_1 = (r + 1). The trace test (λtrace) is calculated under the null hypothesis that $r_0 \leq$

r against $r_1 >$ r. The results of both statistics are reported in table (2).

Table 2 : Johansen's Co-integration Likelihood Ratio Test for Multiple Co-integrating Vectors

Trace Statistic				Maximum Eigenvalue Statistic			
H_o	H_A	λ_{trace}	$CV_{1\%}$	H_o	H_A	λ_{max}	$CV_{1\%}$
$r_0 = 0$	$r_1 > 0$	108.60*	76.07	$r_0 = 0$	$r_1 = 1$	58.07*	38.77
$r_0 \leq 1$	$r_1 > 1$	50.53	54.46	$r_0 = 1$	$r_1 = 2$	27.86	32.24
$r_0 \leq 2$	$r_1 > 2$	22.66	35.65	$r_0 = 2$	$r_1 = 3$	13.70	25.52
$r_0 \leq 3$	$r_1 > 3$	8.96	20.04	$r_0 = 3$	$r_1 = 4$	6.14	18.63
$r_0 \leq 4$	$r_1 > 4$	2.82	6.65	$r_0 = 4$	$r_1 = 5$	2.82	6.65

Notes: i. r refers to number of co-integrating equations.
ii. $CV_{1\%}$ refers to the critical value at the 1 percent significance level.
iii. * Denotes rejection of the hypothesis at the 1 percent level.

The results of the co-integration show that both the trace and the maximum eigenvalue test statistics suggest the existence of only one co-integrating relationship among the variables at the 1 percent significance level. This gives an evidence for a long-run equilibrium relationship between the real effective exchange rate in Egypt, GDP per capita that can be used for indicating the productivity differential between Egypt and its main trading partners, investment as a share of GDP, openness of the Egyptian economy, and government consumption.

To determine the sign and magnitude of the long run relationship, we normalize the co-integrating vectors so that the co-integrating regression of the REER in Egypt can be given as shown in table (3).

Table 3 : Normalized Co-integrating Coefficients: 1 Co-integrating Equation (Reduced-form Estimates)

LREER	LGDPC	OPENGDP	INVESTGDP	LGOVCONS	C
1.000000	0.854949	-0.596277	-0.531042	0.610104	-1.008690
	[7.91626]*	[-7.07989]*	[-2.25875]**	[4.21509]*	

Notes: Figures in parentheses are the t-ratios.* (**) Denotes significance at the 1 percent (5 percent) level.

The long run estimated coefficients appear to be consistent with the economic theory concerning their expected signs[10]. It appears that the productivity differential cause an appreciation of the real effective exchange rate in Egypt. The effect of the openness of the economy is dominated by substitution effects since it leads to a depreciation of the real effective exchange rate as well. Regarding the investment ratio, it has a depreciating effect on the real effective exchange rate in Egypt. This can be explained by the import intensive investment projects and thus; an increase in the ratio of investment to GDP is expected to increase absorption, worsen the current account and lead to depreciation of the REER. Government consumption causes an appreciation of the REER since it raises the prices of non-traded goods.

The results show the following magnitude of effects:

- A 1 percentage point increase in the differential between the rate of growth of the real per capita GDP in Egypt and its main trading partners is associated with a 0.85 percentage point appreciation of the REER in the long run.
- A 1 percentage point increase in the relative openness of the Egyptian economy is associated with a 0.596 percentage point depreciation of the REER in the long run.
- A 1 percentage point increase in the relative investment ratio of the Egyptian economy is associated with a 0.53 percentage point depreciation of the REER in the long run.
- A 1 percentage point increase in the relative government consumption of the Egyptian economy is associated with a0.61 percentage point appreciation of the REER in the long run.

[10]Notice that the definition of the REER in the present study is such that an increase (decrease) denotes a depreciation (appreciation).

Since long run association has been observed among these variables, it is possible to explore the possibility of a short run relationship by using an error correction model (ECM) framework. ECM permits the introduction of past disequilibrium as explanatory variables in the dynamic behavior of existing variables and thus, facilitates in capturing both the short run dynamics and long run relationships among variables[11].

Table (4) gives the speed of adjustment from disequilibrium along with the short run coefficients of the VECM. In the ECM specifications, it is shown that the coefficient of the error correction term (ECT_{t-1}) of the REER is significant and does have the correct sign (negative). The error correction term is the short-run forward looking self-correcting mechanism. If for instance, there is a real undervaluation in the REER, then there will be a real appreciation in the next period, self-correcting the undervaluation. The term indicates the speed of adjustment and in this case, 53 percent adjustment is observed. In other words, about 53 percent of disequilibrium (the gap between the equilibrium REER and its actual value) is corrected each year caused by the REER itself. This means that when the exchange rate deviates from its equilibrium path caused by some temporary shocks, it returns back to that path within nearly two years in the absence of any further shocks. This implies a stable long-run co-integrating relationship.

Another point to observe is that both the per capita GDP and government consumption do not help in bringing the real effective exchange rate to its equilibrium level. The two variables have a destabilizing effect on the system. A positive sign of the adjustment coefficient of the government consumption – as a determinant of the equilibrium exchange rate – means that; an undervalued exchange rate (caused by a decline of the equilibrium exchange rate), for instance, will lead to an increase in the government consumption (which in turn leads to an appreciation of the equilibrium REER) causing an increasingly undervalued REER. The same applies for the productivity differential variable.

Table 4 : Results of Error Correction Model (Short-run Dynamics)

ECT_{t-1} (-1)	D(LREER)	D(LGDPC)	D(OPENGDP)	D(INVESTGDP)	D(LGOVCONS)
Coefficient [t-statistic]	**-0.532781 [-4.4419]***	0.377458 [2.2492]*	0.707195 [2.1506]*	0.191666 [3.0688]*	0.183057 [3.2437]*
Short Run Dynamics					
Variable	**Estimates**			**[t-statistic]**	
D(LREER(-1))	0.616513			[3.54900]	
D(LGDP(-1))	0.420893			[1.63886]	
D(OPEN(-1))	-0.241882			[-1.84655]	
D(INVEST(-1))	-0.350876			[-1.70692]	
D(LGOVCONS(-1))	0.802357			[2.10005]	
C	0.015103			[0.48294]	
CRISDUM	-0.238799			[-2.09408]	
FLOATDUM	0.096741			[1.14355]	

*indicates significance at the 5 percent level.

Results of variance decomposition process are shown in table (5). Variance decomposition process shows that the main source of variance in the real effective exchange rate arises from its own shocks during all periods. In the first period, the change of the exchange rate can be explained by its own shock at 100 percent. In the medium to long term, two variables represent important sources of variation in the exchange rate. These are the openness and investment ratios. For example and starting from the third period, it is seen that economic openness explains the variation in real effective exchange rate at a rate that ranges between nearly 7percent and 35 percent. Between 1.5 percent and 26 percent of the variation in the exchange rate can be explained by the investment ratio. Government consumption plays a more significant role in the variations of the real effective exchange rate from the fourth period onwards while productivity differential do not exceed the rate of 0.8 percent variation of exchange rate during all periods.

[11]As a robustness check for the results, a residual test was conducted

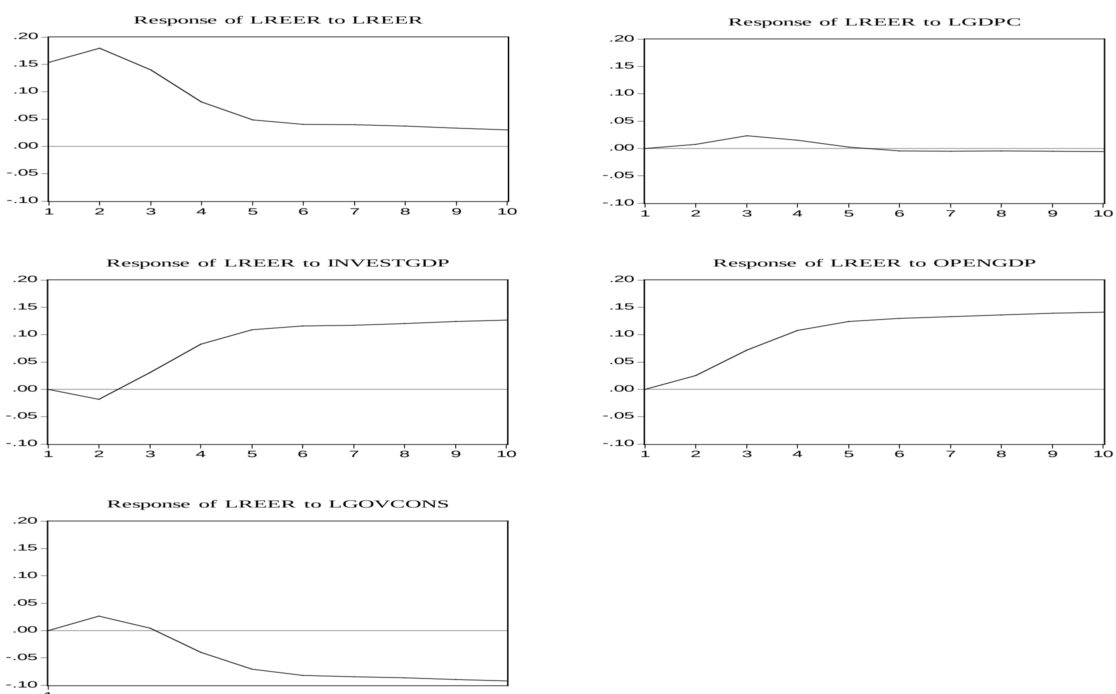
Table 5 : Results of Variance Decomposition Analysis

Period	S.E.	LREER	LGDPC	OPENGDP	INVESTGDP	LGOVCONS
1	0.153767	100.0000	0.000000	0.000000	0.000000	0.000000
2	0.239862	96.99968	0.104174	1.074640	0.585517	1.235985
3	0.289336	90.02097	0.727642	6.861336	1.521275	0.868776
4	0.332485	74.13023	0.751258	15.68004	7.343081	2.095393
5	0.381093	58.03508	0.574909	22.54783	13.77880	5.063372
6	0.428734	46.73881	0.464301	26.95411	18.15387	7.688905
7	0.473253	39.06328	0.392964	29.99569	21.03136	9.516710
8	0.515719	33.41823	0.339437	32.24836	23.15353	10.84045
9	0.556776	29.03055	0.299576	33.93716	24.83525	11.89746
10	0.596247	25.57345	0.270955	35.20686	26.17531	12.77342

The above results are also verified by the generalized impulse response functions (GIRFs), which indicates the causal properties of the system. The estimated GIRFs are plotted in figure (1) reflecting the response of LREER to 1 percent standard-deviation shocks to the explanatory variables. The results indicate that real effective exchange rate depreciates by shocks in itself starting from the first year. Shocks to GDP per capita leads to an appreciation of the REER starting from the sixth period suggesting that the Balassa-Samuelson(B-S) effect is working for Egypt.

Shocks to both the investment and openness ratios have a positive effect on the REER suggesting the dominance of the substitution effect for the latter ratio. Conversely, a 1 percent standard-deviation to the government consumptionaffects real effective exchange rate negatively (leading to an appreciation) and only clearly starting from the fourth period.

Figure 1: Impulse Response Analysis



VI. The Empirical Estimate of the Equilibrium Real Equilibrium Exchange Rate

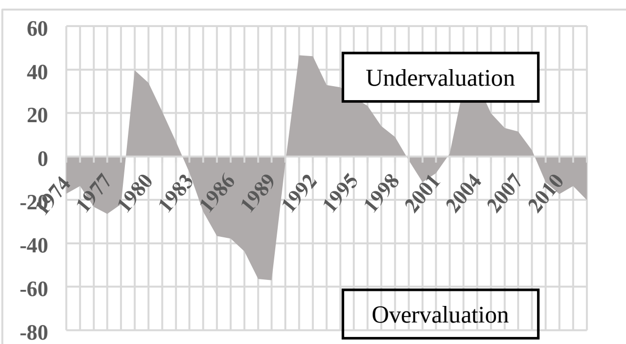
An important feature of the BEER approach is the recognition that the equilibrium exchange rate change over time with the changes in its main fundamentals. The long-run relationship estimated above allows for the calculation of the equilibrium rate by using the permanent components of the fundamentals that are imposed on the long-run relationship obtained from the Johansen co-integration method. The HP filter with a smoothing factor of 100 was used to smooth the variables[12]. Figures (2) and (3) show the actual and equilibrium real effective exchange rate

[12] This smoothing factor is what Hodrick and Presscott suggested for annual data (Hodrick and Prescott, 1997).

and the extent of currency misalignments during the period (1974-2012).

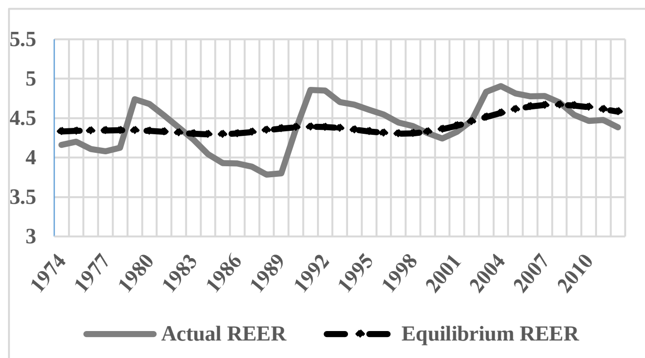
When the actual real effective exchange rate is above the equilibrium, it is undervalued, and when it is below the equilibrium, it overvalued. Through 1974 up till 1990, before the implementation of the ERSAP, the Egyptian trade-weighted exchange rate was always overvalued with the exception of the period (1979-1982). Starting from 1991, Egypt witnessed an undervaluation of the exchange rate that continued till 1998. This means that the unification of the multiple exchange rates that existed before the ERSAP brought a temporary end to the currency overvaluation. Thus, despite the real appreciation of the Egyptian pound during that period, it was not as much as is needed to keep the value of the pound in line with the equilibrium ratein real terms. In addition, this is suggestive of the role of active and periodical foreign exchange market intervention that was practiced during that period to maintain the pegged exchange rate – mainly through international reserves – which, prevented the free market determination of the pound's value. Mohieldin and Kouchouk (2003) describes the first half of the 1990s decade by an undervalued currency based on their own calculations as well.

Figure 2 : Misalignments of the Actual REER in Egypt Based on the BEER Approach (1974-2012) in Percent



A short overvaluation period during the three years between 1999 and 2001 was followed by an undervaluation period that lasted between 2002 and 2008. The latter period marked the consequences of the series of devaluations adopted in 2000 and 2001 and the floatation of the Egyptian pound in 2003. Overvaluation of the Egyptian real effective exchange rate was resumed in 2009 and lasted till the end of the sample employed in the present study. This conforms to the judgment of the IMF's 2010 Article IV consultation report on the Egyptian economy and the arguments by Ghanem and Shaikh (2013).

Figure 3 : Actual and Equilibrium REER in Egypt Based on the BEER Approach (1974-2012)



VII. Concluding Remarks

This paper estimates the equilibrium real effective exchange rate for Egypt between 1974 and 2012. In particular, the relative ability of different economic fundamentals in explaining the path of the real effective exchange rate is examined. To do so, a behavioural equilibrium exchange rate approach is specified in line with Edward's model (1994).

With regard to the policy advice concluded from the paper, the BEER estimation provides several implications to decision making and exchange rate management. The obtained estimates indicate the importance of the incorporated variables in determining the path of the real effective exchange rate in Egypt. The appreciating influence of the relative per capita GDP suggests that economic growth would be a significant factor in directing the real trade-weighted exchange rate in Egypt. The government's efforts to design growth enhancing strategies can succeed in raising the value of the Egyptian pound relative to foreign trading partners. Trade policies directed to discourage import intensive production will be vital to avoid the adverse effects on the current account and strengthen the currency as well.

Moreover, since the impact of openness of the Egyptian economy is dictated by the substitution effect, it leads Egyptian consumers to prefer cheaper foreign goods. As such, further incentives should be offered to domestic producers and exporters to develop their industries and better serve the domestic market. An appreciation of the pound caused by the above mentioned factors is not expected to reduce the competitiveness of the Egyptian economy in international market since it is attributed to a stronger and healthier economy.

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Appendix One

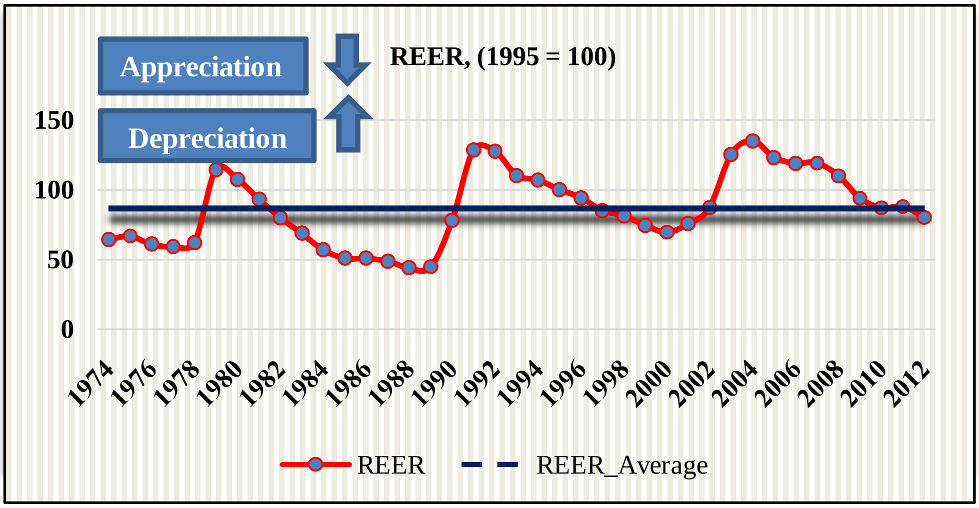
a) Real Effective Exchange Rates for the Egyptian Economy (1974-2012)

To compute the REER index for the Egyptian economy, a number of factors had to be identified; the range of foreign countries to be covered as trading partners, their trade weihgts and the price indices to be compared.

The source of the trade data are the exports and imports with the top ten trading partners for the period (1974-2012) as reported in the Direction of Trade Statistics (DOTS) of the IMF. The source of data for consumer prices is the International Financial Statistics (IFS) of the IMF for the same period. Nominal exchange rates in national currency per base curency (US dollar) were obtained from the IFS, IMF as well.

The calcuation of REER for Egypt for the period between 1974 and 2012 required dealing with three successive tasks; the *first* represents the calculation of the trade shares of the top 10 trading partners, which involved working on 39 columns each representing a year in the sample period (1974-2012), 10 rows each representing a trade partner chosen, the *second* represents calculating the price differential between Egypt and each trading partner, which involved working on 10 columns each representing the currencies of the top trading partners, 39 rows representing the price indices over the sample period, and the *third* represents calculating the overall REER for Egypt with 10 columns each representing the currencies of the top trading partners, 39 rows representing the sample period.

Figure 4 : Real Effective Exchange Rate for Egypt during the Period (1974-2012)



Appendix Two

a) Variables Definition and Data Sources of the BEER Model

The study makes use of annual data. Data availability constrains the sample period to 1974 to 2012.Apart from the data on Egypt, the study uses data on the 10 trading partners, which were included in the calculation of the REER. As such, all the fundamental variables are obtained by weighting them in the same manner. Definitions of the five endogenous variables and two exogenous variables along with their sources are as follows:

LREER: ln of REER. Source: constructed by the researcher using data from the IMF, IFS and IMF, DOTS databases.

LGDPC: ln of per capita GDP as a proxy for relative productivity differential between Egypt and its trading partners. Source: The WB, WDI database.

OPENGDP: Exports and Imports as a ratio of GDP. Source: The IMF, DOTS and WB, WDI database.

INVESTGDP: Investment ratio to GDP. Source: The WB, WDI database.

LGOVCONS: ln of government consumption. Source: The WB, WDI database.

FLOATDUM: A dummy for the float of the Egyptian pound that takes a value of one starting from 2003.

CRISDUM: A dummy for the global financial crisis that takes a value of one starting from 2008.

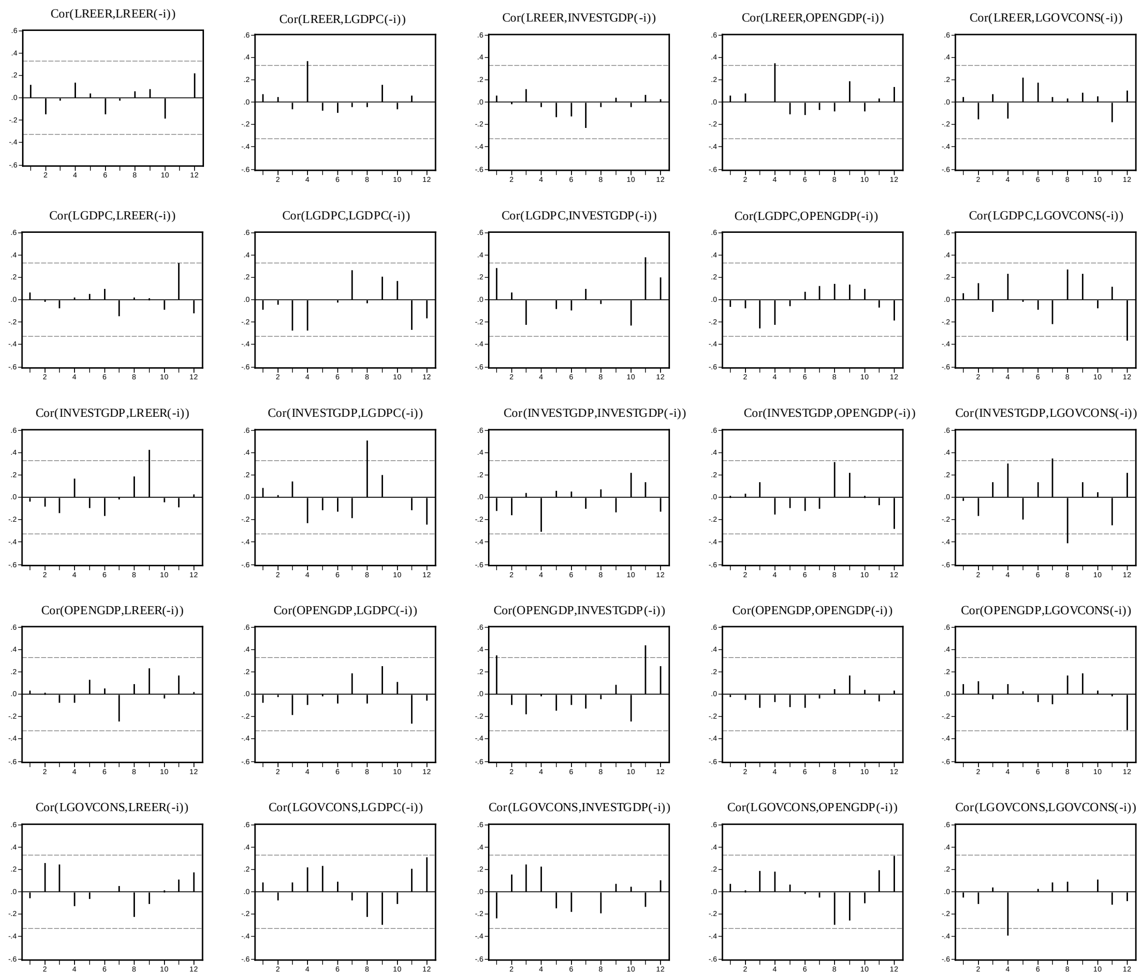


Figure 5 : Residual Test – Correlogram on the Estimated BEER Model

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Prospects and Challenges of Cities Micro Green Economy: A Study of Horticulture Practices in Lagos, Nigeria

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Abstract- This paper is aimed at understanding various planning laws and regulations that serve as hindrance to green economy in Nigerian cities. The study is focused on the horticulture practices in Eti-Osa Local Government Area of Lagos. This is a form of green economy that was not considered during the preparation of the master plan of the area. The survey for the study was conducted on two (2) occasions (2008 and 2013). This was shortly before planning activities became highly intensive during the 6th republic and in the 7th republic. The study purposively sampled all the commercial horticultural gardens available at the two (2) periods; these are 63 and 39 in 2008 and 2013 respectivelyFindings revealed that about 24 (38%) of the gardens has been lost due to strict application of development control regulations in the space of five (5) years. Result also revealed that over N14, 570,000 worth of investment and N11,070,000 annual profit were affected.

GJHSS-E Classification : FOR Code: 340299p

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Prospects and Challenges of Cities Micro Green Economy: A Study of Horticulture Practices in Lagos, Nigeria

Olaleye D.O. [α], Abegunde A. A [σ] & Ebehikhalu Nicholas [ρ]

Abstract- This paper is aimed at understanding various planning laws and regulations that serve as hindrance to green economy in Nigerian cities. The study is focused on the horticulture practices in Eti-Osa Local Government Area of Lagos. This is a form of green economy that was not considered during the preparation of the master plan of the area. The survey for the study was conducted on two (2) occasions (2008 and 2013). This was shortly before planning activities became highly intensive during the 6th republic and in the 7th republic. The study purposively sampled all the commercial horticultural gardens available at the two (2) periods; these are 63 and 39 in 2008 and 2013 respectively. Findings revealed that about 24 (38%) of the gardens has been lost due to strict application of development control regulations in the space of five (5) years. Result also revealed that over N14, 570,000 worth of investment and N11,070,000 annual profit were affected. About 34 employment opportunities were affected and the source of livelihood for over 100 people was destabilised or blocked. The study recommended the inclusion of commercial horticulture practice as an integral part of urban land use and the modification of planning laws and regulations to suit such practices that have multiplier effects (advantages) on the citizenry and the urban environment. The study concluded that although commercial horticulture practice had little contribution where only few people were employed, it is still less few people who are food insecure or those who lack employment. The multiplier effect that entrepreneurial gardens can create through their enterprise is significant: not only does it strengthen the local economy by creating economic opportunities for other people and businesses, but it addressed other multiple problems such as environmental pollution and climate change.

I. Introduction

The need for more space to house urban residents is a global concern but more pronounced in the developing nations of the world (UN-Habitat, 2003). This phenomenon, create critical challenges for proper implementation of development control a subset of urban planning. This is a government- administered termed "development" shape the future of the morphology of towns and cities. It also deals with selecting and prescribing best course of action to arrive at a desired goal for an urban area or to prevent new and solve existing urban problems (Bartone et al. 1994, Smith 1993, Hodge 1991). In other words, urban planning and development control are futuristic; as it caters for present day land use requirements without necessarily preventing the future generation to meet their own needs. An important objective of development control is ensure that the use of land and its resources is to meet people's needs over time according to the land's capabilities (Chapin and Kaiser, 1997). This means that every piece of land within an urban environment should have an appropriate use.

In Nigeria generally, Laws and regulations have been enacted for proper control of development, these include: the Land Use Act of 1978, Urban Development Policy of 1992, Housing and Urban Development Policy of 2002 as well as the Urban and Regional Planning Act 1992 (URPA). On the contrary, planning laws over the decades, especially during the military regime have not been implemented in such way that would have ensure that all land use type are accommodated. Thus, despite the existence of these laws and policies, urban land use problems still persist in metropolitan Lagos. Expectedly, this also has affected green economy because land is required for effective green economy development in urban area.

One of the unpopular means of accomplishing green economy on a micro scale is the utilisation of road setbacks and vacant lots along streets for horticultural practice, with the ultimate goal of residents livelihood (see figure 1). It is obvious that road setbacks and vacant lots along streets exist virtually in every community in the world. Their utilisation and functionality however vary from one place to another. Most of the developing nations' road set-backs and lots are either neglected or under-utilised both by private and public developers purposely because such areas are not for private individuals.

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Figure 1 : A typical example of horticultural garden on road setback

The neglect of such areas by charlatan government often leads to their abuse by the public who use the spaces for selfish and less beneficial purposes to the built environment. The slogan goes that a 'no man's land' is of no 'man's concern'. What this implies is that most road side vacant lots along streets in African modern urban cities are being neglected by their governments, not planned, and abandoned by residents and therefore less beneficial to the community (Abegunde, 2008; Abegunde, Omisore, oluodo and Olaleye, 2009).

Few countries however have successfully transformed their road set-backs and vacant lots to thriving community gardens and flower beds. Examples of this are common in South African cities (City of Cape Town, 2005; Roberts, 2009; FAO, 2010). This is an indication that street gardens can be of economic and physical benefits to man and his built environment. In another dimension, turning roadside vacant lots and setbacks to horticultural gardens has their economical, ecological, aesthetic, health and physical planning implications.

There is therefore the need to understand the economic implication of urban horticultural development in the study area and beyond. The conduct of this kind of study is imperative now that urban agriculture is receiving its popularity as means of restoring productive green belts and economic revival to world cities. In other words, the aesthetics of urban horticulture that serves as a source of agricultural production in a poor economy is of concern to urban development planners. The aim of the study is therefore to critically examine the spatial extent and practice of urban horticulture towards green economic development of cities in the world, citing Lagos, Nigeria as an example. This is with a view to establishing the contributions of such practice to the economic development of the residents and the built environment and by this develop a framework that could be of importance to integrating the practice into urban land use policy and development control.

a) The Study Area with Its Attendant Green Economy Problem

Lagos is considered as one of the Africa's fastest growing cities and Nigeria's commercial nerve centre (Aluko, 2010). The city lies in south western Nigeria, on the Atlantic coast in the Gulf of Guinea, west of the Niger River delta, located on longitude 3°24' E and latitude 6°27' N. On this stretch of the high-rainfall West African coast, rivers flowing to the sea form swampy lagoons behind long coastal sand spits or sand bars. Some rivers, like Badagry Creek flow parallel to the coast for some distance before finding an exit through the sand bars to the sea. The general structure of land use distribution in the study area (Lagos metropolis) shows that only 520 hectares (2.8%) of the total land area is open space. This includes all urban land for recreation, parks and garden, urban agricultural land, commercial and individual horticultural garden, and unused spaces (Oduwaye, 2006). Lagos, an area with limited land is chocked with housing development, heavy industries and automobiles. Further to the above-mentioned problems is the world global warming and depletion of ozone layer, threatening human survival in the new millennium. Despite all the problems, little attention has been given to spatial distribution of green space in the city. The focus on horticultural practice that promotes aesthetic, provides green plants and by this promote city economic development calls for attention. Eti-Osa East Local Government is one of the local government areas in Lagos that has limited land for physical development due to the presence of water bodies.

II. Literature Review, Theory and Concept Framework

a) *Development Control Tools that Restrict Horticultural Practice*

These are framework encompass planning policies, legislation and regulations that guide or direct land-use planning and management. Maxwell and Armar-Klemesu (1998) asserted that the legal and regulatory framework of the city, along with access to land, pose the most significant constraint to horticulture; which is an integral part of urban agriculture. Among these tools are:

Town Planning Laws: In most cities, town planning laws ignore horticulture as an integral part of urban land use in national and municipal policies. Even when regulations/by-laws on, or related to, horticulture exist, this is often not under an overall and clear policy, and the law may be interpreted differently by different actors (Foeken, 2006). Notable among these laws and regulations are:

a. Building line and code standard;
b. Airspace and Setback;
c. Development approval permit;
d. Change in use permit;
e. Environmental Impact Assessment Report (EIAR) of some specific land use; and
f. Land sub-division regulation.

Zoning By-laws: Zoning is the division of a municipality into various land uses and the regulating of land use within those municipal. Typical zone divisions distinguish residential, commercial and industrial land uses, regulating the placement, spacing and size of buildings to conserve and promote human health, safety and convenience (Anderson 1995; Smith 1993).

The National Development Plan: The structure of the various national development plans did not recognise the cultivation of land within urban areas for agriculture purpose. The plans relegate every aspect of agricultural development (horticulture inclusive) to the rural areas.

The 1978 Land Use Tenure System: The enactment of the land use system did not also consider the importance of horticultural practise within the urban area. Land becomes more difficult to acquire because of the activities of land speculators who acquires land before the development process.

Master Plan: The use of master plan by town planners as a tool for the control of development, more often than not exclude horticulture practice. Master plan are long term in nature thus their review always take a very long time. In view of its rigidity, it is not easy to make adjustment to accommodate land uses that are not specified within the master plan until its review.

Layouts of Urban Land: Land in urban area is always sub-divided into plots for various uses. Special attention however has been giving to other forms of land use that is considered to yield more economic return than horticulture. This is why commercial and industrial activities are vividly visible in the urban areas.

Indeed, the integration of horticulture into urban planning will require review of legislative policies at all levels and comprehensive overall of the programmes of all urban and regional planning schools. These steps are necessary in order to change the negative attitude of town planners and development control agencies to horticulture.

b) *The Concept of Urban Horticulture (UH)*

Horticulture is the art of gardening or plant growing; in contrast to agronomy - the cultivation of field crops such as cereals and animal fodder, forestry - cultivation of trees and products related to them, or agriculture - the practice of farming. Urban horticulture (UH) can also be seen as intensive production of a range of vegetables; aromatic, medicinal, flowering and ornamental plants grown mainly in the city or at its close periphery where there is competition among land uses (Moustier, 1999). The origin of horticulture lies in the transition of human communities from nomadic hunter-gatherers to sedentary or semi-sedentary horticultural communities, cultivating a variety of crops on a small scale around dwellings. (Von-Hagen, 1957; McGee and Kruse, 1986). A characteristic of horticultural communities is that useful trees are often planted around the built environment or specially retained from the natural ecosystem. The significance of this in promoting healthy environment is found in the works of Ebenezer Howard (1902) and further explained by Moss-Eccordt (1973) and Ademola, (2002).

Thus, the practice of horticulture plays a role in the development of healthy communities in three distinct ways. First, it provides a physical condition with appealing outlook. Second, it promotes good health as carbon related gasses generated in cities are utilised during plants' photosynthesis while oxygen that is useful for man is released as bye product. Third and perhaps the most important to this study, plants generally enhance the economic and social values of the community (Ward, 1992; Adejumo, 2003). This study is more inclined to the latter importance, though not disassociated with the former. This is because many urban horticulturists contribute their quota to vegetable production. The sales of these vegetables and ornamental plants provide markets for both horticulturists and middlemen and women in the business. This is why it has been argued that solutions to poverty in cities of developing countries has multiple faces, of which horticultural practice; a subset of urban agriculture is one (Weinberger and Lumpkin, 2007).

c) Green Economy Theory

In recent years, poverty and environmental issues have been attracting significant attentions in development studies (Nyasha, 1997; Frey, 2000). First, the causes and consequences of poverty have been explored and theoretical models have been developed to explain hitherto obscure causalities. Along this line, scholars who are environmentally oriented have been attempting to create a meeting point for these two concerns, developed environmentally oriented theories that are pro-poor in approaches (Amati, 2008).

Among such theories is green economy model which focused on improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is a new theory built on the platform of pro-growth model developed lately to justify the need for the type of development that is low income friendly and poverty eradicating. Origin of this can be traced to the work of Simon Kuznets, who in 1955 found an inverted-U pattern between per capita income and inequality based on a cross-section of countries. According to him, as per capita income rises, inequality first worsens and then improves. The major driving force was presumed to be structural change that occurred because of labour shifts from a poor and less productive traditional sector to a more productive and differentiated modern sector (Kakwani, Khandker and Son, 2004).

In relation to this study, green economy is an attempt at accomplishing social, ecological and economic development of cities through low carbon, resource efficiency and social inclusion. A green economy as a new paradigm is the one that believes that sustainability can be achieved through recognition of the cardinal roles and combine efforts of green aspect of the environment and economy that alleviates poverty and improves green areas, and thereby turning lagging regions to prosperous ones. It is a new model of growth that is much less intensive in natural resources and that can lead to social well-being and poverty reduction in Africa and beyond. It opines that the simple pathway towards sustainable development is to balance and coordinate different interests: between economic growth/job creation and environmental integrity (development control), between the rich and the poor, and between the present and the future generations which is the major aim of development control.

As a new model in the green environment, it aims at achieving millennium development goals through pro-growth, pro-jobs and pro-poor techniques of turning environmental imperatives into viable economic activities, helps reconcile the need for economic growth and the need to ensure the environmental basis for continued growth into the future. It recognizes the role of green industry in economic transformation. Green industry here refers to but not limited to businesses involved in production, distribution and services associated with ornamental plants, landscape and garden supplies and equipment. Segments of the industry also include wholesale nursery, greenhouse and sod growers, landscape architects, contractors and maintenance firms on green issues, retail garden centres, home centres and mass merchandisers with lawn and garden departments, and marketing intermediaries such as brokers, horticultural distribution centres, and re-wholesalers. In addition to these are commercial sectors, many state and local governments' institutions that are related to urban forestry operations for management of parks, botanic gardens, and right-of-ways. The Green Industry is linked to urban forestry, by providing quality plant material and professional personnel with specialized expertise for growing, maintaining, and managing city trees.

Horticulture as mentioned under the green industry is the science and art involved in the cultivation, propagation, processing and marketing of ornamental plants, flowers, turf, vegetables, fruits, and nuts. Within the horticultural sector, the environmental horticulture industry, often referred to as the "Green Industry", is one of the fastest growing sectors of agriculture in the US (Palma and Hall, 2009). This study therefore sees green economy model as pro-poor theory of sustainability through involvement in horticultural practice to improve residents' income and boost national economic development while paying attention to community greening, urban aesthetics, and ecological balance in global warming era.

III. Research Methodology

This study focused on Lagos, Nigeria and used information generated from questionnaire administered on residents who engaged in outdoor commercial horticultural practice along major streets in Eti-Osa Local Government Area of the city. The survey for the study was conducted on two (2) occasions (2008 and 2013); this gives five (5) years interval. Reconnaissance survey revealed that urban commercial horticulture in Lagos city was practiced by private individuals and most of their gardens were not formally planned or located in government designated places. The first survey in 2008 purposively selected all (100%) the existing seventy-five (75) gardens and targeted their owners (managers) during questionnaire administration. The study administered questionnaire on all the identified practitioners of commercial horticulture in the area. Sixty-three (63) of them were eventually interviewed, as the managers (owners) of the remaining 12 gardens were not available for questionnaire administration. During the second survey in 2013, the study also purposively selected the entire 63 surveyed horticulturist in 2008 for a re-survey. From this number, only 39 horticulturists were still available.

Analysis is therefore based on these 63 respondents in 2008 and 39 respondents in 2013. Information required from asked the respondents centred on their economic background, amount invested in the horticultural gardens, cost of production and profit realized annually, number of workers engaged in the practice and amount of money paid to them annually, just to mention but few. Data for the study were analysed using descriptive and inferential statistics. Specifically, the study employed frequency tables to analyse data collected on area of land available for the practice, the economic characteristic of the horticulturists.

IV. Findings and Discussion

a) *Socio-economic Background of Horticulturists*

The socio-economic characteristics of horticulturists in this study focused on the location of their garden, gender, marital status, educational level, household sizes, age and monthly income. As indicated in Table 1, in 2008 the practice was dominated by male respondents (93.7%) of which two-fifth of them were single (42.9%), about 41.3% were married, while a few (9.5%) of them were divorced. Information on their educational level revealed that 14.3% of the respondents lacked formal education; while a little over one-fourth (27.0%) of them have been to tertiary institutions. Those with primary and secondary school certificates were 22.2% and 36.5% respectively. The 63 manager cater for 218 household members, this is an average of 3.46 people per horticulturist. Table 1 further revealed that the entire horticulturist are within the productive age, with about three-quarter (75%) within the age bracket of 20 and 39 years. Average monthly income of respondents in the year under study (2008) shows that over three-quarter of the horticulturists earn more than the current minimum wage which is pegged at eighteen thousand naira (N18,000:00). It is important to note that the minimum wage in 2008 was seven thousand five hundred naira (N7, 500:00).

On the other hand, in 2013 only 39 of this gardens were still in operation with 27 (69.2%) and 12 (30.8%) located in Ikoyi and Victoria Island respectively (See Table 1). The practice is still dominated by men (94.9%). The remaining 39 horticulturist cater for 118 household members, which is an average of 3.03 person per horticulturist. The decline in ***arithmetic mean*** is an indication that more household members were affected by the displacement of 20 managers from the garden between 2008 and 2013. There is no significant change in the age structure and the average monthly income of the horticulturist because in the two (2) years under review, just like in 2008 about three-quarter of them are within the productive age and earns above the current minimum wage of N18, 000:00.

Table 1 : Socio-economic Characteristics of Horticulturist

S/No	Variables	2008	2013
1	Location of garden	Frequency	Frequency
	Ikoyi	45 (71.4%)	27 (69.2%)
	Vitoria Island	18 (28.6%)	12 (30.8%)
	Total	63 (100%)	39 (100%)
2	Gender of Respondent		
	Male	59 (93.7%)	37 (94.9%)
	Female	4 (6.3%)	2 (5.1%)
	Total	63 (100%)	39 (100%)
3	Marital Status of Respondent		
	Single	27 (44.4%)	16 (41%)
	Married	26 (39.7%)	16 (41%)
	Divorced	6 (9.5%)	4 (10.3%)
	Widowed	4 (6.3%)	3 (7.7%)
	Total	63 (100%)	39 (100%)
4	Educational Status of Respondent		
	No formal education	23 (31.75%)	6 (15.4%)
	Primary school	14 (22.22%)	9 (23.1%)

	Secondary school	23 (36.51%)	16 (41%)
	Tertiary	6 (9.52%)	8 (20.5%)
	Total	63 (100%)	39 (100%)
5	Household size		
	Total number of the household of respondents	218	118
6	Age of Respondent		
	20-29 years	24 (38.1%)	12 (30.7%)
	30-39 years	24 (38.1%)	20 (51.3%)
	40-49 years	15 (23.8%)	7 (18.0%)
	Total	63 (100%)	39 (100%)
7	Average Monthly Income {in naira (N)}		
	Below 20,000	10 (15.9%)	6 (15.4%)
	20,000-29,999	13 (20.4%)	8 (20.5%)
	30,000-39,999	16 (25.4%)	10 (25.6%)
	40,000-49,999	9 (14.3%)	6 (15.4%)
	50,000-59,999	6 (9.6%)	4 (10.3%)
	Above 60,000	9 (14.3%)	5 (12.8%)
	Total	63 (100%)	39 (100%)

Source: Authors' fieldwork, 2008 and 2013

b) Contributions of Horticultural Practice to Micro Green Economy

As indicated Table 2, in 2008 the entire 63 horticulture gardens employed 70 staff which excludes the managers of garden, furthermore 36 people are under training as apprentice in the various garden. By the year 2013 the number declined to 43 employed staff, 18 apprentices and of course 39 garden managers (owner). The import of this statistic is that about 27 employed staff and 20 garden managers have were rendered jobless during this period. It is equally important to note that the household sizes of the 27 affected employed staff are not among the earlier discussed household members that were affected. The total land area where horticulture was practice in 2008 was 31675 meter-square and 20590 meter-square in 2013.

Table 2 : Employed Staff, Apprentice and Land Area for Horticulture Practice

S/No	Variables	2008 Frequency	2013 Frequency
1	Number of Employed Staff	70	43
2	Number of Apprentice	36	18
3	Total Size of the Gardens (in meter-square)	31675	20590

Source: Authors' fieldwork, 2008 and 2013

Statistic in Table 3 indicates that in 2008 the monetary value of the available horticultural gardens was N40, 005,000:00. This estimated value was sustained on an annual expenditure bill of approximately N15, 000,000:00, with an annual income (gross) of N44, 335,000:00 and a profit of N29, 455,000:00 annually. Implicit to this is that in 2008, arithmetic mean of annual profit is N471, 410.26:00. If the return on investment (ROI) is calculated using the formula below;

$$ROI = \frac{gain\ from\ investment - cost\ of\ investment}{cost\ of\ investment} \quad x \quad 100$$

then the return on investment on horticulture practice in 2008 will be:

$$ROI = \frac{29455000 - 14962000}{14962000} \quad x \quad 100 \quad = 96.87\%.$$

The return on investment (ROI) of this practice far exceeds return on investment from other form of business. The reason for this could be because there are no significant rent charges been paid by the horticulturist since majority of them occupy their sites illegally. This however indicated that if given the proper avenue to thrive horticulture as a subset of city micro green economy can boost the economic viability of urban residents. Although development control practices between 2008 and 2013 reduce the number of horticultural garden in the study area, the ROI of this form of green economy was not affected significantly. The ROI in 2013 is 95.34%, which is only a decline of 1.53%.

Table 3 : Economic Contribution of Horticulture to Micro Green Economy

S/No	Variables	2008 Frequency	2013 Frequency
1	Estimate Value of Garden	N40,005,000:00	N25,435,000:00
2	Average Annual Expenditure	N14,962,000:00	N9,412,000:00
3	Average Annual Income	N44,335,000:00	N27,865,000:00
4	Average Annual Profit	N29,455,000:00	N18,385,000:00

Source: Authors' fieldwork, 2008 and 2013

c) Challenges of Micro Green Economy in the Study Area

From Table 4, the summary of the lost incurred by green economy sector in the study area indicates that 27 employed staff were relieved of the appointment, while the training process of 18 apprentices was aborted. During the period under review (2008 - 2013), 11085 meter-square of land was converted to other forms of land uses (majorly road expansion). Table 4 further indicates that an estimated value of garden lost is N14.57 million, while about N11, 070,000:00 profit was removed from the net income of the study area and by implication the net income of country.

Table 4 : Estimate Differences within the Space of Five Years (2008-2013)

S/No	Variables	Frequency
1	Number of Employed Staff	43
2	Number of Apprentice	18
2	Size of the Garden (in meter-square)	11085
3	Estimate Value of Garden	N14,570,000:00
4	Average Annual Expenditure	N5,550,000:00
5	Average Annual Income	N16,470,000:00
6	Average Annual Profit	N11,070,000:00

Source: Authors' fieldwork, 2008 and 2013

The expansion of roads along which this horticulture gardens were located is one of the major reason for the lost of horticulture land between 2008 and 2013. Example of such expansion is the one done in Ikoyi (Gerald Road) and Victoria Island (Ozumba Mbadiwe Avenue), the two expansion resulted in the loss of about 10 horticulture gardens. Figure 2 and 3 indicates the location of horticulture gardens in 2008 and 2013 respectively.

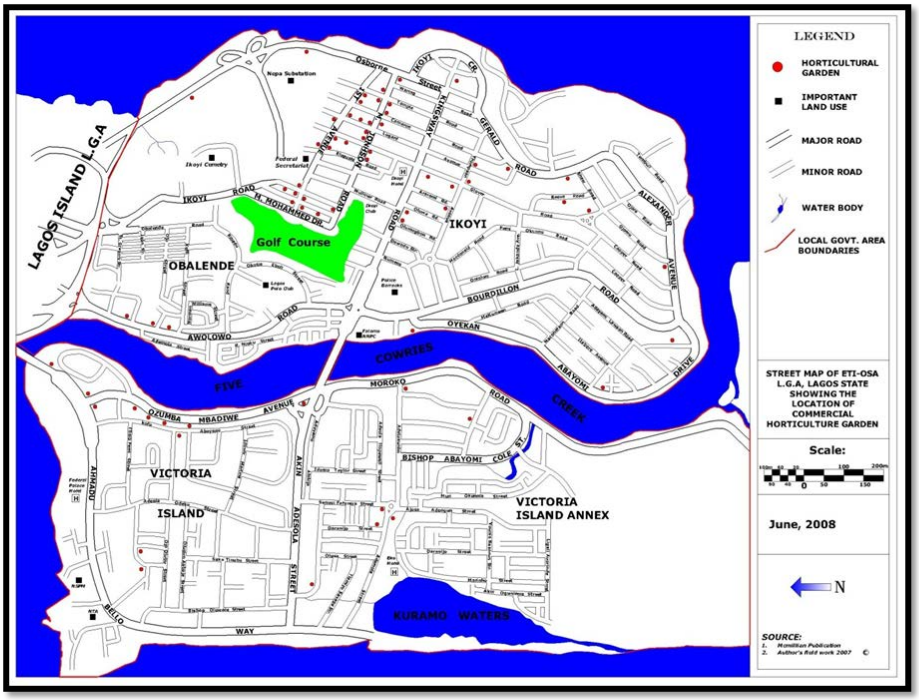

Figure 2 : Location of Horticultural Garden in 2008

Another form of development control which affected the location of horticultural garden in the past five (5) years is the beautification exercise of the Lagos State Government. Roundabout, road intersections and interchange that were used for this practice are now landscape as public green space. Example of such is the Muri Okunola Park in Victoria Island (located on Adeyemo Alkija Street) and the roundabout between Obafemi Awolowo Road and Bourdillon Road (located under Falomo Bridge). Good as this development are, it as a negative effect on the green economy of the study area. Furthermore, the various tools of development control (Zoning, land subdivision, master plan) did not make provision for uses that relate to green economy either on the micro or macro scale.

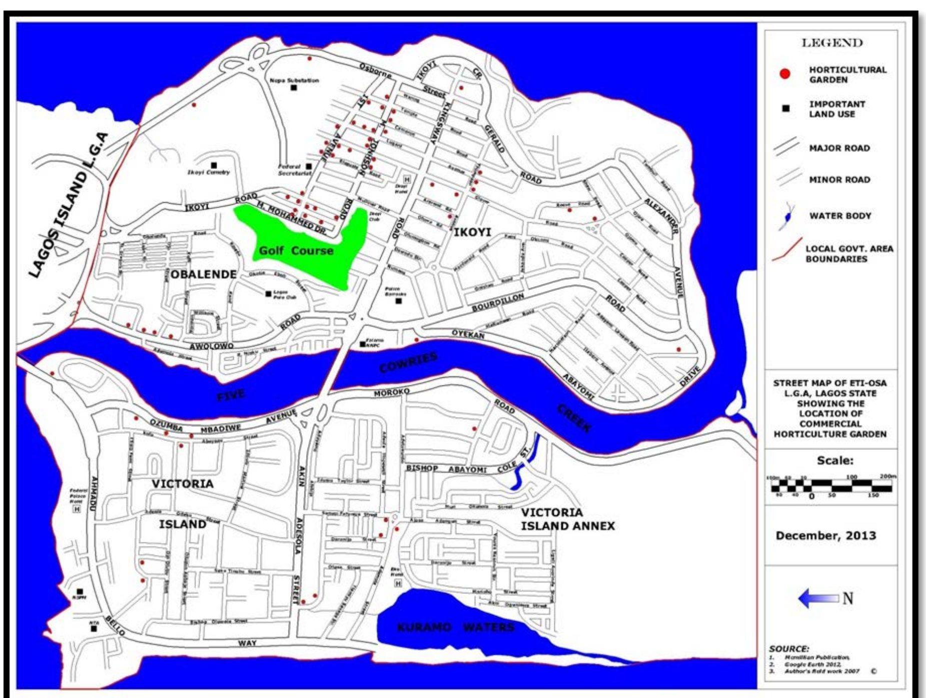

Figure 3 : Location of Horticultural Gardens in 2013

V. Conclusion

Green economy is a popular and precious resource, which can make a valuable contribution to the economy of a community and yet add to the attractiveness of the community. In the light of this, the conversion of green space to other uses should be disallowed particularly in area where horticultural gardens are located. Planning authorities have a key role in ensuring that strategies for micro green economy are integrated with other strategies for improving local economy and quality of life in general. As such, it should be fully involve in micro green economy planning and delivery.

Better provision and care of urban micro green economy will require an effective policy framework, one within which all decision-maker, can operate and work collaboratively. A more strategic approach is needed at the national level for improving co-ordination of national priorities and guiding local strategies for delivering networks of micro green economy that benefit the whole communities and the nation at large. A better policy and good practice framework is also needed at the local level, within which policy maker, designers, managers, and users of urban land for micro green economy can plan to deliver higher standards of noticeable economic value.

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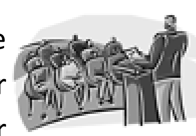

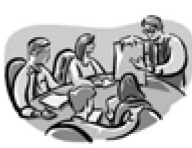

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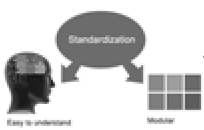

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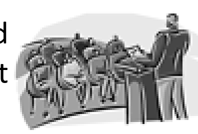

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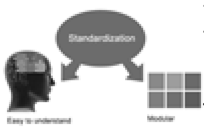

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"

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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.

The Administration Rules

Please carefully note down following rules and regulation before submitting your Research Paper to Global Journals Inc. (US):

Segment Draft and Final Research Paper: You have to strictly follow the template of research paper. If it is not done your paper may get rejected.

- The **major constraint** is that you must independently make all content, tables, graphs, and facts that are offered in the paper. You must write each part of the paper wholly on your own. The Peer-reviewers need to identify your own perceptive of the concepts in your own terms. NEVER extract straight from any foundation, and never rephrase someone else's analysis.
- Do not give permission to anyone else to "PROOFREAD" your manuscript.
- Methods to avoid Plagiarism is applied by us on every paper, if found guilty, you will be blacklisted by all of our collaborated research groups, your institution will be informed for this and strict legal actions will be taken immediately.)
- To guard yourself and others from possible illegal use please do not permit anyone right to use to your paper and files.

Criterion for Grading a Research Paper (Compilation) by Global Journals Inc. (US)

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Topics	Grades		
	A-B	C-D	E-F
Abstract	Clear and concise with appropriate content, Correct format. 200 words or below	Unclear summary and no specific data, Incorrect form Above 200 words	No specific data with ambiguous information Above 250 words
Introduction	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
Methods and Procedures	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
Result	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
Discussion	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
References	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring

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