Online ISSN : 2249-4588
Print ISSN : 0975-5853

Global Journal of Management and Business Research: B

Economics and Commerce

Highlights

- Panel Data Analysis
- Financing of Terrorism
- Public Sector Corruption
- Revenue and Expenditure

Discovering Thoughts, Inventing Future

VOLUME 14 ISSUE 6 VERSION 1.0

Global Journal of Management and Business Research : B
Economics and Commerce

Global Journal of Management and Business Research : B
Economics and Commerce

Volume 14 Issue 6 (Ver. 1.0)

Open Association of Research Society

Incorporation No.: 0423089
License No.: 42125/022010/1186
Registration No.: 430374
Import-Export Code: 1109007027
Employer Identification Number (EIN):
USA Tax ID: 98-0673427

Global Journals Inc.

*(A Delaware USA Incorporation with "Good Standing"; **Reg. Number: 0423089**)*

Sponsors: *Open Association of Research Society*
Open Scientific Standards

Publisher's Headquarters office

Global Journals Headquarters
301st Edgewater Place Suite, 100 Edgewater Dr.-Pl,
Wakefield MASSACHUSETTS, Pin: 01880,
United States of America
USA Toll Free: +001-888-839-7392
USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Global Journals Incorporated
2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey,
Pin: CR9 2ER, United Kingdom

Packaging & Continental Dispatching

Global Journals
E-3130 Sudama Nagar, Near Gopur Square,
Indore, M.P., Pin:452009, India

Find a correspondence nodal officer near you

To find nodal officer of your country, please email us at *local@globaljournals.org*

eContacts

Press Inquiries: *press@globaljournals.org*
Investor Inquiries: *investors@globaljournals.org*
Technical Support: *technology@globaljournals.org*
Media & Releases: *media@globaljournals.org*

Pricing (Including by Air Parcel Charges):

For Authors:

22 USD (B/W) & 50 USD (Color)

Yearly Subscription (Personal & Institutional):

200 USD (B/W) & 250 USD (Color)

Integrated Editorial Board
(Computer Science, Engineering, Medical, Management, Natural Science, Social Science)

Contents of the Issue

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 14 Issue 6 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Biometric System and Performance of Selected Hotels in Abuja of Nigeria

By Dr. Onyeizugbe Chinedu Uzochukw & Anunobi Omelebele Uchechukwu
Nnamdi Azikiwe University, Nigeria

Abstract- Hospitality industry is the economic stream in many parts of the world. With today's increasing terror attacks in Nigeria, it is a great concern that the safety and security of guests and employees' lives and properties be protected. This raises the use of biometric system in hotels. The general objective of the study is to ascertain the extent to which biometric system can affect the performance of hotels in Abuja metropolis. The study seeks to find out specifically the extent of relationship between biometric system and customer satisfaction and the extent to which biometric usage affect competitive advantage of hotels in Abuja. The study is anchored on Expectancy disconfirmation theory. Two research questions and two hypotheses were formulated in line with the specific objectives of the study. The research adopted survey research design. The study worked with sample size of one hundred from the population of five hundred and sixty. Pearson Product Moment Correlation was used for data analysis at 10% level of significance. The findings of research reveal that customers are satisfied with the use of fingerprint scanner and facial dictator for access usage in hotels. The implication of the finding is that if customers are satisfied through the use of biometric system, it will in turn improve the performance level of the hotels. Based on the findings, the study recommends that hotels should provide biometric services to guests as means of registration on check-in and use of any service point in the hote.

GJMBR-B Classification: JEL Code: A19

BIOMETRICSYSTEMANDPERFORMANCEOFSELECTEDHOTELSINABUJAOFNIGERIA

Strictly as per the compliance and regulations of:

Biometric System and Performance of Selected Hotels in Abuja of Nigeria

Dr. Onyeizugbe Chinedu Uzochukwu [α] & Anunobi Omelebele Uchechukwu [σ]

Abstract- Hospitality industry is the economic stream in many parts of the world. With today's increasing terror attacks in Nigeria, it is a great concern that the safety and security of guests and employees' lives and properties be protected. This raises the use of biometric system in hotels. The general objective of the study is to ascertain the extent to which biometric system can affect the performance of hotels in Abuja metropolis. The study seeks to find out specifically the extent of relationship between biometric system and customer satisfaction and the extent to which biometric usage affect competitive advantage of hotels in Abuja. The study is anchored on Expectancy disconfirmation theory. Two research questions and two hypotheses were formulated in line with the specific objectives of the study. The research adopted survey research design. The study worked with sample size of one hundred from the population of five hundred and sixty. Pearson Product Moment Correlation was used for data analysis at 10% level of significance. The findings of research reveal that customers are satisfied with the use of fingerprint scanner and facial dictator for access usage in hotels. The implication of the finding is that if customers are satisfied through the use of biometric system, it will in turn improve the performance level of the hotels. Based on the findings, the study recommends that hotels should provide biometric services to guests as means of registration on check-in and use of any service point in the hote.

I. Introduction

In Nigeria, with the increasing rate of terrorism especially in the federal capital territory and major big cities like Lagos, Port-Harcourt, etc., the security of lives and properties has caused a strain on the performance of most hotels in these cities, leading to decline in demand of patronage.

In as much a guest checking into a hotel is concerned with security but most primarily they want convenience, Biometric system appears to offer the most promising technologies that allow guests to check in and out, access guest areas and make payment with conveniences and speed (Morasan, 2010).

In some countries like Nigeria, for fulfillment of government regulation, hotels must keep a detailed identification records of all guests that patronize the hotels. The main concern of a hotel is to ensure their guest enjoy robust security and comfort in order to maintain continuous patronage.

The Nigerian Tourism Development Corporation (NTDC) in 2013 after discovering the importance of biometric system, entered into a partnership with Orbit Technology and Investment to begin biometric data registration of hotel employees in order to curb fraudulent activities in hotels. This rationale is to create a means of tracing and tracking staff movement within the industry. (Tarpel, 2013).

Rensewe (2012), formal Director-general of NTDC, opined that no foreign investor will come to Nigeria if there are no proper structure in all aspect of our national life and the tourism industry is one of the best and sensitive industries in the world, hence we must do everything to protect the business and ensure security in the sector.

The death rate of people in Nigerian hotels are on the increase as a result of poor security and proper technology that will detect criminals who use hotels as a hide out for their illicit activities. (Rensewe (2012),). Like the incidence of Miss Cynthia Osukogukilled in a Hotel in Lagos.

A step has been made to introduce biometric data records of hotel employees in most hotels but very little has been done with regards to guest or customers' biometric data registration and implementation in Nigerian hotels. (Tarpel, 2013).

Between 2011 and 2013, according to Hotel Owners Forum Abuja (2013), the rate of patronage of hotels in federal capital territory (FCT) from foreign expatriate has declined by 50% as a result of hotel without biometric system of security. (Premium times, 2013).

In July 2012, a young lady Ms. Cynthia Osukogu was killed in a hotel in Festac town Lagos by a group of men who checked her in as business associate. (Vanguard, 2012).

In 2013, a South African Mr. Eric Dominic who visited Nigeria and lodged in a 3-star hotel in FCT, reported that hotels in Abuja do not have report on what happens in the hotel and there are lot of suspected movement in and out of the hotel. (Nigerian Tribune, 2012).

Due to recent terrorism rate in Nigeria, there is a loss in business patronage and poor performance in hotels. The patronage of business in Abuja has declined

Author α: Lecturer In The Department Of Business Administration, Nnamdi Azikiwe University, Awka Anambra State, Nigeria.
Author σ: Research Fellow In The Department Of Business Administration Nnamdi Azikiwe University, Awka Anambra State, Nigeria. e-mail: edu_Phd@Yahoo.Com

Global Journal of Management and Business Research (B) Volume XIV Issue VI Version I Year 2014

by 50% as a result of terrorism attack in Abuja metropolis. (Premium times, 2013).

This study seeks to find out the extent to which biometric system will enhance the performance of hotels in Abuja.

a) *Objectives Of The Study*

The main objective of the study is to ascertain the extent to which biometric system can affect performance of hotels in Abuja metropolis.

The specific objectives are:

1. To identify if there is significant relationship between biometric system and customer satisfaction.
2. To identify the extent to which biometric usage affect competitive advantage of hotels in Abuja.

b) *Research Questions*

In order to carry out this research to fruition the following research question are put forward to guide the course of this study.

1. In what ways do biometric system affect the satisfaction of customers in hotels in Abuja?
2. In what ways do biometric affect competitive advantage among hotels in Abuja?

c) *Hypotheses*

H_1: There is no significant relationship between biometric and customers satisfaction.

H_2: Biometric does affects competiveness in hotels.

II. Review of Related Literature

a) *Conceptual Review*

According to National Science and Technology Committee on Homeland and National Security (2004), it defined biometric as a technology that measures and analyzes human body characteristics such as DNA, fingerprints, eye retinas, iris, voice patterns, facial pattern and hand measurement for authentication purpose.

Ives, Du, Etter and Welch (2005), defined biometric system as technology that uses measurable physical, biological or behaviourial characteristics that can be processed to establish identification to perform identity verification or to recognize a person through automation.

While Jain (2004) opined that biometric is the unique (personal) physical or logical characteristics or traits of human body. Physiological traits are related to the shape of the body, for example are, not limited to fingerprints, face recognition, DNA, hand and palm geometry, Iris recognition and scent recognition. While behaviourial trait or sometimes known as Behaviometric are related to person's behaviour and example include, not limited to typing rhythm, gait (pattern of movement of limb) and voice recognition. (Pike, 2007).

According to Abdelbang (2011), Hand Geometry is a method to distinguish or identify the unique person using 90 dimensional measurements to record an accurate spatial representation of an individual hand.

According to Abdelbang (2011), Retina scanning involves an electronic scan of retina, the innermost layer of the wall of the eyeball.

According to Polemi (1997), Iris scanning uses a camera mounted between three and 10 feet away from the person to take a high definition photograph of the individual's eye. It analyzes 266 different points of data from the meshwork of the iris.

According to Ruggles, (1996), Facial recognition attempts to identify subjects according to the facial characteristics such as eye socket position space between cheekbones, color, etc.

According to Abdelbang (2011), Fingerprint recognition systems rely on biometrics device's ability to distinguish the unique impressions of ridges and valleys made by an individual finger.

Technology has become a component of everyday life in nearly every part of the world in this 21st century. Technology use has permeated every segment of the business world. The hospitality industry is no exception that are constantly seeking new technology as a way of daily operation. Biometric is a highly effective to establish identity verification.

Richard P., Devinney T. M, Yip G. S and Johnson G (2009)(2009) defined organizational performance as the encompassing of financial performance, product market performance and shareholder returns.

b) *Theoretical Framework*

This research is based on the expectancy disconfirmation theory, which states the concept of consumer satisfaction or dissatisfaction.

According to Neo, Devinaga, Yoon Kin Tong, andTeo(2014), Expectancy disconfirmation theory states that consumers purchase goods and service with pre-purchase expectation about the anticipated performance. Once the product has been purchased and used, the outcomes are compared against initial expectation. During comparism, if the outcomes matches expectation confirmation is reached. On the other hand, disconfirmation is achieved when there is a difference between user's initial expectation and outcome.

Negative disconfirmation refers to outcomes which is less than expected and thus the product does not meet user's expectation. On the contrary, positive disconfirmation occurs when the outcome is greater than user's initial expectation and hence the product performance is much better than expected.

In line with this theory, customers that patronize a hotel expect to get ultimate satisfaction for their money. This satisfaction is drawn from the comfort received, security of lives and properties and efficiency of the services offered from the hotel. If a hotel offers biometric system for guests and employees, customers are more likely to favour that hotel than others without this technology because the expectation result on security well-being of the guests in this period of high insecurity in the country will be satisfied by the hotel with this technology.

c) Empirical Literature

Neo, Devinaga, Yoon Kin Tong, and Teo(2014) carried out research on *"Tourists' Satisfaction on the Use of Biometrics Technology: A Conceptual Framework".*

In this work, tourists' satisfaction was measured by using the variables from different theories. There were seven variables from tourists' perspective to be examined: performance expectancy, effort expectancy, facilitating conditions, physical privacy, accuracy, information privacy and contamination fear. The first five were the performance expectations that tourists could anticipated before the actual use of the biometrics fingerprint system. These expectations need to be disconfirmed to establish whether the actual experience exceeds or falls short of expectations.

They found out fingerprint scanning system designed for mandatory programme were able to break-even point that met tourist's expectation.

The data collected was analyzed with statistical software IBM Statistical Package for the Social Science (SPSS) version 20.

Morosan (2010) worked on *"Theoretical and empirical consideration of guest's perception of biometric system in Hotels: extending the technology acceptance model (TAM).*

The objective of his work was to determine the system in which guests in hotels perceived the use of biometric. The researcher analyzed this work using analysis of variance (ANOVA) and was able to find out that perceived innovativeness toward this technology was found to be a strong predictor of perceived ease of use of biometric system.

Hence, customer would prefer to use a hotel with biometric system. This factor is an advantage edge for a hotel over its counterpart, as innovative and technology lovers would certainly opt for a hotel with biometric system than one without.

Bilgihan A., Karadag E., Cobanoglu C. and Okumus F. (2013) carried out research on *"Biometric Technology Applications and Trends in Hotels".*

The purpose of the study was to investigate the biometrics technologies adopted by hotels and the perception of hotel managers toward biometric technology applications. Members of American Hotel and Lodging Association (AHLA) wereselected as the target population for the study. The findings of the study showed that the most frequent use of biometric technology is by hotelemployees in the form of fingerprint scanning, as cost still seems to be one of the major barriers to adoption of biometric technology applications and there is definitely is a future in using biometric technology applications in hotels in the future. The data collected was analysed by T-test statistics.

Abdelbary A. M (2011) worked on *"Exploration of factors affecting adoption of biometric technology by five-star Egyptian hotel employees".* The purpose of the study was to explore perceptions and acceptance of biometric technology by employees in Egyptian hotels. The findings of the study showed that biometric devices positively influences perception of employees of valued-added to the work place and the knowledge of biometric devices to employees influences the type of devices accepted.

The data collected were analysed Statistical Package for the Social Science (SPSS) version 18.

d) Hotel and Technology

According to Murphy andRottet (2009), the hospitality industry are not different than other industries in the world in need and search of new technology that streamline their daily operation such as property management inventory and electronic point of sales.

Heracleous andWartz (2006) opined that reconfiguration of the way transactions are processed with corollaries of better customer service combined with convenience and ease of transaction will be considered a "driver" for the customer and industry alike.

Abdelbary (2011), suggested the different transactions like identification of guests, security and payment process such as booking, reservation, check-in, payment, customer-specific information requests and use of secure devices in guest rooms and offices could be reconfigured with advance technology.

The application of an advanced technology for this transaction can lead to increase in efficiency, decreased cost, increased revenues, enhanced service and increased ability to compete with other hotels within the industry.

Jackson (2009) posited there seems to be the unleashed potential of technology which could enhance organizational practice to gain competitive advantage and that technology is biometric system.

Since hospitality industry provide a homogeneous product, in which information is driving force and key component, O'Conner and Frew (2002) said it will particularly benefit the industry if addition of technological advancement is augmented to existing technology present in the industry today.

The advancement of technology is ever increasing and hotels have historically lagged behind other industry in implementation of technology especially in Nigeria.

According to Murphy andRottet (2009), 87.3% of leisure guests are favourly pre-dispersed to use biometric technology for guest service. Unlike other conventional identification method, the personal traits scanned by biometric are difficult to lose, forget or copy for this reason, it is considered to be safer and more secure than other conventional methods such as keycards or passwords.

e) Biometric System and its Application

O'Conner and Frew (2002) said the need for technology to deliver reliable and reproducible service in the hospitality industry is increasing daily.

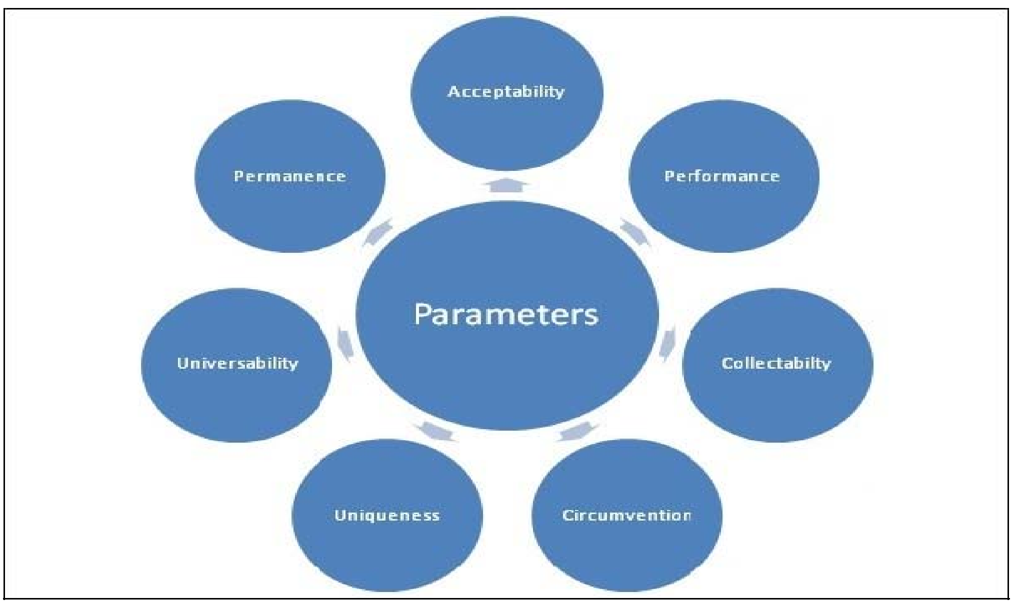
Hotel currently use multiple keys by employees to access areas in hotels to perform their duties as well as gain entry to restricted areas. Human error can result in loss of keys as well as unauthorized individual access to restricted areas or fraudulent activities by employees. Lock change, key replacement and making new password add to cost and inefficiency in operation.

Biometric system is the technology of identifying individual using distinctive physical or behaviourial pattern. Jones and Ruthenbur (2006) posit that biometric system will improve room security, customer convenience, control access to restricted area and limit access to customer's data. The information of access of entry can be printed or retrieved at a later time to determine an entry area in question. Data gotten through biometric are accurate, convenient and cannot be stolen or replicated because it is unique only to one subject.

i. *Criteria For Biometric System*

According to Schucker (2001), there are seven basic criteria for biometric system.

a. Uniqueness
b. Universality
c. Permanence
d. Collectability
e. Performance
f. Acceptability
g. Circumvention



a. *Uniqueness*

This is considered as the priority one requirement for biometric data. It will indicate how differently and uniquely the biometric system will able to recognize each user among groups of user. For instance, the DNA of each person is unique and it is impossible to replicate.

b. *Universality*

This is the secondary criteria. This parameter indicate requirements for unique characteristic of each person in the world which cannot be replicated. For example retinal and iris characteristic of a person.

c. *Permanence*

This parameter requires for every single characteristic or trait which is recorded in the database of the system and needs to be constant for a certain period of time period.

d. *Collectability*

This Parameter requires the collection of each characteristic and traits by the system in order to verify their identification.

e. *Performance*

This parameter outline how well the biometric system works, accuracy and robustness are the main factors of biometric system.

f. *Acceptability*

This parameter will choose field which biometric technology are accepted.

g. *Circumvention*

This parameter decide how easily each characteristics or traits provided by the user can lead to failure during the verification process.

f) Application Fields in Biometric System

There are two application fields in biometric system. They are:

i. Physical access control
ii. Logical access control

The difference between the two access controls are small but can be easily confused.

i. *Physical access control*

According to O'Neil (2011), the physical access control covers identity authentication processes which require users to provide physical characteristics. The most common use for the physical access control application is the access devices which are applied at doors or computers. This application is confidential and important and is entrusted with a high level of security. The physical access control reduces the risk of human problems. It also covers the aspect of data loss in the system. The system helps to eliminate the process of identifying long and complex passcodes with different processes.

Physical access control is not only effective and efficient but also safe, secure and profitable in the workplace.

ii. *Logical access control*

Logical access control refers to a process of a scheme control over data files or computer programs. These contain personal or privacy information of many different users. Logical access control is used by militaries and governments to protect their important data with high security systems using biometric technology.

The only difference between logical access control and physical access control is that the logical access control is used for computer networks and system access control. It helps to reduce the burden of long and complex password requirements for users.

Moreover, it is more secure and effective in the way of protecting and maintaining privacy over data in the system. It also provides a great advantage by saving time and money

g) Types of Biometric System

According to Biometric News Portal (2011), the various types of biometric system are:

i. *Facial Recognition Detector*

The human face is one of the easiest characteristic which can be used in biometric security system to identify a user. Face recognition technology, is very popular and is used more widely because it does not require any kind of physical contact between the users and device. Cameras scan the user face and match it to a database for verification. Thenegative side of face recognition technology is as the user ages over time, the detector finds it difficult to identify the user.

ii. *Fingerprint Reader*

Fingerprint is made of a number of ridges and valleys on the surface of finger that are unique to each human.

According to Biometrics News Portal (2011). "Ridges are the upper skin layer segments of the finger and valleys are the lower segments".

The uniqueness of a fingerprint can be determined by the different patterns of ridges and furrows as well as the minutiae points.

To capture the surface of the fingerprint for verification during the identification of users,two main algorithms which are used to recognize fingerprints: minutiae matching and pattern matching.

Minutiae matching will compare the details of the extract minutiae to identify the difference between one users fingerprint as compared to others. When users register with the system, they will record images of minutiae location and direction on finger surface. When users use fingerprint recognition system to verify their identification, a minutiae image is brought out and compared with the one which provided at the time of access.

Pattern matching will compare all the surfaces of the finger instead of one particular point. It will concentrate more in thickness, curvature and density of finger's surface.

The image of the fingers surface for this method will contain the area around a minutiae point, areas with low curvature radius or areas with unusual combinations of ridges.

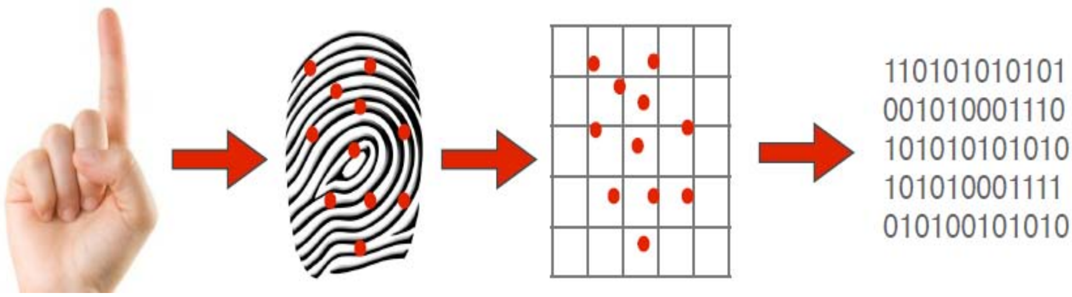
The major disadvantage of finger scanner is damage or having one or more mark on it, will make identification become hard.

iii. *Voice Recognition*

There are two main factors which makes a person's voice unique. One is the physiological component which is known as the voice tract. The Second is a behavioral component which is known as the voice accent. By combining both of these factors, it is almost impossible to imitate another person's voice exactly. Voice recognition will focus on the vocal tract because it is a unique characteristic of a physiological trait. It works perfectly in physical access control for users.

iv. *Iris Scanner & Recognition*

The human iris is a thin circular structure in the eyes which is responsible for controlling the diameter and size of the pupils. It also controls the amount of light which is allowed through to retinal in order to protect the eye's retina. Iris color is also a variable different to each person depending upon their genes. Iris color will decide eye color for each individual.



Biometric Door Lock

Biometric Fingerprint Scanner

Iris recognition systems will scan the iris in different ways. It will analyze over 200 points of the iris including: rings, furrows, freckles, the corona and others characteristics. After recording data from each individual, it will save the information in a database for future use in comparing it every time a user want to access to the system.

During the verification process, if the users are wearing accessories such as glasses and contact lenses, the system will work as normal because it does not change any characteristics of the user's iris.

Theoretically, even if users have eye surgery, it will have no effect on the iris characteristics of that individual.

v. *Veins Recognition*

This is one of the recent biometric technologies invented is the vein recognition system. Veins are blood vessels that carry blood to the heart. Each person's veins have unique physical and behavioral traits. Taking advantage of this, biometrics uses unique characteristics of the veins as a method to identify the user.

O'Neil (2011) said that vein recognition systems mainly focus on the veins in the user's hands.

Each finger on human hand has veins which connect directly with the heart and it has its own physical traits

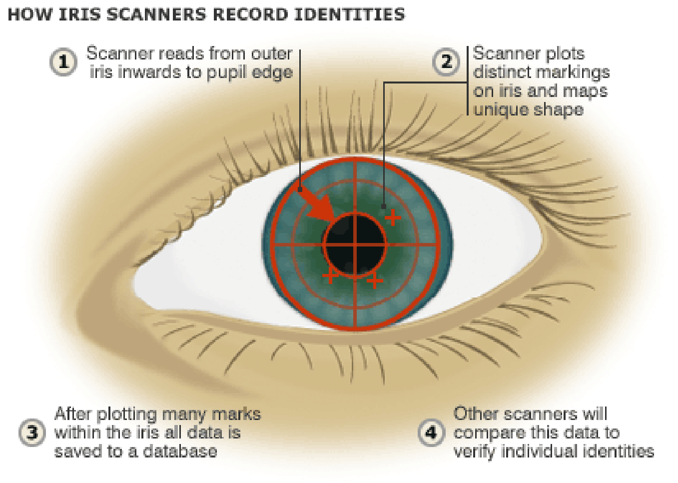
The recognition system will capture images of the vein patterns inside of users' fingers by applying light transmission to each finger. This is done by passing near-infrared light through the fingers by a camera to record the vein patterns.

vi. *DNA Biometrics System*

Each person's DNA contains some trait from his/her parents. DNA profiling will decide the amount of VNTR (variable number tandem repeat) which repeats at a number of distinctive loci. These amounts of VNTR will make up an individual's DNA profile. this technology is new and is hardly applied in public.

vii. *2D Barcode Scanner*

This is a 2-dimesional method of presenting digital security information which is provided by the biometrics technologies system. 2-D barcode is



normally applied during the identification of items rather than users.

This technology is not popular; it can be used for scanning the identity of user's driver license, passport, ID cards, voter cards, etc.

h) Phases of Biometric Operation

According to Abdelbang (2011), the biometric operation consist of the following phases;

i. *Data acquisition*

During this phase, quality is important. If the input is not accurate, the process may not proceed and may require another submission of data.

ii. *Data transmission*

Systems uses two process of transmission, some system self-store and can process at the same location of submission of the information, while other systems transmit the information over the Local Area Networks (LAN), intranet, or internet to other far locations requiring data compression for speedy transfer. This is a critical process and errors can occur; a complex protocol is necessary to ensure accuracy.

iii. *Signal processing*

During this phase, the system is used to either verify the identity of a person or identify an individual among a group. In the verification process, the individual is required to access the system using a personal identification number or a log name for identification and then present the appropriate biometric feature.

The system does a one-to-one comparison to the stored information. In the case of identification.

iv. *Decision*

The biometrics systems have a threshold to make a match or no match based on the quality and match scores. Low scores lead to rejection and high scores compared to the threshold ensure identification.

v. *Data storage*

Data converted to templates are stored locally, on a network, or on portable or external devices based on the needs of the organization.

To further explain the operation phases, using for example, the fingerprint recognition. The fingerprint scanner scans the structure of the finger print picture which contains patterns known as minutiae (valleys and ridges) unique to each individual. Those patterns are stored in templates using encryption algorithms unique to each vendor. Once this information is digitized and stored, it can be recalled with ease and accuracy to identify an individua.

i) Biometric and Security in Hotels

According to Singhal and Jain (2011), biometric technology aims at reducing fraud and eliminating risks associated with security.

Recently, airports, security companies, financial organisation are gradually integrating biometric system applications into their workplace.

Parton (2007) posits that hotels are increasingly seen as soft target by terrorists in the world for being open and accessible. In Days Inn Hotel in Amman, Jordan was attacked by terrorist in 2005, killing 60 people and caused hundreds of injuries. With these world spread of terrorism in the world, biometric system can help in securing the security of hotels.

This has made security an important issue for hotelier particularly at the luxury end of the market.

Also hotels have long suffered security breaches including network and system security, theft by employees and credit/debit card theft. This insurgency can be avoided by use if biometric system.

III. Methodology

The study is limited to five (5) selected hotels in Abuja, Nigeria. The hotels are Rockview Hotel Royale,

Global Journal of Management and Business Research (B) Volume XIV Issue VI Version I Year 2014

Bolingo Hotels, Bolton white Hotel, Dennis Hotel and Emirate Hotel.

The population of the study consists of customers of the selected hotels

Names of hotels	Average no. of customers
Rockview Hotel Royale	100
Bolingo hotels	250
Bolton white hotel	120
Dennis hotel	60
Emirate hotel	30
Total	560

The sample size was determined using Taro Yamane formula. This is statistically determined below;

$$n = \frac{N}{1 + N(e)^2}$$

Where
n= the sample size
N= the finite population
e= level of significance
1= unity

$$n = \frac{560}{1 + 560(0.1)^2}$$

$$\frac{560}{5.61} = 99.8$$

Approx. = 100

The researcher design used for the study is descriptive survey involving the questionnaire administration.Data for the study were sourced from selected hotels in Abuja, Nigeria. Copies of questionnairewere administered to hundred (100) respondents selected from each of the hotels. Data obtained were analyzed using Pearson Product Moment Correlation and descriptive statistics.

Table 1: Biometric System and Security Service

Responses	Frequency	Percentage %
Very good	20	23.8
Good	34	40.5
Average	26	30.95
Poor	4	4.8
Very poor	0	0
Total	84	100

Source: Field Survey, 2014.

Table 1 shows that 34 respondents which represent 40.5% and 20 respondents which represent 23.8% rated hotels security service good and very good respectively. While 26 respondent which constitute 30.95% rated average and 4 respondents which constitute 4.8% rated hotel security service poor.

Table 2 : Finger Print Scanner and Customer Satisfaction

Responses	Frequency	Percentage %
Very good	28	33.3
Good	36	42.9

Average	12	14.3
Poor	8	9.5
Very poor	0	0
Total	84	100

Source: Field Survey, 2014.

Table 2 showsthat 36 respondents which represent 42.9% and 28 respondents which represents 33.3% rated good and very good respectively that finger scanner enhances customer satisfaction, while 12 respondents which represent 14.3% and 8 respondents which represent 9.5% rated finger print scanner enhancer for customer satisfaction average and poor respectively.

Table 3 : Biometric Devices And Guest Privacy

Responses	Frequency	Percentage %
Very good	2	2.4
Good	12	14.3
Average	8	9.5
Poor	28	33.3
Very poor	34	40.5
Total	84	100

Source: Field Survey, 2014.

Table 3 showsthat 34 respondents which represent 40.5% and 28 respondents which represents 33.3% rated very poor and poor respectively rated that biometric system encroach into guest privacy, while other respondents rated the responses good and very good.

a) *Testing of Hypotheses*

i. *Hypothesis One*

There is no significant relationship between biometric system and customer satisfaction.

Table 4 : Pearson-Product Moment Correlation coefficient between mean responses of use of biometric device and customer satisfaction

	X	DF	Standard Error	r-Cal	r-critical	Decision
Biometric system	4.7	3	0.1	0.97	0.865	Reject H_o
Customer satisfaction	4.0					

ii. *Hypothesis Two*

Biometric system does affects competition in hotels.

Table 5 : Pearson-Product Moment Correlation coefficient between mean responses of use of biometric devices and competitive advantage

	X	DF	Standard Error	r-Cal	r-critical	Decision
Biometric system	4.7	3	0.1	0.96	0.865	Reject H_o
Customer satisfaction	3.86					

IV. Summary of Findings

From the result of correlation coefficient in hypothesis one, it was observed that r = 0.97 which showed a positive relationship between biometric devices and customer satisfaction in Abuja metropolis.

This revealed that using fingerprint scanner and other biometric devices for access identification into any hotel will guarantee high level of security of lives and properties of customers in hotels. This will also provide a more functional security against terrorism, fraudulent activities and privacy of guests, in line with the assertion of Abdelbang (2011) that different transactions like identification of guest, security and payment processes such as booking, reservation, check in, payment and use of security devices in guest rooms and offices should be reconfigured with advance technology.

From the result of correlation coefficient in hypothesis two, it was observed that r = 0.96, which showed a positive correlation between biometric system and competitive advantage of hotels in Abuja metropolis. This revealed the extent the usage of biometric devices can influence competitive advantage of hotels. The finding explain why hotels in Abuja metropolis should start using biometric devices for guests as this will boost patronage as asserted by HOFA (2013) that the patronage level of business has declined by 60% since the increased terrorist attacks in Abuja metropolis. Also in line with Jackson (2009) that unleashed potential of technology can enhanc organizational practice to gain competitive advantage and that technology is biometric system.

V. Conclusion

The study has shown that biometric system is needed to enhance the performance of hotels in Abuja. Also the adoption of this technology will help them succeed in this period of increased terrorist attack.

VI. Recommendations

Based on the findings, the following are recommended;

1. With the rate of insecurity in Abuja metropolis, hotels should provide biometric services to guests as a means of registration on check in and use of any service point in the hotel. With the new ongoing National Identity Management Commission (NIMC), it will be easier for hotel biometric database to be built up, by linking a network to the national database. Hence, any suspected criminal can be quickly identified at point of access into any hotel.
2. The hotels should adopt the use of biometric device to lessen the burden of keycards and password, especially the cost and time of reproducing them when they are lost.The use of biometric devices of behaviometric trait like typing rhythm, gait or voice recognition should be used as medium of identification and assess to rooms and guests' area of hotel, other than the physiological traits (fingerprint scanner and hand geometry) which are currently in used in most hotels.

Gait analysis is the systematic study of human locomotion, using the eye and the brain of observers, augmented by instrumentation for measuring body movements, body mechanics, and the activity of the muscles. (Levine D.F, Richards J, and Whittle M, 2012).

Whereas, typing dynamics refers to the automated method of identifying or confirming the identity of an individual based on the manner and the rhythm of typing on a keyboard.

Gait recognition and typing dynamics technology are unique biological or behavioral identification characteristic that will be most efficient in detecting of terrorist in hotels and also public areas of the hospitality industry.

References Références Referencias

1. Abdelbang A. M. (2011). "Exploration of factor affecting adoption of Biometric technology by 5-star Egyptian hotel employees". Unpublished M.Sc. thesis. Iowa state University.
2. Aronson, M (2007). Effective use of Technology is Key to Success. Retrieved on January 15, 2010. From: *http://www.hotelworldnetwork.com/meeting-tools/ effective-use-technology-key-success.*
3. Cynthia's death: Need to increase hotel security. (2012, August 31) vanguard newspaper. Retrieved from http://www.vanguardngr.com/
4. Heracleous, L., &Wirtz, J. (2006). "Biometrics: the next frontier in service excellence, productivity and security in the service sector". Managing Service Quality, 16(1), 12-22.
5. Hotel patronage drops in Abuja due to insecurity-Owners. (Premium Times, September 30). Retrievedfrom http://www.premiumtimesng.com/
6. Ives R. W, Du, Y., Etter D. M, and Welch T. B. (2005). "A multidisciplinary approach to Biometric". IEEC transaction on Education, Vol. 48, 462-471.
7. Jackson L. A (2009). "Biometric technology: The future of identity assurance and authentication in the lodging industry". International Journal of Contemporary Hospitality management Vol. 25, 574-582.
8. Jain A. K, Ross A and Pankanti S. (2004). "An introduction to Biometric recognition". Vol. 14 (1), 4-20.
9. Jain A. K. (2007). Biometrics recognition. Nature Vol. 449, 39-40.
10. Lam T, Cho V. and Qu, H. (2007). "A study of hotel employee behavioral intentions towards adoption of information technology". International Journal of Hospitality management. Vol. 26, 49-65.
11. Levine DF, Richards J and Whittle M. (2012). Whittle's Gait Analysis Elsevier Health Sciences.
12. Morosan C. (2010) "Theoretical and empirical consideration of guests 'perception of biometric system in hotel: extending the technology acceptance model". (Electronic version) Journal of hospitality and tourism research 53-58.
13. Murphy H.C and Rottet D (2009). "An exploration of the key Hotel processes implicated in Biometric adaption". International journal of contemporary hospitality management Vol. 21 (2) 201-212.

14. National science and technology and committee onHomeland and national security (2004). Biometric standards, retrieved March 25, 2014 from http://www.biometricscatalog.org/NSTCsubcommitte/document/
15. Neo, H, Davinaga R, Tong D.Y and Teo C. (2014). "Tourists'satisfaction on the use of Biometric technology: Conceptual framework". Journal of economic, business administration Vol 3 (2), 21-28.
16. O'conner P and Frew A. (2002). "The future of hotel electronic distribution: Expert and industry perspectives". Cornell hotel and business administration quarterly Vol. 43(3) 33-45.
17. Okumus F. (2013). "Knowledge management through information technology in hospitality organizations". Journal of hospitality and tourism technology Vol. 4 (1), 64-80.
18. O'Neil P, O'Neil, Winter S. and Kwiaton L. (2011). Biometric Security system. Retrieved on March 25 2014 from http://www.findbiometrics.com
19. Onyeizugbe C. U. (2013). Practical Guide to Research Methodology in Management: Onitsha: Good Success Press.
20. Parton H. (2007). Guard Duty. Hotel management-network.com. Retrieved February 13, 2013 from http://www.hotelmanagement-network.com/
21. Polemi D. (1997). Biometric technique: Review and evaluation of Biometric techniques for identification and authentication including an appraisal of the areas where they are most applicable.
22. Richard P., Devinney T.M, Yip G.S and Johnson G (2009): Measuring Organizational Performance: Towards Methodological Best Practice. Journal of Management. Vol. 35 (3) 718-804
23. Ruggles T. (1996). Comparison of Biometric techniques. Retrieved on March 12 2014 from http://www.bioconsulting.com/Bio.htm
24. Singhal R. and Jain P. (2011). "Biometric: Enhancing security. Asian Journal of computer science and information technology". Vol. 1 (3), 89-92.
25. Schucker M. E. (2001). Some statistical aspects of Biometric identification device performance.
26. Security issues in Abuja Hotels. (2012, October 1) Nigerian Tribune. Retrieved from http://www.tribune.com.ng
27. Tarpel F. (2013, January 10). NTDC partnership with Orbit Technology on biometric registration. Nigeria Communication week. Retrieved from *http://www.nigeriacommunicationweek.com.ng/e-busin*

This page is intentionally left blank

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 14 Issue 6 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Dividend Policy of Brazilian Companies with the Best Corporate Governance Practices

By Rafael Ramos Da Costa, Dr. Alexandre Assaf Neto & Dr. Fabiano Guasti Lima

Abstract- The article investigates the dividend policy profile of the companies which voluntarily listed themselves in the BM & FBovespa New Market segment, which is seen as the strictest one concerning the best practices of corporate governance in the stock Market. The aim is to check whether the moves in the Brazilian Stock Market to promote greater transparency, equity in the treatment among the shareholders and adherence to the best practices of corporate governance reflected in dividend decisions which pursued the maximization of shareholders´ wealth. Therefore, the conceptual model of Dividend Residual Theory, first established by Modigliani & Miller (1961) and reviewed by Jensen (1986) in the Free Cash Flow Theory, was used. Thus, through multivariate statistical techniques, it was evaluated how these companies administered the Free Cash Flow to Equity during the whole working period of the segment up to 2011. Moreover, it was sought to observe whether the decisions on the FCF caused impacts in the shareholders´ profitability, expressed by the Share Rate of Return (SRR). As a result, it was seen that a great part of the companies presented high level of overinvestment in the period, provoked by the FCFE holding, and that such a problem could have been the cause of a smaller SRR in some sectors.

Keywords: corporate governance, dividend policies, free cash flow to equity, share rate of return, shareholder´s profitability.

GJMBR-B Classification: JEL Code: G34

DIVIDENDPOLICYOFBRAZILIANCOMPANIESWITHTHEBESTCORPORATEGOVERNANCEPRACTICES

Strictly as per the compliance and regulations of:

Dividend Policy of Brazilian Companies with the Best Corporate Governance Practices

Rafael Ramos Da Costa [α], Dr. Alexandre Assaf Neto [σ] & Dr. Fabiano Guasti Lima [ρ]

Abstract - The article investigates the dividend policy profile of the companies which voluntarily listed themselves in the BM & FBovespa New Market segment, which is seen as the strictest one concerning the best practices of corporate governance in the stock Market. The aim is to check whether the moves in the Brazilian Stock Market to promote greater transparency, equity in the treatment among the shareholders and adherence to the best practices of corporate governance reflected in dividend decisions which pursued the maximization of shareholders´ wealth. Therefore, the conceptual model of Dividend Residual Theory, first established by Modigliani & Miller (1961) and reviewed by Jensen (1986) in the Free Cash Flow Theory, was used. Thus, through multivariate statistical techniques, it was evaluated how these companies administered the Free Cash Flow to Equity during the whole working period of the segment up to 2011. Moreover, it was sought to observe whether the decisions on the FCF caused impacts in the shareholders´ profitability, expressed by the Share Rate of Return (SRR). As a result, it was seen that a great part of the companies presented high level of overinvestment in the period, provoked by the FCFE holding, and that such a problem could have been the cause of a smaller SRR in some sectors.

Keywords: corporate governance, dividend policies, free cash flow to equity, share rate of return, shareholder´s profitability.

I. Introduction

According to the company theory, the company is a contractual relation nexus between its several participants (COASE, 1937). In these contractual relations, which are not perfect, agency problems come up, due to information asymmetry and interest conflicts between the contracted and contractor in the case, agent and principal (JENSEN & MECKLING, 1976).

Thus, when there is the intention to align the interest between them, the corporate governance comes up, acting as a way to minimize the conflicts and existing differences as well as correct flaws present in the communication and information process of the companies. Therefore, the corporate governance is the field which deals with the set of relations between the direction of the companies, their counseling management, their shareholders and other interested parts, working as a tool through which the corporate capital providers are assured of their investment returns (SHLEIFER & VISHNY, 1997).

Author α: e-mail: rafael_rramos@yahoo.com.br

In Brazil, some institutional and governmental measures have been taken along the last decades aiming to contribute with the evolution and dissemination of their practices in the companies. One of those initiatives was the creation, in 2000, of the New Market segment by the BM&FBovespa, composed of rules and increasing requirements concerning the good governance practices, among them, the issuing of only one share class, common shares with voting rights.

In this sense, it is consistent to think that the dividend policy, which was at first influenced by the need of acting as a tool of conflict reduction between common and preferred shareholders as well, started to be decided from a predominantly managerial focus by the companies of this segment, that is, from the financial point of view of the shareholders´ wealth maximization.

Therefore, the article proposes to check if there are problems of overinvestment in the companies studied, caused by the free cash flow to Equity holding and demonstrate whether it impacts the shareholders´ profitability, reflected in the share return rate, as the Jensen´s Free Cash Flow (1986) foretells.

II. Dividends

a) *Dividend Residual Theory*

Probably, the first description of the dividend residual policy in the academic literature was written by Preinreich (1932), who proposed an ideal dividend policy as that one which distributed the total wealth increase generated by the company in regular intervals, through the part of the profits which could not be reinvested (BAKER, 2009, p. 115)

However, Modigliani & Miller (1961) were the ones who ended up consecrating this idea, by naming it dividend residual theory, since it is a residual decision to the investment decision. In summary, the theory explains that the managers must reinvest the income generated by the company only in projects with positive net present values (NPV) and, only after all the possibilities have ended, they must pay the "residual" amount of the cash as dividend.

Nevertheless, the individual preferences of the investors and the timely moment for consuming their wealth are not taken into account. Thus, for this whole logic to take place, the authors adopted some premises creating a hypothetical stock Market, in which: (a) no agent would be able to affect the price of the shares

Global Journal of Management and Business Research (B) Volume XIV Issue VI Version I Year 2014

with purchases or sales; (b) there would not be informational asymmetry and transaction costs; (c) it would be constituted of just rational investors, with identical behavior and preferences.

With these restrictive premises adopted by the authors at the time, they ended up not considering the financing sources either. Therefore, from the abandonment of these assumptions concerning the perfection of the Market by other authors, the dividend decision also started being considered as "residual" the financing decision.

Thus, the decision of dividends depends not only on the investment and financing decisions but also interferes on them. That is, a company can decide on the distribution of its profits simply due to the fact it does not have investment projects which offer a return above the minimum required by the partners, turning the dividend decision into a by-product of investment decisions. Or the company can also decide on the reduction of the percentage of equity in relation to third party funds, distributing dividends to seek an optimal combination of capital structure, that is, the one that minimizes the total capital cost. In this context, the dividend decision becomes a by-product of the financing decision.

Relating the dividend, investment and financing policies, Myers (1984) verified that the companies adjust the dividends payout towards preset targets, according to their future investment opportunities, and seek this level in the same way as they seek a better level of indebtedness. Therefore, in a period of financial difficulties, a company must adopt a more defensive posture of profit distribution. Thus, for poor profitable and highly leveraged companies, the payment of dividends is not recommended. In this case, according to the author, considering the presence of financial restriction, it is preferable to hold more profit as source of financing of new investments than seek external financing, offered at a higher cost for companies in this condition.

Finally, besides these aspects involved in the definition of the target index of dividend distribution, another factor that also affects the whole dynamics presented is all the problems elapsed from the agency conflicts, discussed by the Free Cash Flow theory.

b) Free Cash Flow Theory

In the relation between agents, in which there is as premise the inexistence of complete agreement (1) and the inexistence of perfect agent (2), the dividend policy can generate problems of agent conflicts, mainly in large companies, where there is the separation between property and control, provoked by the dispersion of capital.

In them, there is conflict of interests between the internal agents, in this case managers and controlling shareholders, and the external agents, as the minority shareholders and creditors. In Brazil, because of the negotiation traits of its stock Market, two more figures are added between these agents, the common and preferred shareholders.

According to Jensen & Meckling (1976), the main reason of the origin of these conflicts is the lack of the investors´ (mainly in countries which do not offer an appropriate legal protection to the shareholder) ability, mechanism or incentive to control all the activities of the administrators, including those related to the allocation of the company´s profit

I11ustrating, at a certain moment, these administrators can, due to several reasons, obtain incentives to reinvest the company´s profit in project with negative net present value or, even, reinvest the resources of the company besides the necessary amount, which researchers such as Lang & Litzenberger (1989) call "*overinvestment problems*", harming the distribution of "Residual" cash available for dividends to the shareholders.

Testing this condition, these two last authors carried an important study through a sample containing 429 announcements of changes in the dividends of North-American companies from 1979 to 1984. In this study, they were able to check which companies, with excessive investment, increased, consequently, their market value once they decided to raise their payout levels. Moreover, they detected that a reduction in the dividend payout by this companies signaled to the Market that the investment projects with negative net present values were being undertaken, corroborating, therefore, the hypothesis that changes in the dividends of the companies with overinvestment signal information on the company´s investment policy.

Kallapur (1994), also investigating whether the managers reinvest the accumulated profits in projects with negative NVP, carried out a study with 112 companies in the United States. As a result, he verified that the return on these accumulated profits was below the estimated rate required by the Market.

Thereby, as stated by Jensen & Meckling (1976), the administrators tend to use the excess of free cash in investments which meet their own interests. Thus, raising the dividend payout to the shareholders would be a way to control the agency problems, since it would decrease the available cash and would make the managers be more efficient and insightful in choosing the investments.

Baker & Powell (1999) follow the same thought and understand that with fewer available funds, the internal agents are pressured to look for external financings for their projects, what somehow inhibits the capital invested in questionable investments, since there is an insightful evaluation by the external agents.

Jensen (1986), the main proponent of the principal *Free Cash Flow* theory, arguments that the managers can have incentives to increase the growth pace of the company above the level considered as optimal, transforming it into an even bigger company, where the funds under its control will be plentiful and the rewards will be greater. Thus, as a solution to this and other enumerated problems, he proposed a measure to reduce the discretionary power of the managers on the funds generated by the companies, formulating the measure of the Free Cash Flow to Equity (FCFE).

According to the mensuration, the Free Cash Flow to Equity represents the value that a partnership can and must distribute. In other words, it is the excess of cash which can be returned to the shareholders at the end of a period, after all the costs and expenses incurred and, also, all the investment needs have been met.

Therefore, the main implication of the *Free Cash Flow* theory is that the cash incremental disbursement must increase the value of the company when reducing the possibilities of occurrence of overinvestment problems.

c) Corporate Governance and Dividend Policy

It is observed, in the literature, an increasing appearance of researches investigating the connection between corporate governance and dividend policy. In this association, the main goal is to investigate how the governance mechanisms influence the dividend policy of the companies.

An important study in this field, relating the dividend policy with the legal environment of the countries, was carried out by La Porta et al. in 2000. According to them, in countries with weak legal protection, the companies tend to keep a regular dividend payout along the time as a way to create good reputation with investors. On the other hand, in countries with good legal protection, this reputation mechanism is not necessary, so the companies have more autonomy in the definition of their payout levels. Besides, in these last countries, the companies with good growth perspective have greater legitimacy in paying less or no dividend.

Another point explored is the influence the ownership structure of the great corporations has on the policy of profit distribution. According to Zeckhauser & Pound (1990), in a company whose capital is concentrated and the controlling shareholder is an institutional investor, what happens in a most of the cases, there is greater difficulty in closer monitoring the managers actions; consequently, there is greater pressure for the payout of dividends.

However, Shleifer & Vishny (1986), follow another path, when arguing that the majority shareholders, due to the fact they have more interest in the results of the company, have more incentives to monitor the managers more closely. Therefore, more active involvement of this group of shareholders in the businesses of the company ends up generating benefits which reach all the rest of the organization, including minority shareholders.

Harford et al. (2008) checked that the companies in which weaker governance structure presented smaller cash reserves and that, when distributing proceeds to their shareholders, they opt to rebuy shares instead of increasing the dividends. Moreover, it was seen that companies with low shareholders´ rights with excess of cash, presented lower profitability and evaluations. Finally, the authors stated that, in the United States, the results indicated a trend that the greater the shareholders´ rights, the smaller the cash balance holding, contradicting the results of studies carried out in other countries. Thus, they concluded that the shareholders´ rights of each country influence in conducting the cash in the companies.

In another way, by analyzing the relation between corporate governance and the utilization in investment projects in the American Companies, Billett et al. (2011) could see bad governance leads to excess of investment.

According to them, the problems of overinvestment were more evident in the companies with financial restriction and weak governance structure. Thus, they concluded that a good governance structure along with a good financial management is the means to mitigate the overinvestment problems.

d) Dividends in Brazil

It is important to highlight that the studies presented on dividends, their conclusions and the development of theories concerning the subject, were carried out and first tested in the United States.

However, when bringing these implications to the Brazilian scenario, it is necessary to consider the differences in the economical and institutional environment between both countries. Furthermore, the legal aspects the companies are subjected to, which directly influence the dividend policy, have their own traits in each nation.

In Brazil, besides the differences in the structure and development of the stock Market (where most of the studies on dividends are developed) compared to the North-American Market – number of companies listed in the stock exchange, volume of negotiation, liquidity and share concentration – there is also a great difference in the level of corporate governance systems between the two countries, being the U.S. model clearly more developed.

Another matter which deserves attention refers to the taxation matter on the dividends. In Brazil, with the advent of the Law 9,249/95, in 1996, the dividends do not suffer any taxation (3), while the same does not occur in the United States(4).

Besides all these aspects involved, it is also important to highlight some legal features concerning the dividend policy here in Brazil, such as: (1) adjustments in the net profit for determining the basis of dividend calculation; (2) minimum required dividend in case of silent bylaws (5); (3) differences of tax rates between dividends and capital gains (6); and (4) presence of Interest on the Interest on Equity Capital as an alternative means of profit distribution to the shareholders.

Therefore, as it can be observed, Brazil has peculiarities which make the study on dividends even more complex and polemic. Moreover, while the study on dividends in foreign countries, especially in the United States, has been developing since the end of the 1950s, in Brazil, the discussions are more recent, and have been highlighted from the 1990s on, with the process of monetary stability.

III. Return of the Share

The value of company shares, despite restrict, is usually the most adopted measure by the traditional finances to show the objective of wealth maximization of the owners.

Nevertheless, it is important to highlight that for the Market price of a share faithfully represent a company´s fair value, it will depend fundamentally on the development level of the stock Market where the company´s papers are negotiated. In this sense, all the company´s relevant information, which is necessary to establish future trends of its economical results, must be accessible and available to the whole Market.

Calling the attention to the companies listed in the New Market segment, it is sensible to think that, with the adherence to the best corporate governance practices and a greater level of disclosure in publishing information, there is an increase in the quality of share pricing of these companies, making its market value closer to its fair value, which becomes a positive point for the research.

Anyway, inherent to these discussions, the shares offer essentially two ways to their holders: (i) Dividends and (ii) Capital gains. For the investor who wishes to receive current earnings of their investments, the Dividend payout produces a constant flow of cash earnings. On the other hand, for investors who are less worried about the cash results, the shares allow to receive Capital Gains by the appreciation of their prices in the market in a certain period

IV. Methodology

The research reckoned only on companies which disclosed financial statements in at least two years of the period studied, which is between the year after the company joined the New Market and the year it stayed on the segment, being the data extracted from the Economática® database.

These criteria were determined this way due to three factors: (1) the calculation of the variables of the research is performed in yearly basis, since the companies can have entered in the segment in different months of the year, (2) certain values of the balance sheet are used in their two-year average, and (3) certain financial indexes are calculated by the value variation from one year to the other one.

After meeting all these requirements, the total number of companies came down from 125 to 109 (exclusion of 12.8% of the initial sample), distributed in 21 sectors and with 428 total observations within the period. The sector division was done by combining the ranking of the BM&FBovespa with the ranking of Economática®, as demonstrated in the following table:

Table 1 : Research Sample

Sector	Number of Companies	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total Obs.
Agro and Fisheries	4	-	-	-	1	3	4	4	4	4	20
Water and Sanitation	2	1	1	1	1	2	2	2	2	2	14
Food and Beverage	8	-	-	-	1	3	7	7	7	8	33
Commerce	6	-	-	1	2	3	4	5	5	6	26
Construction	19	-	-	-	1	4	18	18	19	19	79
Electrical & Electronics	2	-	-	-	-	1	2	2	2	2	9
Electrical Energy	7	-	-	1	3	4	5	6	6	7	32
Oil Extraction	3	-	-	-	-	-	-	1	1	3	5
Finance and Insurance	5	-	-	1	1	1	1	2	4	5	15
Hotel	1	-	-	-	-	-	1	1	1	1	4
Real Estate & Others	7	-	-	-	-	1	5	5	5	7	23
Wood & Paper	2	-	-	-	-	-	1	1	1	2	5
Industrial Machinery	4	-	-	-	-	1	4	4	4	4	17

Mining	4	-	-	-	-	2	2	4	4	4	16
Chemistry	2	-	-	-	-	-	2	2	2	2	8
Health Services	5	-	-	1	1	2	4	4	5	5	22
Transportation & Parts	13	1	1	1	2	3	6	8	8	13	43
Diverse Services	4	-	-	-	1	3	3	3	3	4	17
Educational Services	2	-	-	-	-	-	-	1	1	2	4
Software and Data	4	-	-	-	-	1	2	3	4	4	14
Textile	5	-	-	1	1	1	4	5	5	5	22
Total Sample	109	2	2	7	15	35	77	88	93	109	428

a) *Free Cash Flow to Equity (FCFE)*

The estimated value of cash available for dividend distribution used in the research follows the logic proposed by Jensen (1986). The following table presents the calculation formula and the respective data sources of the variables used in the estimate of the FCFE of the companies:

Table 2 : Operational Definition of the FCFE variables

VARIABLE	FORMULA OR NAME AT ECONOMÁTICA	SOURCE
Net Profit	Net Profit	DRE
Depreciation	Depreciation	DFC/DOAR
Fixed Capital Investment	Net Purchase of Permanent Assets	DFC
	Ou[1] = Application in the Permanent Asset - Sale of Permanent Asset	DOAR
Working Investment Variation	Net Working Capital (t) - Net Working Capital (t-1)	Balance Sheet
New Contracted Debts	Average Indebtedness x (Investment in fixed Capital + Working Investment - Depreciation)	DFC/DOAR/BP
Average Indebtedness	= (Average burdensome liabilities) / (Average Investment)	Balance Sheet
Burdensome Liabilities	= Total Long-term Loan and financing + Total Short-term Loan and Financing	Balance Sheet
Investment	= Burdensome Liabilities + Equity	Balance Sheet

Note: [1] For calculating the Investment on Fixed Capital, the main source used was the DFC, however, since it became a requirement only in 2007 with the Law 11,638/2007, the DOAR was adopted as an alternative source to the lack of data

i. *Distributed FCFE*

Comparatively, while the conventional measure of the dividend policy - payout – provides the dividend value as a profit proportion, the distributed Free Cash Flow to Equity measure the total funds given back to the shareholders as a proportion of the FCFE. In this way, the distributed FCFE shows which cash value available to be distributed to the shareholders was effectively passed on to them as dividends and, in the case of Brazil, interest on equity capital.

Therefore, adapting it to the Brazilian scenario, the distributed FCFE calculation formula used in this research is described as follows:

$$Distributed\ FCFE = \frac{(Dividend\ _t + IOEC_t)}{FCFE} \qquad (1)$$

Where: Dividend t= dividends paid per share in the period x number of shares in the period; IOEC: Interest on Equity Capital t = interest on net assets per share in the period x number of shares in the period.

ii. *FCFE Holding*

Following the same methodology of calculation of the distributed FCFE, considering, however, just the cash balance held, which theoretically should be with the shareholders, there is the FCFE Holding variable, described as follows:

$$FCFE\ Holding = \frac{FCFE\ Held}{FCFE} \qquad (2)$$

Where: FCFE Held = positive balance of the difference between the FCFE and the dividends and the total interest on equity capital paid. In theory, the closer to 1 this index is, the greater the overinvestment level incurred by the company and, consequently, the greater its loss of economic value, causing the destruction of the co-owners´ wealth.

b) Relation between the Research Variables and the Development of Hypotheses

According to Jensen´s (1986) Free Cash Flow Theory, the Free Cash Flow to Equity represents the amount of profits a company can and must distribute to its owners as proceeds. In other words, it is the excess of funds which can be returned to the shareholders at the end of a period, after all the costs and expenditures incurred have been covered and, also all the company´s investment needs have been met.

Thus, holding the cash balance available to the shareholder is not justified, since the company´s funds would be reinvested beyond the necessary amount; it is very possible those investments would be with negative current value, increasing, consequently, the company´s growth pace beyond the level considered as optimal.

Following this logic, the theory foresees that the FCFE Holding, whatever it is, destroys the company´s economic value, affecting the wealth generation of its owners.

Therefore, as granted in this work, despite its limitations, the best measure to express the company´s economic value and the quality of the decisions taken, among them the FCFE Distribution, it is the share Market value. Then, the generation or destruction of the shareholders´ wealth must be theoretically expressed in the Share Rate of Return.

Hence, according to the theoretical foundations discussed up to this point, the expected relation between the distributed FCFE and the SRR would be positive, as the following null hypotheses of the research *suggest:*

H_{01}– The SRR ascertained by the companies which retain FCFE is *greater* than the other companies´.

H_{02}– The SRR ascertained by the companies which distribute *more* funds than the one available in FCFE is *lower* than the one of the companies which hold FCFE.

H_{03}– The SRR ascertained by the companies which return approximately the *same* amount of available funds in FCFE is *lower* than the other companies´.

On the other hand, the expected relation between the FCFE Holding variable and the SRR would be negative, as the fourth null hypothesis of the research proposes:

H_{04}– The *greater* the holding level of FCFE ascertained by the companies, the *greater* the shareholders´ SRR.

c) Techniques of Data Analyses

In the research, both dependence and interdependence techniques were used for the analysis of data. The dependence technique: Panel regressions and the interdependence technique: cluster analysis. For the performance of the panel tests, the *software* STATA® was used and for the *cluster* analysis, the *software* SPSS® was used.

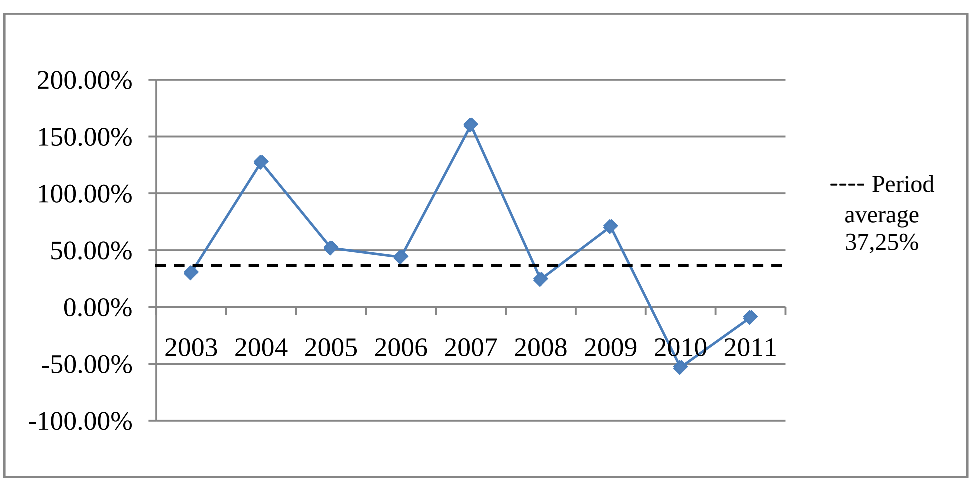
It is important to highlight that for the application of the tests mentioned, the data classified as *outliers* were excluded, that is, the ones with value at three standard deviation above or below (+3 or -3) the average of the observations.

V. Overinvestment

It is understood that the overinvestment in the companies takes place when they hold any part of the balance of the Free Cash flow to Equity (FCFE). Hence, seeking to detect such a problem in the companies studied, the first step was to estimate the FCFE for each one of them and confront it with the total of the dividends and interest on equity capital effectively paid in the period.

Thus, the evidence of overinvestment problems by the companies which keep the best corporate governance practices in Brazil was done by the distributed FCFE and FCFE Holding Variables. Analyzing the following graph, it is possible to observe that there was FCFE Holding in at least five years in the period analyzed, around approximately 50%.

Graph 1 : Yearly Average of the FCFE Distributed by the Companies

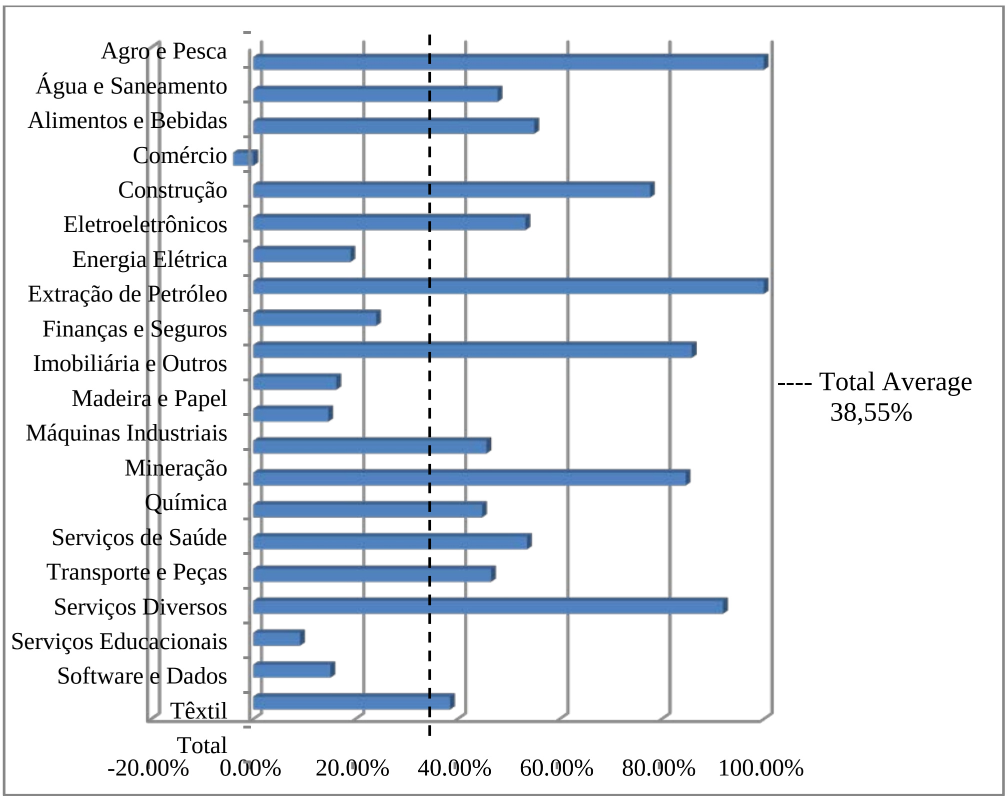


Global Journal of Management and Business Research (B) Volume XIV Issue VI Version I Year 2014

It is important to point out that the interpretation of the results presented by the distributed FCFE variable must be done with caution, since the values in (0%), ascertained by some companies in the period, can either mean that the companies retained the whole balance of FCFE calculated for the year, incurring in extreme overinvestment levels, or can have presented negative FCFE in the year and opted not to distribute dividends to the shareholders.

Due to this inconsistency in the interpretation of the distributed FCFE results, which consider both the positive and negative balances of FCFE in its calculation formula; it was opted to carry out a second analysis in order to detect the overinvestment in companies, this time with the FCFE Holding index, which takes into account only observations which ascertained positive FCFE balance in the period (approximately 60% of the total observations). Its results are illustrated in the following graph:

Graph 2 : FCFE Holding Level in the Sectors



In general, through the results presented by the distributed FCFE and FCFED Holding variables, it was observed that the fact the companies studied have good corporate governance structure was not the determining factor so that most of them did not present overinvestment along the period analyzed, contradicting the expectations and results verified in studies carried out in the United States, such as the ones of Harford et al. (2008) and Billett et al. (2011).

VI. Overinvestment and Share Return

a) Distributed FCFE and Share Rate of Return (SRR)

At first, the observations were distributed from the confrontation between the amount of FCFE ascertained with the total value of Dividends and Interest on Equity Capital paid in the period, forming "three portfolios" according to the possible situations, that is: ividend < FCFE; Dividend > FCFE and Dividend = FCFE. The goal was to set comparisons between the average SRRs ascertained by the groups of companies in the period.

Table 3 : Average of the period of Share Rate of Return according to the distribution of FCFE

Groups	I			II			III			IV		
Sector	Dividend < FCFE			Dividend > FCFE			Dividend = FCFE¹			Dividend = FCFE²		
	Obs.	Average	VC	Obs.	Average	VC	Obs.	Average	VC	Obs.	Average	VC

Agro and Fisheries	6	2.5%	14.9	5	28.9%	3.3	8	-16.8%	-4.4	0	-	-
Water and Sanitation	8	44.1%	1.0	3	5.4%	5.6	0	-	-	2	37.1%	0.1
Food and Beverage	9	18.1%	2.7	16	14.4%	4.4	6	11.3%	7.4	0	-	-
Commerce	7	60.6%	1.7	12	-16.7%	-3.1	2	106.4%	1.2	4	56.4%	1.2
Construction	32	4.3%	22.5	36	38.4%	3.1	6	55.5%	2.1	3	92.9%	0.7
Electrical & Electronics	5	26.9%	4.6	4	1.2%	58.9	0	-	-	0	-	-
Electrical Energy	12	32.4%	0.8	13	37.1%	0.5	3	6.2%	14.2	2	46.0%	0.0
Oil Extraction	2	119.3%	1.2	0	-	-	3	-45.9%	-0.4	0	-	-
Finance and Insurance	7	33.4%	2.5	7	43.9%	1.0	0	-	-	0	-	-
Hotel	0	-	-	0	-	-	3	-6.0%	-6.6	0	-	-
Real Estate & Others	8	45.1%	1.2	9	18.1%	3.5	4	-27.2%	-2.3	0	-	-
Wood & Paper	1	-36.6%	0.0	4	58.7%	3.2	0	-	-	0	-	-
Industrial Machinery	6	7.4%	6.8	5	15.9%	4.6	3	-55.8%	-0.4	2	-28.3%	-0.9
Mining	8	27.1%	2.1	2	58.3%	1.6	5	109.0%	1.8	1	5.0%	0.0
Chemistry	5	63.1%	1.8	2	-41.8%	-1.3	1	-13.8%	0.0	0	-	-
Health Services	10	35.8%	1.8	7	56.5%	2.4	3	-26.3%	-1.3	0	-	-
Transportation & Parts	16	79.6%	1.6	14	49.7%	2.2	6	-39.5%	-0.9	3	63.5%	0.6
Diverse Services	12	38.3%	2.3	4	14.1%	6.1	0	-	-	1	0.3%	-
Educational Services	2	26.6%	4.1	2	-8.6%	-3.4	0	-	-	0	-	-
Software and Data	7	22.2%	1.4	1	-19.9%	0,0	2	49.8%	2.2	2	28.5%	1.5
Textile	8	45.8%	2.0	6	61.0%	1,5	3	-21.0%	-3.5	3	83.0%	1.2
Total Sample	171	30.2%	2.6	152	22.5%	3.6	58	5.5%	17.5	23	37.6%	1.4

Note: The outliers of the Distributed FCFE and SRR were excluded in all the sectors. VC: Variation Coefficient. Obs.: Number of observations. [1] Cases with Negative FCFE which did not distribute profit. [2] Cases with FCFE holding lower than 10% or with profit distribution up to 10% above the FCFE.

As observed, concerning the group "Dividend = FCFE", it was decided to separate the observation whose FCFE presented negative balance and no dividend was distributed from the ones that really distributed approximately the same amount of free cash to equity, that is, +10% or -10% of the balance ascertained.

The calculation of the variation coefficient (VC) was carried out to test the consistency of the average of the SRR´s presented by the groups of each sector. It represents, in statistics, the standard deviation expressed as a percentage of the average: (σ/μ); and it is understood that the lower its value, the greater the data precision. Statistically, when the variation coefficient goes over 0.5 (50%), it indicates problems with the data. Finally, from the results obtained, the null hypotheses 1, 2 and 3 could be tested and the results were:

Table 4 : Analysis of the Hypothesis of the Research

Sector	Rejected Null Hypotheses	Sector	Rejected Null Hypotheses
Agro and Fisheries	H_{01} and H_{02}	Wood & Paper	H_{01} and H_{02}
Water and Sanitation	H_{03}	Industrial Machinery	H_{01} and H_{02}
Food and Beverage	None	Mining	H_{01}, H_{02} and H_{03}
Commerce	H_{01} and H_{03}	Chemistry	H_{03}
Construction	H_{01}, H_{02} and H_{03}	Health Services	H_{01} and H_{02}
Electrical & Electronics	None	Transportation & Parts	H_{03}
Electrical Energy	H_{01}, H_{02} and H_{03}	Diverse Services	None
Oil Extraction	None	Educational Services	None
Finance and Insurance	H_{01} and H_{02}	Software and Data	H_{01} and H_{03}

Hotel	-	Textile	H_{01}, H_{02} and H_{03}
Real Estate & Others	None	Total Sample	H_{01} and H_{03}

In the same way, these hypotheses were tested for all the observations altogether (Total Sample). However, instead of comparing the averages of the whole period of the Share Rate of Return (SRR) between the groups formed, the yearly average rates were compared, as demonstrated in the table that follows:

Table 5 : Yearly Average Share Rate of Return

Total Sample*													
Groups	I			II			III			IV			Rejected Null Hypotheses
Years	Dividend < FCFE			Dividend > FCFE			Dividend = FCFE[1]			Dividend = FCFE[2]			
	Obs.	Average	VC	Obs.	Average	VC	Obs.	Average	VC	Obs.	Average	VC	
2003	2	244.7%	0.9	0	-	-	0	-	-	0	-	-	-
2004	1	2.9%	-	1	287.5%	-	0	-	-	0	-	-	H_{01} and H_{02}
2005	3	106.7%	0.3	3	19.5%	1.6	0	-	-	1	64.4%	-	H_{03}
2006	6	87.3%	0.8	3	71.6%	0.8	3	32.7%	1.8	2	99.4%	0.5	H_{01} and H_{03}
2007	17	4.0%	8.5	15	44.9%	1.2	1	308.7%	-	2	-18.7%	-1.4	H_{01}, H_{02} and H_{03}
2008	31	-44.7%	-0.8	27	-50.1%	-0.5	15	-64.6%	-0.4	2	-21.2%	-1.7	H_{01} and H_{03}
2009	37	129.6%	0.6	27	151.1%	0.7	9	153.5%	0.6	3	83.2%	0.9	H_{01}, H_{02} and H_{03}
2010	34	32.0%	1.2	32	32.3%	2.1	13	-2.7%	-11.9	8	68.4%	0.8	H_{01}, H_{02} and H_{03}
2011	40	-6.3%	-4.9	44	-14.6%	-1.9	17	-27.5%	-1.6	5	27.0%	1.4	H_{01} and H_{03}

Notes: The ouliers of the Distributed FCFE and SRR were excluded. VC: Variation Coefficient. Obs.: Number of Observations. [1] Cases with Negative FCFE which did not distribute profit.. [2] Cases with FCFE Holding lower than 10% or with profit distibution up to 10% above the FCFE.

Still testing the relation between the Distributed FCFE and Share Rate of Return variables, the panel test was applied aiming to find statistical dependence of the Share Rate of Return, considered the dependent or explained variable, in relation to the Distributed FCFE, considered the independent or predictor variable in the model. Thus, through the linear combination proposed, the regression statistical equation or model between them was expressed in the following way:

$$SRR_t = \alpha + \beta Distributed\ FCFE_t + \varepsilon \quad (3)$$

The following tables show the summary of the estimated tests for each sector:

Table 6 : Summary of the Panel Regression Model between the Distributed FCFE and the SRR

Sectors	Sample	Determining Coefficient (R^2)					Adopted Model*
		Pooled Model	Fixed Effect Model			Random Effect Model	
			Company	Years	Companies and Years		
Agro and Fisheries	19	0.31%	4.70%	33.40%	36.10%	0.30%	RE
Water and Sanitation	13	12.54%	13.40%	84.50%	85.70%	12.50%	RE
Food and Beverage	31	0.70%	8.20%	76.80%	80.00%	0.70%	RE
Commerce	25	1.49%	27.50%	84.40%	87.90%	1.50%	FE
Construction	77	3.49%	9.80%	85.30%	89.80%	3.50%	*Pooled*
Electrical & Electronics	9	0.89%	3.60%	78.20%	87.60%	0.90%	RE
Electrical Energy	30	0.13%	15.70%	50.60%	59.10%	0.10%	RE
Oil Extraction	5	-	-	-	-	-	RE
Finance and Insurance	14	0.02%	4.40%	92.60%	97.50%	0.00%	RE
Hotel	3	-	-	-	-	-	RE
Real Estate & Others	21	1.54%	13.60%	86.00%	87.20%	1.50%	RE

Wood & Paper	5	0.30%	8.30%	100.00%	100.00%	0.30%	RE
Industrial Machinery	16	4.46%	5.00%	87.20%	94.60%	4.50%	RE
Mining	16	4.02%	14.80%	56.20%	67.40%	4.00%	RE
Chemistry	8	3.26%	3.30%	99.20%	99.20%	3.30%	RE
Health Services	39	0.40%	31.60%	78.50%	87.90%	0.40%	RE
Transportation & Parts	20	13.42%	19.90%	67.10%	76.40%	13.40%	RE
Diverse Services	17	1.20%	3.10%	86.20%	86.80%	1.20%	RE
Educational Services	4	6.95%	53.20%	100.00%	100.00%	7.00%	RE
Software and Data	12	5.18%	11.70%	43.60%	51.80%	5.20%	RE
Textile	20	14.47%	34.80%	66.70%	79.90%	14.50%	RE
Total Sample	404	0.14%	15.30%	56.30%	67.80%	0.10%	*Pooled*

*Notes: [1] Sector without enough observation for applying the regression test. RA: Random Effects; FE: Fixed Effects. * To identify the most appropriate approach of the panel model in the sectors studied, the statistical tests of Chow (1960), Hausman (1978) and Breusch-Pagan (1979) were performed.*

Comparing the R^2 among several sectors, it is observed that the Water and Sanitation, Health Services and Textile sectors were the ones which presented, relatively, the greatest indexes.

Moreover, they were one of the few which ascertained positive adjusted R^2 in the estimation of the models, indicating, therefore, a greater relative variation in the SRR variable provoked by the Distributed FCFE.

The main results by using the RE procedure are presented in table 6.

Table 7 : Coefficients of the Random Effect Models between the Distributed FCFE and the SRR

Sector	Independent Variable - Distributed FCFE			Constant Variable		
	Coefficient	Standard Error	P>|z|	Coefficient	Standard Error	P>|z|
Agro and Fisheries	-0.63389	2.74848	0.818	-0.00337	0.17965	0.985
Water and Sanitation	0.20514	0.16332	0.209	0.26520	0.12168	0.029
Food and Beverage	0.25311	0.05615	0.652	0.14463	0.11253	0.199
Commerce	0.06022	0.23998	0.802	0.18416	0.36613	0.615
Construction	-0.10624	0.05499	0.847	0.33500	0.07267	0.000
Electrical & Electronics	-	-	-	-	-	-
Electrical Energy	-0.00472	0.09848	0.962	0.39088	0.20099	0.052
Oil Extraction	-	-	-	-	-	-
Finance and Insurance	0.32369	0.59364	0.586	0.20872	0.14013	0.136
Hotel	0.07101	0.74716	0.924	0.39870	0.85779	0.642
Real Estate & Others	0.11822	0.14625	0.419	-0.86554	0.14558	0.552
Wood & Paper	-0.49065	0.64114	0.444	0.65603	0.33249	0.048
Industrial Machinery	0.52047	1.15666	0.653	0.27624	0.37856	0.466
Mining	-0.00980	0.02548	0.701	0.50691	0.18412	0.000
Chemistry	0.57750	0.34567	0.095	0.13803	0.23065	0.550
Health Services	-0.13500	0.31576	0.669	0.32402	0.21298	0.128
Transportation & Parts	0.21957	0.56819	0.699	0.16252	0.44527	0.715
Diverse Services	0.24599	0.33269	0.460	0.12486	0.21006	0.552
Educational Services	0.25736	0.14747	0.081	0.32941	0.20264	0.104

Notes: Sector without enough observation for applying the regression test. P>|z| corresponds to the probability value associated to the z statistics of each estimated coefficient.

Observing the values of the table, it can be seen that in most of the sectors, the sign of the β coefficient turned out positive, therefore confirming the initial expectations. However, through the Z test, it was not verified statistical significance in any of them, harming, consequently, the validity of the estimated models.

The next table presents the main results by using the FE procedure, adopted only in the Commerce.

Table 8 : Coefficients of the Fixed Effect Models between the Distributed FCFE and the SRR

Sector	Adopted FE Model	Independent Variable - Distributed FCFE			Constant Variable		
		Coefficient	Standard Error	P>|t|	Coefficient	Standard Error	P>|t|
Commerce	Company	-0.56119	0.26269	0.047	-0.28021	0.41638	0.510
	Years	0.09706	0.09141	0.303	-0.40652	0.16742	0.027
	Companies and Years	0.03399	0.16835	0.843	-0.75131	0.26389	0.015

Note: P>|t| corresponds to the value of probability associated to the t statistics of each estimated coefficient

According to table 7, the only β coefficient statistically significant is verified in estimating the FE models when the individuality of each case (Company) of the cross-section is considered. However, the signal was negative, contradicting the linear combination proposed.

Finally, the next table shows the main results using the Pooled procedure, equivalent to the application of a simple or multiple regressions. As it can be seen, the signals of the β coefficients are negative, presenting, therefore, no statistical significance.

Table 9 : Coefficients of the Pooled Models between the Distributed FCFE and the SRR

Sector	Independent Variable - Distributed FCFE			Constant Variable		
	Coefficient	Standard Error	Sig.	Coefficient	Standard Error	Sig.
Construction	-0.06300	0.03800	0.104	0.28700	0.12200	0.021
Total Sample	-0.01200	0.01500	0.458	0.28700	0.04400	0.000

In general, it is seen that the results presented up to here indicated weak relation between the Distributed FCFE and the Share Rate of Return in terms of individual observations. However, when these same observations were seen as a whole along the period, through average analyses, the hypotheses of the research could be confirmed in most of the sectors, suggesting an expected positive association between the two variables, as expected.

b) FCFE Retention and Share Rate of Return (SRR)

Seeking another way to evidence whether the overinvestment problems effectively lead to the shareholders´ wealth destruction, only the companies of the New Market which ascertained positive balance of FCFE in the period were analyzed. Thus, the relation between the retention of FCFE and Share Rate of Return (SRR) variables was tested.

Hence, aiming to extract information of the companies as a whole, it was decided to gather them without any previous definition concerning either the number of groups or its structure, but only through their common traits concerning the level of FCFE Retention.

Therefore, adopting a practical judgment, from the theoretical fundamentals on which this work lies, for applying the cluster analysis, it was chosen to consider the formation of three clusters to analyze the empirical relation between the two variables, using the average linkage hierarchical method, according to which the grouping criterion is the distance of all the objects (companies) of a group in relation to the all the ones of another group.

Besides, the method mentioned tends to combine groups with lower internal variations. The table that follows presents the results:

Table 10 : Result of the Cluster Analysis according to the level of FCFE Holding (Three Clusters)

Clusters	I		II		III	
Level of FCFE Holding	High		Medium		Low	
Observations	79		61		40	
Indexes	Average	VC	Average	VC	Average	VC
FCFE (in millions of R$)	258.3	1.4	472.4	1.1	430.1	1.2
Dividend (in millions of R$)	24.7	1.7	176.4	1.2	330.8	1.2
FCFE Holding	92.2%	0.1	62.8%	0.1	24.9%	0.6
Share Rate of Return (SRR)	24.6%	3.2	26.1%	2.5	27.9%	2.0

Note: VC: Variation Coefficient

The calculation of the variation coefficient (VC) was performed to test the consistency of the average of the SRR´s presented by the groups formed. It is understood that the lower its value, the greater the accuracy of the data. Statistically, when the VC surpasses 0.5 (50%), it indicates problems with the data.

Anyway, testing the Null hypothesis of the research 4 (H04), which proposes that the greater the FCFE Holding level ascertained by the companies, the greater the Share Rate of Return obtained by the shareholders; it was verified that the results of the groups formed rejected it, since it was determined that the average rate of the SRR´s in the period were greater while the FCFE Holding level decreased, suggesting an expected negative association between the two variables and, also, confirming the results of some international works, such as the ones of Kallapur (1994) and Harford et al. (2008) who identified, in the United States, that companies with cash excess presented lower returns and evaluations by the market.

VII. Final Considerations

When looking at the companies which seek constantly to improve their management mechanisms, through the adoption of the recommendations prescribed in the concepts developed by the corporate governance, which deep down is nothing more than valuing, above anything else, the shareholders´ wealth maximization; it is expected that the overinvestment problem is one of the unbalances fought against by them.

In Brazil, the public companies which worry the most about following the best corporate governance practices are identified in a differentiated negotiation segment of the stock Market, the New Market. Thus, it was expected to find low levels of overinvestment in those companies, through the calculated indexes of Distributed Free Cash Flow to Equity and FCFE Holding.

However, what was verified was that there really was the occurrence of overinvestment by these companies since the results obtained through the Distributed FCFE index reveled that almost half of the observations studied (42%) reinvested the profit part which should be out of the company, that is, in the shareholders´ ownership. Corroborating this unbalance in relative terms, through the FCFE Holding index, a level of considerably high overinvestment was detected in the period analyzed, with an average of 38%.

Hence, it was observed that the fact that the companies studied seek good corporate governance structure ended up not being a determining factor so that most of them did not present overinvestment along the period analyzed, contradicting the expectations and results ascertained in other studies carried out abroad, such as the ones of Harford et al. (2008) and Billett et al. (2011).

Endless factors could have been the cause of this cash holding by the companies, since in certain moments, many of them could not have been secure of their future financing needs and preferred to hold cash as an alternative source of funds, once it is known that the Brazilian Money Market is characterized by high financial burden and lack of long-term funds. It is also possible that some of them may have had financial restriction and, thus, the creditors restricted the return of funds to the shareholders. Moreover, some of the companies can present volatile profits and decided to hold funds to standardize the dividends along the time, since in Brazil there is the obligation of a minimum percentage dividend payout and, also, evidences of clientele effect, indicating preference of the investors by shares that continuously distribute more dividends.

Adding to this, another regulatory aspect which can have influenced these calculations refers to the calculation basis of the dividends in Brazil, from a conservative stance, allows the companies to proceed to certain adjustments in the net taxable income aiming to reduce the value of calculation basis of the dividends.

Ultimately, among other things, the mechanisms of corporate governance of the New Market can have been inefficient in trying to balance the rights between the several interested parts of the company and, consequently, the managers and majority shareholders would have been benefiting by the holding of these funds.

Nonetheless, if the fact of the occurrence of overinvestment becomes a problem for the companies, it must cause the destruction of its economic value, expressed in the negotiation value of its shares in the Market.

Nevertheless, even considering that the companies studied differ from each other in relation to the corporate governance practices and disclosure levels, implicating, naturally in greater pricing of their shares, making their Market value get closer to their fair value, it is known that the concept of the share Market value to define the value of the company presents restrictions in the several markets worldwide and, specially, in the Brazilian financial environment, characteristically speculative, marked specially by high level of share concentration and high volatility in the share prices.

Aware of this, the results presented indicated a little association between the overinvestment level and the value creation when analyzing the observations in individual terms, in which it was tried to test the relation between the proportion of Distributed FCFE and the variation in the Share Rate of Return (SRR). Nevertheless, when the data analysis was performed in order to group these same observations according to the level of distribution or FCFE Holding in the period, the hypotheses of the research could be confirmed in almost all the sectors, suggesting an expected association between the variables and denoting the existence of a certain negative relation between the overinvestment level with the value creation, reflected in the share rate of return (SRR).

Broadly, the results ended up confirming the findings of some international studies such as the ones of Kallapur (1994) and Harford et al. (2008) who identified, in the United States, that companies with cash excess presented lower returns and evaluations by the Market.

Notes

1. Klein (1985) justifies the nonexistence of the complete agreement due to the traits which are particular of the business environment, marked by discontinuities and uncertainties.
2. Jensen & Meckling (1994), explained that due to the fact the human nature is noticeably utilitarian and rational, oriented more for its own preferences and its own goals, it becomes impossible to motivate the agent to behave in an indifferent way when maximizing its interests and the ones of the third parties.
3. In Brazil, the dividends were taxed with an income tax rate of up to 23% until 1989. From 1989 on, the dividends became tax-free and, in 1994 and 1995, they became taxed once more through the income tax, with a 15% rate. Finally, from 1996 on, the dividend yield for any partner of shareholder, independently from the nationality, became tax-free in the income tax.
4. In the United States, the tax rates for dividends are historically higher that the rates for capital gains. However, from the 1986 Tax Reform Act – TRA on, the capital gains with the share appreciation started having the same tax incidence that the dividend gains.
5. According to the article 202 of the Law 11,638/2007, the company is forced to distribute 50% (fifty percent) of the adjusted net profit when its by-laws fails or when it has not precisely defined the distribution of it. Nonetheless, the company´s articles of incorporation are sovereign to the Law to deliberate on the profit distribution to the shareholders, as long as they contain an article which regulates the dividends. However, the same article 202 of the Law of the Public Limited Companies states that if the General Meeting deliberates to alter the bylaws to introduce norm concerning the profit yield, the mandatory dividend cannot be lower than 25% of the net profit.
6. Since December, 2004, the income tax on capital gains has been 15% in Brazil. The tax must be paid the moment the bonds are sold, when the gains are accomplished.

Literature

1. BAKER, H. K. ***Dividends and dividend policy.*** New Jersey: John Wiley e Sons, Inc., 2009.
2. BAKER, H. K.; POWELL, Gary E. How corporate managers view dividend policy. ***Quarterly Journal of Business & Economy,*** v. 38, n. 2, 1999.
3. BILLETT, M. T.; GARFINKEL, J. A.; JIANG, YI. The influence of governance on investment: Evidence from a hazard model. ***Journal of Financial Economics,*** v. 102, p. 643-670, 2011.
4. BREUSCH, T. S.; PAGAN, A. R. **A simple test for heteroscedasticity and random coefficient variation.** Econometrica, v. 47, n. 5, p. 1287-1294, Set. 1979.
5. CHOW, Gregory C. **Tests of equality between sets of coefficients in two linear regressions.** Econometrica, v. 28, n.3, p. 591-605, Jul. 1960.
6. COASE, R. The nature of the firm. ***Economica,*** New Series, vol. 4, n. 16, p. 386-405 November 1937.
7. HARFORD, J.; MANSI, S. A.; MAXWELL, W. F. Corporate governance and firm cash holdings in the US. ***Journal of Financial Economics,*** v. 87, p. 535-555, 2008.
8. HAUSMAN, J. A. **Specification tests in econometrics.** Econometrica, v. 46, n. 6, p. 1251-1271, Nov. 1978.
9. JENSEN, M. C. Agency Cost of Free Cash Flow, Corporate Finance, and Takeovers. ***American Economic Review,*** v. 76, n. 2, p. 323-329, 1986.

10. JENSEN, M. C.; MECKLING, W. H. The nature of man. *Journal of Applied Corporate Finance,* v. 7 n. 2, 1994.
11. _______. Theory of the Firm: managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics,* v. 3, n. 4, p. 305-360, 1976.
12. KALLAPUR. S. Dividend payout ratios as determinants of earnings response coefficients. *Journal of Accounting and Economics,* v. 17, p. 359-375, 1994.
13. KLEIN, B. Contracting costs and residual profits: the separation of ownership and control. *Journal of Law & Economics,* v. 26, 1985.
14. LA PORTA, R.; LOPES-DE-SILANES, F.; SHLEIFER, A.; VISHNY, R. Agency problems and dividend policies around the world. *Journal of Finance,* v. 55, n. 1, p. 1-33, 2000.
15. LANG, L. H. P.; LITZENBERGER, R. H. Dividend announcements: cash flow signaling vs. free cash flow hypothesis? *Journal of Financial Economics,* v. 24, n. 1, p. 181-191, 1989.
16. MODIGLIANI, F.; MILLER, M. Dividend Policy, Growth and the Valuation of Shares. *Journal of Business,* v. 34 n. 4, 1961, p. 411-433.
17. MYERS, S. C.; MAJLUF, N. S. Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, n. 13, p. 187-221, 1984.
18. SHLEIFER, A.; VISHNY, R. W. A survey of corporate governance. *Journal of Finance,* v. 52, n. 2, p. 737-783, 1997.
19. _______. Large Shareholders and Corporate Control. *Journal of Political Economy,* v. 94, n. 3, p. 461-488, 1986.
20. ZECKHAUSER, R. J.; POUND, J. Asymmetric *Information, Corporate Finance and Investment.* Chicago: University of Chicago Press, 1990.

Global Journal of Management and Business Research (B) Volume XIV Issue VI Version I Year 2014

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 14 Issue 6 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Why Traditional Corporate Governance Implementations Fail and Lack Sustainability

By Prof. Dr. Hubert Rampersad
Authentic Governance Institute Miami, USA

Abstract- The collapse of high-profile international businesses, giant banks and mega-multinational companies over the past several years, the recent unprecedented worldwide financial crisis, the power shift from public to private sector through converting state-owned enterprises to joint stock publicly-owned companies, the transfer of technology, and globalization are compelling reasons for good corporate governance practices to be applied. Large-scale accounting scandals that brought trouble to many large companies are often caused by unethical behavior of top-executives. Poor ethical leadership, lack of integrity, mismanagement, fraud, corruption, and violating corporate governance rules are the main contributors towards bankruptcy and financial failures. This article introduces an authentic way to reduce these failures.

Keywords: authentic governance, corporate governance, personal governance, integrity, business ethics, personal balanced scorecard.

GJMBR-B Classification: JEL Code: G34

WHYTRADITIONALCORPORATEGOVERNANCEIMPLEMENTATIONSFAILANDLACKSUSTAINABILITY

Strictly as per the compliance and regulations of:

Why Traditional Corporate Governance Implementations Fail and Lack Sustainability

Prof. Dr. Hubert Rampersad

Abstract -The collapse of high-profile international businesses, giant banks and mega-multinational companies over the past several years, the recent unprecedented worldwide financial crisis, the power shift from public to private sector through converting state-owned enterprises to joint stock publicly-owned companies, the transfer of technology, and globalization are compelling reasons for good corporate governance practices to be applied. Large-scale accounting scandals that brought trouble to many large companies are often caused by unethical behavior of top-executives. Poor ethical leadership, lack of integrity, mismanagement, fraud, corruption, and violating corporate governance rules are the main contributors towards bankruptcy and financial failures. This article introduces an authentic way to reduce these failures.

Keywords: authentic governance, corporate governance, personal governance, integrity, business ethics, personal balanced scorecard.

I. The Human Element

The human element represented by the directors and employees is the major cause of the mentioned failures. Especially unethical behavior of leaders is the main cause of bankruptcy and financial failures. Remember what Alan Greenspan, Former Chairman of the Board of Governors of the US Federal Reserve System, said: "Our market system depends critically on trust—trust in the world of our colleagues and trust in the world of those with whom we do business…. I am saying that the state of corporate governance to a very large extent reflects the character of the CEO." Therefore, the corporate governance codes around the world should strongly advocate a focus on personal integrity development within organizations.

Many governments and large companies everywhere are currently very keen to revamp, develop, and implement a corporate governance code to address the above mentioned shortcomings. Unfortunately, all these codes are cosmetic and not sustainable. All these codes do not provide adequate protection. For example, top executives in Europe and the USA found easy escape routes to misinterpret their code and increased their salaries significantly.

The situation at JPMorgan Chase, the world's largest bank, early this year is an interesting case with regard to corporate governance. Government investigators have recently found that JPMorgan Chase devised "manipulative schemes" that transformed "money-losing power plants into powerful profit centers," and that one of its most senior executives gave "false and misleading statements" under oath. JPMorgan executives also ignored a series of alarms that went off as the bank's Chief Investment Office breached one risk limit after another. Rather than ratchet back the risk, JPMorgan personnel re-engineered the risk controls to silence the alarms. In a previously undisclosed case, prosecutors examined whether JPMorgan failed to fully alert authorities to suspicions about Bernard Madoff. And nearly a year after reporting a multibillion-dollar trading loss, JPMorgan did face a criminal inquiry over whether it lied to investors and regulators about the risky wagers. This case pinpoints that JPMorgan's corporate governance code and exhaustive regulations do not provide adequate protection. A recent study conducted by Labaton Sucharow, a New York City law firm, suggested that Wall Street still has a shaky grip on its ethical compass. Despite the financial changes enacted after the 2008 financial crisis, improper and even illegal activity is perceived as common among traders, brokers, portfolio managers, and bankers.

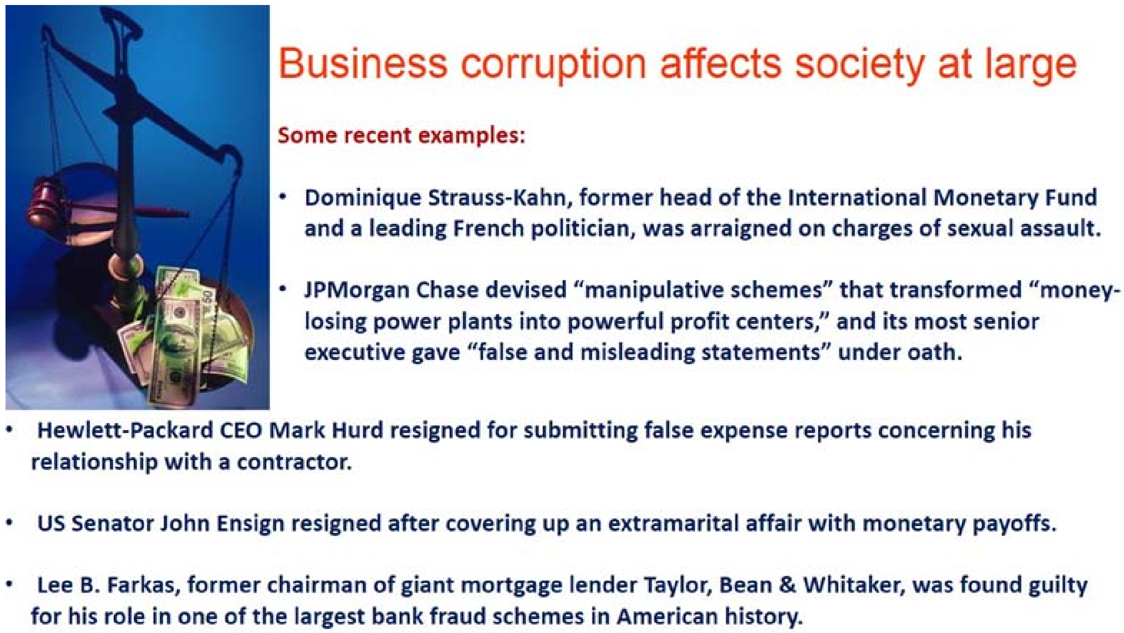
Some other examples: a) US Treasury estimated that if Apple had more honestly assessed what percentage of its profits were generated by its U.S. operations, it would have owed \$2.4 billion more in federal taxes last year; b) Wal-Mart's often criticized treatment of employees as a commodity and its sometimes inhuman business ethics; and c) Chevron has been accused of tax evasion as well a number of environmental infractions in several countries and hiring military force for use on native peoples.

All the above mentioned organizations have comprehensive corporate governance codes in place, implemented by the left brain Big Four accountancy firms (PwC, KPMG, Ernst & Young and Deloitte), which apparently are not working at all.

Unethical behavior of top-executives, poor ethical leadership, lack of integrity, mismanagement, fraud, corruption, and violating corporate governance

Author: Chairman, Authentic Governance Institute Miami, Florida, USA.
e-mail: h.rampersad@tps-international.com

codes are the main contributors towards most of these Scandals.



II. Authentic Governance; Aligning Personal Governance with Corporate Governance

Most companies' approaches to corporate governance are extremely formal, bureaucratic, cosmetic, not holistic and not authentic, and therefore fail to address above mentioned shortcomings. Their implementations of corporate governance provide no protection from potentially catastrophic ethical failures. We urgently need a sustainable and innovative solution to this global epidemic.

Corporate governance practices worldwide via traditional corporate governance codes are extremely formal, bureaucratic, cosmetic, and doomed to failure. Business ethics cannot be controlled with a range of formal and exhaustive rules, regulations, guidelines, and procedures. It's about decency and personal integrity, and this must be cultivated within you. Remember what Albert Einstein said: "Try not to become a man of success but a man of value". As demonstrated by Enron and others, traditional corporate governance codes provide no protection from potentially catastrophic ethical failures. Company integrity must always start with personal integrity. It must be an informal learning process and a way of life, based on alignment with yourself and alignment with your company. This ethical process must be promoted and communicated within the whole company to all stakeholders consistently. In this way ethical behavior will become a routine in the whole organization, and leaders and employees will gain more understanding about their responsibility with regard to ethical behavior.

They will understand that it is their responsibility to act ethically, on duty as well as off duty. This is a more sustainable, comprehensive and holistic approach to ethics and social responsibility.

It is time that we are aware that corporate governance cannot be controlled effectively with formal and exhaustive rules, regulations, guidelines, and procedures only. It's about decency and personal integrity and this must be cultivated from within. Against this background, I propose an organic and holistic approach to corporate governance, by integrating personal values and integrity into one overall authentic governance framework, in which formal corporate regulations and personal values mutually reinforce each other. This theory has not only been borne out through my leadership experiences in the corporate world, but is also based on the leadership vision of Harvard Business School professor Bill George, who outlined in his article '"Why Leaders Lose Their Way'" why powerful and talented leaders often misbehave and how they lose their moral bearings, such as: Hewlett-Packard CEO Mark Hurd who resigned for submitting false expense reports concerning his relationship with a contractor; US Senator John Ensign (R-NV) who resigned after covering up an extramarital affair with monetary payoffs; and Lee B. Farkas, former Chairman of giant mortgage lender Taylor, Bean & Whitaker, who was found guilty for his role in one of the largest bank fraud schemes in American history. According to Bill George, they can avoid these pitfalls by devoting themselves to personal leadership development that cultivates their inner compass, based on self-reflection. This process requires thought and introspection because many people get into leadership roles in response to their ego needs.

Sustainable corporate governance starts with personal leadership development, based on self-reflection and introspection and embedding personal values in the mind of the Chairman, President, CEO, CFO, managers and employees, and coaching them to reflect on these values honestly. It's about values-based Leadership. Steve Jobs once remarked, "The only thing that works is management by values". This is done, according to the authentic governance method I have launched in my new book; by coaching the Chairman, President, CEO, CFO, managers and employees to reflect on their "personal ambitions and their alignment with their behavior and actions." In this way good corporate governance will be a way of life, characterized by trust, credibility, transparency, personal and social responsibility, open communication and a continuous learning process, embedded in an ethical culture. This cultural shift will have a positive impact throughout society.

III. Authentic Governance Model

In this article I introduce a more sustainable, authentic and holistic approach to corporate governance, which I call authentic governance. I have defined authentic governance in holistic humanized terms, namely: the systematic process of continuous, gradual and routine improvement, steering, and learning, that lead to sustainable high performance and ethical excellence. I made a distinction between authentic personal governance and authentic corporate governance, which I will explain below in detail. So, authentic governance is a continuous voyage of discovery, involving continuous, gradual and routine improvement, steering, and learning. It is about a journey towards a happier and more successful life for individuals and ethical corporate excellence.

By redefining and governing themselves effectively, leaders and employees will gain more understanding about their responsibility regarding ethical behavior, and they will understand that it is their responsibility to act ethically, on duty as well as off duty. Figure 1 shows the related authentic governance model, which provides an excellent framework and roadmap to develop, implement, and cultivate personal governance and corporate governance in a systematic and sustainable way. This new governance blueprint is an inside-out approach and focuses mainly on the human side of good governance. It places more emphasis on understanding yourself and the needs of others, meet those needs while staying true to your personal and corporate values, improve yourself and your personal integrity continuously, making ethics a way of life and a continuous learning process, and align these with formal corporate regulations, procedures and guidelines, instead of focusing on exhaustive formal corporate regulations, procedures and guidelines only.

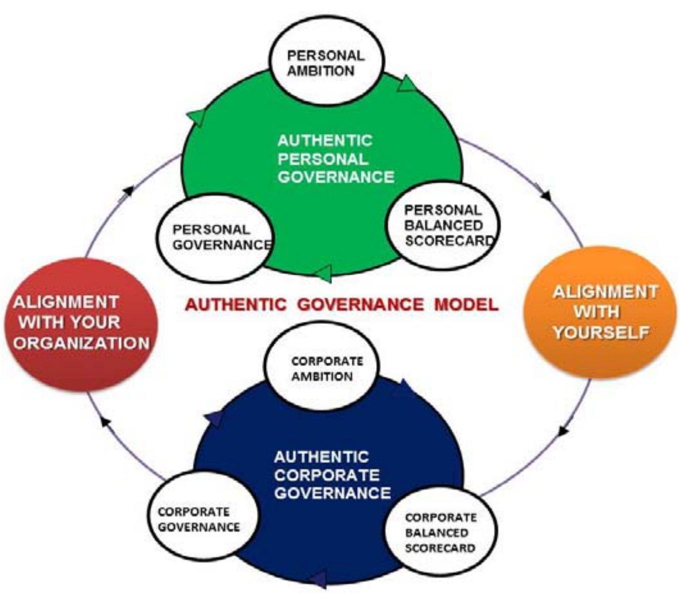


Figure 1 : Authentic Governance Model (© Hubert Rampersad, 2014)

This authentic governance model consists of the following four phases (see Figure 1), which are the building blocks of sustainable corporate governance:

a) Authentic Personal Governance

i. *Personal ambition*

This phase involves a soul searching process based on thought, introspection, and self-reflection,supported by a breathing and silence exercise. Question which you can ask yourself are: *Who am I, What do I stand for?, What makes me happy?, What do I live for?, Why do I want to lead? and What's the purpose of my leadership?* If the honest answers on the last four questions are power, prestige, and money, you may be at risk for your company. The result of this phase is the formulation of your personal mission, vision and values. On the basis of insights acquired through this process, you develop self-awareness and self-regulation, which are the foundation of trustworthiness, integrity, and openness to learn.

ii. *Personal Balanced Scorecard (PBS)*

Personal ambition has no value unless you take action to make it a reality. Therefore the emphasis in this stage is developing an integrated and well balanced action plan based on your personal ambition to realize your life objectives. It's about translating your personal ambition into action. Your PBS entails your personal critical success factors that are related to your personal ambition and your corresponding objectives, performance measures, targets and improvement actions. It translates your personal ambition into manageable and measurable personal objectives, milestones and improvement actions in a holistic and balanced way.

iii. *Personal governance*

Personal ambition and personal balanced scorecard have no value unless you implement them to maintain, and cultivate your ambition and PBS to govern yourself effectively. This entails personal governance; the systematic process of continuous, gradual and routine personal improvement, steering, and learning. Your PBS needs constant updating to reflect the new challenges you take, the lessons you have learned, and the growth of yourself.

b) *Alignment with yourself*

corporate governance will be cosmetic if personal integrity is not a way of life in your organization and if you focus mainly on ethical procedures, formal regulations, and guidelines. Therefore it's needed to align your personal ambition with your behavior and your way of acting (see Figure 2). So you need to commit yourself to live and act according to your personal ambition and to keep promises that you make to yourself. Personal governance built on the person's true character is sustainable and strong. You should reflect your true self and must adhere to a moral and behavioral code set down by your personal ambition. This means that who you really are, what you care about, and your passions should come out in your personal ambition, and you should act and behave accordingly (you should be yourself) to build trust. This inner alignment is an important step towards lasting personal growth and reinforcing integrity, honesty, trustworthiness, credibility, transparency, and personal charisma.People with this perspective on life value others' lives and create a stable basis for others to feel they are credible, truthful, and trustworthy.

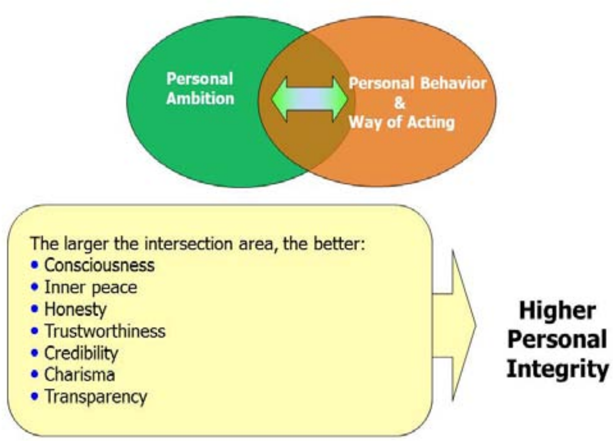


Figure 2 : Aligning Personal Ambition with Personal Behavior and Actions

These first two stages in the authentic governance model focus on personal leadership development by cultivating your inner compass.

c) *Authentic Corporate Governance*

i. *Corporate ambition*

This phase involves defining and formulating the shared corporate ambition. The corporate ambition is the soul, core intention and the guiding principles of the organization and encompasses the corporate mission, vision, and core values.

ii. *Corporate Balanced Scorecard (CBS)*

The corporate ambition has no value unless you don't take actions to make it a reality. Therefore the emphasis in this stage is developing an integrated and well balanced action plan based on the corporate ambition to realize the corporate objectives. The CBS is needed to improve the business and governance processes continuously based on the corporate ambition in order to add value to customers and satisfy them.

iii. *Corporate governance*

The next step is to implement, maintain, and cultivate the corporate ambition and CBS in order to govern your organization effectively, to deliver peak performance, and to create competitive advantage. This entails corporate governance: the systematic process of continuous, gradual and routine corporate improvement, steering, and learning. This stagefocuses also on the implementation of formal corporate regulations, procedures and guidelines (corporate governance code). To operate in accordance with the corporate ambition and related CBS, through its implementation using the PDAC cycle, results in a journey towards sustainable and ethical business success.

d) Alignment with your organization

The emphasis here is aligning personal ambition with corporate ambition and creating uniformity of personal and organizational values. By unifying corporate ethics with individual ethics you will create a strong foundation of peace, integrity, engagement, and learning upon which creativity and growth can flourish, and life within the organization will become a more harmonious and ethical experience. You will also attract and retain the most talented employees. It's about aligning personal governance with corporate governance and getting the optimal fit and balance between these two activities in order to enhance labor productivity, to create a climate of trust, and to stimulate engagement, commitment, integrity, and passion in the organization. This alignment process is needed because staff members don't work with devotion or expend energy on something they do not believe in or agree with. If there is an effective match between their interests and those of the company, and if their values and the company's values align, they will be engaged and will work with greater commitment and dedication towards realizing the company objectives (see Figure 3). When the personnel's personal ambition is in harmony with their company's (are compatible) and combined in the best interest of both parties, the results will be higher productivity and sustainable corporate governance. Employees are stimulated in this way to commit, act ethically and focus on those activities that create value for clients. This will create a strong foundation of peace, personal integrity, and stability upon which creativity and growth can flourish, and life within the organization will become a more harmonious experience.

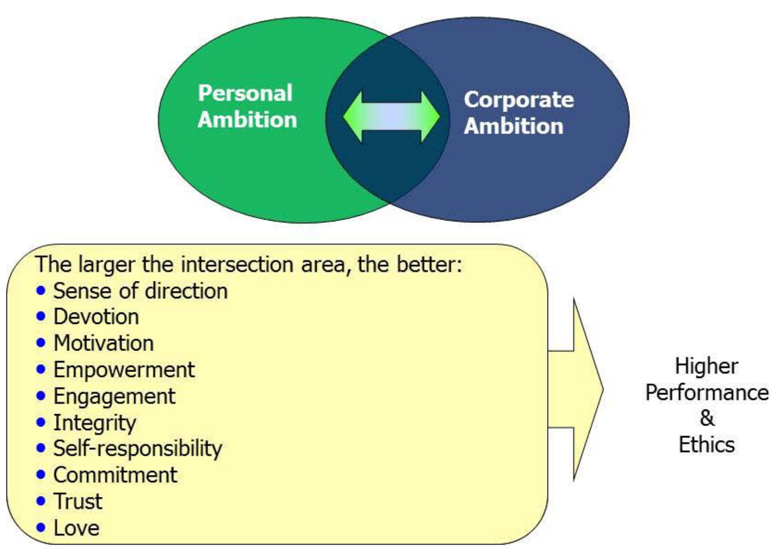


Figure 3: Matching the Personal Ambition with the Corporate Ambition

The effective combination of all these four phases creates a stable basis for high performance employees and a high performance organization. To illustrate the importance of this authentic governance model: Of the 140 businesses recognized by the Ethisphere Institute as the 2013 World's Most Ethical Companies, Aflac and Starbucks have received this honor every year between 2007 and 2013.They have been judged to not only have exemplary ethical standards and policies, but also consistently high ethical practices. Their corporate governance codes are not empty words, but represent active coordinates in maintaining an ethical business culture, based on effective values- based leadership and the alignment of personal governance with corporate governance.

IV. Authentic Governance Institute Become a Certified Authentic Governance Consultant

Based on this new governance concept I have established the Authentic Governance Institute (AGI) in the United States, which is the global not-for-profit membership association for the authentic governance profession. AGI's worldwide advocacy for authentic governance is reinforced by our globally recognized standards, certification and licensee programs for consultants and organizations, extensive academic programs, eLearning programs, chapters of practice in 50 countries, and professional development opportunities. Become a member and see what AGI can offer you at every stage of your authentic governance career. Discover more about what our AGI membership is and what benefits it offers, and choose the type of membership that's best for you. As an AGI member, you gain exclusive access to AGI publications and our global standards, networking options with our global chapters and online communities of practice, and career opportunities. AGI also offers a comprehensive authentic governance certification program for accountants, financial consultants, corporate governance practitioners and organizations globally. You will demonstrate your expertise and your commitment to the authentic governance profession with an AGI certification.

References Références Referencias

1. Rampersad, H.K (2014), Authentic Governance; Aligning Personal Governance with Corporate Governance, Springer USA, New York, 2013.
2. Rampersad, H.K (2008),Authentic Personal Branding: A new blueprint for building and aligning a powerful leadership brand, Information Age Publishing, Conneticut; SaraBooks, New Delhi.
3. Rampersad, H.K. (2008), Authentic Personal Branding, www.brandchannel.com, New York.
4. Rampersad, H.K. (2006), The Personal Balanced Scorecard; The Way to IndividualHappiness, Personal Integrity and Organizational Effectiveness, Information Age Publishing, Conneticut.
5. Rampersad, H.K. (2003), Total Performance Scorecard; Redefining Management to Achieve Performance with Integrity, Butterworth-Heinemann Business Books, Elsevier Science, Massachusetts.

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 14 Issue 6 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

An Investigation of Granger Causality between Oil-Price, Inflation and Economic Growth in Jordan

By Hussein Ali Al-Zeaud
Al al-Bayt University, Jordan

Abstract- This paper is an empirical investigation on the directional causality between oil price (oil imports cost), gross domestic product (GDP) and Inflation (consumer price index) for the period 1990-2011 in Jordan. Using Johannes-Juseliusco-integration test, Granger-causality test, and VECM to inspect the long-term relationship, the short-term relationship and the speed of adjustment toward long-term equilibrium between the variables. The tests' results indicate that there is a long-run equilibrium relationship between gross domestic product these results indicate that there is a long-run equilibrium relationship between gross domestic product (LGDP) and other variables oil cost (LOP) and inflation (LINF). The estimation of the adjustment speed indicates that (58%) of any previous year's deviation in gross domestic product (GDP) from its long-run equilibrium path will be corrected in the current year. Furthermore, the VECM reveals the existence of a significant, negative and weak (-0.046) causation relationship in the short run between (GDP) and oil cost (OP) running from oil cost to (GDP).

Keywords: oil price (cost), gross domestic product, Inflation, inflation, Granger causality test, Johannes-Juseliusco-integration test, and VECM, speed of adjustment toward equilibrium.

GJMBR-B Classification: JEL Code: O40

ANINVESTIGATIONOFGRANGERCAUSALITYBETWEENOILPRICEINFLATIONANDECONOMICGROWTHINJORDAN

Strictly as per the compliance and regulations of:

An Investigation of Granger Causality between Oil-Price, Inflation and Economic Growth in Jordan

Hussein Ali Al-Zeaud

Abstract- This paper is an empirical investigation on the directional causality between oil price (oil imports cost), gross domestic product (GDP) and Inflation (consumer price index) for the period 1990-2011 in Jordan. Using Johannes-Juseliusco-integration test, Granger-causality test, and VECM to inspect the long-term relationship, the short-term relationship and the speed of adjustment toward long-term equilibrium between the variables. The tests' results indicate that there is a long-run equilibrium relationship between gross domestic product these results indicate that there is a long-run equilibrium relationship between gross domestic product (LGDP) and other variables oil cost (LOP) and inflation (LINF). The estimation of the adjustment speed indicates that (58%) of any previous year's deviation in gross domestic product (GDP) from its long-run equilibrium path will be corrected in the current year. Furthermore, the VECM reveals the existence of a significant, negative and weak (-0.046) causation relationship in the short run between (GDP) and oil cost (OP) running from oil cost to (GDP).

Accordingly, the finding of this study suggests that an increase in oil cost today leads to a small decrease in gross domestic product. This consist with the basic hypothesis which proposes that an increase in oil price (cost) will be harm for economic growth in oil-importing countries like Jordan, but the effect size dose not consist with rate of dependency of economic activities in Jordan on oil. Thus, the study recommends investigating this inconsistent situation.

Keywords: oil price (cost), gross domestic product, Inflation, inflation, Granger causality test, Johannes-Juseliusco-integration test, and VECM, speed of adjustment toward equilibrium.

I. Introduction

In Jordan like many countries, oil is one of the major factors of economic activity, due to it is the main source for energy. Furthermore, oil has become a social issue as it affects everyone on a way or another. This implies that there is a strong relationship between economic indicators of a country (growth, inflation, budget deficit, current account deficit and ….. etc.) and oil-price changes.

Accordingly, Many economists all over the world has attempted to investigate the relationship between economic indicators such as growth and inflation on one hand and oil-price fluctuations on the other hand in order to explain, forecast and control the effects of these fluctuations. studies have revealed that oil-price fluctuations have great effects on economic activities and indicators. These effects may vary from country to another, depending on the ratio of dependency of the economic activities on oil hand whether the country is importing or exporting oil. Therefore, basically oil price increase should be good news in oil exporting countries and bad news in oil importing countries, and vice versa. Economic activity is affected by fluctuations of oil price through both supply and demand channels. In The supply side and due to the fact thatoil is a basic input of production, so an increase in oil price will raise the production costs which make firms to reduce output. On other hand, in the demand side oil prices changes affect consumption and investment. Consumption is affected indirectly through its positive relation with disposable income. Likewise, investment is affected due to an increase in oil price will rise firms' costs which reduces the retune of investment and this will lessen the investment. Furthermore, real economic activity will be affected indirectly by oil price fluctuations through its impact on exchange rate and inflation.

Given the World's high dependence on oil products which makes oil the largest internationally traded good and its price more vital to today's world economy. Moreover, the prices of energy intensive goods and services are linked to energy prices, of which oil makes up the single most important share. Finally, the price of oil is linked to some extent to the price of other fuels (even though oil is not fully substitutable for natural gas, coal, and electricity, particularly in the transportation sector). For these reasons, sudden fluctuations in the price of oil have wide-ranging consequences. Thus, it is expected that inflation and economic growth rate have a strong relationship with oil-price fluctuations.

In general, there is an interaction between economic growth and oil price. As World economic growth increases the demand for oil increases which pushes up oil prices. Oil prices then, tend to be volatile, at least partly due to variations in the business cycle.

While the increase in GDP growth and economic activity in general, has led to increase in

Author: Al al-Bayt University, Mafraq, Jordan.
e-mail: husseinhah@yahoo.com

energy demand, which in turn raise the oil price and this can lessen the economic growth due to its impact on economic activities. A glance over the figure below shows the close correlation in the timing of oil price hike and economic depressions; this emphasizes the serious negative effect of oil price hike on the economies. In case of oil, Demand function implies that quantity demanded will fall by a certain percentage for each percentage rise of price. Thus, large oil price hike will unavoidably cut oil demand and decrease economic growth.

All other factors remains constant, an oil price increase should be good for oil exporting countries and negative for oil importing countries, while the opposite expected when the oil price decreases. In general, oil as internationally traded good causes a transfer of income from importing to exporting countries depending on terms of trade. The international demand effect would depend on how oil exporting and importing countries would response for an increase of oil price. On one hand, Exporting countries have additional revenues, but these countries used to save a fraction of their revenues for future funds, and their demand increase slowly in response to these revenues. On other hand, importing countries have additional expenses, in response to this, they seek to lessen their demand rapidly. so that net global demand tends to fall in the short term. Consequently, economic growth in exporting countries which induced by higher oil prices has always been less than economic decay in importing countries, therefore, the net effect was negative. As a result, the growth of the world economy was decaying after each oil price hike.

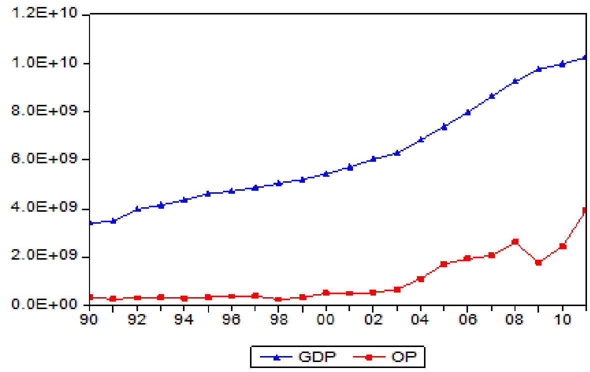
In case of oil importing countries, the increase in oil prices not only induces imported price push or cost push inflation but also demands pull inflation. So as worldwide oil prices rise, this brings domestic inflation in the economy that leads to decline in foreign exchange reserves. As foreign exchange become scarce in supply its value would increase while on the other hand local currency depreciates that brings rise in the import prices & would increase the import bills. It would also worsen the position of trade balance of the country. It would not only appreciate the private expenditures but also public expenditure, which would also increase the consumer price index. All these factors pushed the country to the paucity trap or poverty trap.

Reading the increasing oil costs as generalized price inflation may leads local authorities to adopt restrictive policies which could slow the economy's growth. Excessively restrictive monetary and fiscal policies to deal with inflationary pressures could worsen the declining income and unemployment effects. However, expansionary monetary and fiscal policies may simply delay the fall in real income necessitated by the increase in oil prices, stoke up inflationary pressures and worsen the impact of higher prices in the long run. Also, in terms of the state of the economy, if the economy is already suffering from high inflation and unemployment, then the oil price increases have the potential to cause severe damage by limiting economic policy options and affect the overall economic impact of higher oil prices over the longer term.

Jordan's economy is among the smallest in the Middle East, with insufficient supplies of water, oil, and other natural resources, underlying the government's heavy reliance on foreign assistance. Other economic challenges for the government include chronic high rates of poverty, unemployment, inflation, and a large budget deficit. The global economic slowdown and regional turmoil, however, have depressed Jordan's GDP growth, impacting export-oriented sectors, construction, and tourism.

Unlike most of its neighbors, Jordan has no significant petroleum resources of its own and is heavily dependent on oil imports to fulfill its domestic energy needs which Jordan Currently imports (96%) of it. So, energy is one of the biggest challenges for continued growth for Jordan's economy. The Iraq invasion of 2003 disrupted Jordan's primary oil supply route from its eastern neighbor, which under Saddam Hussein had provided the kingdom with highly discounted crude oil. Since late 2003, Saudi Arabia has become Jordan's primary source of imported oil; Kuwait and the United Arab Emirates (UAE) are secondary sources. Although not so heavily discounted as Iraqi crude oil, supplies from Saudi Arabia and the UAE are subsidized to some extent. Spurred by the surge in the price of oil to more than $145 a barrel at its peak, the Jordanian government has responded with an ambitious plan for the sector. The country's lack of domestic resources is being addressed via a $14bn investment program in the sector. The program aims to reduce reliance on imported products from the current level of 96%, with renewable meeting 10% of energy demand by 2020 and nuclear energy meeting 60% of energy needs by 2035. The government also announced in 2007 that it would scale back subsidies in several areas, including energy, where there have historically been regressive subsidies for fuel and electricity. In another new step, the government is opening up the sector to competition, and intends to offer all the planned new energy projects to international tender.

The figure below provides a starting point to the analysis of oil price behavior and Jordan economic growth relation over the last two decades. The graph shows annually oil cost and Jordan gross domestic product have experienced an upward trends.



In 2011 Jordan's finances have been strained by a series of natural gas pipeline attacks in Egypt, causing Jordan to substitute more expensive heavy fuel oils to generate electricity. An influx of foreign aid, especially from Gulf countries, has helped to somewhat offset these extra budgetary expenditures, but the budget deficit is likely to remain high, at nearly 10% of GDP excluding grants. Jordan likely continues to depend heavily on foreign assistance to finance the deficit in 2012.

This study investigates the causality between crude oil prices at international market and the inflation rate (CPI) and economic growth (GDP) of Jordan. We begin by analyzing the impact of an oil price changes on the economy, followed by an explanation of what tests have revealed about the relation between oil price and economic growth. The paper is organized as follows: section 2 presents the related literature review. Section 3 shows a model of the study. Section 4clarifies the econometric methodology, section 5 offers and analyzes the empirical results . Finally conclude in section 6.

II. Literature Review

World's high dependency on oil products, the relation between oil prices and economic growth has encouraged many economists over the years to carry out studies in order to investigate these relations, and there is a rich spectrum of literature on various aspects of the subject. Following some of these studies:-

Farhani (2012) estimated simple linear regression model (SLRM), dynamic regression model (DRM) and VAR model to evaluate the impact of oil price increases on the U.S economic growth. The results indicate strong weaknesses on the relation between these two factors in what way that the relation has had allow significant effect caused by the existence of breakpoints and the asymmetric effects of the oil price variations. Bouzid (2012) investigated the causal relationship between oil prices and economic growth in Tunisia which is not oil producing rather oil-importing country over a period from 1960 to 2009. The study analyzed that, how change in real crude oil price effects the real GDP of Tunisia negatively and many other factors differently. The results show the existence of a long-term relationship between energy prices and economic growth and Granger pair wise causality test revealed unidirectional causality from real GDP to oil prices. Chou and Tseng (2011) studied The Shocks in global oil prices have always been most important concern in market fluctuations. The discussion about pass-through impact of oil price fluctuation on domestic inflation (consumer price index) helps domestic policy decisions that could inhibit disruptions to the economy caused by oil price shocks. They researched the short-run and long-run pass through impact crude oil price on Taiwan's inflation from 1982 to 2010, using the CPI index, core index, and different necessary sub-indices for estimation. The findings expressed that there is a significant and long run pass through impact of crude oil prices on Taiwan's inflation, although the short run pass through impact is not significant. This study applied both recursive regression and rolling regression methods to compare variation in the short term bypass through effects of oil prices and determined that in short term pass through effects inflation rates did not change with the fluctuation in global oil prices in Taiwan. Moreover, since the Consumer Price index comprises on everyday necessities, global oil prices do not cause significant in short term .Berument, Ceylan and Dogan (2010) examined how oil price shocks affect the output growth of selected MENA countries that are considered either net exporters or net importers of this commodity, but are too small to affect oil prices. That an individual country's economic performance does not affect world oil prices is imposed on the Vector Autoregressive setting as an identifying restriction. The estimates suggest that oil price increases have a statistically significant and positive effect on the outputs of Algeria, Iran, Iraq, Kuwait, Libya, Oman, Qatar, Syria, and the United Arab Emirates. However, oil price shocks do not appear to have a statistically significant effect on the outputs of Bahrain, Djibouti, Egypt, Israel, Jordan, Morocco, and Tunisia. When they further decomposed positive oil shocks such as oil demand and oil supply for the latter set of countries, oil supply shocks are associated with lower output growth but the effect of oil demand shocks on output remain positive.Abdul Jalil, Ghani and Duasa(2009) studied the impact of oil prices on GDP in Malaysia. In particular, three types of oil prices; world oil price (PW), world oil price in domestic currency (PWD), and domestic oil price (PD) are tested against the GDP within VAR frame work. Based on the findings, change in PD oil price appears to have the most pronounced effect to the GDP. It is because, significant results of PD analysis are documented both in short-run and long-run tests. In the asymmetric test, significant result is documented in PD analysis only. The finding signifies the presence of asymmetric relationship between oil price changes and the economy. Kumar (2009) assessed the oil prices-macro economy relationship by means of multivariate VAR using both linear and non-linear specifications. Scaled oil prices model outperforms other models used in the study. He studied the impacts of oil price shocks on the growth of industrial production for Indian economy over the period 1975Q1-2004Q3. It is found that oil prices Granger cause macroeconomic activities. Evidence of asymmetric impact of oil price shocks on industrial growth is found. Oil price shocks negatively affect the growth of industrial production and it is found that an hundred percent increase in oil prices lowers the growth of industrial production by one percent. Moreover, the variance decomposition analysis while putting the study in perspective finds that the oil price shocks combined with the monetary shocks are the largest source of variation in industrial production growth other than the variable itself .Kiptui (2009) estimated a conventional Phillips curve to obtain estimation of oil price through to inflation for Kenya. Result indicated inflation being correlated with oil prices, in the early 90's correlation appear to have declined but begun to boost after trade liberalization. The result showed that oil price fluctuations have had significant impact on inflation. Other outcomes are that changes in exchange rate and aggregate demand have had significant influence on inflation. The measure of oil price pass-through is discovered to be 0.10 in the long-run and 0.05 in the short-run to inflation, much lower while comparing to exchange rate pass-through which is 0.64 in thelong-run and 0.32 in the short-run. It means that 10%risein prices of oil leads to 1% increase in inflation in the long-term and 0.5% in the short-term. Therefore Oil price pass-through is incomplete and low in both cases. Meanwhile, Cologni and Matteo (2008) anticipated a vector autoregressive form for the G-7 nations to confirm whether the oil price fluctuation throughoutpast20 years have been affecting the monetary policy action. It was deduced that majority of the countries under examination, an unanticipated oil price fluctuation is ensued by a rise in inflation rate and also a decrease output increase. Moreover, the findings suggested that 1990's impact oil price shocks indicate there was a major element of the impact of the oil price variation was roughly resulted in the aftermath of fiscal policy.

III. Model Specifications for the Study

Using annual data from CBJ's database and IMF's database the present paper examines the relationship between oil price, inflation and economic growth in Jordan, while our model will be:

$$GDP_t = \alpha + \beta_1 OP_t + \beta_2 INF_t + U_t \dots\dots\dots \quad (1)$$

Where GDP_t is real gross domestic product, OP_t is oil imports cost and INF_t is inflation which is measured by consumer price index (CPI_t) while α and β_s are the coefficient to be estimated and the U_t is error term.

This can be reformulated to examine the link between each variables and other variables as follows:-

$$INF_t = \alpha + \beta_1 OP_t + \beta_2 GDP_t + U_t \dots\dots\dots \quad (2)$$

Taking the logarithm form of the equation (1) will yield equation (3) below with "In" standing for the natural logarithm

$$InGDP_t = \alpha + \beta_1 InOP_t + \beta_2 InINF_t + U_t \dots\dots\dots \quad (3)$$

IV. Econometric Methodology

The objective of this section is to examine the presence of interaction and the direction of causality between economic growths, oil cost and inflation in Jordan.

In order to examine the relationship between economic growth, oil cost and inflation in Jordan, a two-step procedure is adopted. The first step investigates the existence of a long-run relationship between the variables through a co-integration analysis. The second step explores the causal relationship between the series. If the series are non-stationary and the linear combination of them is non-stationary, then standard granger's causality test should be employed. But, if the series are non-stationary and the linear combination of them is stationary, Error Correction Method (ECM) should be adopted. For this reason, testing for co-integration is a necessary prerequisite to implement the causality test.

a) *long run relationship*

We perform our investigation of existence of co-integration which clarifies the long run relationship between variables in two steps. First, we test for unit root vs. stationary. Then we test for no co-integration vs. co-integration.

i. *Unit root test*

The objective of unit root test to empirically examine whether a series contains a unit root. Since many macroeconomic series are non-stationary (Nelson and Plosser 1982), unit root test are useful to determine the order of integration of the variables and, therefore, to provide the time-series properties of data. If the series contains a unit root, this means that the series is non-stationary. Otherwise, the series will be categorized as stationary. In order to implement a more rigorous test to verify the presence of a unit root in the series, an Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) test are employed.

ii. *Co-integration test*

Johansen and Juselius procedure is applied to test for the existence of co-integration. The Johansen technique enables us to test for the existence of non-unique co-integration relationships in more than two variables cases. Through Johansen procedure of co-integration two tests statistics are suggested to determine the number of co-integration vectors determined based on a likelihood ratio test (LR): the trace test (λ_{trace}) and the maximum eigenvalues test statistics ($\lambda_{\max}$).

b) *Granger-causality test*

Pair wise causality relationship between variables should be tested through the implementation Granger causality test; Granger (1969), the concept of "causality" assumes a different meaning with respect to the more common use of the term. The statement(y) Granger causes (x) or vice versa, in fact, does not imply that (y) and (x) is the effect or the result of (y) and (x), but represents how much of the current (y) and (x) can be explained by the past values of (y) and (x) and whether adding lagged values of (y and x) can improve the explanation. For this reason, the causality relationship between (y and x) can be evaluated by estimating the following regressions:

$$\Delta Y_t = \beta_0 + \sum_{i=1}^{m} \beta_{1i} \Delta Y_{t-i} + \sum_{i=1}^{n} \beta_{2i} \Delta X_{t-i} + \varepsilon_i \qquad (8)$$

$$\Delta X_t = \beta_0 + \sum_{i=1}^{n} \beta_{1i} \Delta Y_{t-i} + \sum_{i=1}^{m} \beta_{2i} \Delta X_{t-i} + \varepsilon_i \qquad (9)$$

Where (m and n) represents the lag length and should set equal to the longest time over which one series could reasonable help to predict the other.

Following this approach, the null hypothesis that (x) does not granger cause (y) in regression (4) and that (y) does not Granger cause (y) in regression (5) can be tested through the implementation of a simple F-test for the joint significance of, respectively, the parameters β_{1i} and β_{2i}. Following the equations (4) and (5) were estimated using four lags of each variable which should represent and adequate lag-length over which one series could help to predict the other.

The results of stationary and co-integration tests determine how Granger-causality test should be applied, as follows:

If the variables (y) and (x) are stationary, the standard Granger-causality test should be carried out by estimating the following regressions:-

$$Y_t = \alpha + \sum_{i=1}^{m} \beta_{1i} Y_{t-i} + \sum_{i=1}^{n} \beta_{2i} X_{t-i} + \varepsilon \qquad (6)$$

$$X_t = \alpha + \sum_{i=1}^{n} \beta_{1i} Y_{t-i} + \sum_{i=1}^{m} \beta_{2i} X_{t-i} + \varepsilon_i \qquad (7)$$

If the variables (y) and (x) are non-stationary and integrated of order (1), but, they are not co-integrated, the Granger-causality test could be carried out by estimating regression models (4 and 5) using the first difference series of both variables (Yoo and Kwak, 2004). In general, if the origin series of both variables are non-stationary and the variables are not co-integrated, the Granger-causality test could be performed by using the same order of integration for both series, and reforming model (5 and 6) to suit the order of difference series.

In model (4 and 6), (Y) is caused by past values of both (Y) and (X). Likewise, in model (5 and 7), (X) is caused by past values of the two variables. According to Granger, (X) causes (Y) in model (4 and 6) if ($\beta 2i$) is significant from zero, and that (Y) causes (X) in model (5 and 7) if ($\beta 1i$) is significant from zero. On other hand, (X) does not cause (Y) if ($\beta 2i$) in model (4 and 6) is insignificant from zero, and that (Y) does not cause (X) if ($\beta 1i$) in model (5 and 7) is insignificant from zero. These hypotheses can be verified depending on the joint significance of the parameters ($\beta 1i$, $\beta 2i$) which can be tested through the implementation of a simple F-test.

If the variables (Y) and (X) are non-stationary, integrated of the same order (d), and co-integrated which means that they have a long-run equilibrium relationship, the Granger-causality test should be carried out through estimating Error Correction Model (VECM) which could have the following form:

$$\Delta Y_t = \alpha + \sum_{i=1}^{m} \beta_{1i} \Delta Y_{t-i} + \sum_{i=1}^{n} \beta_{2i} \Delta X_{1t-i} + \sum_{i=1}^{n} \beta_{3i} \Delta X_{2t-i} + \beta_4 \eta_{t-1} + \varepsilon_i \qquad (10)$$

$$\Delta X_{1t} = \alpha + \sum_{i=1}^{m} \beta_{1i} \Delta X_{1t-i} + \sum_{i=1}^{n} \beta_{2i} \Delta Y_{t-i} + + \sum_{i=1}^{n} \beta_{3i} \Delta X_{2t-i} \beta_4 \eta_{t-1} + \varepsilon_i \qquad (11)$$

Where (η_{t-1}) is error-correction term. The error correction term (η_{t-1}) is the lagged value of the residuals from the OLS regression of equation (8), and the lagged value of the residuals from the OLS regression of equation (9). In (8) and (9), ΔY_t,

ΔX_{1t},$\Delta X_{2t}$and ε i are stationary, implying that their right-hand side must also be stationary. It is obvious that (8) and (9) compose a multivariate VAR in first differences augmented by the error-correction terms (η_{t-1}), indicating that ECM model and co-integration are equivalent representations.

According to Granger (1969; 1988), in a co-integrated system expressed by ECM representation causality must run in at least one way. Within the ECM equation (8), (X_{1t} or X_{2t}) does not Granger cause (Y_t) if all βs =0. Equivalently, in equation (9) (Y_t or X_{2t}) does not Granger cause (X_{1t}) if all β_s = 0. Also, (β_{4s}) the parameters of the error correction term indicate the speed of adjustment of any short-run disequilibrium towards a long-run equilibrium between the variables.

The Granger-causality could be claimed if the parameters (β_{2i},$\beta_{3i}$and β_4) in (8) and, or (β_{2i},$\beta_{3i}$and β_4) in (9) are jointly significant from zero which can be tested by a simple F-test. Similarly, Long-run causality could be claimed if (β_4) the parameter of the error correction term in (8 or 9) is statistically significant which can be tested by t-test.

What have been mentioned above clarifies that testing of stationary then co-integration are an essential requirements which determine how we do Granger-causality test.

Thus, once the variables in a VAR system are co-integrated, we can use a vector error-correction models (VECM) depending on the equations (8 and 9).in which a restricted VAR is used in order to assess the direction of Granger causality and to estimate the speed of adjustment to the deviation from the long-run equilibrium between variables.

Otherwise, unrestricted VAR model could be used to assess the relationship between the variables. This excludes Error Correction Term from equations (8 and 9). Then we simulate the impulse responses for the variables. The impulse response analysis quantifies the reaction of every single variable in the model on an exogenous shock to the model. The reaction is measured for every variable a certain time after shocking the system. The impulse response analysis is therefore a tool for inspecting the inter-relation of the model variables.

Finally, as co-integration, causality tests and VAR model are sensitive to lag length (m) the choice of the number of lag actually employed was assigned toLR: sequential modified LR test statistic (each test at 5% level).

V. Estimation and Interpretation of Results

This study uses annual observations for the period 1990-2011 for three variables: government expenditure (G), money supply (M2) and inflation (consumer price index (CPI)) in order to analyze the possibility of co-integration and causality relationship among them.

a) unit root test

The first step in analysis is to test the unit roots in each variable. Consequently, we apply Phillips-Perron test to check for unit root vs stationary on logarithms of GDP, OP and INF (LGDP, LOP and LINF). From the results of the PP test presented in Table 1.

Table 1: Unit Root Tests

Series	With intercept	With intercept and trend	Decision	Order of integration
Levels	PP	PP		
LGDP	-0.103971 [-3.012363]	-1.643065 [-3.644963]	Not stationary	-
LOP	1.203015 [-3.012363]	-1.952601 [-3.644963]	Not stationary	-
LINF	0.031585 [-3.012363]	-1.556921 [-3.644963]	Not stationary	-
First difference				
ΔLGDP	-4.224322* [-3.020686]	-4.094895* [-3.658446]	stationary	I(1)
ΔLOP	-4.171564* [-3.020686]	-4.926571* [-3.658446]	stationary	I(1)
ΔLINF	-4.848472* [-3.020686]	-4.852617* [-3.658446]	stationary	I(1)

- *Note: * test critical values which denotes significant at 5% level.*
- *The number in parenthesis is the [t] statistic value.*

As a sum up, (LGDP, LOP and LINF) are stationaries in the first difference. This implies that all the series are integrated of order one I(1). Thus, co-integration tests is relevant.

b) Testing Co-integration and Error Correction mechanism

Since the first difference series are stationary, Let us examine the existence of co-integration between variables. Johansen-Juselius procedure is used to test for co-integration between variables. Tables 3 reports the results obtained from the co-integrationtests and presents the result of the trace test (λ trace)) and maximum eigenvalues test (max) statistics for the existence of long run equilibrium between the variables:

Table 2 : co-integration test

Null Hypothesis	λ_{trace}	λ_{max}
r=0	62.20445 [42.91525]	42.58433 [25.82321]
$r \leq 1$	19.62012 [25.87211]	15.34550 [19.38704]
$r \leq 2$	4.274617 [12.51798]	4.274617 [12.51798]

- *terms in [ ] indicates 5% level critical value*

The null hypothesis of no Co-integration (r=0) based on both the trace test (λ_{trace}) and the maximum eigenvalues test (λ_{max}) between variables (LGDP, LOP and LINF) is rejected at (5%) level of significance. However, the null hypothesis that ($r \leq 1$ and $r \leq 2$) could not be rejected. The estimated tests indicate that there is only one Co-integration vector between the variables.

c) Causality & VECM tests

Now we can turn our attention to the question of direction of causality. It contains three elements: (a) does oil cost cause gross domestic product, or does oil cost cause gross domestic product? (b) Does oil cost cause inflation, or does inflation cause oil cost? And (c) does gross domestic product cause inflation, or does inflation cause gross domestic product?

As the variables (LGDP, LOP and LINF) are non-stationary at level, integrated of the same order (d), and co-integrated, the Granger-causality test is carried out through estimating Vector Error Correction Model (VECM). Table 4 shows the findings of VECM for the variables:-

Table 3 : Vector Error Correction Model

Regression	ΔLGDP	ΔLOP	ΔLINF
CONSTANT	0.060945 [8.20618]	0.343620 [2.32778]	0.029088 [1.65349]
Error Correction Term (η_{t-1})	-0.586694 [-8.03161]	-0.562858 [-0.38766]	-0.172740 [-0.99830]
$\Delta LGDP_{-1}$	-0.100507 [-0.90719]	-1.276312 [-0.57959]	0.269276 [1.02608]
ΔLOP_{-1}	-0.046731 [-3.40564]	0.045134 [0.16548]	-0.024117 [-0.74198]
$\Delta LINF_{-1}$	0.085251 [0.85618]	-3.871933 [-1.95638]	-0.155586 [-0.65965]
R^2	0.832267	0.220763	0.141612
S.E	0.012565	0.249755	0.029764

- *terms in [ ] are t – statistics*

As it is mentioned before, error correction term (η_{t-1}) captures the short-run dynamics relationship among variables. The above VECM test results show that The lagged error term coefficient (η_{t-1}) in (LGDP) equation is negative and statistically significant. On other hand, although the lagged error term coefficients (η_{t-1}) in (LOP and LINF) equations are positive but they are statistically insignificant. These results indicate that there is a long-run equilibrium relationship between gross domestic product (LGDP) and other variables oil cost (LOP) and inflation (LINF). The value of error term coefficient in (LGDP) indicates that adjustment process is (58%) of the previous year's disequilibrium in gross domestic product (GDP) from its long-run equilibrium path will be corrected in the current year. Furthermore, the estimates of the VECM does support the existence of significant causation relationship in the short run between (GDP) and oil cost (OP) running from oil cost to (GDP) but it is a negative (-0.046%) and low causation. Also, according to the results short-run elasticities of gross domestic product, oil cost and inflation in the equation of (LGDP) are -0.10, -0.046 and 0.085 respectively. It is seen that these elasticities are less than long run elasticity which is the value of error correction model (η_{t-1}).

VI. Conclusion

This paper is an empirical investigation on the directional causality between oil price (oil imports cost), gross domestic product (GDP) and Inflation (consumer price index) for the period 1990-2011 in Jordan. Using Johannes-Juseliusco-integration test, Granger-causality test, and VECM to inspect the long-term relationship, the short-term relationship and the speed of adjustment toward long-term equilibrium between the variables. The tests' results indicate that there is a long-run equilibrium relationship between gross domestic product These results indicate that there is a long-run equilibrium relationship between gross domestic product (LGDP) and other variables oil cost (LOP) and inflation (LINF). The estimation of the adjustment speed indicates that (58%) of any previous year's deviation in gross domestic product (GDP) from its long-run equilibrium path will be corrected in the current year. Furthermore, the VECM reveals the existence of a significant, negative and weak (-0.046) causation relationship in the short run between (GDP) and oil cost (OP) running from oil cost to (GDP).

Accordingly, the findings of this study suggest that an increase in oil cost today leads to a small decrease in gross domestic product. This consist with the basic hypothesis which proposes that an increase in oil price (cost) will be harm for economic growth in oil-importing countries like Jordan, but the effect size dose not consist with rate of dependency of economic activities in Jordan on oil. Thus, the study recommends investigating this inconsistent situation.

References Références Referencias

1. Abdul Jalil, Norasibah, Ghani, Gairuzazmi Mat and Duasa, Jarita(2009),"Oil Prices And The Malaysia Economy", *International Review of Business Research Papers,* Vol. 5 No. 4 June 2009 Pp.232-256.
2. Berument,M. Hakan, Ceylan, Nildag Basak and Dogan, Nukhet (2010*)."The Impact of Oil Price Shocks on the Economic Growth of Selected MENA1 Countries", The Quarterly Journal of the IAEE's Energy Economics Education Foundation*. Volume 31, Number
3. Bouzid, Amaira (2012)."The Relationship of Oil Prices and Economic Growth in Tunisia: A Vector Error Correction Model Analysis", *The Romanian Economic Journal*, Year XV no. 43 March 2012.
4. Cashin, P., Liang H., & Mcdermott, C. J. (2000). How persistent are shocks to world Commodity prices? *IMF Staff Papers*, 47 (2), 178-217. Central Bank of Jordan database : (www.cbj.gov.jo).
5. Chou, K.W., & Tseng, Y. H. (2011). Pass-Through of Oil Prices to CPI Inflation in Taiwan*. International Research Journal of Finance and Economics,* 69, 73-83.
6. Cologni, A. &Matteo, M. (2008). Oil Prices, Inflation and Interest Rates in a StructuralCo-integrated VAR Model for the G-7 Countries. *Energy economics*, 30, 856-888.
7. Cunado, J. &Gracia, F. P. (2005). Oil prices, economic activity and inflation: evidence for some Asian countries. *The Quarterly Review of Economics and Finance*, 45, 65–83.
8. Cunado, J. & Perezde G. F. (2003). Do oil price shocks matter? Evidence for some European countries, *Energy Economics*, 25(2), 137-154.
9. Daniel, N. C. (1997). International Interdependence of National Growth Rates: A structural Trends Analysis, *Journal of Monetary Economics* 40, 73-96.
10. Dickey, d. A. and Fuller, W. A. (1979) Distribution of the estimator for autoregressive time series with a unit root, Journal of the American Statistical Association 74, 427-431.
11. Farhani, Sahbi (2012). "Impact of Oil Price Increases on U.S. Economic Growth: Causality Analysis and Study of the Weakening Effects in Relationship", *International Journal of Energy Economics and Policy* Vol. 2, No. 3, 2012, pp.108-122.
12. Gisser, M. & Goodwin, T. H. (1986) Crude Oil and the Macro economy, Tests of Some Popular

Notions. *Journal of Money Credit and Banking*, 18, 95-103.
13. Granger, C. W. J (1969)," Investigating Causal Relations by Econometric Models and Cross-spectral Methods", *Econometrica*, Vol. 37, No. 3. (Aug., 1969), pp. 424-438.
14. Granger, C. and New bold, P. (1974) Spurious regressions in econometrics, *Journal of Econometrics* 2, 111-120.
15. Hamilton, J.D. (1996). This is What Happened to the Oil-Price Macro economy Relationship, *Journal of Monetary Economics*, 38, 215-20.
16. Hooker, M. A. (1996). What Happened to the Oil Price Macro economy Relationship? *Journal of Monetary Economics* 38, 195-213.
17. Johansen, Soren (1988), "Statistical Analysis of Cointegration Vectors", Journal of Economics Dynamics and Control, 12(2-3), pp. 231-254.
18. Johansen, Soren and Juselius, Katarina 1990, "The Maximum Likelihood Estimation and Inference on Cointegration - with Application to Demand for Money", Oxford Bulletin of Economics and Statistics, 52(2), pp. 169-210.
19. Kumar, Surender (2009) "The Macroeconomic Effects of Oil Price Shocks: Empirical Evidence for India", *Economics Bulletin*,Vol. 29 no.1 pp. 15-37. Submitted: Oct 05 2008. Published: February 04, 2009.
20. MacKinnon, James. G., Alfred A. Haug and Leo Michelis, 1999, "Numerical Distribution Functions of Likelihood Ratio Tests for Cointegration", Journal of Applied Econometrics, 14(5), pp. 563-577.
21. Kim, I. M., & Loungani, P. (1992).The Role of Energy in Teal Business Cycles. *Journal of Monetary Economics,* 29, 173-189.
22. Kiptui. M. (2009). Oil Price Pass through into Inflation in Kenya. Proceedings from *14th Annual conference on econometric modeling for Africa,* 1-14.
23. Michael. L., & David, C. M. (2004). Do High Oil Prices Presage Inflation? The Evidence fromG-5 countries. Santa Cruz Center for International Economics, Department of Economics, UCSC, UC, Santa Cruz.
24. Mork, K. A. (1994). Business Cycles and the Oil Market. *Energy Journal*, 15, 15 38.
25. Nelson, Charles R. and Charles I. Plosser, 1982, "Trends and Random Walks in Macroeconomic Time Series: Some Evidence and Implications", *Journal of Monetary Economics*, 10(2), pp. 139-162.
26. Olomola, P. A., & Adejumo, A. V. (2006). Oil Price Shock and Macroeconomic Activities in Nigeria. *International Research Journal of Finance and Economics*, 13. Washigton, DC: International Monetary Fund (IMF) database.
27. Yoo, S. H. and Kwak, S. J. (2004) Information technology and economic development in Korea: A causality study, *International Journal of Technology Management* 27, 57-67.

This page is intentionally left blank

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 14 Issue 6 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Fighting Against Financing of Terrorism and Money Laundering

By Prof. Dr. Covadonga Mallada Fernández
UDIMA, Spain

Abstract- Economic development and globalization of international markets have created a favourable atmosphere for the emergence of new forms of crime such as money laundering or financing of terrorism, which may contribute to destabilized and damage economic systems. In particular, money laundering have acquired great importance since the 11S attacks, what has caused on the one hand, the establishment and development of preventive measures and, on the other hand, a progressive hardening of penal measures. Since then, the regulations imposed to fight against money laundering have been viewed as key components also in the fight against terrorist financing. Terrorism, at the beginning, was a "national" crime connected with internal problems of the State (for instance the RAF in Germany or ETA in Spain) but in the last 20 years has started to be an international problem that is connected with the defence and security of the States. Therefore, the new strategic concept for the defense and security of NATO has a comprehensive list of security threats to the Alliance, such as terrorism, international instability, money laundering or attacks on cyberspace, among others. With this new concept, money laundering and terrorism has become a priority in the national defense.

Keywords: money laundering, terrorism, financing of terrorism, control of financial flows.

GJMBR-B Classification: JEL Code: P49

FIGHTINGAGAINSTFINANCINGOFTERRORISMANDMONEYLAUNDERING

Strictly as per the compliance and regulations of:

Fighting Against Financing of Terrorism and Money Laundering

Prof. Dr. Covadonga Mallada Fernández

Abstract - Economic development and globalization of international markets have created a favourable atmosphere for the emergence of new forms of crime such as money laundering or financing of terrorism, which may contribute to destabilized and damage economic systems. In particular, money laundering have acquired great importance since the 11S attacks, what has caused on the one hand, the establishment and development of preventive measures and, on the other hand, a progressive hardening of penal measures. Since then, the regulations imposed to fight against money laundering have been viewed as key components also in the fight against terrorist financing. Terrorism, at the beginning, was a "national" crime connected with internal problems of the State (for instance the RAF in Germany or ETA in Spain) but in the last 20 years has started to be an international problem that is connected with the defence and security of the States. Therefore, the new strategic concept for the defense and security of NATO has a comprehensive list of security threats to the Alliance, such as terrorism, international instability, money laundering or attacks on cyberspace, among others. With this new concept, money laundering and terrorism has become a priority in the national defense.

In this work we will analyze the methods to combat these new threats to the national security. We will study the preventive legislations to combat money laundering and financing of terrorism, the UIF that exchange information between States, and the hawala-Banking. Key words: Money laundering, terrorism, financing of terrorism, control of financial flows.

Keywords: money laundering, terrorism, financing of terrorism, control of financial flows.

I. Introduction

The topic of this work was chosen because money laundering and financing of terrorism have become an international problem in the last decades.

Money laundering has acquired great importance in the last two decades what has caused on the one hand, the establishment and development of preventive measures of money laundering and, on the other hand, a progressive hardening of penal measures.

In the last twenty years terrorism has undergone a great change and has grown from a domestic crime connected with internal problems of the State (as the RAF in Germany and ETA in Spain) to an international problem and connected with other crimes, as money laundering or tax evasion and with the defence and security of the States. Therefore, the new strategic concept for the defense and security of NATO has a comprehensive list of security threats to the Alliance, such as terrorism, international instability, money laundering or attacks on cyberspace, among others. With this new concept, money laundering and terrorism has become a priority in the national defense (Hardouin and Weichhardt, 2006, p.304-305).

The tragic events of 11 September were the crucial point in the development of new legislation to combat this new type of terrorism and money laundering. We will focus our study on Germany because in this State the legislation to combat terrorism had been marked by national terrorism in which the State could easily identifies the members who were part of the terrorism organization. Instead, nowadays Germany must face international terrorism in which is more difficult to locate the members of these organizations because they can be in any country and fully integrated into society without raising suspicions about their terrorist intentions.

Each State has a different policy because the different criminal law regulations of each country are different and independent, so what it is money laundering and terrorism in one country is not in other country. In that way, governments, in order to fight and stop this delinquency need cooperation between each other and uniformity in the concept of these crimes. They must fight against such crimes through preventive legislation derived from European directives, since the exchange of tax information and prevention are the most important tools to eradicate financing of terrorism.

Moreover, with the rise of the preventive measures of money laundering in recent years, these types of criminals with large sums of capital have had to develop new techniques to achieve their purpose, to temper with money´s apparent legality and use it in impunity. Consequently, money laundering and financing of terrorism techniques are highly sophisticated and equipped with a fast dynamics that allows them to be constantly adapting and changing in order to accomplish safe investments made up with funds of illicit origin. Rather than disguising criminal proceeds as legitimate funds, financing of terrorism seeks to disguise the origin of legitimate funds for use in terrorist activities. We will focus in this paper on the

Author: Assistant, UDIMA, Spain.
e-mail: covadonga.mallada@udima.es

hawalas, methods use by al-Qaeda that in recent years is also being developed in Europe because of his informality.

We begin our study with an introduction to domestic forms of terrorism both in Spain and Germany, then we will focus our attention in the current international terrorism, we will analyze the different methods of financing of terrorism (from legal and illegal sources); we will study money laundering to see the differences and similarities with financing of terrorism and we focus in particular in the "money laundering reverse". Finally we will study the different methods to combat these types of crimes (Know your customer or exchange of information between FIU) and we will analyze the effective or effectiveness of using the same methods to combat money laundering and financing of terrorism.

The innovation and originality of this study are in the focus of the research. Nowadays financing of terrorism is not only a criminal problem of one country, financing of terrorism is an international problem that uses the same skills of concealment as money laundering, and both are perpetrated across the tax havens, financial entities, etc. In that way, the Administration should fight against both crimes with the same weapons.

II. Financing of Terrorism

The issue of this paper is focused in the financing of terrorism. No terrorist organization can exist if they do not have economic sources to sustain their criminal activities. Terrorist financing has been a priority in the fight against terrorism, especially after the tragic events of 11 September. Therefore, we will focus on the study of the financing of terrorism as an autonomous crime of terrorism.

The first problem that we must face in the study of terrorist financing is the lack of reliable data, we have hypothesis of the money that this crime moves but no real data, only approximation to the real data.

Then, we should analyze the difference between organized crime and terrorism. It is true that both phenomena have in common fundamental aspects and increase the chances of interaction between the two of them: both are moving in the underground, both avoid being controlled by authorities and both agree on the methods for achieving their goals. But organized crime seeks to obtain maximum economic benefit while terrorism rather uses that money as a way, not as an end.

Once we have distinguished between organized crime and terrorism, we need to difference the means of funding for these organizations. We must emphasize that there is a before and after the Cold War. Traditionally, some States had collaborated with funding these terrorist organizations, but nowadays the sources of funding of these organizations can come from both legal and illegal sources.

Legal sources can be voluntary financial contributions from supporters of the organization or forced contributions or money that comes from the business activities of the members of the organization. An important part of the financing of terrorist organizations as al-Qaida comes from charity. Thus, large Islamic charities have worked with this terrorist organization. This method of funding is so important that the government of United States has come to freeze funds of NGOs as Global Relief Foundation, Holy Land Foundation for Relief and Development, International Benevolence or Islamic American Relief Agency, among others. These hard measures have not been entirely successful, as they show that United States still are unaware of the main ways of financing these organizations, and have also helped to the resentment of the affected communities, since in some cases, the preventive measures taken by the US have been forced to close some of these organizations (Giménez-Salinas Framis, pp. 3-5).

I11egal sources of funding may be the money that comes from crimes such as theft, extortion (Passas and Giménez-Salinas Framis, 2007, p.495) kidnapping, the use of shell companies, or the case that concerns us in this paper, money laundering .

The threats associated with money laundering and terrorist financing are constantly evolving, which requires regular updates of the rules. Following the model of the fight against money laundering, international organizations as FATF and the European Directives (Johnson, J. 2008, p.7-21) the EU Members have chosen to develop two different lines to combat terrorist financing. First, the preventive line, which, as well as in the fighting against money laundering, would be to establish a series of obligations for different entities (banks, casinos, lawyers….), through with which they should identify suspicious transactions; and secondly a repressive line, which would consist on the offenses specified in the Criminal Codes. (Schneider and Caruso, 2011, p. 6-8)

Internal Market and Services Commissioner Michel Barnier said: "The Union is at the forefront of international efforts to combat the laundering of the proceeds of crime. Flows of dirty money can damage the stability and reputation of the financial sector, while terrorism shakes the very foundations of our society. In addition to the criminal law approach, a preventive effort via the financial system can help to stop money-laundering. Our aim is to propose clear rules that reinforce the vigilance by banks, lawyers, accountants and all other professional concerned" (Barnier, 2013). So, preventive measures are the first step to fight against this delinquency and stop the flow of the illegal money.

Global Journal of Management and Business Research (B) Volume XIV Issue VI Version I Year 2014

III. Instruments to Fight Against Financing of Terrorism and Money Laundering

The main international and European instruments against terrorist financing are the following (Ertl. 2004, p-11):

- International Convention for the Suppression of the Financing of Terrorism (1999).
- Resolution 1373 (2001) of the Security Council. According to this resolution, states must punish terrorist financing and assistance for terrorist activities.
- Europe Convention on the Suppression of Terrorism 1977 (amended in 2003).
- Council of European Convention on the Prevention of Terrorism (2005).
- Council of Europe Convention on Money Laundering, Search, Seizure and Confiscation of the Proceeds from Crime and on the Financing of Terrorism.
- Council Framework Decision of 13 June 2002 on combating terrorism.
- Directive 2005/60/EC on the prevention of the use of the financial system for money laundering and terrorist financing.
- 9 Special Recommendations FATF on Money Laundering & Terrorist Financing.

In general, all the international instruments establish the need of the separate offense of the crime of financing of terrorism. It can be seen that preventive measures to combat the financing of terrorism are identical to those measures establish to fight against money laundering: Know your customer, keeping documents for 5-10 years (depends on the legislation of the country), etc.

The creation of the FIU (Fiscal International Unit) is one of the major instruments to combat these types of crimes. These units mainly analyze and transmitted to the competent authorities (or each other) information on suspicious activities of money laundering or terrorist financing (Palicio Díaz-Faes, 2010, p.7).

The cell responsible for carrying out the terrorist attack of 11S was based in Hamburg. This fact made that the German government began to set up measures urgently, with the main purpose of preventing the commission of new terrorism attacks on German territory. Thus, after the 11S, two security packages were developed, one repressive and other preventive:

The First Security Package (November 9, 2001) that was repressive and included the following measures:

1. Introduction of 129b StGB (Europeanization of criminal law). With the introduction of this provision, the German legislative intended to prosecute members of criminal organizations and terrorists once they were in Germany (although it was not necessary that they carried out a terrorist act).
2. Forfeiture. One of the most important methods to fight against these crimes. To this end, paragraph 2 of Article 129b StGB provides that the confiscation will change under the terms established in paragraphs 73d and 74a StGB.
3. Creation of the Evidence Central Auditors (Kontenevidenzzentrale). This measure should facilitate not only the discovery of transfers of funds aimed at financing terrorist activities but also those for money laundering.

The Second Security Package that was preventive and established the *Terrorismusbekämpfungsgesetz* of 9 January 2002 which included the creation of the Joint Defence against Terrorism (*Gemeinsames Terrorismusabwehrzentrum*, GTAZ) in 2004, among other things.

After the security packages new legislation was developed. For the purposes of this paper, we will mention the *Geldwäschekämpfunggesetz* of 8 August 2002, with which the obligation of financial institutions to identify and report suspicious transactions was intensified and the creation of the BaFin (*Bundesanstalt für Finanzdienstleistungsaufsicht)* in 2003. BaFin tries to prevent any misuse of the financial system for the purposes of money laundering, terrorist financing and other crimes. For this purpose, BaFin ensures that the companies and persons under its supervision implement any statutory obligations adopted for prevent these crimes.

The problem is that the reforms carried out in Germany to combat money laundering in relation to the control of financial transactions cannot be used to combat against those terrorist that have a small budget for financing their criminal activities or those who use informal systems as the Hawala-Banking

IV. Money Laundering

Economic development and globalization of international markets have created a favorable atmosphere for the emergence of new forms of crime such as money laundering, which may contribute to destabilized and damage economic systems. In particular, money laundering has acquired great importance in the last two decades what has caused on the one hand, the establishment and development of preventive measures of money laundering and, on the other hand, a progressive hardening of penal measures

Money laundering is a phenomenon that was born relatively recently, closely related to drug trafficking. In Spain, as from the appearance of the 1995 Penal Code, money laundering was associated with several serious crime that are to be punished by more than three years of prison, but due to the last reform of the Penal Code, money laundering can be associated with any type of crime.

As money laundering is a transnational problem, the international community has tried to boost the fight against such crime, approving of conventions and treaties, which have been adapted in the internal acts of the European States to take repressive measures and preventive measures. Launderers have taken advantage of this international factor to carry out their activities outside national borders, looking for countries where the prevention is no strict. Thus, one of the methods most used for money laundering are tax havens, where they can easily avoid the hefty taxes that some people, both natural and legal, have in their places of origin. Therefore, in recent years, the tax information exchange among States has acquired dimensions unthinkable a few decades ago, it all in the interest of stability of the global economy.

To summarize, the purpose of money laundering is that the funds obtained through illegal activities appear as the result of legitimate activities and circulate apparently legal in the financial system (Schneider and Windischbauer, U, 2008, p.5).

V. Differences between Money Laundering and Financing of Terrorism. Money Laundering Reverse

From the definitions of money laundering and terrorism financing we can see that the objective of money laundering is giving a legitimate appearance to the money that comes from crimes. Contrary to this, financing of terrorism use legitimate or illegitimate funds that are used for illegitimate activities. Because of this, terrorism financing has been called *"money laundering in reverse"*.

So, should money laundering and financing of terrorism be regulated together? Money laundering and financing of terrorism, despite being totally different procedures, use the same methods to them purposes, therefore, although a priori they may seem diametrically opposed between them, they share a lot of factors in common. The process of financing of terrorism works like money laundering, but in reverse. In other words, it can be seen how terrorist financing shares the modus operandi of money laundering but in the other way (Cano Paños, 2008 p.7). While the money laundering process involves injecting illegally money into the financial system to become legal, in terrorist financing the process is reversed, this is that we have legal or illegal funds that will be used for illegal activities. As a result, in financing of terrorism becomes more important the trail concealment that the money laundering process.

The different is the purpose of money laundering and financing of terrorism, so, this difference of purpose do not always permit that preventive mechanisms to combat money laundering are equally effective in preventing terrorist financing. Anyway, in practice, money laundering and terrorist financing can often appear intermingled, their closeness is irrefutable.

But one problem of this reasoning is that when we have money from illegal sources to finance illegal activities such as terrorism, money laundering is unnecessary and ineffective means to control for these cases. This money will never be introduced in the financial system and its detection is extremely complicated. In these cases, the money is kept in the underground economy and if they need to move this money, these organizations use the informal transfer modes parallel to traditional financial system whose goal is to blur the money trail (the hawala system). So, the money remains in the informal economy and uses informal procedures.

To sum up, although the methods to combat money laundering are not always effective to combat financing of terrorism, notwithstanding, in order to fight against these crimes we think that a cooperation between the authorities and the organism in charge of these crimes will be very effective and they will change information about both directions of financial flows (from legal to illegal and vice versa).

Also, we must keep in mind that terrorist organizations sometimes do not require major infrastructure to carry out their criminal purposes because some attacks are really low cost and the financial resources needed for these groups are not significant enough to arouse suspicions for the control authorities. So, financial controls are not a truly effective method for fighting financing of terrorism. We need other methods to control and prevent this crime because the money that they use for their criminal purposes is only a mean not the end of the terrorist attack.

After 11S multitude of measures were developed to reduce the financing of terrorism, (i.e. to detect suspicious transactions and proceed to lock them). These types of measures have been mostly preventive and ineffective because the authorities are fighting against an unknown phenomenon with methods that have been created for other crimes, such as money laundering, but not identical. But it is a first step to fight against financing of terrorism (Campón Domínguez J.A., 2004, pp-120).

VI. Conclusions

Terrorism and money laundering are a challenge to modern societies. Terrorism may produce direct costs (the terrorist attacks) and indirect costs, the reaction of economic agents to the threat of terrorism and to money laundering. (Krieger and Meierrieks, 2011, p. 20-21). We have focused this paper in the indirect costs of these crimes and how the governments fight against this delinquency with preventive and repressive measures. So, we argued that the preventive measures are more effective that repressive measures to fight against these types of crimes.

The governments may create instruments to prosecute the financial funds of these terrorist groups. We must put the start point of these legislations in the 11S. After these terrorist attacks several measures were introduced to fight against money laundering which were extended to face terrorist financing. However, as we have said in this paper, a simple analogy between money laundering and terrorist financing is a weak comparison. The aim of money laundering is to give appear legitimate to the money. Contrary to this, terrorist groups can be financed by legitimate or illegitimate sources but always the use of these funds will be criminal. For that, some authors say that terrorist financing is "money laundering reverse".

Should be terrorist financing and money laundering be regulated together on preventive measures? The finance of terrorism (and considering the role of money laundering in this process) must be fight since the point of view of preventive legislations, interrupting the flows of money. This preventive policy tries to make terrorism more difficult and expensive and thus less likely. The problem of these preventive methods is that nowadays there are terrorist groups that only need a small budget for their criminal purposes. This movement of funds can be less easily detected by money laundering prosecutors. So, we think that, with the preventive legislation that exist nowadays to prosecute financing of terrorism and money laundering, we need to add new exclusive legislation to fight against financing of terrorism, because this crime have peculiarities that money laundering does not has.

Finally, we think that it is necessary to incorporate a specific offense criminalizing terrorist financing, different from the crime of terrorism but it is desirable that it complies with our tradition, ancient history to suffer the scourge of this extremely serious crime. Maybe, in the future, we could move towards a European criminal law.

References Références Referencias

1. Barnier, M., 2013. Anti-Money Laundering: Stronger rules to respond to new threats. *European Commission Press Release*. http://europa.eu/rapid/press-release_IP-13-87_en.htm accessed July 10, 2013).
2. Campón Domínguez J.A., 2004. El blanqueo de capitales y la financiación del terrorismo como amenazas a la seguridad. *Cuadernos de la Guardia Civil: Revista de seguridad pública,* ISSN 1136-4645, Nº 30, pp. 119-144.
3. Cano Paños, M.A., 2008. Los inicios de la lucha antiterrorista en Alemania. *Revista Electrónica de Ciencia Penal y Criminológica,* p. 1-31 http://criminet.ugr.es/recpc/10/recpc10-14.pdf (accessed July 10, 2013)
4. Enders, W., Sandler, T. 2002. Patterns of Transnational Terrorism, 1970-1999: Alternative Time-Series Estimates, *International Studies Quarterly*, 46(2), 145-165.
5. Ertl, B. 2004. Der Kampf gegen Geldwäscherei und Terrorismusfinanzierung, *Working Paper 4/2004*, Bundesministerium für Finanzen, Vienna. http://www.diw.de/documents/publikationen/73/diw_01.c.404013.de/diw_econsec0065.pdf (accessed August 6, 2013)
6. FATF/OECD (2010a) "FATF 40 recommendations, October 2003, incorporating all subsequent amendments until October 2004", Financial Action Task Force, Paris, www.fatf-gafi.org (accessed August 6, 2013)
7. FATF/OECD (2010b) "FATF IX Special recommendations on terrorist financing, October 2001, incorporating all subsequent amendments until February 2008", Financial Action Task Force, Paris, www.fatf-gafi.org (accessed August 6, 2013).
8. Giménez-Salinas Framis, A., 2007. La financiación del terrorismo de Al-Qaeda: una lucha desenfocada. *Athena Paper*, Vol. 2, No 22, http://www.gees.org/documentos/Documen-02655.pdf (accessed August 5, 2013).
9. Haigner, S.D., Schneider, F. and Wakolbinger, F., 2012. Combating money laundering and the financing of terrorism: A survey. Economics of Security Working Paper 65, Berlin: *Economics of Security.* http://www.diw.de/documents/publikationen/73/diw_01.c.404013.de/diw_econsec0065.pdf(accessed August 5, 2013).
10. Hardouin P., Weichhardt, R. 2006. Terrorist fund raising through criminal activities, *Journal of Money Laundering Control,* 9(3), 303-308. http://www.emeraldinsight.com/journals.htm?articleid=1563503&show=abstract (accessed August 5, 2013).
11. Hinojosa Martínez, Luis M., 2009. La financiación del terrorismo y las Naciones Unidas. Madrid. Tecnos.
12. Johnson, J. 2001. In Pursuit of Dirty Money: Identifying Weaknesses in the Global Financial System, *Journal of Money Laundering Control*, 5(2), 122-133.
13. Johnson, J. 2008. Is the global financial system AML/CFT prepared?. *Journal of Financial Crime*, 15(1), 7-21.http://www.emeraldinsight.com/journals.htm?articleid=1641902&show=abstract (accessed August 7, 2013).
14. Tim Krieger, T. and Meierrieks, D., 2011. Terrorist Financing and Money Laundering. *Working papers*

series.http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1860069(accessed August 5, 2013).

15. Koh, J.-M., 2006. *Suppressing terrorist financing and money laundering,* Springer, Berlin.
16. Laufhütte, Heinrich Wilhelm / Rissing-van Saan, Ruth / Tiedemann, Klaus (Hrsg.), 2009. Leipziger Kommentar zum StGB, Band 5, 12. Aufl. Berlin.
17. Levi, M., Gilmore, W. 2002. Terrorist Finance, Money Laundering and the Rise and Rise of Mutual Evaluation: A New Paradigm for Crime Control. *Financing Terrorism*, Netherlands, Kluwer Academic Publishers, 87-115.
18. Palicio Díaz-Faes, I., 2010. El intercambio internacional de información financiera y la lucha contra la financiación del terrorismo: el acuerdo UE-EEUU sobre Swift. Análisis del Real Instituto Elcano (ARI), ISSN-e 1696-3466, Nº. 49,pp.http:www.realinstitutoelcano.org/wps/wcm/connect/67ec378041c58174a6dcb6a33d11d698/ARI492010_Palicio_intercambio_informacion_financiera_terrorismo_Swift.pdf?MOD=AJPERES&CACHEID=67ec378041c58174a6dcb6a33d11d698 (accessed August 6, 2013).
19. Passas, N., Giménez-Salinas Framis, A., 2007. La financiación del terrorismo de Al-Qaeda: mitos y realidades. Inteligencia y seguridad: Revista de análisis y prospectiva, 2, junio-noviembre, pp-493-521.http://espacio.uned.es/fez/eserv.php?pid=bibliuned:DerechoPenalyCriminologia2007-15&dsID=financiacion_terrorismo.pdf (accessed August 5, 2013).
20. Passas, N., 2004. Law Enforcement Challenges in Hawala-related Investigations. *Journal of Financial Crime* 12(2). http://www.emeraldinsight.com/journals.htm?articleid=1533889&show=html (accessed August 7, 2013).
21. Schneider, F. and R. Caruso 2011. The (Hidden) Financial Flows of Terrorist and Transnational Crime Organizations: A Literature Review and Some Preliminary Empirical Results. *Economics of Security Working Paper* 52, Berlin: Economics of Security. http://www.diw.de/documents/publikationen/73/diw_01.c.386645.de/diw_econsec0052.pdf (accesed August 7, 2013).
22. Schneider, F. 2009. Die Finanzströme von Organisierter Kriminalität und Terrorismus: Was wissen wir (nicht)?. *Vierteljahreshefte zur Wirtschaftsforschung,* DIW Berlin, 78(4), 73-87.
23. Schneider, F., Dreer, E., Riegler, W. 2006. *Geldwäsche: Formen, Akteure, Größenordnung – Warum die Politik machtlos ist.* Gabler-Verlag, Wiesbaden.
24. Schneider, F., Windischbauer, U., 2008. Money Laundering: Some Facts, *European Journal of Law and Economics*, 26(4), 387-404. http://econpapers.repec.org/article/kapejlwec/v_3a26_3ay_3a2008_3ai_3a3_3ap_3a387-404.htm (accesed August 7, 2013).
25. Shelley, L., 2005. *The Nexus between Terrorism and Organized Crime. Confronting Terrorism Financing, Lanham,* MD , University Press of America, 29-33.
26. Wang, J., 2011. Regulating Hawala: a comparison of five national approaches. *Journal of Money Laundering Control,* 14(3), 210-231.

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 14 Issue 6 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

The Causal Relationship between Government Revenue and Expenditure in Jordan

By Hussein Ali Al-Zeaud
Al al-Bayt University, Jordan

Abstract- The main purpose of the study is to examine the causal relationship between government revenues and expenditures of the Jordan government over the period from 1990 to 2011 using Granger causality and VECM tests methodology. Which provides channels of causation between government revenues (GR) and government expenditures (GE).The empirical results show that bidirectional causality running between revenues and expenditure. This result supports lend support to the fiscal synchronization hypothesis, implying that government of Jordan makes its revenues and expenditures decisions simultaneously. On other hand, it shows that allocated expenditures decide the amount of revenues which in turn affects the size of expenditures for the present and the next fiscal year(s).Thus the policy maker should pay attention to the bidirectional causality between government expenditures and revenues which might complicate the government's efforts to control the budget deficit and may contribute in explaining the high national debt figure.

Keywords: government expenditures, revenues, Granger causality, VECM.

GJMBR-B Classification: JEL Code: O10

THECAUSALRELATIONSHIPBETWEENGOVERNMENTREVENUEANDEXPENDITUREINJORDAN

Strictly as per the compliance and regulations of:

The Causal Relationship between Government Revenue and Expenditure in Jordan

Hussein Ali Al-Zeaud

Abstract- The main purpose of the study is to examine the causal relationship between government revenues and expenditures of the Jordan government over the period from 1990 to 2011 using Granger causality and VECM tests methodology. Which provides channels of causation between government revenues (GR) and government expenditures (GE).The empirical results show that bidirectional causality running between revenues and expenditure. This result supports lend support to the fiscal synchronization hypothesis, implying that government of Jordan makes its revenues and expenditures decisions simultaneously. On other hand, it shows that allocated expenditures decide the amount of revenues which in turn affects the size of expenditures for the present and the next fiscal year(s).Thus the policy maker should pay attention to the bidirectional causality between government expenditures and revenues which might complicate the government's efforts to control the budget deficit and may contribute in explaining the high national debt figure.

Keywords: government expenditures, revenues, Granger causality, VECM.

I. Introduction

Government budget deficits have significant impact on the economy. Such fiscal imbalance tends to reduce national savings and economic growth. Therefore, the decrease of the fiscal deficit by reducing government expenditures and/or raising revenues would stimulate economic growth. (Saeed and Somaye, 2012) However, one of the most studied topics in macroeconomics is the testing of relationship between government expenditures and its revenues.

The causality between government expenditures and revenues has important public policy implications because the controls of the size of the government and budget deficits are dependent on the relationship between these variables (Baffes and Shah, 1994; Baghestani and McNown, 1994; Darrat, 1998; Ross and Payne, 1998).

Theoretically, there are three main hypotheses on this relationship in the literature. The first hypothesis; the tax-and-spend hypothesis revenue changes expenditure was argued by Friedman (1978). According to this hypothesis unidirectional causality runs from revenue to expenditure so an increase in tax or revenue will lead to increases in public expenditure, and this may result in the inability to reduce budget deficits (Chang, 2009).

On the contrary, Buchanan and Wagner (1978) propose an increase in taxes revenue as remedy for deficit budgets. Their point of view is that with a decline in taxes the public will perceive that the cost of government programs has fallen. The second hypotheses; spend and tax hypothesis suggests that government spending leads revenue (Baghestani and McNown, 1994).The third hypotheses; Fiscal synchronization was suggested by Musgrave (1966) and Meltzer and Richard (1981), is based on the belief that public revenue and public expenditure decisions are jointly determined. It is, therefore, characterized by contemporaneous feedback or bidirectional causality between government revenue and government expenditure Chang, (2009).

In general, there are three reasons why the nature of link between government expenditure and revenue is important. First, if the "revenue-and-spend" hypothesis holds, budget deficits can be avoided by implementing policies that stimulate government revenue. Second, if bi-directional causality does not hold, then government revenue decisions are made independently from government expenditure decisions. Third, if the spend-revenue hypothesis holds, then government spends first and pay for this spending later by raising revenues Narayan and Narayan(2006). Jordan has been facing persistent budget deficits since long hence it is appropriate to find the causality between government revenue and expenditure. But on the empirical side, there is very limited literature on the issue for Jordan.

II. Literature Review

In this section, theoretical literature is reviewed; numerous empirical studies available on revenue and expenditure nexus all over the world but there is no consensus about the linkage between these variables. Unidirectional causal evidences from revenue to expenditure and from expenditure to revenue are available in the literature whereas some studies claims bidirectional linkage between these important variables. Besides that revenue and expenditure independence are also reported in the literature.

Rafaqet and Mahmood (2012) examine government revenue and expenditure nexus for Pakistan by using annual data for the period 1976-2009. Using

Author: Deputy Dean of Faculty of Finance and Business Administration, Al al-Bayt University, Mafraq, Jordan.
e-mail: husseinhah@yahoo.com

Johansen cointegration and Granger causality techniques, they found that there is no long run relationship among the variables whereas short run Granger causality analysis unveils that government revenue and expenditure have no causal linkage in Pakistan.

Muhammad, et.al.(2012)investigate on the unidirectional causality between government expenditures and the revenues, Annual data for Pakistan from the period of 1979 to 2010 using Granger causality for the outlined variables. The results indicate that there is an uni-directional causality between the expenditures and revenues, which runs from tax revenues to govt. expenditures, that is the previous lags of tax revenue has a causal impact on the current govt. spending.

Omo and Taofik (2012) examine the long-run relationships and dynamic interactions between the government revenues and expenditures in Nigeria over the period 1970 to 2008. using Autoregressive Distributed Lag (ARDL) bound test the results, indicate that there is the existence of a long run relationship between government expenditures and revenues when government expenditure is made the dependent variable. When revenue was made the dependent variable, no evidence of a long run relationship was found. The tax- spend hypothesis was therefore confirmed.

Mohsen, et.al.(2012) examine the causal relationship between the government expenditure and non oil revenues in a panel of 11 selected oil exporting countries by using panel unit root tests and panel cointegration analysis. The results show a strong causality from GDP and non oil revenues to government spending in the oil exporting countries. Yet, spending does not have any significant effects on revenues in short- and long-run. This supports the tax-and-spend hypothesis of Friedman (1978), implying that raising taxes in an attempt to reduce deficit will also cause expenditure to rise. Therefore it will not be possible to reduce deficit by increasing taxes.

Saeed and Somaye (2012) investigate the causality and the long-run relationships between government expenditure and government revenue in oil exporting countries during 2000-2009 by using P-VAR framework. Since the major share of total revenue in these countries is related to the oil revenue, hence the oil revenue is applied as proxy of total revenue. The results show that there is a positive unidirectional long-run relationship between oil revenue and government expenditures.

Yousef and Mohammad (2012) investigate the relationship between government revenue and government expenditure in Iran by applying the bounds testing approach to cointegration. The results of the causality test show that there is a bidirectional causal relationship between government expenditure and revenues in both long run and short run. Therefore, the results of this paper are consistent with fiscal synchronization hypothesis.

Owoye and Onafowora (2011) examined the causal relationship between tax revenues and government expenditures in twenty-two OECD countries, eleven European Union (EU) member states, and eleven non-EU using ARDL bounds test and the Toda-Yamamoto approach to test for causality. The results show that the long-run and short-run causal patterns differ across these groups within OECD. For the long-run causal patterns they find evidence to confirm the tax-and-spend hypothesis in eight of the twenty-two countries; but the evidence is more prevalent within the EU countries, where tax burdens are much higher than in the non-EU OECD countries.

Keho (2010) Study the data from 1960 to 2005 of European space to analyze the cause and effect relationship between government expenditure and revenue Collection while integrating and confirming the unidirectional causality between them as, his findings of granger causality test indicate the unidirectional causality from government revenue to expenditures.

Chang and Chiang (2009) investigate the relationship between government revenue and government expenditure in 40 Asian countries and indicate that there is a bidirectional causal relationship between government expenditure and revenues in both the long and the short run so that fiscal synchronization hypothesis is confirmed.

The summary of the literature from the foregoing and generally is that understanding the relationship between government expenditures and revenues is best done through country specific analysis. In addition, the hypothesis regarding the relationship between government revenues and expenditures has no discernable pattern among countries, in terms of whether developed or developing. Lastly, the results obtainable are sensitive to the nature of the data utilized as well as the estimation approach.

III. Econometric Methodology

The objective of this section is to examine the presence of interdependence and directions of causality between government revenue and expenditure in the case of Jordan. This examination is based on time series data from 1990 to 2011. The existing empirical work on the direction of causality between government revenue and expenditure uses granger-causality tests which we is applied in this study too.

In order to examine the relationship between government revenue and expenditure in Jordan, a two-step procedure is adopted. The first step investigates the existence of a long-run relationship between the variables through a cointegration analysis. The second step explores the causal relationship between the series. If the series are non-stationary and the linear combination of them is nonstationary, then standard granger's causality test should be employed. But, if the series are nonstationary and the linear combination of them is stationary, Error Correction Method (ECM) should be adopted. For this reason, testing for cointegration is a necessary prerequisite to implement the causality test.

We perform our analysis in two steps. First, we test for unit root vs. stationarity. Then we test for no co-integration vs. co-integration. The objective of unit root test to empirically examine whether a series contains a unit root. Since many macroeconomic series are non stationary (Nelson and Plosser 1982), unit root test are useful to determine the order of integration of the variables and, therefore, to provide the time-series properties of data. If the series contains a unit root, this means that the series is nonstationary. Otherwise, the series will be categorized as stationary. In order to implement a more rigorous test to verify the presence of a unit root in the series, an Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) test are employed.

a) Unit root test

In order to model the variable in a manner that captures the inherent characteristics of its time-series, we use the Schwarz Information Criterion (SIC) to determine the lag structure of the series. This test represents a wider version of the standard Dickey-Fuller (AD) test (1979). Given a simple AR(1) process:

$$y_t = \rho y_{t-1} + \delta x_t + \varepsilon_t \qquad (1)$$

Where (y_t) is a time series (in this case, GR and GE), (x_t) represents optional exogenous regressors (e.g. a constant or a constant and a trend), (ρ) and (δ) are parameter to be estimated and (ε_t) is a white noise error component, the standard DF is implemented through the Ordinary Least Squares (OLS) estimation of the above AR(1) process after subtracting the term (y_{t-1}) from both sides of the equation. This leads to the following first difference equation:

$$\Delta y_t = \alpha y_{t-1} + \delta x_t + \varepsilon_t \qquad (2)$$

Where (Δ) is the first difference operator, α=p-1, and (ε_t) is the error term with zero mean and constant variance. Now, adopting a simple t-test, if α=0 (i.e. if p=1), then (y) is a nonstationary series and its variance increases with time. Under such cases, the series is said to be I(1), requiring to be differenced once to achieve stationary. However, if the series is correlated at higher order lags, the assumption of white noise error is violated. In such case, the ADF test represents a possible solution to this problem: it permits to correct for higher order correlation employing lagged differences of the series (y_t) among the regressors. In order words, the ADF test "augments" the traditional DF test to assuming that the (y) series is an AR(p) process and, therefore, adding (p) lagged difference terms of the dependent variable to the right hand side of the first difference equation given above. This gives the following equation:

$$\Delta y_t = \alpha y_{t-1} + \delta x_t + \sum_{i=1}^{p} \phi \Delta y_{t-i} + \varepsilon_t \qquad (3)$$

In both cases, a constant and a linear trend were included since this represents the most general specification.

b) Co-integration test

In order to test for causality between the series (GR) and (GE) through the ECM, it's necessary to verify if the two series are co-integrated. Two or more variables are said to be co-integrated if they share a common trend. In other words, the series are linked by some long-run equilibrium relationship from which they can deviate in the short-run but they must return to in long-run, i.e. they exhibit the same stochastic trend (Stock and Watson, 1988).

Co-integration can be considered as an exception to the general rule which establishes that, if two series are both I(1),then any linear combination of them will yield a series is integrated of a lower order in this case, in fact, the common stochastic trend is cancelled out, leading to something that is not spurious but that has some significance in economic terms.

The existence of a co-integration relationship between the series (GR) and (GE) was verified implementing a unit root ADF and PP tests on the residuals from the two long-run regressions between the levels variables, estimated through the OLS method:

$$GR = \beta_0 + \beta_1 GE + \varepsilon_i \qquad (4)$$

$$GE = \beta_0 + \beta_1 GR + \varepsilon_i \qquad (5)$$

In the language of co-integration theory, regression such as (equation 4 and 5) are known as co-integrating regressions and the slope parameters and β0 and β1 are known as the co-integrating parameter (Gujarati & Sangeetha, 2007).

However, Johansen and Juselius procedure is considered better than Engle-Granger even in a two variables context and has better small sample properties since it allows feedback effects among the variables. The Johansen technique enables us to test for the existence of non-unique Cointegration relationships in more than two variables cases. The Johansen procedure of Cointegration is a test of the rank of the matrix .

Co-integration between two non-stationary series requires that the matrix Π does not have full rank ($0 < r(\Pi) = r < n$) where (r) is the number of Co-integration vectors.

Two tests statistics are suggested to determine the number of Co-integration vectors determined based on a likelihood ratio test (LR): the trace test and the maximum eigenvalues test statistics.

The trace test (λ_{trace}) is defined as:

$$Trace = -T\sum_{i=r+1}^{n}\log(\hat{\lambda}_i) \qquad (6)$$

The null hypothesis is that the number of Cointegration vectors is$\leq$ r against the alternative hypothesis that the number of Cointegration vectors = r.

The maximum eigenvalues test ($\lambda_{\max}$) is defined as:

$$\lambda_{\max} = -T\log(1-\hat{\lambda}_i) \qquad (7)$$

Which tests the null hypothesis that the number of Cointegration vectors = r against the alternative that they are r+1.

c) Causality Test

Given the results from co-integration test, the causality relationship between (GR) and (GE) should be tested through the implementation of an ECM. Before proceeding with it, the standard Granger (1969), the concept of "causality" assumes a different meaning with respect to the more common use of the term. The statement(GR) Granger causes (GE) or vice versa, in fact, does not imply that (GR) and (GE) is the effect or the result of (GR) and (GE), but represents how much of the current (GR) and (GE) can be explained by the past values of (GR) and (GE) and whether adding lagged values of (GR,GE) can improve the explanation. For this reason, the causality relationship can be evaluated by estimating the following two regressions:

$$\Delta GR_t = \beta_0 + \sum_{i=1}^{m}\beta_{1i}\Delta GR_{t-i} + \sum_{i=1}^{n}\beta_{2i}\Delta GE_{t-i} + \varepsilon_i \qquad (8)$$

$$\Delta GE_t = \beta_0 + \sum_{i=1}^{n}\beta_{1i}\Delta GE_{t-i} + \sum_{i=1}^{m}\beta_{2i}\Delta GE_{R-i} + \varepsilon_i \qquad (9)$$

Where (m) represents the lag length and should set equal to the longest time over which one series could reasonable help to predict the other.

Following this approach, the null hypothesis that (GE) does not granger cause (GR) in regression (8) and that (GR)does not Granger cause (GE) in regression (9) can be tested through the implementation of a simple F-test for the joint significance of, respectively, the parameters β1i and β2i.Following the equations (8) and (9) were estimated using four lags of each variable which should represent and adequate lag-length over which one series could help to predict the other.

d) Error Correction Model

Once the variables in a VAR system are co-integrated, following Johansen–Juselius, we can use a vector error-correction models (VECM) in which an unconstrained VAR is used in order to assess the direction of Granger causality and to estimate the speed of adjustment to the deviation from the long-run equilibrium between government revenue (GR) and Expenditure (GE).

The error correction model is based on the two following equations:

$$\Delta GR_t = \beta_0 + \sum_{i=1}^{m}\beta_{1i}\Delta GR_{t-i} + \sum_{i=1}^{n}\beta_{2i}\Delta GE_{t-i} + \beta_3\eta_{t-1} + \varepsilon_i \qquad (10)$$

$$\Delta GE_t = \beta_0 + \sum_{i=1}^{m}\beta_{1i}\Delta GE_{t-i} + \sum_{i=1}^{n}\beta_{2i}\Delta GR_{t-i} + \beta_3\mu_{t-1} + \varepsilon_i \qquad (11)$$

Where (η_{t-1}) and (μ_{t-1}) represent the error-correction term lagged residual from the co-integration relations. The error correction terms (η_{t-1}, μ_{t-1}) will capture the speed of the short run adjustments towards the long run equilibrium. Furthermore, the error correction model equations (10) and (11) allow testing for short run as well the long run causality between government expenditure and revenues.

The short run causality is based on a standard F-test statistics to test jointly the significance of the coefficients of the explanatory variable in their first differences. The long run causality is based on a standard t-test. Negative and statistically significant values of the coefficients of the error correction terms indicate the existence of long run causality.

IV. Data Analysis

In this section, first we see the results of the primary analysis of the data series. Basically the time series data has a trend; it was proved by the graphs of government revenue (GR) and government expenditure (GE) during the period from 1990 to 2011. The results of unit root test are discussed below with the output of Augmented Dickey-Fuller test. To see the long run relationship, co-integration results also elaborated. Finally, the direction of causality will be analyzed. Table 1 shows the descriptive statistics of these two series.

Table 1 : Descriptive Statistics

variables	Mean	Median	Max	min	Std. Dev.	Skewness	Kurtosis
LGR	0.79765	0.62217	1.72330	0.01489	0.51218	0.32826	1.92439
LGE	0.91817	0.72829	1.92512	0.20049	0.54036	0.49333	1.94916

a) *Testing unit roots*

The first step in empirical work was to determine the degree of integration of both variables. The ADF and PP unit root test with intercept and with intercept and trend are adopted to check whether the variables contain a unit root or not. The results of ADF and PP test are reported in the Table 2 for the level as well as for the first difference of each of variable. The result shows that the null hypothesis that the series contain unit root cannot be rejected in both cases at zero order levels. But the hypothesis of a unit root is strongly rejected for the differenced series of both variables. Given the consistency and ambiguity of the results from this testing approach, we conclude that the series under investigation are I(1). This reveals that all both the government revenue and expenditure are non-stationary in its levels and stationary in first difference.

Table 2 : Results of ADF and PP test

Series	With intercept		With intercept and trend	
Levels	ADF	PP	ADF	PP
LGR	-3.012363 [0.249573]	-3.012363 [0.791300]	-3.644963 [-1.721988]	-3.644963 [-1.637502]
LGE	-3.012363 [1.418137]	-3.012363 [1.597031]	-3.644963 [-1.100418]	-3.644963 [-1.100418]
First difference				
ΔLGR	-3.020686* [-5.032742]	-3.020686* [-5.052478]	-3.658446* [-4.931242]	-3.658446* [-4.959425]
ΔLGE	-3.020686* [-4.140659]	-3.020686* [-4.145667]	-3.658446* [-4.865945]	-3.658446* [-4.865945]

*Note: * test critical values which denotes significant at 5% level.*

The number in parenthesis is the (t) statistic value.

b) *Testing Co-integration and Error Correction mechanism*

Since the first difference series are stationary, Let us examine the existence of co-integration between government revenue and expenditure. To test the co-integration or long run relationship, first we run the regression, Table 3-1 reports the results obtained from the co-integration tests.

Table 3-1: co-integration tests

Regression	ADF of residual
LGR on LGE	-3.012363* [-4.460183]
LGE on LGR	-3.012363* [-4.295122]

*Note: * test critical values which denotes significant at 5% level*

The number in parenthesis is the (t) statistic value.

The ADF unit root test suggests that the estimated residuals from equation 4 and 5 are stationary: in both the cases, the null hypothesis of a unit-root can be rejected, meaning that there is evidence of a co-integration relationship between the series government revenue and expenditure.

Having established the long run relationship by the Engle-Granger two-steps co-integration test, Johansen-Juselius procedure is used to further test for co-integration between government expenditure and revenues. Table 3-2 presents the result of the trace test (λ_{trace}) and maximum eigenvalues test (λ_{max}) statistics for the existence of long run equilibrium between the government expenditure and revenues .

Table 3-2 : co-integration test

Null Hypothesis	λ_{trace}	λ_{max}
r=0	44.63141 [25.87211]	40.61260 [19.38704]
r≤1	4.018808 [12.51798]	4.018808 [12.51798]

**terms in [ ] indicates 5% level critical value*

The null hypothesis of no Cointegration (r=0) based on both the trace test and the maximum eignvalues test between government expenditure and revenues is rejected at (5%) level of significance. However, the null hypothesis that $(r \leq 1)$ could not be rejected. The estimated two tests indicate that there is only one Cointegration vector.

c) causality tests

The above analysis suggests that there exists a long-run relationship between government revenue and expenditure in the country. But in order to determine which variable causes the other, granger causality test was used. The granger causality test results are presented in Table 4.

Table 4 : Granger causality test

Regression	Lag	F-statistics	P-Value	Granger causality
LGE on LGR Null hypothesis: LGR does not granger cause LGE	1	6.26239	0.0222	YES
LGR on LGE Null hypothesis: LGE does not granger cause LGR	1	3.63803	0.0726	YES

As shown in table 4, GR on GE is statistically significant at the 5% level, implying that there is causality running from GR to GE. The F statistics imply that the null hypothesis GR does not granger cause GE can be rejected at the 5% significance level. This means, higher revenue would lead to higher government expenditure. On the other hand, GE on GR is statistically significant at 10% level and the F statistics imply that the null hypothesis that GR does not granger cause GE can be rejected at the 10% significance level. This indicates that a increases in expenditure would induce higher revenue. Therefore, the study reveals bidirectional causation between government revenue and expenditure in Jordan, which is running from revenue (GR) to expenditure (GE) and vice versa.

Above findings lend support to the fiscal synchronization hypothesis, implying that government of Jordan makes its revenue and expenditure decisions simultaneously.

d) Vector Error Correction Model (VECM)

The vector Error Correction Model (VECM) is used to generate the short run dynamics. The number of lags in the model is one lag. Table 5 reports the results of vector error correction model. The findings from VECM are similar the ones resulting from the application of standard Granger causality test. Which is meaning that evidence of causal relationship in Jordan results from data.

Table 5 : vector error correction model

Regression	ΔLGR	ΔLGE
CONSTANT	0.056605 [1.60716]	0.091267 [3.67732]
η_{t-1}	-0.857538 [-2.11952]	
μ_{t-1}		-0.575836 [-2.36852]
ΔLGR_{-1}	0.255915 [0.80378]	-0.019922 [-0.08879]
ΔLGE_{-1}	0.109249 [0.35991]	-0.103984 [-0.48614]
R^2	0.257861	0.398926
S.E	0.084514	0.059555

(terms in brackets are t – ratios)

Table (5) presents the error correction models estimations. The error terms (η_{t-1}, μ_{t-1}) in both equations are statistically significant and negative at (5%) level of significance based on(t) test statistics which indicate that there is a bidirectional causality between government expenditure and revenues in the short run. Therefore, there is bi-directional causality between government expenditure and revenues in the long as well as in the short run. The value of (η_{t-1}) indicates the speed of adjustment of any disequilibrium towards a long-run equilibrium eighty five percent of the disequilibrium in (GR) is corrected each year, as well, The value of (μ_{t-1})indicates the speed of adjustment of any disequilibrium towards a long-run equilibrium fifty seven percent of the disequilibrium in (GE) is corrected each year. In addition, the significant error terms in both equations support the existence of a long run equilibrium relationship between (GR) and (GE).Furthermore, the estimates of the VECM indicate the existence of bidirectional causality running between (GR) and (GE).

The result of VECM emphasizes the bidirectional Granger causality between government revenue and expenditures which consists with the fiscal synchronization hypothesis.

V. Conclusions

This study tried to investigate the relationship between government revenues and expenditures in Jordan for the period 1990-2011 using cointegration and Granger causality tests. Investigation this relationship is important for understanding the role of government in allocation of its resources.

Based on empirical results we are able to accept the fiscal synchronization hypothesis. In addition, our empirical results further discover that there is a stable long-run equilibrium relationship between government revenues and expenditures, although, they may be in disequilibrium in the short run, as well, there exists bidirectional causality running between government revenue and government expenditure. This means that we can't reject the hypothesis that an increase in government revenue would lead to higher expenditure in Jordan, at the same time, we can't reject the hypothesis that an increase in government expenditure would induce higher government revenue. The results coincide with (AbuAl-Foul and Baghestani, 2004) in case of Jordan, (Gounder et al, 2007), (Aslan and Taşdemir, 2009), (Chang and Chiang, 2009), and (Chang et al., 2002) for Canada, who found that there is a bidirectional causality running between government revenue and government expenditures. Implying that government makes simultaneously its revenues and expenditures.

Finally, For the case of Jordan this paper lifts a very thoughtful suggestion for policy makers that Jordan is an economy where impositions of revenues (taxes) are decided on basis of allocated government expenditures. On other hand, expenditures would positively induce revenue which in turn affects the expenditures for the present and the next fiscal year(s). The bidirectional causality between government expenditures and revenues might complicate the government's efforts to control the budget deficit and may contribute in explaining the high national debt figure.

References Références Referencias

1. Afonso, A. and Rault, C., (2009), 'Bootstrap Panel Granger-Causality between Government Spending and Revenue in the EU', Economics Bulletin, 29(4), pp. 2542-2548.
2. Aslan, M. and Taşdemir M., (2009), 'Is Fiscal Synchronization Hypothesis Relevant for Turkey? Evidence from Cointegration and Causality Tests with Endogenous Structural Breaks' Journal of Money, Investment and Banking; Issue 12, pp. 14-25.
3. AboAl-Foul, B. and Baghesani, H. (2004). "The Causal Relation between Government Revenue and Spending: Evidence from Egypt and Jordan." Journal of Political Economy. Vol. 28, Number 2.
4. Akike, Hirotugu (1969) "Fitting Autoregressive Models of Prediction", Annals of the Institute of Statistical Mathematics, Vol. 2, pp. 630-39.
5. Anderson, W., M.S. Wallace, and J.T. Warner. (1986) "Government Spending and Taxation: What Causes What?" Southern Economic Journal, Vol. 52, pp. 630-639.
6. Baghestani, H., and R. McNown. (1994) "Do Revenue or Expenditures Respond to Budgetary Disequilibria?" Southern Economic Journal 60, pp. 311-322.
7. Barro, Robert J (1974) "Are Government Bonds Not Wealth?" Journal of Political Economy, Nov.-Dec., pp. 1095-1118.
8. Baffes, John and Anwar Shah,(1994) Causality and Comovement between Taxes and Expenditures: Historical Evidence from Argentina, Brazil and Mexico," Journal of Development Economics ,44 (1994):311-31.
9. Blackley, R. Paul (1986) "Causality between Revenues and Expenditures and the Size of Federal Budget", Public Finance Quarterly, Vol.14, No. 2, pp. 139-56.
10. Bohn, H. (1991) "Budget Balance Through Revenue or Spending Adjustment? Some Historical Evidence for the United States", Journal of Monetary Economics, 27: 335-359.
11. Buchanan, James M. and Richard W. Wegner. (1978) "Dialogues Concerning Fiscal Religion. Journal of Monetary Economics, Vol 4, pp. 627-636.
12. Chang, T. (2009), „Revisiting the Government Revenue-Expenditure Nexus: Evidence from 15 OECD Countries based on the Panel Data Approach‟. Czech Journal of Economics and Finance, 59(2), 165-172.
13. Chang, Tsangyao and Chiang, Gengnan (2009) "Revisiting th Government Revenue-expenditure Nexus: Evidenc 15 OECD Countries Based on the Panel Data Approach." Czech Journal of Economics and Finance, 59(2): 165-172.
14. Cheng, Benjamin S. (1999) "Causality between Taxes and Expenditures: Evidence from Latin American Countries", Vol. 23, No. 2, pp. 184-192.
15. Chang, T, Liu, W.R. and Caudill.(2002) "Tax - and spend, - spend - and - tax, or fiscal synchronization: new evidence for ten countries", Applied Economics, 34: 1553-1561.
16. Central Bank of the Islamic Republic of Iran (2010) Economic Research and Policy Department, Economic TimeSeDatabase (http://tsd.cbi.ir/).
17. Central Bank of the Islamic Republic of Iran (2010) Economic Res and Policy Department, Economic Time Series Database. (http://tsd.cbi.ir/).
18. Darrat, Ali F.,(1998) "Tax and Spend, or Spend and Tax? An Inquiry into the Turkish Budgetary Process," Southern Economic Journal 64 pp.940–56.
19. Eita, J. and Mbazima, D., (2008), 'The Causal Relationship between Government Revenue and Expenditure in Namibia', MPRA Paper, No. 9154.
20. Engle, Robert F., and Granger, Clive W. J. (1987). "Cointegration and Error Correction: Representation, Estimation, and Testing." Economterica, Vol. 55, pp. 251-276.
21. Friedman, M (1978) "The Limitations of Tax Limitation", Policy Review: pp. 7-14.
22. Granger, C. W. J. (1969) "Investigating Causal Relationship bEconometric Models and Cross Spectral Methods, Econometrica, 37, pp. 424-438.
23. Gounder, N.; Narayan, P. and Prasad, A., (2007), 'an Empiric Investigation of the Relationship between Government Revenue and Expenditure: The Case of the Fiji Islands', International Journal of Social Economics, 34(3), pp. 147-158.
24. Hakkio, Craig S., and Mark Rush. (1991). "Cointegration: How Short Is the Long0Run?" Journal of International Money and Finance, Vol.10, pp.571-581.
25. Hasan, M. and Lincoln, I. (1997) "Tax Then Spend or Spend Then Tax? Experience in the U.K., 1961-93", Applied Economics Letters, 4(4): 237-239.
26. Hoover, Kevin D., and Steven M. Sheffrin. (1992). "Causation, Spending, and Taxes: Sand in the Sandbox or Tax Collector for the Welfare State? American Economic Review 82:225-248.
27. Johansen, Soren and Juselius, Katarina. (1992). „Testing Structural Hypothesis in Multivariate Cointegration Analysis of PPP and UIP for KH." Journal of Econometric, Vol. 53, pp.211-244.
28. Johansen, Soren. (1991). "Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregressive Models." Econometrica, Vol. 59, pp. 1551-80.
29. Joulfaian, D. and R. Mookerjee (1991), "Dynamics of Government Revenues and Expenditures in Industrial Economies" Applied Economics, Volume 23, pp. 1839-1844.

30. Keho, Y., (2010), 'Budget Balance through Revenue or Spending Adjustments? An Econometric Analysis of the Ivorian Budgetary Process, 1960- 2005', Journal of Economics and International Finance, 2, 1, pp. 001-011.
31. Miller, S. and Russek, F.S. (1990) "Cointegration and Error-Correction Models: The Temporal Causality between Government Taxes and Spending", Southern Economic Journal, 57:617-629.
32. Meltzer and Richard,(1981) "A rational theory of the size of government", Journal of Political Economy, vol. 89, pp. 914-924. Mohsen , Maysam and Abbas Rezazadeh (2012), The Relationship between Revenue and Expenditure in Oil Exporting Countries, International Journal of Business and Behavioral Sciences Vol. 2, No.6. Muhammad , Syed , Amber and Tanzeel (2012), An Investigation of Granger Causality between Tax Revenues and Government Expenditures, European Journal of Scientific Research, Vol.68 No.3 (2012), pp. 340-344.
33. Musgrave, R. (1966). "Principles of Budget Determination" H. Cameron and W. Henderson (eds.), Public Finance Selected Reading. New York: Random House, pp. 15-27.
34. Nanthakumar, L., & R, Taha (2007). Have Taxes Led Government Expenditure in Malaysia?Journal of International Management Studies.
35. Narayan and Narayan,(2006) "Government Revenue and Government Expenditure Nexus: Evidence from Developing Countries", Applied Economic Letters, vol. 38, pp. 285-291.
36. Owoye, O. (1995) "The Causal Relationship Between Taxes and Expenditures in theG7Countries: Cointegration and Error-Correction Models", Applied Economics Letters, 2: 19-22.
37. Omo Aregbeyen and Taofik Mohammed (2012), Testing the Revenue and Expenditure Nexus in Nigeria: An Application of the Bound Test Approach, European Journal of Social Sciences, Vol.27 No.3 , pp. 374-380.
38. Owoye and Onafowora,(2011) "The Relationship between Tax Revenues and Government Expenditures in European Union and Non-European Union OECD Countries".
39. Phillips, P. C. B. and P. Perron. (1988). „Testing for a Unit Root in Time Series Regression." Biometrika, Vol.75, pp. 335-346.
40. Ross, Kevin L. and James E. Payne, (1998)"A Reexamination of Budgetary Disequilibria, " Public Finance Review 26 :67–79.
41. Rafaqet and Mahmood (2012) The Causal Relationship between Government Expenditure and Revenue in Pakistan, Interdisciplinary Journal of Contemporary Research in Business, vol.3,No.12.
42. Saeed and Somaye (2012), Relationship between Government Spending and Revenue: Evidence from Oil Exporting Countries, International Journal of Economics and Management Engineering (IJEME) IJEME Volume 2, Issue 2May 2012, PP. 95-97.
43. Xiaoming LI (2001) "Government Revenue, Government Expenditure, and Temporal Causality: Evidence from China", Applied Economics, 23: 485-497.
44. Yousef and Mohammad (2012), The Causality between Government Revenue and Government Expenditure in Iran, International Journal of Economic Sciences and Applied Research 5 (1): 129-145.

This page is intentionally left blank

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 14 Issue 6 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Nexus between Foreign Aid and Economic Growth: Evidences from Bangladesh

By Basharat Hossain

International Islamic University Chittagong, Bangladesh

Abstract- Bangladesh receives about $56.5 billion foreign aid during 1971-2012 periods. This paper analyzes 33 years data for 1980-2012 periods to show the effects of foreign aid on the economic growth of Bangladesh. This study estimates eight models including three for last three decades (1980-1990, 1991-2001, 2002-2012), four for the four different government periods, namely, Military government period (1982-1990), BNP (Bangladesh Nationalist Party) government (1991-1995, 2002-2006) , BAL (Bangladesh Awami League) government (1996-2001, 2009-2012) and the Whole Democratic government period (1991-2012) and one for entire period (1980-2012). This research finds that, foreign aid has positive effect on the economic growth of Bangladesh and it is statistically significant in two models. The contribution of aid to GDP is falling overtime. This paper also reveals that the aid generates decreasing returns because of capacity constraint of Bangladeshi institutions to utilize foreign aid effectively. This finding is consistent with previous findings of different researches.

Keywords: oreign aid, effect, economic growth, government, bangladesh.

GJMBR-B Classification: JEL Code: F43, P49

NEXUSBETWEENFOREIGNAIDANDECONOMICGROWTHEVIDENCESFROMBANGLADESH

Strictly as per the compliance and regulations of:

Nexus between Foreign Aid and Economic Growth: Evidences from Bangladesh

Basharat Hossain

Abstract- Bangladesh receives about $56.5 billion foreign aid during 1971-2012 periods. This paper analyzes 33 years data for 1980-2012 periods to show the effects of foreign aid on the economic growth of Bangladesh. This study estimates eight models including three for last three decades (1980-1990, 1991-2001, 2002-2012), four for the four different government periods, namely, Military government period (1982-1990), BNP (Bangladesh Nationalist Party) government (1991-1995, 2002-2006) , BAL (Bangladesh Awami League) government (1996-2001, 2009-2012) and the Whole Democratic government period (1991-2012) and one for entire period (1980-2012). This research finds that, foreign aid has positive effect on the economic growth of Bangladesh and it is statistically significant in two models. The contribution of aid to GDP is falling overtime. This paper also reveals that the aid generates decreasing returns because of capacity constraint of Bangladeshi institutions to utilize foreign aid effectively. This finding is consistent with previous findings of different researches.

Keywords: foreign aid, effect, economic growth, government, bangladesh .

I. Introduction

Foreign aid is one of the important sources to finance the development program in developing countries. Bangladesh is not exception to this (Lahiri, 2007, pp.200). Foreign aid can be defined as the economic assistance from one country to another country, intended either to provide humanitarian relief in emergencies, to promote economic development or to finance military expenditures (Friedman, 1995, pp.1-8). Aid may take the form of outright gifts of money, which may be tied to purchase from the donors, or untied and available for expenditure anywhere.

Aid may also be given in form of food, commodity, project or technical assistance. Aid fund is divided into two parts, namely, grants and interest based loans. Bilateral aid is given directly by a donor to a recipient country whereas multilateral aid is channeled through an international organization, without direct contact between donors and particulars recipients.

Bangladesh, is one of the most poorest and 5th densely populated country in the world with 1.37percent population growth per year (United Nation, 2012, pp.; 41-51 and GOB, 2013, pp.; 183-189). More than 154 million people lives in this country with 47 million poor people. The current GDP of this country is $116.4 billion with per capita GDP$ 859. Moreover, it is a low income country with yearly 6.03 percent GDP growth and most of its income is generated from the industrial sectors followed by agricultural sector (GOB, 2013, pp.279-351). In addition, the life expectancy of its people at birth is 65 years only. The adult literacy rate is only 57.91 percent and labor force (15-64 years) comprises by 62.1 percent of total population (BBS, 2010, *pp.23*). Bangladesh has achieved significant success in reducing extreme poverty during the last 42 years (1971-2013) (BBS, 2011, pp.132-141). Furthermore, different democratic governments have been ruling this country since 199, namely, BNP (Bangladesh Nationalist Party) government for two terms (1991-1995, 2002-2006), BAL (Bangladesh Awami League) government for two terms (1996-200, 2009-2012). While a Military government ruled this country for eight years (1982-1990).

Bangladesh receives aid since its independence in 1971. It receives foreign assistance mainly to finance the budget or trade deficit and the annual development program (ADP) over the period of time (Akash, 2003, pp. 129-132). Moreover, it also gets external assistance in form of food and commodity aid for various purposes in different years from the donors. Mainly for, reconstruction of the newly independent country, to overcome the various natural disasters such as flood, famine, cyclones etc. Bangladesh received about $56.5 billion foreign aid from the donor countries during 1971-2012 periods. While this figure recorded as $51.12 billion for the period of 1980-2012. This paper scrutinizes the 33 years data from 1980 to 2012 through econometric model. Moreover, In order to better understand the effect of aid on growth as well as any change of its effect over time, three separate models for shorter time periods, namely, 1980-1990, 1991-2001, and 2002-2012 were also estimated. During 1980-1990, it receives $15.342 billion while it increases to $16.984 billion in the period of 1991-2001 and in the last 11 years (2002-2012), the received amount was $18.789 Billion (GOB, 2013, pp.344).

Bangladesh receives the foreign assistance from both the multilateral and bilateral donors. Three

Author: Lecturer in Economics, Department of Business Administration, International Islamic University Chittagong, Chittagong. Bangladesh. e-mail: m_basarat06@yahoo.com

development partners – World Bank-International Development Agency (IDA), Asian Development Bank (ADB) and Japan provide 52.71 percent of the total disbursed aid. The biggest multilateral donor is the World Bank, which provided 23.11 percent of the total aid, ADB ranked second with a contribution of 16.09 percent and UN Agency secured third position by disbursing 5.34 percent of total aid in Bangladesh. Multilateral donors provide these amounts of aid almost entirely in the form of loans. Japan is the biggest bilateral donor, accounting for almost 13.51 percent of the total aid, almost evenly split between loans and grants. United States contributes 6.29 percent while United Kingdom provides 4.01 percent of the total foreign assistance as the bilateral donors to Bangladesh.

The foreign assistance received by Bangladesh is constituted mainly by the grants and interest based Loans. During 1971 - 2012 periods, loans occupied the large portion (58.22 percent) of the total external assistance while grants made up 41.78 percent of all foreign assistance. Conversely, the share of grants and loans in total aid changed over time. In the first decade after Independence (1971-1980), the amount of grants was more than half (51 percent) of all foreign aid and this share goes down consistently over the next three decades (1981-2012) and recorded as less than one-third (31 percent) of total aid during 2001-2012. Alarmingly, the share of loans in total aid rose from 49 percent in 1971 to 69 percent in 2012 respectively.

Bangladesh receives its external assistances mainly in three forms as food aid, commodity aid and project aid accordingly. More than two-third (67.7 percent) of the total aid was disbursed in the form of project aid during 1971-2012 period while commodity and food aid accounted for 21 percent and 12 percent respectively. Likewise share of Loan-Grants, the shares of the three forms of aid have changed over time. In the first decade (1971-1980) after independence, the donors provided the highest amount of Commodity aid (42 percent) and food aid (32 percent) for the poor people of Bangladesh. Over the period of time the dominant figure of Commodity and food aid steadily declined due to the reduction of dependency on these forms of aid and both together recorded as only 5.17 percent of total assistances in 2001-2012. On the contrary, the share of project aid progressively increases over the years, from 26 percent during 1971 to 94.83 percent in 2012.Bangladesh spends the foreign assistance in almost twenty sectors including agriculture, rural development, water, oil, gas, mineral resources, transport, education, planning, power, industry, infrastructure and health sector. Most of the aid has been spent in power, education, transport, rural development and agriculture sector respectively.

Over the period of time, this is a topic of intense debate that, whether the foreign aid has any positive effect on the economic development of the recipient countries. The aim of this paper is to examine the effect of foreign aid on the economic growth of Bangladesh. This paper estimates eight separate models by investigating the 33 years data for 1980-2012 periods in Bangladesh.

The results of the empirical analysis are presented in Tables 1 and 2. At first, four econometric models have been estimated for four different time periods: 1980-1990, 1991-2001, 2002-2012 as well as for the entire period of 1980-2012. The results of this analysis are presented in Table 1. Then the last four models were estimated for four different political government period, namely, Military government (1982-1990), BNP (Bangladesh Nationalist Party) government (1991-1995, 2002-2006) , BAL (Bangladesh Awami League) government (1996-2001, 2009-2012) and the Whole Democratic government period (1991-2012) accordingly. The results of this analysis are presented in Table 2.

II. Objective of the Study

The principal objective of this paper is to show relationship between the foreign aid and economic growth in the context of Bangladesh. More specifically, the aim of this paper is to disclose the effect of foreign aid on the economic growth of Bangladesh.

III. Literature Review

In the contemporary world, Developing countries receive foreign aid for economic development from the donor country, though there is a controversy that, whether the aid has any effect on the economic growth of recipient ((country (Perkins, 2006, pp: 124-74)). Joseph Stiglitz, Jeffrey Sachs, Nicholas Stern and others have argued that although aid has sometimes failed, it has supported poverty reduction and growth in some countries and prevented worse performance in others ((country (Stiglitz and Stern, 2002, pp.61-89, Sachs, 2004, pp. 117-240)).) While Milton Friedman, Peter Bauer, and William Easterly have criticized that aid has enlarged government bureaucracies, perpetuated bad governments, enriched the elite in poor countries, or just been wasted and thus no effect on economic growth (Friedman, 1958, pp. 501-16, Bauer,1972, pp.; 14-25, Easterly, 2001, pp.67-81).

Hansen et al (2000-2001, pp. 375-98,547-70) and Clemens et al (2004, pp.13-19) found that, empirical evidence is mixed, with different studies reaching different conclusions depending on the time frame, countries involved, and assumptions underlying the research. Three broad views have emerged on the relationship between aid and growth. 1. Aid has a positive relationship with growth on average across countries (although not in every country), but with diminishing returns as the volume of aid increases. 2. Aid has no effect on growth, and may actually undermine growth. 3. Aid has a *conditional* relationship with growth, helping to accelerate growth under certain circumstances. Foreign aid mainly restructures the local governance and there by contribute to economic development (Picard, Groelsema and Buss, pp.: 212-220 (edited in 2008)).

The research of World Bank explained that aid works better (or in a stronger version, aid works *only*) in countries with good policies and institutions (World Bank, 2000, pp.29).Burnside and Dollar (2000, pp.; 80-96) explained that, an increase in aid flows strengthens economic growth in poor countries when the policy environment is conducive. Veiderpass and Andersson in SADEV report (2007, pp.18) find the little evidence of a significant positive effect of aid on the long-term growth of poor countries.

Several research works have been done to examine the effect of foreign aid on the economic growth of Bangladesh for different shorter period of time. The researcher found mixed result in their studies. Islam (1992, pp. 541-544, 1999, pp.23-77) analyzes 27 years (1972-1998) data and exposed that the effects of aid on GDP growth are barely positive, but highly insignificant. On the other hand, Ahmed (1992, pp.; 82-89) showed that aid has negative effect on growth due to institutional constraints. Quazi (2005, pp. 48-63) scrutinizes the 27 years data from 1973 to 1999 and found a little positive effect of aid on GDP growth. Abu-Obaydullah (2007, pp.; 16-18) showed that, aid has little impact on the country's socioeconomic development of Bangladesh. Recently, the study of Quibria (2010, pp. 22-37) has described that; Bangladesh achieved mixed (both positive and negative contributions) results in aid effectiveness.

From the above discussion, it can be said that, this study is different from the earlier research in a sense that, it analyzes 33 years data from 1980 to 2012 for a long period of time. In addition, this paper includes a new variable in the analysis to represent the "absorptive capacity constraints to utilize aid of Bangladeshi institution" through a "squared term", which has not yet been used in the previous research on foreign aid.

IV. METHODOLOGY AND DATA

a) Derivation of the Model

It is needed to specify a model to show the relationships between foreign aid and per capita GDP growth. The conventional production function $Y= f(L, K)$ has been used here by adding the Foreign Aid as an input. So the new function is

$$Y = f(L, K, A) \qquad (1)$$

Where Y is gross domestic product (GDP) in real terms, L is labor input, K is domestic capital stock, and A is stock of foreign aid. It is assuming that, equation (1) to be linear in logs, taking logs and differencing, the following expression describing the determinants of the growth rate of real GDP is obtained:

$$y = \alpha + \beta\, l + \delta\, \kappa + \varphi\, a \qquad (2)$$

Where

y -denotes the per capita GDP growth rate.

k -denotes the rate of growth of the capital stock is approximated by the share of investment in GDP. Since the data on gross capital formation as a share of GDP is not available for 1980-2012 periods in Bangladesh, the investment/GDP ratio is used to represent the growth of capital stock.

l -denotes the rate of change in labor input is also replaced by the growth rate of population.

a-denotes the share of foreign aid in GDP.

Furthermore, sometimes aid generates diminishing returns if the recipient country has absorptive capacity constraints. Absorptive capacity exposes the ability of recipient country to employ the foreign aid fund effectively (Feeny and McGillivray 2008, pp.1031–1050). A square term of AID-GDP ratio has been included into the model to determine this effect. These changes presented the following growth equation.

$$GGDP\mathrm{t} = \beta^0 + \beta^{1(GPOP)_t} + \beta^{2\left(\frac{INV}{GDP}\right)_t} + \beta^{3\left(\frac{AID}{GDP}\right)_t} + \beta^{4\left(\frac{AID}{GDP}\right)_t^2} + \beta^5 INF + e\mathrm{t} \qquad (3)$$

Where GGDPt is the growth rate of real GDP per capita of Bangladesh in year t, GPOPt is the growth rate of population in year t, INV is the investment in year t, AID is the foreign aid in year t, and INFt is the inflation rate in year t.et is the stochastic error term in year t. This model has been estimated by using panel least squares estimation method.

The economic growth rate is measured in this study as the growth of real GDP per capita in constant (2000) U.S. dollars. Since the labor force growth data of Bangladesh is not available for the period of 1980-2012, the growth rate of population is used as a proxy for the growth rate of the labor force. The investment/GDP ratio is used to represent the growth rate of the capital stock, because, the data on gross capital formation as a share of GDP is not available for these period in Bangladesh. Inflation rate is defined as the annual percentage change in Consumer Price Index (CPI).

The hypothesis is that, foreign aid has no effect on economic growth of Bangladesh and tested through the above mentioned models. The key objective of this analysis is to inspect whether the marginal effect of foreign aid on economic growth of Bangladesh (β_3). Is positive or negative and statistically significant. The expected signs of the coefficients β_1 and β_2 are positive and that of β_3 either positive or negative, β_4 and β_5 are negative.

b) Data Sources

To examine the implication of these models, a panel of aggregate data of Bangladesh on real GDP growth, foreign aid, investment/GDP ratio, population growth and inflation has been collected for 1980–2012 periods. This 33 years data has been analyzed to show the effect of foreign aid on the economic growth of Bangladesh. The data on real GDP, investment/GDP ratio and inflation are collected from the International Monetary Fund (IMF, 2013), World Economic Outlook (WEO). (2013 database. The data on Foreign Aid and population growth has been taken from the different issues of Bangladesh Economic Review, Ministry of Finance, Government of Bangladesh (GOB, 2013).

V. Empirical Results and Discussion

The findings of the empirical analysis are presented in Tables 1 and 2. The results of first four econometric models that have been estimated for four different time periods: 1980-1990, 1991-2001, 2002-2012 as well as for the entire period of 1980-2012, presented in Table 1. Then, Table 2 presents the findings of the last four models which are estimated for four different government period, namely, Military government (1982-1990), (BNP (Bangladesh Nationalist Party) government (1991-1995, 2002-2006), BAL (Bangladesh Awami League) government (1996-2001, 2009-2012) and the Whole Democratic government period (1991-2012) correspondingly. In Table-1, the adjusted R^2 values. vary in a range from 0.739 to 0.836. This is the good indicator for reliable data sources in the sense that, R^2values show that about 73 percent to 83 percent of variation of dependent variable (GDP Growth) is explained by the independent variables in these models.

Table 1 : Effects of Foreign Aid on the Economic Growth in Bangladesh
Dependent variable: Real G DP per capita growth

Variable	1980-1990	1991-2001	2002-2012	1980-2012
Constant	-66.79182 (-3.60)	5.897308 (0.70)	-26.98439 (-4.34)	-5.296597 (-1.00)
Labor Growth	9.743605 (1.91)	-.5394451 (-0.29)	2.411042 (1.56)	.3621807 (0.23)
Capital Growth	.9329385** (3.89)	.0116448 (0.05)	1.150163*** (5.46)	.4310246*** (2.79)
AID/GDP	10.2441** (2.95)	.1015523 (0.23)	1.699052** (3.47)	.5493307 (1.02)
$(AID/GDP)^2$	-.613666** (-2.83)	-.0255637 (-0.63)	-.4297674** (-3.68)	-.0432482 (-1.05)
Inflation	-.7856391*** (-5.00)	-.0337032 (-1.20)	-.0063625 (-0.13)	-.0803071 (-1.46)
Number of country	1	1	1	1
Number of observations	11	11	11	33
Adjusted R^2	0.8361	0.7804	0.8013	0.7399

*Note: Figures in parentheses are t-values. ***, ** and *indicate the statistical significance at the 1 percent, 5 percent and 10 percent level, respectively.*

The coefficients of the first two variables, namely Labor Growth and Capital Growth in the first four models are expected to be positive and the results are consistent except for the coefficients of Labor Growth during 1991-2001. This result implies that Labor Growth and Capital Growth have positive impact (except one case of labor growth) on Real GDP growth of Bangladesh. Although the capital growth variable is statistically significant in three models out of four models, labor growth variable is not statistically significant in any of the four cases.

The estimated result is fully consistent as it shows the positive relationship between Capital Growth rate and GDP Growth rate. Investment is the source of capital formation. However, after independence, during 1971-1979 periods, the GDP-investment ratio was only 3 to 4 percent, while it rises to 16.52 percent during1980-1990 periods. At the same period, GDP growth rate was only 3.39 percent. With the course of time, GDP growth rate rises to 6.05 percent with a 24.41 percent investment in the period of 2002-2012 correspondingly. The data illustrates that, the average population growth rate in Bangladesh was 2.23 percent in 1980s and was declining to 1.44 percent in 2000s.

Foreign aid variable has positive sign in all cases, indicating that foreign aid has positive effect on the economic growth of Bangladesh. This coefficient is statistically significant in two cases out of four cases. It is not found statistically significant for the entire period 1980-2012. This result is consistent with data. The data shows that Foreign Aid has the on average 7.38 percent contribution in GDP of Bangladesh in 1980s. While this figure positively declining in the last two decades and recorded as average 4.05 percent and 1.8 percent of GDP in 1990s and 2000s respectively.

The square term has the expected negative sign and the results are consistent in all of four cases.

It is found statistically significant in two cases among the four cases. This finding indicates that there are diminishing returns to aid due to recipient country's having absorptive capacity constraints. Absorptive capacity relates to an aid recipient's ability to utilize foreign aid inflows effectively.

Inflation rate variable has the expected negative sign and it is statistically significant at the 1 percent level of significance in the first case but not found significant in the rest three cases. This result depicts that Inflation rate has negative role on the economic growth rate of Bangladesh. This finding has represented the inflation data of Bangladesh. After independence, in 1970s, Bangladesh experienced a double digit inflation rate. While in 1980s, this figure rose to 11.19 percent of GDP and the average GDP growth rate was 3.39 percent only at the same time. On the other hand, GDP growth rate increases over the last two decades (1991-2012) with the declining of average inflation rate. The average inflation rate. and GDP growth rate during 2002-2012 was figure recorded as 6.85 percent and 6.05 percent correspondingly.

Table 2 : Effects Of Foreign Aid On The Economic Growth In Bangladesh In Different Government Period
Dependent variable: Real GDP per capita growth

Variable	Military government (1982-1990)	BNP government (1991-1995, 2002-2006)	BAL government (1996-2001, 2009-2012)	Whole Democratic government (1991-2012)
Constant	-76.75248 (-2.20)	-28.75935 (-2.49)	-16.54524 (1.65)	-5.809827 (-1.56)
Labor Growth	12.10823 (1.36)	8.244215* (2.27)	3.693156 (1.65)	1.649832 (1.43)
Capital Growth	1.27053 (1.24)	.8659924** (3.38)	.6292013* (2.50)	.3697521*** (3.84)
AID/GDP	10.07466 (2.31)	.86031 (1.27)	1.477596 (1.64)	.2663335 (0.68)
$(AID/GDP)^2$	-.596263 (-2.17)	-.0908101 (-1.42)	-.1959558 (-1.14)	-.0319429 (-0.86)
Inflation	-.8416047 (-2.13)	.012037 (0.20)	.034407 (0.69)	.0139492 (0.46)
Number of country	1	1	1	1
Number of observations	9	10	10	22
Adjusted R^2	0.3543	0.8412	0.6354	0.7823

*Note : Figures in parentheses are t-values. ***, ** and * indicate the statistical significance at the 1 percent, 5 percent and 10 percent level, respectively.*

Table-2 illustrates the results of last four estimated for four different government period, namely, Military government (1982-1990), BNP (Bangladesh Nationalist Party) government (1991-1995, 2002-2006) ,BAL(Bangladesh Awami League)government (1996-2001, 2009-2012) and the Whole Democratic government period (1991-2012) accordingly.

The adjusted R^2 value is 0.354 for Military government while this figure fluctuates between 0.635 and 0.841 for others democratic governments period. The resulted R^2values show that about 35 percent, 84 percent, 63 percent and 78 percent of variation in dependent variable (Real GDP Growth) is explained by the five independent variables in these models respectively.

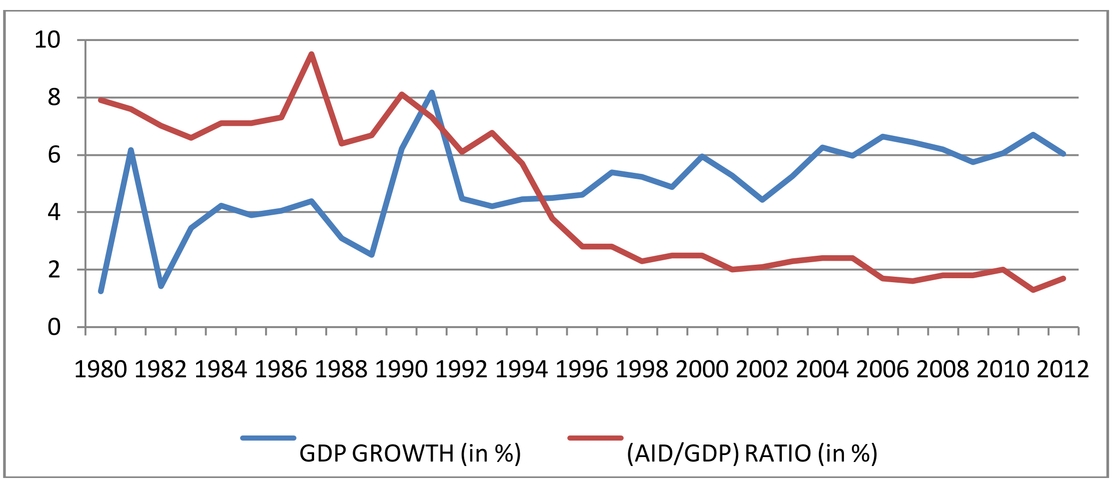
The estimated coefficients of the Labor Growth and Capital Growth have the expected positive sign in the four models and indicate that these two variables have also constructive contribution to the economic growth as we found in the first four models in table 1. Labor Growth variable is statistically significant at the 1 percent level of significance for only the BNP government period. Conversely, the capital growth variable is statistically significant in three models except Military government period.

Similarly, as previous findings, the Foreign aid variable have also positive sign for all government periods in table 2, which again exposes the positive role of foreign aid on the economic growth of Bangladesh. But it is not found statistically significant for any of the four cases. The square term represents the negative sign in all of four cases like the first four models. It is not statistically significant for any of the four models. Inflation rate variable generates the expected negative sign only for Military government. It does not found significant in any of the four cases.

VI. Contribution of Aid to GDP

The figure shows that, proportion of aid to GDP was very high till 1995. After 1996; the scenario was being changed as receiving of foreign aid fall and continues to 2012. The implication is that, when GDP of a country increases, then the necessary of aid decreases gradually. As a result, effect of aid is still positive but reduces gradually. During military periods (1982-1990), the proportion of aid to GDP was very high rather than GDP growth, it is consistent with the views of Friedman (1958). While, in democratic period (1991-2012), after a little fluctuation, the economy achieves higher GDP growth with a smaller amount of aid.

Figure 1 : Contribution of Aid to GDP



VII. Summary of Findings and Recommendation

Foreign aid variable has positive sign in all estimated model as presented in table-1 and table-2 respectively. This indicates that foreign aid has positive effect on the economic growth of Bangladesh. This coefficient is statistically significant in two cases out of four cases in table-1and not found statistically significant for any of the four cases in table-2. This result is consistent with data. The data shows that Foreign Aid is declining over the period of time. It has 7.38 percent, 4.05 percent, 1.8 percent and 4.43 percent contribution to GDP of Bangladesh during 1980-1990, 1991-2001, 2002-2012 and 1980-2012 correspondingly. The square term depicts that, the return of aid is diminishing for a country having the absorptive capacity constraints. Bangladesh is not exception to this. This research concludes that, foreign aid has positive effect but diminishing return on the economic growth of Bangladesh. Aid mobilizing and executing institutions of Bangladesh including public administrations have capacity constraints, mainly for, poor structure and planning, corruption and political instability

Still now, Bangladesh depends on external aid to finance the development budget. The government may take following initiative to overcome these shortcomings to gain the maximum and efficient output from aid.

1. Form an executive planning committee under prime minster office.
2. Making an Applicable and Scientific plan for each sector or ministry,
3. Infrastructural development project according to preference, to reduce corruption,
4. Honest government and private official may be appointed who had previous good record in different financial transaction,
5. Besides Aid, government must encourage foreign direct investment to form new capital,
6. Political stability should be insured,
7. Coordination among fiscal and monetary policy is essential to achieve high economic growth,
8. Education, health and environment sector must get preference, because research finds that, education may reduce poverty, increase productivity and thereby reduce environmental degradation,
9. Accountability of aid project should directly ensure under prime minster office.

VIII. Conclusion

This study explores that foreign aid has positive role on the economic growth of Bangladesh and it is statistically significant in only two cases out of eight cases. This finding is not statistically significant for the entire period (1980-2012). The estimated results also indicate that, due to the lower level of capacity constraint of Bangladeshi institutions to use the foreign aid effectively, the aid provide diminishing returns in Bangladesh. Foreign aid can contribute to the national economy more effectively, if the Bangladesh government utilizes its aid funds more efficiently by reforming its institutions and policies.

References Références Referencias

1. Abu-Obaydullah, Muhammad (2007). *Impact of Foreign Aid on Development in Bangladesh*, Ph.D. Thesis, School of Global Studies, Social Science and Planning, pp;16-18, University of RMIT University, Australia.
2. Ahmed, Quazi (1992). *Foreign Aid, Domestic Savings and Economic Growth: The Experience of Bangladesh, 1972-1991*, Ph.D. Dissertation, pp.; 82-89, University of Illinois, United States of America.
3. Akash, M.M. (2003). *Economy of Bangladesh-Banglad\esher Orthonitee*, (2nd ed.), Chapter-4, pp.129-132 Published by Bangladesh Open University, Dhaka, Bangladesh.
4. Bauer, Peter, (1972), *Dissent on Development* (Cambridge: Harvard University Press), pp.; 14-25.
5. BBS (2010), *Household Income and Expenditure Survey (HIES) 2010, pp.23,* 48-62 Bangladesh Bureau of Statistics, Dhaka, Bangladesh.
6. BBS (2011), *Bangladesh Population and Housing Census 2011,* pp.132-141, Bangladesh Bureau of Statistics, Dhaka, Bangladesh.
7. Burnside, G. and D. Dollar (2000):"Aid, Polices and Growth." *American Economic Review*, Vol.90, pp.; 80-96.
8. Clemens Michael A., Steven Radelet and Rikhil Bhavnani, (2004), "Counting Chickens When They Hatch: The Short Term Effect of Aid on Growth," Working Paper No. 44, pp.13-19, Centre for Global Development. Revised September 6, 2011.Washington, D.C.: Center for Global Development.http://www.cgdev.org/content/publications/detail/2744.
9. Easterly, William, (2001), Ross Levine, and David Roodman, (2004*), "New Data, New Doubts: A Comment on Burnside and Dollar's 'Aid, Policies, and Growth,' American Economic Review*, 94-3, pp.67-81, (June).
10. Friedman, Milton, (1995); Foreign Economic Aid: Means & Objectives, 1st edition (1995); pp.1-8, published by Hoover Institution Press, Leland Stanford Junior University, USA. January 3, 1995.
11. Friedman, Milton, (1958), "Foreign Economic Aid," *Yale Review*, Vol. 47 (4), pp. 501-16.
12. GOB (Government of Bangladesh) (2013), *Bangladesh Economic Review 2013,* chapter, 13, pp.; 183-189, 279-351,344Ministry of Finance, Government of Bangladesh, Dhaka.
13. Hansen, Henrik, and Finn Tarp, (2000), *"Aid Effectivness Disputed*," Journal of International Development, Vol. 12, pp. 375-98.
14. Hansen, Henrik, and Finn Tarp, (2001), "*Aid and Growth Regressions*", Journal of Development Economics, Vol. 64, pp. 547-70.
15. IMF (International Monetary Fund), (2013), *World Economic Outlook (WEO) 2013* database, Available: http://www.econstats.com/weo/CBGD.htm (November 20, 2013).
16. Islam, Anisul (1992), "*Foreign Aid and Economic Growth: An Econometric Study of Bangladesh*," Journal of Applied Economics, 24, pp. 541-544.
17. Islam, A.N. (1999), "*Foreign Assistance and Development in Bangladesh*", in K.K. Gupta, (ed.),
18. *Foreign Aid: New Perspectives*, pp.23-77, Massachusetts: Kluwer.
19. Lahiri, Sajal,(2007), *theory and practice of foreign aid,(Edited)* , First edition 2007,pp.200, published by Elsevier, Amsterdam, The Netherlands, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK.
20. McGillivray, M., Feeny, S., Hermes, N. and R. Lensink (2006), *"Controversies over the impact of*

development aid: it works; it doesn't; it can, but that depends," Journal of International Development, 18(7), pp.1031–1050.
21. Perkins, Dwight, Radelet, Steven and Lindauer, David, (2006); *Economics of Development, a primer on foreign aid*, 6th Edition, chapter; 14, pp.: 124-74,New York: W.W. Norton and Co.
22. Picard, Louis A. Groelsema, Robert and Buss, Terry F, (edited), (2008); *Foreign aid and foreign policy: lessons for the next half-century*, pp.: 212-220, published by M.E. Sharpe, Inc., 80 Business Park Drive, Armonk, New York 10504.
23. Quazi, Rahim M. (2005),*Effects of Foreign Aid on GDP Growth and Fiscal Behavior: An Econometric Case Study of Bangladesh,* the Journal of Developing Areas , 38(2),pp. 48-63.
24. Quibria, M.G. (2010), *Aid Effectiveness in Bangladesh: Is the Glass Half Full or Half Empty?* ; pp. 22-37, Mimeo, Policy Research Institute of Bangladesh, Dhaka, Bangladesh.
25. Sachs, Jeffrey, et al, (2004), "*Ending Africa's Poverty Trap*," Brookings Papers on Economic Activity 1:2004, pp. 117-240.
26. Stern, Nicholas, (2002), "*Making the Case for Aid,"* in World Bank, A Case for Aid: Building a Consensus for Development Assistance, pp.61-89,(Washington: The World Bank).
27. Stiglitz, Joseph, (2002). *"Overseas Aid is Money Well Spent*," Financial Times (April 14, 2002).https://www0.gsb.columbia.edu/faculty/jstiglitz/download/opeds/Overseas_Aid_is_Money_Well_Spent.htm (access on 15th august,2014).
28. United Nation (2012), *World Population Prospects: 2012 revision*, pp.; 41-51, Department of Economic and Social Affairs Population Division, United Nations.
29. Veiderpass, Ann and Andersson, Per-Åke (2007); *Foreign aid, economic growth and efficiency development: A Data Envelopment Analysis approach*, pp.18, printed in Karlstad, Sweden 2007. SADEV Reports are available at www.sadev.se.
30. World Bank, (2000),*Assessing Aid: What Works, What Doesn't, and Why,* pp.29,(Oxford: Oxford University Press).

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 14 Issue 6 Version 1.0 Year 2014
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Jeffrey Sachs, (2005). The End of Poverty: Economic Possibilities for our Time. New York: The Penguin Press. (Book Summary and Book Review)

By Dr. Kazi Abdur Rouf

Noble International University, USA

Abstract- This paper is a book review of the book 'The End of Poverty: Economic possibilities for our time' written by Nobel Laureate Jeffrey Sacks (2005), an American renounced economist and director of the Earth Institute, Columbia University. In the book, Sachs talks about global poverty issues and their miseries in poor countries. Moreover, he provides statistics with examples of the many problems related to economic, educational, population, cultural, health and environmental issues. He narrates in detail the poverty of Malawi, Bangladesh, Kenya, India and Bolivia. The book compares and contrasts the economic histories of China, Russia and India. The book also narrates the current Chinese and Indian economic booms in the global context.

The book contains economic histories of many countries; it has many suggestions for economic policy reforms and cooperation among rich and poor countries. It contains suggestions for improving donor funding plans, and strategies for ending poverty in poor countries.

Keywords or phrases: clinical economics, corruption, donors funding, international funding policies, economic development, economic policy reforms, information technology (it), millennium development goals (mgds), poverty, poverty trap.

GJMBR-B Classification: JEL Code: P46, I39

Jeffrey Sachs, (2005). The End of Poverty: Economic Possibilities for our Time. New York: The Penguin Press. (Book Summary and Book Review)

Dr. Kazi Abdur Rouf

Abstract- This paper is a book review of the book 'The End of Poverty: Economic possibilities for our time' written by Nobel Laureate Jeffrey Sacks (2005), an American renounced economist and director of the Earth Institute, Columbia University. In the book, Sachs talks about global poverty issues and their miseries in poor countries. Moreover, he provides statistics with examples of the many problems related to economic, educational, population, cultural, health and environmental issues. He narrates in detail the poverty of Malawi, Bangladesh, Kenya, India and Bolivia. The book compares and contrasts the economic histories of China, Russia and India. The book also narrates the current Chinese and Indian economic booms in the global context.

The book contains economic histories of many countries; it has many suggestions for economic policy reforms and cooperation among rich and poor countries. It contains suggestions for improving donor funding plans, and strategies for ending poverty in poor countries. Jeffrey Sachs describes World Bank and International Monetary Fund (IMF) activities and their wrong, stereotypical funding policies and strategies for different countries, particularly those in Africa. He identifies information technology (IT) flow, different technological innovations, technological change and its development (invention of the steam engine, use of coal, invention of the rail engine and railway, electrification of industry) and their contributions to world development. Poor countries are using less IT and technology; however. as a result, they get fewer benefits from them than rich countries. Hence there are needs for use of more IT in poor countries.

The book suggests simultaneous trade investments in and aid to poor countries for their socio-economic development, in addition to technology and energy support to them. Moreover, at the end of the book, Jeffrey Sachs provides nine tips / actions / steps for ending poverty around the world: 1) adopt a plan of action; 2) raise the voice of the poor; 3) redeem the role of the United States in the World; 4) rescue the IMF and the World Bank (they have been misused as creditors; 5) run agencies, rather than international institutions, that represent all of the 182 member governments; 6) strengthen the United Nations; 7) harness global science; 8) promote sustainable development; 9) make a personal commitment.

However, to fulfill Millennium Development Goals (MDGs), it is urgently necessary that rich countries donate the 0.7% Gross National per Capita (GNP) to poor countries that they committed to at the 1949 and other UN Conventions. Poverty exists in both poor and rich countries; therefore, it is necessary to challenge globalization with acts for pro-globalization (good things) and initiate green social economic projects and services in rich as well as poor countries for the sake of ending their poverty.

Keywords or phrases: clinical economics; corruption; donors funding; international funding policies; economic development; economic policy reforms; information technology (it); millennium development goals (mgds); poverty; poverty trap.

Author: Visiting Professor, Chittagong University, Bangladesh. Visiting Scholar, Faculty of Environmental Studies, York University, Canada. Associate Professor, Noble International University, USA.

I. Introduction

Jeffrey Sachs (2005), the Nobel Laureate and Director of the Earth Institute, Columbia University, in his book "The End of Poverty: Economic possibilities for our time" provides global poverty statistics and describes many countries' poverty situations with examples. The book narrates the role of international institutions like the World Bank and the International Monetary Fund (IMF) in increasing poverty in developing countries. Jeffrey Sachs raises many issues of social, economic, and cultural nature, such as public health, HIV Aids, child mortality, maternal mortality, population problems, malaria, polio etc. in the book. He articulates environmental problems like environmental pollution and climate change, and their devastations that destroy our Mother Earth in different countries and exacerbate global poverty, particularly in the developing countries. The book describes how the poverty trap works globally at the expense of the human face. It narrates the ups and downs of the economic development histories of different countries like India, China, Russia, U.S.A. and Japan. Moreover, the book compares and contrasts the economic histories of China, Russia and India.

The book mainly focuses on global poverty and its miseries in the poor countries. Jeffrey Sachs provides many suggestions in the book about how to end poverty in the poor countries. He narrates with examples how different countries have started their economic development processes. The book tells about technological change, the flow of technological innovations and their development (invention of the steam engine, use of coal, invention of the rail engine and railway, electrification of industry), IT information flow and their contributions in society. The book also argues the pros and cons of science and technology and their contributions to economic progress and economic decline throughout the world. Moreover, the book touches upon the contribution of computers to socio-economic development in society; however, there are problems that exist in using computers and IT in the developing countries. Therefore it is important to identify how developing countries can overcome problems in using computers and in developing IT industries.

II. Significance of the Book Review

This book creates new knowledge, thoughts, policies and strategies that might inspire poor countries to organize them against poverty and to develop partnerships among international agencies and rich countries for foreign funding and foreign investments for the well-being of the poor countries. It tells us how to use IT and energy resources, and reminds us of the human potential for creative cooperation exemplified by the sharing of resources for ending global poverty. The book is critical of World Bank and IMF international funding schemes. The book awakens international donors and international investment agencies to improve their funding/investment policies and strategies. The book has many economic statistics, facts and figures that show that possibilities or opportunities exist so that poor countries could develop people-centered economies for the well-being of all their people. This book review could promote cooperation among international donor agencies, and increase collaborations among rich and poor countries based on Jeffrey Sachs' recommendations. The reviewer of this book thinks this book summary and review provide readers with a synopsis of the book and shares Jeffrey Sachs' 'The End of Poverty' and its features, such as descriptions of different policies, strategies and services, that might help researchers think about and find out ways of implementing economic development for altruistic communities, making life better in the contemporary world.

III. Chapter-Wise Book Summary

Chapter 1: "A Global Family Portrait" talks about socio-economic features of Malawi, Bangladesh, India and China and the development services provided to their people to address their poverty. The book narrates that in Malawi 84 percent of the population lives in rural areas, in Bangladesh 76 percent, in India 72 percent, in China 61 percent, and in the United States 20 percent. Services account for fewer than 25 percent of employment in Malawi, whereas in the United States, they account for 75 percent (Sachs, 2005: p. 18). In Malawi many whole villages are with few able-bodied women and men because of the AIDS epidemic. The country's HIV AIDS organizations submitted a proposal to its donors for a new system of drug delivery, but it was not fully funded. This indicates donor funds are not fully available for human crisis projects around the world.

Jeffrey Sacks (2005) finds in Bangladesh poverty is decreasing because this country has several steps up the ladder of development by implementing many community development projects like green revolution, blue revolution, micro-credit, community forestry, community nutrition education and adult education across etc. Bangladesh. Bangladesh demonstrates there are ways forward if the right strategies and combinations of investments are applied. He mentions that Grameen Bank micro-financing and Bangladesh Rural Advancement Committee (BRAC) activities contribute to Bangladesh poverty eradication. The book mentions that BRAC and Grameen Bank pioneered 'microfinance', giving funds to women once considered unbankable, and allowing them to engage in agriculture, commerce and food processing small businesses. Many of the women engaging in microcredit etc. have less children and want less children; fewer children will also help get out of the cycle of poverty. However, the book does not narrate these two world-famous organizations by giving details of their programs/services and their implementation strategies. The detailed information about these two NGOs could provide readers more information and ideas about these two organizations' services and implementation strategies. The detailed information might assist readers in thinking about how to initiate the social development programs in their own country's context.

Although Bangladesh is not out of the grip of extreme poverty, young women are working in garment factories in inhumane working conditions and are low-paid. He interviews many garment workers in Bangladesh. There he finds the garment workers are suffering in exploitive sweatshop job environments where these women are working. At the same time they talked to Sacks about their greatest opportunity for their empowerment. For example, they could imagine being able to save surpluses from their pay, manage their own income, have their own rooms, and choose when and whom to date and marry, choose when to have children, and use their savings to go back to school. According to Jeffrey Jacks this is the first step on the ladder out of poverty for Bangladesh.

Jeffrey Sacks finds India has made 'Export Revolution' in South East Asia. The information technology (IT) revolution is creating jobs for young educated women, unknown of before. He mentions, for example, Indian IT young women who have taken a medical transcription course and do the jobs of transcribing medical charts. For this they earn $250-$500 a month. This income is more than twice the earnings of a low-skilled industrial worker in India and perhaps eight times the earnings of an agricultural labourer. These are women whose mothers perhaps had to labour in garment factories and whose grandmothers no doubt worked as agricultural labourers. This is a generational employment history and professional change in India. Economic growth in India is now 6% or more per year because of growth in not just IT, but also textiles, apparel, electronics, pharmaceuticals and automotive components.

Jeffrey Sacks mentions in this chapter (Chapter 1) that people in the U.S. worry about growth of India and China. However, the world is not a zero-sum struggle in which one country's gain is another's loss; rather it is "a positive-sum opportunity in which improving technologies and skills can raise living standards around the world" (Sacks, 2005: p.16). Jeffrey Sacks expresses China as the 'Rise of Affluence'. For example, Beijing is now a booming city of eleven million; annual income has surpassed $4,000 per capita, and the Chinese economy continues to soar at above 8 percent growth per annum. "China's advance during the past 25 years reflects the fact that within two decades, it has gone from being a virtually closed society and economy to one of the great export powers of the world." ((Ibid, p. 17). Chinese exports have been fuelled by inflow of foreign investment and technology in combination with relatively low-cost Chinese workers who are proficient in skills of all sorts. Result has been a rise in exports from $20 billion in 1980 to around $400 billion in 2004 (Ibid, p.18). These four examples of development (India, China, Bangladesh and Malawi) show us the pivotal roles science and technology, and exports play in the development process; they also show a progression of development that moves form subsistence agriculture toward light manufacturing and urbanization.

Chapter 1 also mentions that poverty does exist in rich countries, but not extreme poverty. However, the book does not provide facts and figures of poverty in developed countries, even in Jeffrey's own country, the US. In the US the poverty rate is 10% (US Bureau 2008). In all rich countries single mothers'/single parents' poverty rates are increasing. Hence there is a need for poverty intervention in rich countries too.

The book articulates global poverty statistics in different economics classes. For example, globally one billion people are fighting for survival each day. Their cash earnings are pennies each day. A few rungs up the development ladder are the upper end of the low-income world, roughly 1.5 billion. These are "the poor" who live above mere subsistence; although daily survival is assured, they struggle in the cities and countryside to make ends meet. The poor and the extreme poor make up about 40 percent of world humanity. Another 2.5 billion people, including the Indian IT workers, are in the middle-income world (Sacks, 2005: p. 20). However, they would not be recognized as middle-class by the standards of rich countries. Still higher up the ladder are the remaining one billion people, roughly a sixth of the world's population, in the high-income world (Ibid, p. 20).

Jeffrey Sacks identified three degrees of poverty: extreme poverty, moderate poverty and relative poverty. Extreme poverty means that households cannot meet basic needs for survival, moderate poverty refers to conditions in which basic needs are met just barely, relative poverty is generally construed as a household income level below a given proportion of average national income. The relative poor, in high-income countries, lack access to cultural goods, entertainment, and recreation, and to quality health care, education etc. The overwhelming share of the world's extreme poor, 93 percent in 2001, live in three regions: East Asia, South Asia, and sub-Saharan Africa. Half of Africa's population lives in extreme poverty, and the proportion have risen; the proportion of the extreme poor in East Asia has plummeted from 58 percent in 1981 to 15 percent in 2001; in South Asia extreme poverty has dropped from 52 percent to 31 percent. Eastern Europe's extreme poverty rate rose from negligible levels in 1981 to 4 percent in 2001 (Sacks, 2005: p. 21).

Jeffrey Sacks's concern is, as a global citizen, that the world should ensure that the international rules of the game in economic management do not have economic snares (traps) along the lower rungs of the ladder in the form of inadequate development assistance, protectionist trade barriers, destabilizing global financial practices and poorly designed rules for intellectual property. These are the barriers that prevent the low-income world from climbing up the rungs of development. The good news is that in 2002 all 191 UN member states agreed with the Millennium Development Goals (MDGs). These goals are important targets for cutting poverty in half by the year 2015. These MDGs represent a crucial landmark on the path to ending extreme poverty by 2025. To accomplish all of this, the rich countries need to provide what they have long promised. To meet these challenges, fiscal policy makers and executives first have to understand how they got to where they are.

Chapter Two is entitled `The Spread of Economic Prosperity`. The author describes the economic history and demographic history of the world since two thousand years before and after BC. Here Jeffrey says, 'The move from universal poverty to varying degrees of prosperity has happened rapidly; before 200 hundred years almost everyone was poor except for landowners. One leading economic historian, Angus Madison, puts the average income per person in Western Europe in 1820 at 90 percent of the average

Global Journal of Management and Business Research (B) Volume XIV Issue VI Version I Year 2014

income of Africa today" (Sacks, 2005: p.26). The past two centuries since around 1800 are a unique era in economic history. Before then, indeed for thousands of years, there had been virtually no sustained economic growth in the world. There were only gradual increases in the human population.

The book talks about world demographic history and statistics. The world population has risen rapidly in the last two centuries. However, before this it had gradually increased from around 230 million people at the start of the first millennium in A.D. 1 to perhaps 270 million by A.D. 100 (Sacks, 2005: p.27). As shown on a figure on page 27 of the book, global population raised more than six fold in just two centuries, reaching 6.1 billion at the start of the third millennium. The population reached in 2011 was seven billion people (World Population Statistics). The world's average per capita income had increased by around nine times between 1820 and 2000 (Ibid, p.28). There was a 49-fold increase in total economic activity in the world over the past 180 years. Malthusian demographic theory dictates that when the geometric progression in a population's increase supersedes economic resource growth of a country, it results in a resource crisis. This section alerts us to the population increase and reminds / alerts us that developing a plan for managing population growth is necessary for the world's sustainable economic growth.

Jeffrey Sacks asserts that the gulf between rich and poor countries is a new phenomenon. As of 1820, the biggest gap between the rich (taking the UK as the richest country) and the poorest region (Africa) - was a ratio of four to one in per capita income. However, by 1998, the gap between the richest economy (the United States), and the poorest region (Africa) had increased by twenty to one (Sacks, 2005: p.28). He mentions that there are three main points standing out: 1) All regions were poor in 1820, 2) All regions experienced economic progress, 3) Today rich regions have experienced by far the greatest economic progress (Ibid, p.29). Hence the world is facing regional imbalance in socioeconomic growth that creates social and economic injustice. Moreover, it creates the resource consumption imbalance among rich and poor countries of the world by distant manufacturing and distant resources travelling from poor countries to rich countries. However, the distance manufacturing concept exploits cheap labour in third world countries. As a result more poverty exists in Africa, South East Asia, South Asia, and Latin America.

Technology has been the main force of development in richer regions. Technology is the 'Eve of Takeoff' progress of rich nations. Even political power was fuelled by technology and industry. For example, Britain's industrial breakthrough created a huge military and financial advantage that allowed Britain to expand its control over one sixth of humanity at the peak of the empire during the Victorian era (Sacks, 2005: p. 33). According to Jeffrey Sacks British development was faster for six reasons: 1) British society was relatively open, with more scope for individual initiative and social mobility than most others, 2) It was strengthening institutions of political liberty; allowing free speech and open debate contributed to the creation of new ideas, 3) Britain became one of the leading centres of Europe's scientific revolution, 4) It has several crucial geographical advantages, 5) Britain remained sovereign and faced lesser risk of invasion than its neighbours and 6) It has coal, and with the invention of the steam engine, coal freed society from energy constraints. There is a great transformation that occurs when populations move from rural to urban settings. This urbanization process develops discriminatory new gender and family roles, and specialization in labour.

Jeffrey identifies two basic reasons why urbanization and economic growth go hand in hand and generate a negative impact in society: 1). As food production per farmer rises, an economy needs fewer and fewer farmers to feed the overall population, but the food prices fall causing farmers to seek employment in nonfarm activities. 2). Gender roles change, which leads to changes in family structure. The age of marriage is typically delayed, sexual relations are transformed and fewer generations of family members live under one roof.

The diffusion of modern economic growth (MEG) occurred in three main forms 1). MEG took place within Europe itself, 2) MEG spread from Britain to colonized countries, and 3). MEG spread from Europe to Latin America, Africa, and Asia. However, there was much direct and indirect confrontation between rich and poor. A gap of wealth also meant a gap of power, and power could be used for exploitation. Therefore the 'Great Rapture', happening after World War I, made a dramatic change to end the era of European-led globalization, reshaping the 'Global Economy' and starting the US economic regime (Sacks, 2005: p. 46). Europe, the United States and Japan reconstructed a new international trading system under US political leadership, and began building a market-based free-trading system. After World War II, the third world, simply meaning poor, included the rapidly rising number of postcolonial countries. By the early 1990s, the majority of countries of the second world and third world were saying in order to eradicate the low-income countries' extreme poverty, "We need to be part of the global economy once again" (Ibid: p.48).

In Chapter 3, Jeffrey Sacks identifies reasons for some countries failing to thrive. Here his first point is to understand the economic measuring framework of the GDP per person. However, growth of household income per capita can increase in at least four ways: through saving, trade, technology, and a resource boom. Nonetheless, the lack of saving, absence of trade, technological reversal, natural resource decline, adverse productivity shock (natural disaster) and population growth are the causes of failure of economic development in poor countries. Hence the poor countries need to emphasize accumulation of savings, smart trade and the use of technology and natural resources for their own development.

Chapter four is entitled 'Clinical Economics'. Jeffrey Sacks's clinical economics is a symbolic comparison with clinical medicine. He proposes a new method for development economics called 'clinical economics' to highlight similarities between good development economics and good clinical medicine. This perspective learns from medicine's scientific development and systematization of clinical practice. It is the economics that is needed to replace the past twenty years of development practice known as the structural adjustment model.

The book mentions that the rich world dominates third world countries by employing Ph.D. economists in international institutions like the International Monetary Fund (IMF) and the World Bank. However, it is a wrong strategy of the World Bank and IMF because rich countries' economic development policies, strategies and paths are different from those of developing countries. Hence it is appropriate to let the developing countries themselves identify their own resource strengths, resource gaps, and resource needs, and possible solutions for their own socioeconomic development.

Jeffrey Sacks realized he had learned an important set of skills and that 'the standard tools of economics' are adequate if they are properly used in a particular situation. His clinical economics lessons are as follows: Lesson-1 is that economies are complex systems. Societies have distinct systems for transport, power, communications, law enforcement, national defence, taxation etc. They must operate properly for the economy to function. The failure of one system can lead to a cascade of failures in other parts of the economy.
Lesson-2 is that complexity requires a differential diagnosis; this means there are many causes for one problem. The IMF, by contrast, focuses on a very narrow range of issues such as corruption, barriers to private enterprise, budget deficits, and state ownership of production. As a result, the IMF has overlooked urgent problems involving poverty traps, agronomy, climate change, disease, transport, gender and a host of other pathologies. Lesson-3 is to understand the social setting.

Lesson-4 is that monitoring and evaluation are essential to successful economic development treatment. When economic goals are not being achieved, it is important to ask why. The development economics community does not take on its work with the sense of responsibility that the task requires. Rather, they are providing economic advice to others which, at most, offer superficial approaches. Hence it requires a commitment to give honest advice. However, the IMF and the World Bank and many other agencies have hired and sent armchair advisers from rich countries. These are wrong practices of the IMF and World Bank (Sacks, 2005: p. 77-78).

In the SAP model, the rich countries told the poor countries, "Poverty is your own fault. Be like us be-free-market oriented, entrepreneurial, fiscally responsible..." (Sacks, 2005: p. 81). The IMF-World Bank programs of the structural adjustment era were designed to address the four maladies that are assumed to be economic ills: (1) poor governance, (2) excessive government intervention in the markets, (3) excessive government spending, and (4) too much state ownership. However, Jeffrey Sacks considers these as wrong diagnoses of a country's economic diseases. Rather, he suggests that belt tightening, privatization, liberalization, and good governance are the solutions for a country to come out of poverty.

The Millennium Development Goals (MDGs) offer the world a chance to do better after 20 years of failed policies; the failure to meet the MDGs are failures of both rich and poor, since both are responsible for their success. To evaluate the extent of extreme poverty, the economist should make a set of poverty maps using available or newly commissioned household surveys. They would develop their own geographic information systems and data, national income accounts and other information. Poor countries should survey households to find which live in extreme poverty and which households lack access to basic needs in schooling. Moreover, it is necessary to develop the economic policy framework, the fiscal framework (the current levels of budget spending and public revenues) and the patterns of governance (rule of law).

The fiscal policy should conduct thinking about efficiencies of the health-care system, basic public services such as water and sanitation systems, power, health and sanitation. The country needs to emphasize electricity and roads infrastructure development and improve transport conditions. Moreover, many economists and human ecologists think people's nutrition is connected with rural or urban poverty and human ecology. However, Jeffrey Jacks rightly identifies that 'economics management' is not only fiscal budget and fiscal financial management; it is about a country's total socioeconomic, cultural, and environmental development. Therefore it is necessary to identify faulty systems of public management for the registering of businesses and trade. An integrated economics could identify the cultural barriers and gender discrimination that hampers economic development. Moreover, he discovers the importance of geopolitics: the international security bloc of the country, the potential for international sanctions and cross-border security threats against the country.

Chapters five, 6 and 7 are about narrations of Bolivia`s high-altitude hyperinflation, Poland`s reunion to Europe, and reaping the whirlwind: Russia`s struggle for normalcy, respectively.

Chapter 5 talks about Jeffrey`s working experience in regards to the economic ups and downs of Bolivia through its history, different minerals and their export history, and causes of currency hyperinflation.

Chapter six is about the history of Poland's shift from liberal communist state to solidarity state, its democratic revolution history, its transformation to establish a market economy, the launching of the economic plan and actions taken for its development, and his lessons learned from Poland`s reform.

Chapter 7 talks about Russian political and economic history, its transformation from communism to free-market economy and its capitalism and mode of foreign investments should be identified. Here the book advocates for three actions needed by the West to support Russia`s economic transformation: (1) a stabilization fund for the rubble, (2) an immediate suspension of debt payments, followed by deep cancellation of Russia`s debts, and (3) a new aid program for transformation, focusing on the most vulnerable social sectors of the Russian economy.

Chapter 8 is entitled 'Catching up After Half a Millennium'. This chapter talks about China and its economic ladder in the 21st century. China's population of 1.3 billion is more than a fifth of humanity; Asia's population includes 60 percent of humanity; Asia's fate is the world's fate (Sacks, 2005: p. 149). India and China are ancient civilizations that were far ahead of Europe a few centuries ago, yet now they are catching up to North America and Europe. In 1975, China's per capita income was a mere 7.5 percent of Western Europe's. Especially since the past quarter century China has soared, reaching about 20 percent of Europe's income level by 2000 (Ibid, p.150). China is progressing from turmoil to economic takeoff stage. China's is a largely agricultural economy independent of the state. However, Russia has a largely urban economy dependent on the state. In the 1980s and 1990s, first China provided rural peasants freedom to leave the farm and begin to work in rural industries known as township and village enterprises (TVEs). Second China emphasises on international trade and investment that was liberalized, initially in specially designated free-trade zones, known as special economic zones (SEZs). This policy contributed to manufacturing exports soaring from a few billion dollars in 1980 to more than $200 billion by 2000 (Ibid, p. 161).

In the Soviet Union, by contrast, Gorbachev tried to free the non-state sector while preserving the state enterprise sector; whereas China had 80 percent of the labour force outside state-owned enterprises. The Soviet Union has massive foreign debts while China did not. However, according to Jeffrey China's greatest challenges are: 1) China's growth is not uniformly high throughout the country, there is an East-West divide, the East with the pacific ocean and some of its most important export cities, the West has a forbidding mountain plateau; 2) Social and environmental protection: China is unable to cover many rural people with healthcare services. It needs to take care of environmental protection more seriously; 3) Political reform- democratization: China's idea of a centralized state, with power emanating from the top, has been the basic Chinese model. However, China needs a decentralized and diverse market economy.

Chapter 9 talks about 'India's Market Reforms'. India began to introduce far-reaching market reforms in 1991. The Author considers India's history during the seventeenth to nineteenth centuries, when it lost its sovereignty to a private corporation (the British East India Company). The British Raj did not show an interest in educating the Indian population (Sacks, 2005: p.174). Moreover, its per capita economic growth during the period 1870 to independence in 1947 was a meagre 0.2 percent per year, compared with 1 percent in the UK" (Ibid, p.176).

This chapter (Chapter 9) of the book mentions that "By 2004, India was growing at around 7 percent per year, approaching the growth rate of China…By national measures, the poverty rate declined from 42 percent of the population in 1990 to an estimated 35 percent of the population in 2001" (Sacks, 2005: p.181). In other words, economic growth reduced poverty. Still, India has economic challenges to reduce its poverty. However, the good news is that India has made a new goal to provide "electricity for all", and develop basic infrastructure and social services.

Chapter 10 talks about different diseases that cause human sufferings in African countries. The reasons are poverty and inappropriate fiscal policies and inadequate funding from the donors. Jeffrey Sacks claims that it is not true African countries are behind in development because of corruption, lack of good governance and market reforms. He finds Asian countries (Bangladesh, India, Indonesia and Pakistan) have extensive corruption, but they enjoyed rapid economic growth. African countries are suffering from HIV AIDS and Malaria. They need funding for eradicating these diseases. However, rich countries and international donors are not funding enough to address these issues in Africa. Jeffrey Sacks (2005) believes, "Many African governments are desperately trying to do the right things, but they face enormous obstacles of poverty, disease, ecological crisis, and geopolitical neglect or worse (p. 207).

Chapter Eleven talks about the Millennium Development Goals (MDGs) and post 9/11 anti-terrorist movement. Millennium goals are 1: eradicate extreme poverty and hunger; 2: achieve universal primary education; 3: promote gender equality and empower women; 4: reduce child mortality (children dying under the age of five); 5: Improve maternal health; 6: Combat HIV/AIDS, malaria and other diseases; 7: Ensure environmental sustainability; 8: Develop a global partnership for development.

Jeffrey Sacks (2005) thinks "It would be a huge mistake to direct all DCs' energies, efforts, resources, and lives to the fight against terrorism while leaving vast and even greater challenges aside. Ten thousand Africans die needlessly and tragically every single day since September 11 –of AIDS, TB and malaria" (p.215) because "The costs of that misadventure have been huge –at least $130 billion or so in direct military outlays in the first eighteen months in Iraq war…"(Ibid, p.221). It is kind to the perpetrators to call an attack on another country a misadventure, especially it that directly results in thousands of people dying and indirectly hundreds of thousands (possibly a million). Even if the intention was good or without malice, in an impartial court it would be judged at least as criminal negligence. Many would call it a major crime.

Jeffrey suggests that by facing poor countries' emerging markets "private capital can fuel a great deal of development" (Ibid, p.217).

Jeffrey Sacks has initiated two projects in Sauri Kenya and Mumbai India. He narrates experiences from these two projects in Chapter Twelve. These two micro level projects are examples of on-the-ground solutions for ending poverty. Sachs went to eight Kenyan villages in July 2004 as part of the UN Millennium Project and the Earth Institute. There he finds 30 percent of the adult population in Sauri is infected with AIDS. There he finds just one in four Sauri farmers' uses nitrogen fixation fertilizers in the village because it costs money to use this fertilizer. Around ¾ of households of the village reported that someone was suffering from malaria. Only two out of two hundred people said they used bed nets, but all said they would like to have one (Sacks, 2005: p.230). Moreover, in his narrations he considers macro-level problems like geographic isolation, disease, vulnerability to climate shocks, and so on (Ibid, p.226). Jeffrey urges a political commitment to addressing these macro-level issues.

Jeffrey Sachs proposes five interventions to address African issues: 1) agricultural inputs like fertilizers, small-scale irrigation, grain storage, etc.; 2) investment in basic health services; 3) investments in education such as meals for all children at primary school, vocational training, and technical knowledge; 4) electric power, modern cooking fuels, transport, and communications services must be made available, as well as 5) safe drinking water and sanitation. Jeffrey Sacks (2005) says, "Corruption must be dealt with systematically through education and fair pay to senior officials rather than with moralizing" (p. 237. Moreover, he identifies both sides (donors and receivers) as having issues of corruption that need to be addressed to stop corruption.

Jeffrey Sacks has meetings with the urban poor in Mumbai, India and he has come to learn about community organization for slum dwellers with the NGO Society for the Promotion of Area Resource Centres (SPARC). He finds the women of SPARC testify to the power of group action: "Group action has taught them that in fact they have legal rights within the city and even the possibility of access to public services if they act together" (Sacks, 2005: p. 240). However, Sacks finds, "there are problems existing among these women because this impoverished squatter community of women have no land. Therefore there are problems continue among these women to develop their collective voices" (bid, p.241).

The author of the book "The End of Poverty" Jeffrey Sacks believes that investment can contribute to economic development better than aid. In chapter 13, he thinks part of the reason for poverty is that the amount of per capita income declines when a population grows faster than its income (Sacks, 2005: p. 245). Here Jeffrey Sachs draws three diagrams: The first diagram (Ibid, p. 247) demonstrates the basic mechanics of capital accumulation--how a household functions normally and becomes richer. The second diagram (Ibid, p. 248) demonstrates the poverty trap. The diagram indicates that the state has no income, which means that there is no tax money to invest in public services by the state because there is no household savings of the citizens of poor countries. The third diagram (Ibid, p. 248) demonstrates that foreign aid is not enough for food for families in crisis. Rather the money toward the public budget to projects serving to the vulnerable people and micro-financing small businesses will break the poverty trap. Sachs calls this Official Development Assistance (ODA), and it is necessary to poor countries to overcome their poverty.

A government might want to provide subsidized fertilizers to subsistence farmers so that they can produce enough to eat, or micro-credits to rural women so that they can start micro-businesses. Jeffrey Sacks (2005) believes, "Once these households successfully raise their incomes above subsistence, and begin to accumulate savings on their own, the government subsidies can be gradually withdrawn" (p.254). Moreover, he suggests that public funding (investment) should look to develop the six types of capital: (1) business capital (machines, facilities, transport, and industry); (2) human capital (health, nutrition, and skills development); (3) infrastructure; (4) natural capital (land good for farming, biodiversity); (5) knowledge capital (science and technology) and (6) public institutional capital--commercial law, justice system for peace.

In Chapter 13, Jeffrey Sachs mentions that large numbers of people need to be educated in specific ways that will address the tasks at hand. For example, a literate person could be trained as a community health worker (Paramedics) with the ability to prescribe anti-malaria and anti-AIDS drugs, give out bed nets, administer immunizations, etc. The chapter has ten examples of successful development projects for scaling up the fight against poverty. They are: 1) the green revolution in Asia. 2) The eradication of smallpox. 3) The campaign for child survival. 4) The global alliance for vaccines and immunization. 5) The campaign against malaria 6) the control of African river blindness. 7) The eradication of polio. 8) The spread of family planning. 9) Export processing zones in East Asia. 10) The mobile phone revolution in Bangladesh.

Chapter 14 is entitled "A Global Compact to End Poverty". Ending poverty requires assistance from both the rich and the poor. Many donors give such little funding to so many projects in developing countries that they are really only for show. For example, Ethiopia needs about $70 per person per year in development assistance compared with the $14 per person it receives today (Sacks, 2005: p.266). The author describes the issue of the planning process for funding from the donors. The UN secretary-general should oversee the entire effort of the funding planning process. He suggests that each low-income country should adopt a poverty reduction strategy (PRS) specifically designed to meet the Millennium Development Goals. Jeffrey claims that many of them have PRS, but they are unable to achieve their goals because of chronic underfunding.

A Millennium Development Goals-Based Poverty Reduction Strategy (PRS) has five parts: 1) A differential diagnosis which identifies the policies and investments countries need to achieve the goals; 2) An 'Investment Plan' which shows the size, timing, and costs of the required investments; 3) A Financial Plan to fund the Investment Plan, including the amount donors will have to fill; 4) A Donor Plan, which gives the multiyear donor commitments for filling the Millennium Development Goals Financing Gap; 5) A Public Management Plan that outlines the mechanisms of governance and public administration that will help implement the expanded public investment strategy. This would help the rest of donors to develop their "absorptive capacity", i.e. scale up the health sector if countries lack the doctors, nurses and clinics.

Jeffrey Sacks finds there is a gap between the 'Financial Plan' and 'Millennium Development Goals'. For example, in the education sector, a proper financial plan begins with an estimate of the unit costs of providing the key investments in teachers, classrooms, kilowatt hours of electricity, health clinics, kilometres of road, and so forth. The costs should include not the initial costs of the project, but the costs to maintain the project. For example, many donors would help poor countries build clinics, but wouldn't help with salaries of nurses and doctors to go to the clinics. A financial plan should include a realistic picture of what poor countries can do although they cannot pay.

The book asserts, in this Chapter 14, the following 4 things are important for the donor plan: (1) Magnitude of funding: Aid must be large enough to enable the recipient country to finance its investment plan, (2) Timing: Aid must be long term enough to enable the recipient country to follow through on a ten-year program, (3) Predictability. Aid must be predictable enough so that stops and starts in the aid flows do not jeopardize the investment program or the macroeconomic stability of the recipient country. (4) Harmonization-Aid must support the investment plan, rather than the pet projects of the aid agencies

Moreover, in Chapter 14, the author of the book suggests six components for implementing the public management strategy: (1) decentralization: investments are needed in hundreds of thousands of villages and cities; decisions must be at the ground level, not from Washington; (2) make available training to public officials and other agency officials of the country; (3) information technologies are needed to increase the amount of information transmitted in the public sector that are accessible to all parties; (4) develop measurable benchmarks; (5) enlarge public audit teams; and (6) develop intensive monitoring and evaluation schemes for public projects and public works. It is also necessary to enhance regional infrastructure development and cooperation, which are important for a country's development.

Global socioeconomic and environmental policies are important for global poverty reduction too. Poor countries need to address their poverty at the global level by taking into account the debt crisis, global trade policy, science for development and environmental stewardship. Restoration of cultural values and norms are also important. He thinks it is time to cancel the debts of highly indebted poor countries as part of the financing package for the Millennium Goals-based poverty reduction strategies. However, the global trade policy slogan "trade, not aid" is wrong. According to Jeffrey Sacks (2005) aid and investments should go parallel. The Sect oral approaches are necessary for a country's total development: for tropical agriculture, one needs seed varieties, water management techniques, and soil management techniques, including renewable energy sources in the remotest areas of poor countries. Moreover, developing countries need to improve their water management technologies such as those for water harvesting, desalination, and small-scale irrigation, and to improve management of aquifers which are being depleted by overuse.

Moreover, the book advocates for sustainable management of ecosystems. Poorest are the most innocent victims in a process that is disproportionately caused by rich countries. Rich countries, particularly the United States, need to keep their commitment to the

United Nations Framework Convention on Climate Change for the "stabilization of greenhouse gas concentrations in the atmosphere." (Sacks, 2005: p. 284) and give financial assistance to poor countries to enable them to respond to climate change.

In chapter 15, entitled 'Can the Rich Afford to Help the Poor?' Jeffrey Sacks (2005) suggests, "The rich can eliminate extreme poverty by committing 0.7 percent of the gross national product of the high income world (p. 288). He mentions there are five reasons for the requirement of the effort to eradicate extreme poverty (Ibid, p. 289): 1) the numbers of extreme poor have declined to a small proportion of the world's population; 2) the goal is to end extreme poverty, not all poverty; 3) success in ending the poverty trap will be much easier than good governance or efficient market economies; 4) the rich world today is so vastly rich; 5) current tools are more powerful than ever, with mobile phones and the Internet ending an information famine across the world. Global development strategies should emphasize these points in order to develop the under-developed countries.

Jeffrey Sacks does not like direct cash transfers for development assistance except for humanitarian crises. He suggests direct foreign assistance should be used for investments to infrastructure and human capital, thereby empowering the poor to be more productive on their own account, and putting them on a path to self-sustaining growth. Jeffrey Sacks (2005) identifies 6-steps proven to be useful for the UN Millennium Project for investments needed to end extreme poverty (p. 291): 1) identify the package of basic needs; 2) identify, for each country, the current unmet needs of the population; 3) calculate the costs of meeting the unmet needs through investments, taking into account future population growth; 4) calculate the part of the investments that can be financed by the country itself; 5) calculate the Millennium Development Goals Financing Gap that must be covered by donors; 6) assess the size of donor contributions relative to donor income.

To fulfill the 'Package of Basic Needs Primary Education for All Children' the book has calculated that of the $110 per person per year, households will be able to pay around $10 per person per year, whereas government could pay $35/year and $65 would be for donors to finance (Sacks, 2005: p. 294-295). In such case, only $12 billion out of the $43 billion in development assistance in 2002 went to low-income countries in a form that helped support the package of basic needs. However, the top four hundred taxpayers in the U.S. had a combined income of $69 billion dollars or $174 million dollars per taxpayer (Ibid, p. 305) while the combined incomes of Botswana, Nigeria, Senegal and Uganda in 2000 was the income of 161 million people. If the wealthy would spend the money they gained from the tax cuts, they could eliminate extreme poverty. Bill Gates has done his part with a gift of $23 billion establishing the Bill and Melinda Gates Foundation (Ibid, p. 3407). Hence Jeffrey Sacks concludes it is not a problem for the United States to afford 0.7 percent of GDP aid to UDCs, but the US does not keep its commitment.

In the twentieth century, sociological theories in the tradition of Max Weber tried to explain lower incomes of Southern Europe and Ireland relative to Northern Europe on the basis of Catholicism and Protestantism. However, once malaria was cured, the Catholic countries began to overtake the protestant ones in per capita income. Weber also hypothesized that 'Asian values' would make it difficult for China to achieve economic progress. However, now 'Asian values' are being touted as an explanation for success. In the wake of September 11, Islamic societies have been categorized by some Western observers to be unfit for modernity; yet some of the fastest growing economies in the past decades have been Islamic. Between 1990 and 2001, average annual per capita growth was 3.9 percent in Malaysia, 3.1 percent in Bangladesh and 3.01 percent in Tunisia (Sacks, 2005: p. 316-317).

Jeffrey Sacks thinks 'Social Darwinism', the idea that real life is competition and struggle for survival of the fittest, is another myth. However, although much of free-market economic theory has this vision, economists from Adam Smith onward recognized that competition and struggle are but one side of economic life. Trust, cooperation, and collective action in the provision of public goods are the other side of Social Darwinism. Hence, modern economic planners need to look at communal norms and values instead of only promoting individualism and the profit motive of business culture.

Chapter seventeen talks about why the whole world needs to move forward together to eradicate poverty. The author hears that many Americans put their faith in military spending, which was thirty times more (at $450 billion) than what they spent on foreign assistance ($15 billion) in 2004 (Sacks, 2005: p. .329). Many Americans think that more economic linkages with the rest of the world diminish chances of state failure. Since 9/11, the United States of America's budget has emphasized the National Security Strategy. President George Bush Junior increased aid by $5 billion, but this was not in accordance with the needs of the poor countries ($100 billion more need for aid increase) to meet the Millennium Development Goals (Sacks, 2005: p. 336). However, much of the money from this funding went to pay development professionals. The US should act as it promised in the Rio Summit on Sustainable Development in 1992, committing itself to reach the accepted UN target of 0.7 per cent of Gross National Product (GNP) in international development assistance (Ibid, p. 338).

Chapter 18 is called 'Our Generation's Challenge'. Adam Smith believed that an economic system could be designed in a way that meets human needs (in Sacks, 2005: p. 348). Immanuel Kant in 1795 argued for the need for a global system of governance to end war. Marie-Jean-Antoine Condorcet, a French philosopher, stressed the need for public education to accomplish all of these goals. Public education is very important to eradicate poverty because the current generation needs to have an advanced enlightened vision (Sacks, 2005: p. 351). Moreover it needs to foster political systems that promote human well-being. Jeffrey Sacks believes that the spread of economic systems could be possible by spreading the benefits of science, technology, and the equitable division of labour in all parts of the world in order to foster international development and to secure peace. Interestingly, the spread of the economic system favoured by the U.S. (corporate capitalism) has been accomplished through wars and threats of violence, as well as making financial assistance dependent on adoption of economic policies that place burdens exclusively on workers. This manuscript thinks conflicts among countries are destroying peace and development of the respective countries. Therefore, avoiding conflict among nations is crucial for development and peace.

In addition to these, cooperation among regional agencies and networking among international and national development agencies can contribute to putting pressure on rich nations to fulfill their role in resolving the human rights issues of developing countries and to solve these problems. Although this is a challenging job, it is necessary for human well-being.

IV. Book Review

The book contains world maps marked/sketched with different colours to show moderate poverty and extreme poverty, income per capita, low-income, and average annual GDP per capita growth of different countries in the world. The maps show variation in life expectancy around the world, distribution of foreign affiliates in textile and clothing industries, multinational electronics companies around the world. There are some colourful maps on malaria risk by regions and a malaria ecology index of different countries. The book has many pictures of squatters/slums and schools in different countries. Pictures have scenarios of the social and familial life of poor people in squats. These colourful maps and pictures visually identify different socioeconomic problems/issues in different countries around the world.

The first chapter contains bar diagrams on the numbers of extreme poor, the proportion of people living in extreme poverty, the proportion living in moderate poverty and numbers living in moderate poverty in different regions in the world in 1981 and 2001. The poverty areas are divided into seven regions by Jeffrey Sacks (2005): East Asia, Eastern Europe and Central Asia, Latin America and Caribbean, Middle East and North Africa, South Asia and Sub-Saharan Africa.

Moreover, the book contains different tables and figures with latest statistics on savings rates in developing countries, corruption and economic growth, foreign direct investment and income. Many tables contain average economic growth in different decades, growth and governance, and urbanization growth rates in 1981-1991. The book includes facts and figures on economic growth and poverty reduction in India. Many figures compare and contrast distribution of employment in China and Russia, economic growth and poverty reduction in China. Moreover, figures contain per capita income in China relative to Western Europe, fertility and economic development. The book has a checklist for making a differential diagnosis of innovative 'Clinical Economics'.

Many tables and figures relate to state failures and subsequent U.S. military involvement, and the ratio of military expenditure to official development assistance (2002). The book has tables that indicate overseas development budgets for sexually transmitted disease control, including HIV/AIDS in sub-Saharan Africa (1990-1998). The book has tables and figures comparing highest U.S. incomes and African GDP. Moreover, the book has statistics in tabular form on the regional breakdown of annual budget support required from donors to meet the millennium development goals (MDGs) by UN agencies. The book also includes figures on private and public capital investment in poor countries, the poverty trap and the role of ODA in eliminating it, and the basic mechanics of capital accumulation. All data, facts, figures and statistics of the book are from secondary sources. There is a chart of details of the Millennium Development Goals (MGDs). These tables, figures, diagrams and checklists assist readers to quickly skim and visually grasp ideas of different issues in different regions and different countries in the world. The tables, figures and diagrams have descriptions in the book too.

Poor people need services in health, nutrition, education, housing, agriculture, security. Moreover, the poor countries need to develop their transportation and IT infrastructures. Jeffrey Sacks believes economists should engage in holistic analyses of countries, which sounds good. However, Rouf's question is: then what? Too much analysis results in economic plan paralysis. Every country has its own 'Economic Master Plan' and 'Five Year Plan', but following Western orthodox economics. These plans are political and serve as eye wash to the public. In addition to this, geopolitics, globalizations, misrule of the rich countries (particularly US and Britain) lead the poor countries to poverty and to be dependent on them. Therefore it is important poor countries should challenge the prescriptions of Western donors and develop their country's economics in context.

The book mainly focuses to reform international agencies Aids and G-8 countries international development policies, international funding strategies and actions. Although Jeffrey Sacks is from US, he is critical to US role to international development and fund realising to developing countries. Moreover the book focuses on developing countries poverty; however, poverty also exists in rich countries.

The book misses to narrate poverty situations in rich countries and their poverty eradication in rich countries. For example, according to U.S. Census figures 36 million persons lived in poverty (2005). 20.4 million of the nation's 36 million poor persons are women and 13 million of these women are in what the US Census Bureau has accepted as 'deep poverty'. 9.8 million are single mothers who are by far the poorest group with 38 percent living poverty line. This compares to 11 percent of all Americans who live below the poverty threshold. Among these poor persons, 8.7 million are first-generation immigrants and their family members. Roughly one in four poor persons is an immigrant or member of an immigrant's family. Half of the poor immigrant population is female. Moreover, three million undocumented women are living in United States (Grameen America Project Paper, 2008). However, these women form much of the back bone of USA economy, providing care for children, and nursing services for the aging parents. They clean houses, prepare food in restaurants and pick up food that people eat breakfast (Jewish Council for Public Affairs, 2007). Similarly Canada has poverty. Even poverty rate is higher than USA.

Although Canadian economy is growing; however, according to Statistics Canada 2006, the overall poverty rate is 15.5% in Canada in 2004. The poverty rate for children increased from 16.25 in 1984 to 17.7% in 2004. Poverty rate of senior citizens is 14%. The poverty rate of unattached Canadians is 37.6%. Moreover, children poverty rate in female-led households is very high 52.12% (Raphael, 2007: p. 31).

Child poverty in Toronto has reached "epidemic" levels, with 29 per cent of children –almost 149,000-living in low-income families, according to new data being released by a coalition of community activists and social agencies in Toronto. Across the city, almost 40 per cent of the Toronto's 140 neighbourhoods have child poverty rates of 30 per cent or more according to the coalition's analysis of Statistics Canada recently released 2012 tax filer data. Moreover, neighbourhood disparity varies dramatically from 5 per cent in Leaside, Lawrence Park and the Kingsway neighbourhoods to 60 per cent or more in Regent Park, Moss Park and Thorn cliff Park neighbourhoods, the data shows. Residents of African, Asian, Middle Eastern, Caribbean and Latin American backgrounds are more likely to be living in poverty (Toronto Metro, August 27, 2014).

Similarly it is find every rich country is also suffering from poverty and unemployment. Poverty eradication and unemployment issue is a global issue; these problems are not only in poor countries issue. Although Jeffrey Sacks articulates alarming statistics and alarming future poverty situation of poor countries; however, green fiscal macroeconomic policies and green community development micro economic actions are essential both in rich countries and poor countries that are missing in the book. However, Jeffrey's suggestions of six steps at the end of the book for UN Millennium Project to end extreme poverty are applicable to all countries: 1) Identify the package of basic needs, 2) Identify, for each country, the current unmet needs of the population, 3) Calculate the costs of meeting the unmet needs through investments, taking into account future population growth, 4) Calculate the part of the investments that can be financed by the country itself, 5) Calculate the Millennium Development Goals Financing Gap that must be covered by donors and 6) Assess the size of donor contributions relative to donor income. It is important to know whether UN agencies take notes and follow these six steps for their UN Millennium Project to end extreme poverty where applicable.

V. Book Review

The book has eighteen chapters and sixty five sections and sub-sections. The first part of the book (Chapter 1-12) provides poverty situations for the five countries of Malawi, Bangladesh, India, China and Russia, and their ascent and descent on the 'Ladder of Economic Development'. The countries' examples of development show the reader the pivotal roles that science and technology play in the development process; a progression of development that moves from subsistence agriculture toward light manufacturing and urbanization.

Chapters 13-18 contain analyses of different socio-economic situations, issues and challenges of the world, global policies and the macro policies of different developing countries and their pros and cons for economic development, barriers to socio-economic development, the role of international donor agencies and rich countries and their funding statistics (the commitments of rich countries and their actual fund release statistics). Moreover the chapters talk about the politics of international agencies (World Bank, IMF and other international agencies) and their role in poverty eradication. These chapters contain many recommendations to address different issues in different countries.

The book contains world maps marked/sketched with different colours to show moderate poverty and extreme poverty, income per capita, low-income, and average annual GDP per capita growth of different countries in the world. The maps show variation in life expectancy around the world, distribution of foreign affiliates in textile and clothing industries, multinational electronics companies around the world. There are some colourful maps on malarial risk by regions and a malaria ecology index of different countries. The book has many pictures of squatters/slums and schools in different countries. Pictures have scenarios of the social and familial life of poor people in squats. These colourful maps and pictures visually identify different socio-economic problems/issues in different countries around the world.

The first chapter contains bar diagrams on the numbers of extreme poor, the proportion of people living in extreme poverty, the proportion living in moderate poverty and numbers living in moderate poverty in different regions in the world in 1981 and 2001. The poverty areas are divided into regions: East Asia, Eastern Europe and Central Asia, Latin America and Caribbean, Middle East and North Africa, South Asia and Sub-Saharan Africa.

Moreover, the book contains different tables and figures with latest statistics on savings rates in developing countries, corruption and economic growth, foreign direct investment and income. Many tables contain average economic growth in different decades, growth and governance, and urbanization growth rates in 1981-1991. The book includes facts and figures on economic growth and poverty reduction in India. Many figures compare and contrast distribution of employment in China and Russia, economic growth and poverty reduction in China. Moreover, figures contain per capita income in China relative to Western Europe, fertility and economic development. The book has a checklist for making a differential diagnosis based on innovative 'Clinical Economics'.

Many tables and figures relate to state failures and subsequent U.S. military involvement, and the ratio of military expenditure to official development assistance (2002). The book has tables that indicate overseas development budgets for sexually transmitted disease control, including HIV/AIDS in sub-Saharan Africa (1990-1998). The book has tables and figures comparing highest U.S. incomes and African GDP. Moreover, the book has statistics in tabular form on the regional breakdown of annual budget support required from donors to meet the MDGs, by UN agencies, World Bank, IMF, UNESCO, UNICEF, UNDP, UNHCR, ILO, and FAO. The book also includes figures on private and public capital investment in poor countries, the poverty trap and the role of ODA in eliminating it, and the basic mechanics of capital accumulation. Maximum all data, facts, figures and statistics of the book are from secondary sources. There is a chart of details of the Millennium Development Goals (MGDs). These tables, figures, diagrams and checklists assist readers to quickly skim and visually grasp ideas of different issues in different regions and different countries in the world. The tables, figures and diagrams have descriptions in the book too.

Poor people need services in health, nutrition, education, housing, agriculture, security. The poor countries need to develop their transportation and IT infrastructures. Jeffrey Sachs believes economists should engage in holistic analyses of countries, which sounds good. However, Rouf's question is: then what? Too much analysis results in economic plan paralysis. Every country has its own 'Economic Master Plan' and 'Five Year Plan' following Western orthodox economics. These plans are political and serve as eye wash to the public. In addition to this, geopolitics, globalizations, misrule of the rich countries (particularly US and Britain) lead the poor countries to poverty and to be dependent on them. Rouf believes poor countries should challenge the prescriptions of Western donors and develop their countries' economics in context.

The recent and most growing problem in poor countries is the growing number of unhygienic and unsecure slums in cities. Criminal activities like rape, prostitution, women and child trafficking, kidnapping, murder, drugs and fighting are going on in slums. Political parties use slum dwellers for political and voting purposes. Governments, national NGOs and international agencies should look at physical and social infrastructure development of slums.

Jeffrey Sachs finds the post 9/11 US role in the world is one guided especially by a policy of warfare and actions in the name of security measures. The US has increased its budget for its Inland Security. However, it decreases its international development aid budget that it had committed to in the UN Convention of 1949.

In the book, Jeffrey Sachs presents a definition of poverty and identifies different patterns of poverty in different countries. The world's extreme poor, 93 percent in 2001, live in three regions: East Asia, South Asia, and sub-Saharan Africa. He suggests that the eradication of poverty should be strategic to specific situations of poverty instead of using a flat playing field model for all. However, he is unable to provide a specific model for ending poverty.

The book claims that the G-8 countries do not keep their 'Development Aid' commitments of 0.7% of their Gross National Income (GNP) as funding to developing countries. Although Jeffrey Sachs is an economist, his suggestions to end poverty and enable ascent of the economic development ladder are based on an economic ladder with integrated rungs. He provides both micro- and macro-level examples of innovative projects that contribute to country-specific socio-economic development. Although the book has few macro-economic policy intervention steps, policy is not enough for a country's development. It additionally needs actions and advocacy that exert pressure towards releasing funds and implementing macro-economic policies in developing nations. Although the book's emphasis is on trade investments by rich countries in addition to donations to developing countries to further their development, the book does not narrate how trade investments would appear in trade policy. Nevertheless, he suggests direct foreign assistance should be used for investments in infrastructure and human capital development through public services in health, nutrition, and education, thereby empowering the poor to be more productive on their own account, and putting poor countries on a path of self-sustaining growth.

Jeffrey Sachs is optimistic about ending poverty because he finds half of the world is experiencing economic progress. However, the greatest tragedy in the 21st century is that one sixth of humanity is not even on the development ladder; a large number of the extremely poor are caught in a poverty trap that they are unable to escape from. According to Jeffrey Sachs 'Our Generation's Challenge', which is the title of a section in the book, is to help the poorest of the poor to escape the misery of extreme poverty as part of the process of development. By offering this help to poor countries, all people will have the opportunity to ascend up the ladder of economic development. However, the book neglects to explain how the world employment crisis, including that among youth, and the more grave crises of pollution and environmental degradation can be met through macro- and micro-economic policy and strategy.

Chapter 1 of the book covers eight of the Millennium Development Goals (MDGs). All 191 UN member states unanimously agreed to work for MDGs in 2002 by signing the UN Millennium Declaration; these goals are important targets for cutting poverty in half by the year 2015. Jeffrey Sachs criticizes the applied strategies for MDGs as failures to achieve them. Although the book talks about global poverty and its end, Jeffrey misses the chance to suggest that solutions to achieve MDGs are tied to context; that is to say, they differ according to the countries in which they are applied.

The book's coverage includes different economic theorists like Adam Smith, Angus Madison, Immanuel Kant, John Maynard Keynes, as well as events and concepts such as the French Revolution, Industrial Revolution, British Colonization and the process of economic exploitation of different countries by the colonizers. However, the book does not have a new theory or a new framework of development for eradication of poverty; rather it provides an aggregation of a variety of statistics. These alarming statistics, facts and figures generate consensus among readers, academicians, researchers, donors and policy makers about poverty and its consequences.

Now-a-days advocacy and movements like the occupy movement are important and powerful for putting pressure on formal agencies/governments to achieve targeted socio-economic demands. There are many national and international advocacy agencies advocating for and working to fulfill people's rights, demanding justice and government commitments to solve the issues. However, Jeffrey Sachs does not mention or suggest advocacy by occupy movements for the fulfilling of demands on various issues. For example, advocacy can put pressure to G-8 countries, the World Bank and IMF for increasing their funding and investments to developing countries for the poverty eradication programs and services. The book does not mention this important advocacy/ occupy movement strategy for fulfilling public issues and demands.

Jeffrey Sachs believes in 'Growth of Household Income per Capita'. This growth can increase in at least four ways: saving, trade, technology, and resource boom. According to him, reduction in household incomes results from lack of saving, absence of trade, and technological reversal. However, the key problem for the poorest countries is the poverty trap itself. When poverty is very extreme the poor do not have the ability to get out of the mess by themselves.

Jeffrey Sachs concludes that when people are poor, but not utterly destitute, they may be able to save financially. However, the garment factories are helping to change the idea of women in society, as women send back remittances to their families and the families are able to diversify their rural agriculture base with urban industry as well. The garment sector is fuelling Bangladesh's economic growth of 5% each year (Sachs, 2005: p. 13).

The book mentions the key problem for the poorest countries is that poverty itself can be a trap (Sachs (2005: p. 71). This is because when poor people are utterly destitute they need their entire income just to survive. Moreover, he mentions that other factors like physical geography, geopolitics, government failures, cultural barriers, and lack of innovation are causes of poverty. Contributing to poverty are the fiscal trap (lack of the financial means to provide public goods as the most people possible are impoverished, and can't be taxed, or the government may be corrupt and unable to collect tax revenue, or the government may be carrying a lot of debt), and the demographic trap (where poor families continue to have many children).

Jeffrey Sachs claims that poverty was seen in a simpleminded way by the rich countries, which is wrong. For example, the rich countries told the poor countries: "Poverty is your own fault. Be like us be-free-market oriented, entrepreneurial, fiscally responsible) and you too, can enjoy the riches of private-sector led economic development" (Sachs, 2005: p. 81).

The IMF-World Bank programs of the structural adjustment era were designed to address not poverty, rather to address the four maladies assumed to be economic ills: poor governance, excessive government intervention in the markets, excessive government spending, and too much state ownership. However, Jeffrey Sachs does not tell about a people-centered public financing approach that could be an alternative to the IMF and World Bank for addressing the issue of poverty in poor countries. Brazil, Russia, India, China and South Africa together make an international bank called BRICS Bank. The BRICS Bank could finance development projects in poor countries without red tape.

Currently rich countries are preoccupied with addressing the issue of terrorism after 9/11. In regards to this issue, Jeffrey Sachs (2005) rightly mentions, "It would be a huge mistake to direct all our energies, efforts, resources, and lives to the fight against terrorism while leaving vast and even greater challenges aside (p. 214). The rich countries are revenges for three thousands died New York in 9/11. However no body seriously think to the issues of ten thousand Africans die needlessly and tragically every single day –and many have died every single day since September 11 – of AIDS, TB and malaria" (p.215). Rich countries, particularly the U.S., are focused on their terrorism agenda. Hence they spend billions of dollars to fight against terrorism. For example, "The war in Iraq began on March 20, 2003…The costs of that misadventure have been huge –at least $130 billion or so in direct military outlays in the first eighteen months…" (Ibid, p. 221). It is kind to the perpetrators to call an attack on another country a misadventure, especially 1 that directly results in thousands of people dying and indirectly hundreds of thousands (possibly a million). Even if the intention was good or without malice, in an impartial court it would be judged at least as criminal negligence. Many would call it a major crime.

The book rightly raises the point that 'good investments should come in packages' to reduce the child mortality rate, and it proceeds to develop his six types of capital. The six types of capital are: (1) business capital (machines, facilities, transport, industry); (2) human capital (health, nutrition, skills); (3) physical and social infrastructure capital; (4) natural capital (land good for farming, biodiversity); (5) knowledge capital (science and technology); and (6) public institutional capital (commercial law, justice system, peace). However, missing here are strategies to implement these types of capital by rich and poor countries in order to address the issue of poverty.

Chapter 15 of the book has a section called 'The Package of Basic Needs'. Here Jeffrey Sachs specifically talks primarily about education for all children, nutrition programs for all vulnerable populations and costs of providing them. The book emphasizes designated target ratios of pupils to teachers, access to safe drinking water and sanitation. Here the book illustrates MDG projects in the five developing countries of Bangladesh, Cambodia, Ghana, Tanzania, and Uganda and calculates the costs of scaling up infrastructure and social services by the year 2015 as having a price tag of roughly $100 per person per year during the period of 2005 to 2015 (Sachs, 2005: p. 295). He thinks that, of the $110 per person per year, households will be able to pay around $10 per person per year, whereas the government could pay $35/year and $65 would be for donors to finance. However, the problem here is that in 2002, for example, only $12 billion out of the $43 billion in development assistance provided by rich countries went to low-income countries in a form that helped support the package of basic needs. In other words, the problem is that rich countries do not fulfill their commitments.

The book has a section called 'Investing in Technological Capacity' in Chapter 13. Here Jeffrey Sachs mentions, "Indeed, rapid economic development requires that technical capacity suffuse the entire society, from the bottom up" (p.257). He believes that, as a result, large numbers of people need to be educated in specific ways that will address the tasks at hand. However, he does not mention mass education and mass literacy services, non-formal adult learning and global citizenship education, which are very important for a poverty eradication strategy. This important education component of development is an oversight of the book and needs to be included. However, the book rightly mentions that ending poverty requires assistance and effort from both the rich and the poor; the poor need to spend more of the resources on poverty reduction and the rich need to follow through on their promises to give more help to poor countries.

The book also mentions implementation strategies for donor plans. Development of a public management strategy is crucial for governance of resources and donor funds. Jeffrey suggests six components of a strategy for implementing public management services/projects: (1) Decentralization--investments are needed in hundreds of thousands of villages and cities, therefore the details need to be decided at the ground-level rather than in Washington; (2) appropriate training for public budget management; (3) provide training on information technologies; (4) there is a need to increase the amount of information transmitted in the public sector and to make it accessible to all parties; (5) identify measurable benchmarks; (6) develop public auditing systems and design monitoring and evaluation devices or schemes. These are ideal tips for implementing donor plans. However, donors can get ideas and overcome challenges, if the book provides mean ways of creating or implementing or devising donor plans and implementations of plans with examples using Jeffrey Sachs's tips.

At the end of the book Jeffrey Sachs suggests several strategies and policies for poverty reduction in poor countries. His emphasis is on regional infrastructure development like African Union, and African Peer Review Mechanism (APRM). However, for regional infrastructure development, regions need regional policies, location-specific strategies and funding for poverty reduction. Poverty reduction approaches are not one size fits all that applies to all. For example, poor countries have needs to be addressed at the global level such as the issue of the debt crisis; they need global trade policy, appropriate science and clean technology for their development and environmental stewardship.

Chapter 16 of the book tells of nine myths. Jeffrey Sachs describes these myths as development mistakes, falsehoods, propaganda, and false beliefs about developing countries' resources and their utilization and governance. The myths act as negative propaganda on problems of different socio-economic, cultural, and environmental plans and programs by rich countries and international agencies. The myths are: (1) aid given to poor countries is wasted aid; (2) corruption is the culprit (in Africa there is poor governance); (3) there is absence of democracy and lack of modern values; (4) the need for economic freedom means that markets should rule every aspect of the economy, not just the productive sectors; (5) aid is dangerous; (6) all that is needed is the will to liberalize and privatize; (7) HIV crisis in Africa is due to a shortage of morals; (8) helping the poor will only lead to a population explosion; (9) the remaining problems of extreme poverty will take care of themselves because economic development will spread everywhere, and real life is competition and struggle for survival of the fittest, or social Darwinism.

For context regarding the first myth, Jeffrey Sachs (2005) debates that in 2002, the U.S. gave $3/sub-Saharan African, and after administrative costs this amounted to 6 cents, then they complained they have "nothing to show for it" (Ibid, p. 310). However, in reality it was of little use because they gave very little money. Virtually every society that was once poor has been derided for being lazy until its citizens became productive by their superior character. For example, according to the foreign press Japan in the 1870s was unable to achieve wealth (Ibid, p. 316), but now they are among the richest nations in the world.

Jeffrey thinks these myths are not universally true everywhere. He provides the actual flip-side of the situation or the motives for these portraits of misinformation sketched by donor countries and funding agencies. For example, he mentions that people think the HIV crisis in Africa is due to a shortage of morals. Studies show African men do not have more sexual partners than men in Thailand and Rio de Janeiro.

In the Rio Summit on 'Sustainable Development' in 1992, the world leaders committed to reach the accepted UN target of 0.7 per cent of Gross National Product (GNP) assigned to international development assistance. The UN Marshall Plan had the U.S. commitment to carry on in other development programs in Asia and Latin America. Sachs (2005) mentions, " Over time, that effort has evaporated; U.S. aid fell from more than 2 percent of GNP during the heyday of the Marshall Plan to less than 0.2 percent of GNP today" (p.217).

Jeffrey Sachs in his book 'The End of Poverty' (2005) places emphasis on private capital investment in poor countries to rejuvenate their economy and to address their unemployment issues instead of resorting to warfare. In the case of emerging markets in poor countries, he says, "private capital can fuel a great deal of development" (p.217). Moreover, he urges the current generation to adopt a vision of advanced enlightenment (Ibid, p. 351) and to foster political systems that promote human well-being based on the consent of the governed. He believes that, to help the spread of economic systems, it is necessary to spread the benefits of science, technology, and the division of labour in all parts of the world. Therefore it is necessary to foster international cooperation in order to secure peace and development in the world.

Almost all scholars are positioned against globalization, but Jeffrey Sachs' position is different. His position is "The anti-globalization movement should mobilize its vast commitment and moral force into a pro-globalization movement on behalf of a globalization so that pro-globalization can addresses the needs of the poorest of the poor; support the global environment and the spread of democracy in poor countries" (p. 259). However, globalization destroys local initiatives, local living economics and community development activities. Instead globalization liberalizes the global trade, consumerism and capitalism that benefit more to rich countries.

More the paper would also argue that the anti-globalization movement is not against globalization in general, but opposes those forms of it such as the W.T.O., N.A.F.T.A., etc. that are designed to benefit and maximize profits of investors and corporations (including provisions for government assistance like tax shelters and relief, financial bail-outs and give-aways, and changing laws to accommodate private ownership or control of public assets) while requiring workers to bear the costs of production and compete against each other in a free-market of global labour.

Jeffrey Sachs (2005) requests that world leaders, donors and other national and international agencies take up the challenge for ending global poverty. His last urgings in this regard are: Commit to ending poverty, adopt a plan of action, raise the voice of the poor, redeem the role of the United States in the World, rescue the IMF and the World Bank (they have been misused as creditor-run agencies rather than international institutions representing all of the 182 member governments), strengthen the United Nations,

Global Journal of Management and Business Research (B) Volume XIV Issue VI Version I Year 2014

harness Global Science, promote sustainable development and make a personal commitment. The World Bank and IMF are bureaucratic red-tape organizations. Hence it is necessary to overhaul these organizations to turn them into ones that are people-centered organizations in the world.

Jeffrey Sachs (2005) points out eight actions and strategies that are needed to keep the commitment made by the U.S. to assist international development: (1) provide resources to aid countries that have met the challenge of national reform; (2) improve the effectiveness of the World Bank and other development banks in raising living standards; (3) insist upon measurable results to ensure that development assistance is actually making a difference in the lives of the world`s poor; (4) increase the amount of development assistance provided in the form of grants instead of loans; (5) since trade and investments are the real engines of economic growth, open societies to commerce and investment; (6) secure public health; (7) emphasize education; (8) continue to aid agricultural development. These are ideal suggestions, but it is not easy to implement them in the present world of capitalistic norms.

President George Bush Junior believes poverty does not cause terrorism and being poor does not make people murders. However, Bush mentions in his speech at the International Conference on Financing for Development in Monterrey Mexico "When governments fail to meet the most basic needs of their people; these failed states can become havens for terror. For example, in Afghanistan, persistent poverty and war and chaos created conditions that allowed a terrorist regime to seize power" (in Sachs, 2005: pp. 218-219.)

The book is critical of Global Trade Policy. Sustained economic growth requires poor countries to increase their exports to rich countries and then earn money to import goods from rich countries. As the rich countries are powerful in trade and commerce, they impose their trade policies on poor countries. Hence the paper question: is it possible to reinvent present global trade policy to free poor countries from influence and trade exploitation by rich countries?

It is necessary to prioritize scientific research to focus on identifying diseases, find out the needs of the poor, and mobilize donor assistance. To address these issues, the UN Millennium Project recommends global donor support of $7 billion per year to address priority research and development needs. World leaders and donor agencies should align funding with poverty research and development (Sachs (2005: p. 283). Jeffrey raises the issue, but he does not reveal how life-threatening-disease-eradicating public health funding strategies can be placed to UN agencies so that the UN could mobilize these funds from rich countries and release funds to needy countries for public health research and development.

The book has a section called 'Environmental Stewardship' in Chapter 14. Here it raises environmental issues and dangers that threaten human existence. Jeffrey Sachs (2005) alerts us to rising ocean levels resulting from global warming. Global warming has disastrous effects on coastal ecosystems and coastal economies. The poorest are the most innocent victims in a process that is disproportionately caused by rich countries. In these situations rich countries, particularly the United States, will have to live up to their long-standing commitment on the 'United Nations Framework Convention on Climate Change' to the "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (p. 284). To address this issue, rich countries need to give financial assistance to and invest more in poor countries to enable them to respond to climate change that affects the poor.

Jeffrey Sachs is critical of the 'International System of Development'. He thinks, "The current system is surprisingly dysfunctional to the point where the IMF and the World Bank sometimes hardly speak with the UN agencies, even though they all depend on one another" (p. 285). All of the agencies are highly specialized in their areas. The table on page 286 describes different UN agencies and their roles in development. The IMF and the World Bank have a privileged position in UN agencies. However, the problem is each does not benefit from its interactions with the others.

In Chapter 15, Jeffrey Sachs talks about 'Can the Rich Afford to Help the Poor'. Here he again narrates that the rich can eliminate extreme poverty by committing 0.7 percent of the gross national product of the high income world; a mere $10 in income; a very small effort is required from DCs. Jeffrey describes five reasons why the level of required effort is modest: 1) the numbers of extreme poor have declined to a small proportion of the world's population; 2) the goal is to end extreme poverty, not all poverty; 3) success in ending the poverty trap will be much easier than it appears; 4) the rich world today is so vastly rich; 5) current technologies and tools are more powerful than ever, with mobile phones and the Internet ending an information famine around the world. Hence, he suggests that, except for humanitarian crises, direct cash transfers are not recommended for development assistance. Jeffrey Sachs (2005) thinks cash doesn't usually alleviate poverty. Instead, direct foreign assistance could be used for investments to infrastructure and human capital development, thereby empowering the poor to be more productive on their own account, and putting them on a path to self-sustaining growth.

VI. Conclusion

The book mainly focuses on reforming international agencies and the international development policies of G-8 countries, as well as their international funding strategies and actions. Although Jeffrey Sachs is from the U.S., he is critical of the U.S. role in international development and the realization of funding to developing countries. The book mainly focuses on the poverty of developing countries. However, poverty also exists in rich countries, and the book misses the opportunity to narrate poverty situations and the means for poverty eradication in rich countries. For example, according to U.S. Census figures, 36 million persons lived in poverty (2005). 20.4 million of the nation's 36 million poor persons are women and 13 million of these women are in what the US Census Bureau has accepted as 'deep poverty'. 9.8 million are single mothers who are by far the poorest group with 38 percent living below the poverty line. This compares to 11 percent of all Americans who live below the poverty threshold. Among these poor persons, 8.7 million are first-generation immigrants and their family members. Roughly one in four poor persons is an immigrant or member of an immigrant's family. Half of the poor immigrant population is female. Moreover, three million undocumented women are living in United States (Grameen America Project Paper, 2008). However, these women form much of the back-bone of the economy of the U.S.A., providing care for children, and nursing services for aging parents. They clean houses, prepare food in restaurants and pick up food that people eat at breakfast (Jewish Council for Public Affairs, 2007). Similarly Canada has poverty, the rate of which is even higher than in the U.S.A.

The Canadian economy is growing; however, according to Statistics Canada 2006, the overall poverty rate was 15.5% in Canada in 2004. The poverty rate for children increased from 16.25% in 1984 to 17.7% in 2004. The poverty rate of senior citizens is 14%. The poverty rate of unattached Canadians is 37.6%. Moreover, the poverty rate for children in female-led households is very high at 52.12% (Raphael, 2007: p. 31). The latest child poverty statistics mentions that Child Poverty in Toronto (Toronto Metro, August 27, 2014) Child poverty in Toronto has reached "epidemic" levels, with 29 per cent of children –almost 149,000- living in low-income families, according to new data being released Wednesday by a coalition of community activists and social agencies. Across the city, almost 40 per cent of the Toronto's 140 neighbourhoods have child poverty rates of 30 percent or more, according to the coalition's analysis of Statistics Canada's recently released 2012 tax filer data. But neighbourhood disparity varies dramatically-from 5 per cent in Leaside, Lawrence Park and the Kingsway to 60 per cent or more in Regent Park, Moss Park and Thorn cliff Park, the data shows. Residents of African, Asian, Middle Eastern, Caribbean and Latin American backgrounds are more likely to be living in poverty.

Similarly, it is found that every rich country is suffering from poverty and unemployment. Therefore, poverty eradication and unemployment are global issues, and not only for poor countries. Jeffrey Sachs articulates alarming statistics and alarming future poverty situations of poor countries. However, missing in the book are treatments of green fiscal macro-economic policies and green community micro-economic development actions, both of which are essential in rich and poor countries. However, Jeffrey's suggestions of six steps at the end of the book for the UN Millennium Project to end extreme poverty are applicable to all countries: 1) identify the package of basic needs; 2) identify, for each country, the current unmet needs of the population; 3) calculate the costs of meeting the unmet needs through investments, taking into account future population growth; 4) calculate the part of the investments that can be financed by the country itself; 5) calculate the Millennium Development Goals Financing Gap that must be covered by donors; and 6) assess the size of donor contributions relative to donor income. It is important to know whether UN agencies take note of and follow these six steps for their UN Millennium Project to end extreme poverty where applicable.

Information Technology (IT) makes a huge contribution to world development, especially in rich countries. However, poor countries use less IT and technology. As a result poor countries get fewer benefits from them. Hence there are needs for use of more IT in poor countries. Rich countries can help poor countries in this regard.

Rouf strongly advocates for participatory democracy, citizenship learning, cultural coherence learning and religious tolerance in poor countries. These are necessary for their economic and political stability and peace. However, the book misses the political development point, which is necessary for economic stability of a country. Every citizen has a right to practice their faith. Poor countries should realize it and ensure the rights of citizens to political, economic, religious, and cultural freedoms, and the right of access to knowledge. Countries should avoid religious chaos, political turmoil, cultural conflict and ethnic havoc to develop harmonious relationships among all faith believers, ethnic/racial groups and political parties. They should avoid antagonistic behaviour and influence over each other for capturing power, staying in power, and exploiting and antagonizing others. Participatory democratic processes and practices at the micro- and macro-level could develop political harmony and tolerance among the citizens of a country. In conclusion, Rouf finds the book definitely raises many issues that are valuable for further discussion and actions for the socio-economic infrastructure and physical infrastructure development of poor countries.

Bibliography

1. Attaran, Amir and Jeffrey D. Sachs (2001). Defining and redefining international donor support for combating the Aids Pandemic. *The Lancet*, Vol. 357.
2. Grameen America Project Document (2008). *Grameen America: Bankers to the unbankable*. Arkansas: Elgin, Wright & Jennings.
3. Jewish Council for Public Affairs (2007). *Confronting poverty civility*. New York: Jewish Council for Public Affairs Press.
4. Raphael, D. (2007). *Poverty and policy in Canada*. Toronto: Canadian Scholar's Press Inc.
5. Sachs, J. (2005). *The End of Poverty: Economic possibilities for our time.* New York: The Penguin Press.
6. Toronto Metro (2014). Child *Poverty in Toronto*, August 27, 2014.
7. Transparency International (2004). *Global Corruption Report (2004).* London: Pluto Press.
8. US Census Bureau (2005). *Poverty Report*. Washington: US Census Bureau
9. UN Millennium Project (2005). *Investing in Development: A practical plan to achieve the Millennium Development Goals*. Report to the UN Secretary General. London: earth scan, 2005.
10. World Bank (2004). World Development Indicators. Washington, D.C.

Global Journals Inc. (US) Guidelines Handbook 2014

www.GlobalJournals.org

FELLOW OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (FARSB)

Global Journals Incorporate (USA) is accredited by Open Association of Research Society (OARS), U.S.A and in turn, awards "FARSB" title to individuals. The 'FARSB' title is accorded to a selected professional after the approval of the Editor-in-Chief/Editorial Board Members/Dean.

- The "FARSB" is a dignified title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FARSB or William Walldroff, M.S., FARSB.

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

The following benefits can be availed by you only for next three years from the date of certification:

FARSB designated members are entitled to avail a 40% discount while publishing their research papers (of a single author) with Global Journals Incorporation (USA), if the same is accepted by Editorial Board/Peer Reviewers. If you are a main author or co-author in case of multiple authors, you will be entitled to avail discount of 10%.

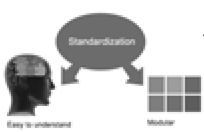
Once FARSB title is accorded, the Fellow is authorized to organize a symposium/seminar/conference on behalf of Global Journal Incorporation (USA).The Fellow can also participate in conference/seminar/symposium organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent.

You may join as member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. In addition, it is also desirable that you should organize seminar/symposium/conference at least once.

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

The FARSB can go through standards of OARS. You can also play vital role if you have any suggestions so that proper amendment can take place to improve the same for the benefit of entire research community.

As FARSB, you will be given a renowned, secure and free professional email address with 100 GB of space e.g. johnhall@globaljournals.org. This will include Webmail, Spam Assassin, Email Forwarders,Auto-Responders, Email Delivery Route tracing, etc.



The FARSB will be eligible for a free application of standardization of their researches. Standardization of research will be subject to acceptability within stipulated norms as the next step after publishing in a journal. We shall depute a team of specialized research professionals who will render their services for elevating your researches to next higher level, which is worldwide open standardization.

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

The FARSB members can avail the benefits of free research podcasting in Global Research Radio with their research documents. After publishing the work, (including published elsewhere worldwide with proper authorization) you can upload your research paper with your recorded voice or you can utilize chargeable services of our professional RJs to record your paper in their voice on request.

The FARSB member also entitled to get the benefits of free research podcasting of their research documents through video clips. We can also streamline your conference videos and display your slides/ online slides and online research video clips at reasonable charges, on request.

The FARSB is eligible to earn from sales proceeds of his/her researches/reference/review Books or literature, while publishing with Global Journals. The FARSB can decide whether he/she would like to publish his/her research in a closed manner. In this case, whenever readers purchase that individual research paper for reading, maximum 60% of its profit earned as royalty by Global Journals, will be credited to his/her bank account. The entire entitled amount will be credited to his/her bank account exceeding limit of minimum fixed balance. There is no minimum time limit for collection. The FARSC member can decide its price and we can help in making the right decision.

The FARSB member is eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get remuneration of 15% of author fees, taken from the author of a respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account.

MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (MARSB)

The ' MARSB ' title is accorded to a selected professional after the approval of the Editor-in-Chief / Editorial Board Members/Dean.

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

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

The following benefitscan be availed by you only for next three years from the date of certification.

MARSB designated members are entitled to avail a 25% discount while publishing their research papers (of a single author) in Global Journals Inc., if the same is accepted by our Editorial Board and Peer Reviewers. If you are a main author or co-author of a group of authors, you will get discount of 10%.

As MARSB, you will be given a renowned, secure and free professional email address with 30 GB of space e.g. johnhall@globaljournals.org. This will include Webmail, Spam Assassin, Email Forwarders,Auto-Responders, Email Delivery Route tracing, etc.

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

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

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

It is mandatory to read all terms and conditions carefully.

Auxiliary Memberships

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

Global Journals Incorporation (USA) is accredited by Open Association of Research Society, U.S.A (OARS) and in turn, affiliates research institutions as “Institutional Fellow of Open Association of Research Society” (IFOARS).

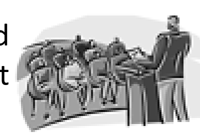
The “FARSC” is a dignified title which is accorded to a person’s name viz. Dr. John E. Hall, Ph.D., FARSC or William Walldroff, M.S., FARSC.

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

The Institute will be entitled to following benefits:

The IBOARS can initially review research papers of their institute and recommend them to publish with respective journal of Global Journals. It can also review the papers of other institutions after obtaining our consent. The second review will be done by peer reviewer of Global Journals Incorporation (USA)
The Board is at liberty to appoint a peer reviewer with the approval of chairperson after consulting us.
The author fees of such paper may be waived off up to 40%.

The Global Journals Incorporation (USA) at its discretion can also refer double blind peer reviewed paper at their end to the board for the verification and to get recommendation for final stage of acceptance of publication.

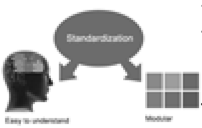


The IBOARS can organize symposium/seminar/conference in their country on behalf of Global Journals Incorporation (USA)-OARS (USA). The terms and conditions can be discussed separately.

The Board can also play vital role by exploring and giving valuable suggestions regarding the Standards of “Open Association of Research Society, U.S.A (OARS)” so that proper amendment can take place for the benefit of entire research community. We shall provide details of particular standard only on receipt of request from the Board.

The board members can also join us as Individual Fellow with 40% discount on total fees applicable to Individual Fellow. They will be entitled to avail all the benefits as declared. Please visit Individual Fellow-sub menu of GlobalJournals.org to have more relevant details.

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



After nomination of your institution as "Institutional Fellow" and constantly functioning successfully for one year, we can consider giving recognition to your institute to function as Regional/Zonal office on our behalf.

The board can also take up the additional allied activities for betterment after our consultation.

The following entitlements are applicable to individual Fellows:

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

Open Association of Research Society (US)/ Global Journals Incorporation (USA), as described in Corporate Statements, are educational, research publishing and professional membership organizations. Achieving our individual Fellow or Associate status is based mainly on meeting stated educational research requirements.

Disbursement of 40% Royalty earned through Global Journals : Researcher = 50%, Peer Reviewer = 37.50%, Institution = 12.50% E.g. Out of 40%, the 20% benefit should be passed on to researcher, 15 % benefit towards remuneration should be given to a reviewer and remaining 5% is to be retained by the institution.

We shall provide print version of 12 issues of any three journals [as per your requirement] out of our 38 journals worth $ 2376 USD.

Other:

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

- The professional accredited with Fellow honor, is entitled to various benefits viz. name, fame, honor, regular flow of income, secured bright future, social status etc.

- In addition to above, if one is single author, then entitled to 40% discount on publishing research paper and can get 10%discount if one is co-author or main author among group of authors.
- The Fellow can organize symposium/seminar/conference on behalf of Global Journals Incorporation (USA) and he/she can also attend the same organized by other institutes on behalf of Global Journals.
- The Fellow can become member of Editorial Board Member after completing 3yrs.
- The Fellow can earn 60% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.
- Fellow can also join as paid peer reviewer and earn 15% remuneration of author charges and can also get an opportunity to join as member of the Editorial Board of Global Journals Incorporation (USA)
- • This individual has learned the basic methods of applying those concepts and techniques to common challenging situations. This individual has further demonstrated an in–depth understanding of the application of suitable techniques to a particular area of research practice.

Note :

"

- In future, if the board feels the necessity to change any board member, the same can be done with the consent of the chairperson along with anyone board member without our approval.
- In case, the chairperson needs to be replaced then consent of 2/3rd board members are required and they are also required to jointly pass the resolution copy of which should be sent to us. In such case, it will be compulsory to obtain our approval before replacement.
- In case of "Difference of Opinion [if any]" among the Board members, our decision will be final and binding to everyone.

"

Process of submission of Research Paper

The Area or field of specialization may or may not be of any category as mentioned in 'Scope of Journal' menu of the GlobalJournals.org website. There are 37 Research Journal categorized with Six parental Journals GJCST, GJMR, GJRE, GJMBR, GJSFR, GJHSS. For Authors should prefer the mentioned categories. There are three widely used systems UDC, DDC and LCC. The details are available as 'Knowledge Abstract' at Home page. The major advantage of this coding is that, the research work will be exposed to and shared with all over the world as we are being abstracted and indexed worldwide.

The paper should be in proper format. The format can be downloaded from first page of 'Author Guideline' Menu. The Author is expected to follow the general rules as mentioned in this menu. The paper should be written in MS-Word Format (*.DOC,*.DOCX).

The Author can submit the paper either online or offline. The authors should prefer online submission.Online Submission: There are three ways to submit your paper:

(A) (I) First, register yourself using top right corner of Home page then Login. If you are already registered, then login using your username and password.

(II) Choose corresponding Journal.

(III) Click 'Submit Manuscript'. Fill required information and Upload the paper.

(B) If you are using Internet Explorer, then Direct Submission through Homepage is also available.

(C) If these two are not convenient, and then email the paper directly to dean@globaljournals.org.

Offline Submission: Author can send the typed form of paper by Post. However, online submission should be preferred.

MANUSCRIPT STYLE INSTRUCTION **(Must be strictly followed)**

Page Size: 8.27" X 11'"

- Left Margin: 0.65
- Right Margin: 0.65
- Top Margin: 0.75
- Bottom Margin: 0.75
- Font type of all text should be Swis 721 Lt BT.
- Paper Title should be of Font Size 24 with one Column section.
- Author Name in Font Size of 11 with one column as of Title.
- Abstract Font size of 9 Bold, "Abstract" word in Italic Bold.
- Main Text: Font size 10 with justified two columns section
- Two Column with Equal Column with of 3.38 and Gaping of .2
- First Character must be three lines Drop capped.
- Paragraph before Spacing of 1 pt and After of 0 pt.
- Line Spacing of 1 pt
- Large Images must be in One Column
- Numbering of First Main Headings (Heading 1) must be in Roman Letters, Capital Letter, and Font Size of 10.
- Numbering of Second Main Headings (Heading 2) must be in Alphabets, Italic, and Font Size of 10.

You can use your own standard format also.
Author Guidelines:

1. General,

2. Ethical Guidelines,

3. Submission of Manuscripts,

4. Manuscript's Category,

5. Structure and Format of Manuscript,

6. After Acceptance.

1. GENERAL

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

Scope

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

Journals Inc. (US) are being abstracted and indexed (in process) by most of the reputed organizations. Topics of only narrow interest will not be accepted unless they have wider potential or consequences.

2. ETHICAL GUIDELINES

Authors should follow the ethical guidelines as mentioned below for publication of research paper and research activities.

Papers are accepted on strict understanding that the material in whole or in part has not been, nor is being, considered for publication elsewhere. If the paper once accepted by Global Journals Inc. (US) and Editorial Board, will become the copyright of the Global Journals Inc. (US).

Authorship: The authors and coauthors should have active contribution to conception design, analysis and interpretation of findings. They should critically review the contents and drafting of the paper. All should approve the final version of the paper before submission

The Global Journals Inc. (US) follows the definition of authorship set up by the Global Academy of Research and Development. According to the Global Academy of R&D authorship, criteria must be based on:

1) Substantial contributions to conception and acquisition of data, analysis and interpretation of the findings.

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

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

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

Acknowledgements: Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

Appeal of Decision: The Editorial Board's decision on publication of the paper is final and cannot be appealed elsewhere.

Permissions: It is the author's responsibility to have prior permission if all or parts of earlier published illustrations are used in this paper.

Please mention proper reference and appropriate acknowledgements wherever expected.

If all or parts of previously published illustrations are used, permission must be taken from the copyright holder concerned. It is the author's responsibility to take these in writing.

Approval for reproduction/modification of any information (including figures and tables) published elsewhere must be obtained by the authors/copyright holders before submission of the manuscript. Contributors (Authors) are responsible for any copyright fee involved.

3. SUBMISSION OF MANUSCRIPTS

Manuscripts should be uploaded via this online submission page. The online submission is most efficient method for submission of papers, as it enables rapid distribution of manuscripts and consequently speeds up the review procedure. It also enables authors to know the status of their own manuscripts by emailing us. Complete instructions for submitting a paper is available below.

Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.

To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

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

4. MANUSCRIPT'S CATEGORY

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

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

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

Research articles: These are handled with small investigation and applications

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

5.STRUCTURE AND FORMAT OF MANUSCRIPT

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

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

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

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

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

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

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

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

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

(h) Brief Acknowledgements.

(i) References in the proper form.

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

The Editorial Board reserves the right to make literary corrections and to make suggestions to improve briefness.

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

Format

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

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

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

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

Structure

All manuscripts submitted to Global Journals Inc. (US), ought to include:

Title: The title page must carry an instructive title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) wherever the work was carried out. The full postal address in addition with the e-mail address of related author must be given. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining and indexing.

Abstract, used in Original Papers and Reviews:

Optimizing Abstract for Search Engines

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

Key Words

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

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

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

Choice of key words is first tool of tips to write research paper. Research paper writing is an art.A few tips for deciding as strategically as possible about keyword search:

- One should start brainstorming lists of possible keywords before even begin searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in research paper?" Then consider synonyms for the important words.
- It may take the discovery of only one relevant paper to let steer in the right keyword direction because in most databases, the keywords under which a research paper is abstracted are listed with the paper.
- One should avoid outdated words.

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

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

Acknowledgements: Please make these as concise as possible.

References

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

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

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

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

Tables, Figures and Figure Legends

Tables: Tables should be few in number, cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g. Table 4, a self-explanatory caption and be on a separate sheet. Vertical lines should not be used.

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

Preparation of Electronic Figures for Publication

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

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

Color Charges: It is the rule of the Global Journals Inc. (US) for authors to pay the full cost for the reproduction of their color artwork. Hence, please note that, if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a color work agreement form before your paper can be published.

Figure Legends: Self-explanatory legends of all figures should be incorporated separately under the heading 'Legends to Figures'. In the full-text online edition of the journal, figure legends may possibly be truncated in abbreviated links to the full screen version. Therefore, the first 100 characters of any legend should notify the reader, about the key aspects of the figure.

6. AFTER ACCEPTANCE

Upon approval of a paper for publication, the manuscript will be forwarded to the dean, who is responsible for the publication of the Global Journals Inc. (US).

6.1 Proof Corrections

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

Acrobat Reader will be required in order to read this file. This software can be downloaded

(Free of charge) from the following website:

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

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

As changes to proofs are costly, we inquire that you only correct typesetting errors. All illustrations are retained by the publisher. Please note that the authors are responsible for all statements made in their work, including changes made by the copy editor.

6.2 Early View of Global Journals Inc. (US) (Publication Prior to Print)

The Global Journals Inc. (US) are enclosed by our publishing's Early View service. Early View articles are complete full-text articles sent in advance of their publication. Early View articles are absolute and final. They have been completely reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after sending them. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so Early View articles cannot be cited in the conventional way.

6.3 Author Services

Online production tracking is available for your article through Author Services. Author Services enables authors to track their article - once it has been accepted - through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The authors will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript.

6.4 Author Material Archive Policy

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

6.5 Offprint and Extra Copies

A PDF offprint of the online-published article will be provided free of charge to the related author, and may be distributed according to the Publisher's terms and conditions. Additional paper offprint may be ordered by emailing us at: editor@globaljournals.org .

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

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

TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:

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

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

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

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

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

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

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

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

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

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

11. Revise what you wrote: When you write anything, always read it, summarize it and then finalize it.

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

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

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

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

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

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

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

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

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

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)

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals Inc. (US).

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

Index

save our planet

Global Journal of Management and Business Research

Visit us on the Web at www.GlobalJournals.org | www.JournalofBusiness.Org
or email us at helpdesk@globaljournals.org

ISSN 9755853