Online ISSN : 2249-460X
Print ISSN : 0975-587X
DOI : 10.17406/GJHSS

Global Journal

of Human Social Sciences: E

Economics



Perception of Non-Muslim

Macroeconomic Fluctuations

Highlights

Economic Growth Nexus

Socio-Economic Determinants

Discovering Thoughts, Inventing Future

VOLUME 17 ISSUE 5 VERESION 1.0

© 2001-2017 by Global Journal of Human Social Sciences, USA

Volume 17 Issue 35 was originally issued as E5

Global Journal of Human-Social Science: E
Economics

Volume 17 Issue 35
Originally issued as E5

Global Journal of Human-Social Science: E

Economics

Volume 17 Issue 5 (Ver. 1.0)

Open Association of Research Society

© Global Journal of Human Social Sciences. 2017.

All rights reserved.

This is a special issue published in version 1.0 of "Global Journal of Human Social Sciences." By Global Journals Inc.

All articles are open access articles distributed under "Global Journal of Human Social Sciences"

Reading License, which permits restricted use. Entire contents are copyright by of "Global Journal of Human Social Sciences" unless otherwise noted on specific articles.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission.

The opinions and statements made in this book are those of the authors concerned. Ultraculture has not verified and neither confirms nor denies any of the foregoing and no warranty or fitness is implied.

Engage with the contents herein at your own risk.

The use of this journal, and the terms and conditions for our providing information, is governed by our Disclaimer, Terms and Conditions and Privacy Policy given on our website http://globaljournals.us/terms-and-condition/menu-id-1463/

By referring / using / reading / any type of association / referencing this journal, this signifies and you acknowledge that you have read them and that you accept and will be bound by the terms thereof.

All information, journals, this journal, activities undertaken, materials, services and our website, terms and conditions, privacy policy, and this journal is subject to change anytime without any prior notice.

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
945th Concord Streets,
Framingham Massachusetts Pin: 01701,
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 Pvt Ltd
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)

Editorial Board

Global Journal of Human-Social Science

Dr. Heying Jenny Zhan

B.A., M.A., Ph.D. Sociology, University of Kansas, USA Department of Sociology Georgia State University, United States

Dr. Prasad V Bidarkota

Ph.D., Department of Economics Florida International University United States

Dr. Alis Puteh

Ph.D. (Edu.Policy) UUM Sintok, Kedah, Malaysia M.Ed (Curr. & Inst.) University of Houston, United States

Dr. André Luiz Pinto

Doctorate in Geology, PhD in Geosciences and Environment, Universidade Estadual Paulista Julio de Mesuita Filho, UNESP, Sao Paulo, Brazil

Dr. Hamada Hassanein

Ph.D, MA in Linguistics, BA & Education in English, Department of English, Faculty of Education, Mansoura University, Mansoura, Egypt

Dr. Asuncin Lpez-Varela

BA, MA (Hons), Ph.D. (Hons) Facultad de Filolog?a. Universidad Complutense Madrid 29040 Madrid Spain

Dr. Faisal G. Khamis

Ph.D in Statistics, Faculty of Economics & Administrative Sciences / AL-Zaytoonah University of Jordan, Jordan

Dr. Adrian Armstrong

BSc Geography, LSE, 1970 Ph.D. Geography (Geomorphology) Kings College London 1980 Ordained Priest, Church of England 1988 Taunton, Somerset, United Kingdom

Dr. Gisela Steins

Ph.D. Psychology, University of Bielefeld, Germany Professor, General and Social Psychology, University of Duisburg-Essen, Germany

Dr. Stephen E. Haggerty

Ph.D. Geology & Geophysics, University of London Associate Professor University of Massachusetts, United States

Dr. Helmut Digel

Ph.D. University of Tbingen, Germany Honorary President of German Athletic Federation (DLV), Germany

Dr. Tanyawat Khampa

Ph.d in Candidate (Social Development), MA. in Social Development, BS. in Sociology and Anthropology, Naresuan University, Thailand

Dr. Gomez-Piqueras, Pedro

Ph.D in Sport Sciences, University Castilla La Mancha, Spain

Dr. Mohammed Nasser Al-Suqri

Ph.D., M.S., B.A in Library and Information Management, Sultan Qaboos University, Oman

Dr. Giaime Berti

Ph.D. School of Economics and Management University of Florence, Italy

Dr. Valerie Zawilski

Associate Professor, Ph.D., University of Toronto MA - Ontario Institute for Studies in Education, Canada

Dr. Edward C. Hoang

Ph.D., Department of Economics, University of Colorado United States

Dr. Intakhab Alam Khan

Ph.D. in Doctorate of Philosophy in Education, King Abdul Aziz University, Saudi Arabia

Dr. Kaneko Mamoru

Ph.D., Tokyo Institute of Technology Structural Engineering Faculty of Political Science and Economics, Waseda University, Tokyo, Japan

Dr. Joaquin Linne

Ph. D in Social Sciences, University of Buenos Aires, Argentina

Dr. Hugo Nami

Ph.D.in Anthropological Sciences, Universidad of Buenos Aires, Argentina, University of Buenos Aires, Argentina

Dr. Luisa dall'Acqua

Ph.D. in Sociology (Decisional Risk sector), Master MU2, College Teacher, in Philosophy (Italy), Edu-Research Group, Zrich/Lugano

Dr. Vesna Stankovic Pejnovic

Ph. D. Philosophy Zagreb, Croatia Rusveltova, Skopje Macedonia

Dr. Raymond K. H. Chan

Ph.D., Sociology, University of Essex, UK Associate Professor City University of Hong Kong, China

Dr. Tao Yang

Ohio State University M.S. Kansas State University B.E. Zhejiang University, China

Mr. Rahul Bhanubhai Chauhan

B.com., M.com., MBA, PhD (Pursuing), Assistant Professor, Parul Institute of Business Administration,
Parul University, Baroda, India

Dr. Rita Mano

Ph.D. Rand Corporation and University of California, Los Angeles, USA Dep. of Human Services, University of Haifa Israel

Dr. Cosimo Magazzino

Aggregate Professor, Roma Tre University Rome, 00145, Italy

Dr. S.R. Adlin Asha Johnson

Ph.D, M. Phil., M. A., B. A in English Literature, Bharathiar University, Coimbatore, India

Dr. Thierry Feuillet

Ph.D in Geomorphology, Master's Degree in Geomorphology, University of Nantes, France

Contents of the Issue

i. Copyright Notice
ii. Editorial Board Members
iii. Chief Author and Dean
iv. Contents of the Issue

1. Perception of Non-Muslim Customers towards Islamic Banking: A Study in Northern Part of Bangladesh. *1-7*
2. Economic Growth Nexus Trade Liberalization in Ethiopia: Evidence from the Johnson's Multivariate Cointegration Analysis. *9-15*
3. Empirical Analysis on Determinants of Childlabor and Associated Problems (The Case of Damot Gale District, Wolaita Zone, SNNPR, Ethiopia). *17-24*
4. Analysis of Macroeconomic Fluctuations and Economic Growth in Nigeria (1986-2014). *25-28*
5. International Trade and Economic Growth in Nigeria. *29-39*
6. Socio-Economic Determinants of Fuelwood usage by Bread Producers in Owerri North Local Government Area of Imo State, Nigeria. *41-46*

v. Fellows
vi. Auxiliary Memberships
vii. Process of Submission of Research Paper
viii. Preferred Author Guidelines
ix. Index

Global Journal of HUMAN-SOCIAL SCIENCE: E Economics
Volume 17 Issue 5 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460x & Print ISSN: 0975-587X

Perception of Non-Muslim Customers towards Islamic Banking: A Study in Northern Part of Bangladesh

By Md. Anowar Hossain & Brazendra Nath Roy
Pundra University of Science & Technology, Rangpur Road, Gokul, Bogra

Abstract- Product and services provided by Islamic banking are gaining popularity among not only among Muslim customers but also among non-Muslims across the world due to its wider products coverage and ability to pass through the global economic melt-down. However, to what extent this statement is true in the context of Bangladesh needs focus and hence this research aims to investigate the perception of non-Muslim customers about the products and services provided by Islamic banking in Bangladesh. A total of 12 actual respondents participated in the survey at selected areas in the northern part of Bangladesh. The result of the study showed that the perception of non-Muslims regarding Islamic banking is positive and it's gaining popularity day by day. Non- Muslims, in some cases have knowledge of Islamic banking products and services. Taking these mixed responses i,e little awareness but positive perceptions, further efforts need to be taken to promote the level of consciousness about Islamic banking among non-Muslims in northern part of Bangladesh and throughout the country.

Keywords: *perception, non-muslim, islamic banking, products & services, bangladesh.*

GJHSS-E Classification: *FOR Code: 149999*



Strictly as per the compliance and regulations of:

© 2017. Md. Anowar Hossain & Brazendra Nath Roy. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Perception of Non-Muslim Customers towards Islamic Banking: A Study in Northern Part of Bangladesh

Md. Anowar Hossain [α] & Brazendra Nath Roy [σ]

Abstract- Product and services provided by Islamic banking are gaining popularity among not only among Muslim customers but also among non-Muslims across the world due to its wider products coverage and ability to pass through the global economic melt-down. However, to what extent this statement is true in the context of Bangladesh needs focus and hence this research aims to investigate the perception of non-Muslim customers about the products and services provided by Islamic banking in Bangladesh. A total of 12 actual respondents participated in the survey at selected areas in the northern part of Bangladesh. The result of the study showed that the perception of non-Muslims regarding Islamic banking is positive and it's gaining popularity day by day. Non-Muslims, in some cases have knowledge of Islamic banking products and services. Taking these mixed responses i,e little awareness but positive perceptions, further efforts need to be taken to promote the level of consciousness about Islamic banking among non-Muslims in northern part of Bangladesh and throughout the country.

Keywords: perception, non-muslim, islamic banking, products & services, bangladesh.

I. Introduction

History of conventional baking is a long back while the concept of Islamic banking is a newer one. One distinguishing factors that made it separate is interest; which is prohibited in Islam forcing Muslims to interest free banking system-Islamic bank. As interest is not allowed in Islam so Islamic financial system cannot operate based on interest *(Rahman, 2007)* [1]. As a result of this differing nature Islamic Bank emerged as Islamic scholar thought it as necessary. Following that many Islamic banks started to be established in the earliest of 1970. That made a scratch in Bangladesh too; Islamic Bank Bangladesh Limited has started its operation in Bangladesh as Islamic bank in 1983 with facilitation of Dubai Islamic bank. Beginning of Islamic banking operation was limited to Muslims customers preferring interest free banking *(Kuran & Timur 2004)* as Islamic banking is based on profit and loss sharing mechanism [2]. Comparing with conventional banking one could easily find that the approach applied to Islamic banking is different *(Khan, Hassan & Shahid, 2008)*[3]. Since its inception it has been growing in operation and getting preference among various classes of clients not excluding non Muslims also *(Abdullah, Sidek & Adnan 2012)*[4]. Various studies have already been conducted in various countries and found mostly similar findings about the likeliness of Islamic banking. Especially one of the mentionable points is not interest freeness rather Islamic banking is on their mark of fulfilling necessity easily *(Hedayet & Al-Bawardi 2012)*[5]. A study conducted in Sylhet Bangladesh by *Uddin et al (2016)* finds that non Muslims customers also like Islamic banking products and services [6]. The attitude and perception of non Muslims regarding Islamic bank is has now been drawing the attention of researcher to dig into fact why they are being focused on Islamic banking services. It is found out to be focusing on understanding of needs, employees attitude & behavioral pattern which makes a pavement for Islamic bank (Cohen et al., 2006)[7] . While a number of studies have been so far conducted in Bangladesh have given focus on comparative performances but why the comparative performance of Islamic banking is getting competitive good position is focused in this study which will basically comprised of perception of non Muslims on Islamic bank.

II. Literature Review

Attitude –perception is related to psychology of human as human psychology shape the nature of perception which influence how a man will behave in his /her life. How a man thinks, feel and act on something is his/her attitude (Hawkings' S, Mothers baugh, & Best, 2007)[8]. Customers' knowledge on Islamic banking motivates for a positive perception about Islamic bank (Kaynak et al., 1992)[9]. Rose & Marquis (2006) felt that the similarities in banking products and services in conventional and Islamic banking are getting forceful [10]. While customer like Islamic banks or conventional is an issue of debate. Numbers of studies have been done to find out the facts and variables. Efficiency in service with speed, banks reputation attracts customers' preference in making and continuing banking relation (Haron et al. 1994) [11]. Turkish customers give preference to the religious factors, friendliness of bank personnel and speediness of transaction (Okumus 2005) [12].

Author α σ: Lecturer, Business Administration, Pundra University of Science & Technology. e-mails: Anowar.fnb@gmail.com, Noyon.roy99@gmail.com

© 2017 Global Journals Inc. (US)

Contradictory result was found in Singapore that there were lack of any point of significant difference in selecting banks between Muslims and non-Muslims (Gerrard & Cunningham, 1997) [13]. While Ali & Zohu (2013) discovered that service quality is acting factors for perceiving bank as a choice in Pakistan [14]. In this line Dusuki and Abdullah (2007) finds staffs friendliness with experienced knowledge with abilities to handle any matter easily and effectively are some of the most important perceived factors [15] But Sheikh et al., (2010) states that comparatively conventional banks' customer are satisfied with their banks for better facilities [16]. This may be due to the facts that for religious causes (Shari-ah principles) Islamic banks can't offer every kind of services, like credit cards. Rezwan, Shabnaz & Shajahan (2015) states that Islamic bank have played pivotal role since its inception and playing role in the improvement of the banking sector [17]. Uddn et al., (2016) in their study findings found that majority of non Muslims customers are satisfied with the services of Islamic banking [18]. Hamid Nordin (2001) reported that most of the Islamic banks customers are highly aware but poor in knowledge about Islamic bank [19]. Ahmad and Haron (2002) focused on scale of measurement which can reflect the intention to use Islamic banking conducting a study among only corporate groups of customer and conclude [20]. And most of respondents in Malaysia replied of the issue that they have fewer knowledge of Islamic banking but their belief was an indication of good future market of Islamic banking in Malaysia [20]. While in Malaysia still the focus is given on some selected factors those patronize Islamic bank (Thambiah et al., 2008) [21]. According to Bley and Kuehn (2005) Non-Muslim students in United Arab Emirates think Islamic banking is mainly & specially alluring to Muslims, and it's not accepted as an unique service provider [22]. Ahasanul, Jamil and Ahmad (2007) identified noteworthy relationship between religion and perception towards Islamic banking [23]. Amin and Isa (2008) looked into relationship between perception of service quality and customers satisfaction and found a significant relationship between the variables [24]. Haque (2010) stated attitudinal difference can attract customers and hence Islamic banking service providers can be benefited by making strategies keeping in mind the difference of gender as the study concludes with the findings that male customers are more positive for Islamic banking services [25].

III. Islamic Banking

Activities of banking in Shariah compliance is Islamic banking. The differentiating point or facts which make it different from conventional bank is the interest. The main elements in conventional banking is neglected in Islamic banking and given focus on sharing of profit and loss which is called as profit loss sharing system (PLS) of banking. While conventional banking are operating with their efficiency own but parallel Islamic banking has also started to cut their own edge over the conventional bank. As riba is prohibited in Islam so banking with conventional interest based bank becomes less attractive to Muslims. But due to lack of Islamic bank there lacks the option. Following the necessity Islamic scholars though to establish a Shariah compliant Islamic bank which will be based on PLS basis not interest basis and the outcome becomes visible in 1975 with the establishment of Dubai Islamic Bank (DIB) [26]. Following the establishment of DIB in March 1983 Islamic banking started its operation in Bangladesh being incorporated as Islami Bank Bangladesh limited (IBBL) [27]. According to the data of central bank of Bangladesh there are 8 Islamic private commercial banks operating in Bangladesh [28]. To mention some of them are; Islami Bank Bangladesh Limited, Shahjalal Islami Bank Limited, Al-Arafah Islamic Bank, First Security Islami Bank, ICB Islamic Bank, EXIM Bank Limited.

IV. Objectives of the Study

Basically the research is forwarded with the aim of finding the perception of Non Muslims regarding Islamic banking in Bogra, Bangladesh. So the primary objective is perception and secondary objective of the research is finding the factors that are considered or perceived good for choosing Islamic bank or moving to Islamic banks from conventional banks. Finally suggesting bank to focus on some selected to be perceived good to non Muslims customers and attract the non Muslim customers towards Islamic banking along with Muslims.

V. Research Design and Methodology

Focusing on the aim and practical scenario prevailed in Bangladesh; the district of Bogra is chosen as the sample of population of Bangladesh. Bogra is chosen on the basis that it is the gateway of whole northern part of country with a branch of Central bank and almost every commercial bank in operation at Bogra. For ensuring better serving the purpose a purposive sampling/ convenience sampling technique is used. After preparing a five point liker scale (1: Strongly Disagree, 2: Disagree, 3: Neutral, 4: Agree, 5: Strongly Agree) structured questionnaire representative of the researcher has stayed at bank area from from 9 a.m to 5 p.m five days a week from Sunday to Thursday when the banks customers visit the bank for banking. Before that a pilot survey is conducted to find the number of non Muslims customer having banking relationship with Islamic banks in Bogra, and factors of perception regarding Islamic bank in Bogra. Bank officials are used as a main source of information to find non Muslims customers of Islamic banking institutions. Journal article

© 2017 Global Journals Inc. (US)

and other periodicals related to perception and patronage are studied for extensive objective. Research period covers January 2017 to April 2017. A total of 12 questionnaires were back from respondents with full information out of 20 distributed. Descriptive statistics with tables and graphs are used to depict the result and for easier conclusion.

VI. Findings and Analysis

Table 1: Demographic Information

	N	Mean		Std. Deviation
	Statistic	Statistic	Std. Error	Statistic
Age	12	2.50	.261	.905
Occupation	12	2.75	.329	1.138
Education	12	3.50	.314	1.087
Gender	12	1.33	.142	.492
Duration of Banking	12	2.42	.336	1.165
Type of Services	12	1.50	.289	1.000
Valid N (list wise)	12			

Source: Questionnaire

Table shows that most of the respondents are of the class having at least bachelor or master degree with age range of 40 and above but below 50. Basically male respondents are found to be included in sample as there is only a few numbers of non Muslim women were found to be having banking with bank. Most of the respondents uses bank for deposit purpose.

Table 2: State of Knowledge on Islamic Banking and Practice

Crosstabs: State of Knowledge and Practice * Duration of Banking						
		Duration of Banking				Total
		1-3	4-6	7-9	10-above	
State of Knowledge and Practice	Know and Use	0	2	1	2	5
	Know but Don't Use	2	0	1	1	4
	Don't Know but Use	1	2	0	0	3
Total		3	4	2	3	12

Source: Questionnaire

One of the major findings from the study reveals that customer having banking relation for longer time is interested about Islamic bank as they also have some knowledge on Islamic bank. Those having little or no knowledge but interested about Islamic bank are also found in the study which is depicted in the table above.

Table 3: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Islamic Banks are Available for Non Muslims also	12	4	5	4.67	.492
Return of Islamic Bank is Higher	12	2	5	3.75	.754
Islamic Banks are able to Provide lower cost Products	12	2	5	3.83	1.115
Deficiency of Marketing by Islamic Bank	12	1	5	3.50	1.168
Dissimilarities of Products	12	1	5	2.92	1.379
Islamic Banks are able to Compete with Conventional bank	12	4	5	4.17	.389
There Is High Potentiality of Islamic Banking Products in Bangladesh	12	2	5	3.75	1.055

Source: Questionnaire

- Islamic banks are available for Muslims with non Muslims also. The result findings shown the mean value of 4.67 (5 strongly agree) with negligible standard deviation suggest that the perception regarding availability of Islamic banking is good among non Muslims.
- Answer regarding the profitability of Islamic bank is scrutinized with special consideration as most of the respondents were found to be having banking relation for deposit purpose. The result found Mean value of 3.75 (3 Neutral, 4 Agree) and standard deviation .754 signifies that the non Muslims agree that profit of Islamic bank is higher.

© 2017 Global Journals Inc. (US)

- In the era of modern banking, Islamic banking is perceived to provide lower cost products to it Muslims and no Muslims customer. The statement is proved by the result that they agreed to the issue with mean value 3.83 suggesting agree with the statement.
- Deficiency of marketing and promotional tools by Islamic banking is perceived to prevail in the market. While others (Conventional) banks are regularly conducting marketing activities then Islamic banks are laggard in this issue. As Islamic banks are different from conventional banks and people are yet to be clear about the principles and operational procedure of Islamic bank. Most of the respondents were agreed that Islamic banks lack marketing.
- Product dissimilarities are denied by non Muslims customers of Islamic bank. Mean values of 2.92 suggest that they are not agreed with the facts that Islamic banking products are dissimilar which simply states that products are only named differently.
- Competitive market condition forces Islamic banks to compete with the trend, common perception on Islamic banks compatibility is also judges with 5 point likart scale in which 4 means agreed and the result findings value of 4.17 with minimum standard deviation of .389 signifies the statement that the perception of non Muslims regarding the power of competition is perceived good.
- Mean value of 3.75 & standard deviation of 1.055 suggest that the respondents are agreed with the facts that there is high potentiality in Bangladesh as non Muslims agreed with Muslims customers also. The current trend of moving to Islamic bank from conventional bank has created a buzz in the industry of banking.

Table 4: Crosstab (Deficiency of Marketing by Islamic Bank * Return of Islamic Bank is Higher)

		Return of Islamic Bank is Higher				Total
		D	N	A	SA	
Deficiency of Marketing by Islamic Bank	SD	0	1	0	0	1
	D	0	0	1	0	1
	N	1	0	2	0	3
	A	0	1	4	0	5
	SA	0	0	1	1	2
Total		1	2	8	1	12

Source: Questionnaire

Analysis of the questionnaire finds that there are 34% persons agreed on the issue that though Islamic banks have deficiency in marketing but still earns a good return. 8% were found strongly agreed that profit of Islamic bank is higher and one says agree.

Table 5: Crosstab (Deficiency of Marketing by Islamic Bank * Islamic Banks are able to Provide lower cost Products)

		Islamic Banks are able to Provide lower cost Products				Total
		D	N	A	SA	
Deficiency of Marketing by Islamic Bank	SD	1	0	0	0	1
	D	0	1	0	0	1
	N	0	2	0	1	3
	A	0	2	0	3	5
	SA	0	0	1	1	2
Total		1	5	1	5	12

Source: Questionnaire

About 25% of respondents were found to be strongly agreed that there is deficiency in marketing by Islamic bank and they can provide lower cost products, 17% of the respondents were found to be neutral and another 17% agreed on deficiency but says Islamic bank can provide lower cost products to its customers.

© 2017 Global Journals Inc. (US)

Table 6: Cross-tab (Deficiency of Marketing by Islamic Bank * There Is High Potentiality of Islamic Banking Products in Bangladesh)

		There Is High Potentiality of Islamic Banking Products in Bangladesh				Total
		Disagree	Neutral	Agree	Strongly Agree	
Deficiency of Marketing by Islamic Bank	SD	1	0	0	0	1
	D	0	0	0	1	1
	N	0	1	1	1	3
	A	0	3	1	1	5
	SA	0	1	0	1	2
Total		1	5	2	4	12

Source: Questionnaire

Tabular data shows despite deficiency of marketing by Islamic bank it has huge potential in Bangladesh, as many of the untouched Muslims and non Muslims customer is yet to know about Islamic banking but still there is a wave of either moving from conventional bank to Islamic bank or to be a customer of Islamic bank fresh.

Table 7: Cross-tab: Deficiency of Marketing by Islamic Bank * Islamic Banks are able to Compete with Conventional Bank

		Islamic Banks are able to Compete with Conventional bank		Total
		A	SA	
Deficiency of Marketing by Islamic Bank	SD	1	0	1
	D	1	0	1
	N	2	1	3
	A	4	1	5
	SA	2	0	2
Total		10	2	12

Source: Questionnaire

The mentionable point here is there are 33% of respondents were found having perception that though it lacks marketing still has the potential to compete with conventional bank. And other 17% strongly agreed of lacking of marketing activities but Islamic bank has high potential to compete with conventional bank.

Table 8: Cross-tab (Dissimilarities of Products * Islamic Banks are able to Provide lower cost Products)

		Islamic Banks are able to Provide lower cost Products				Total
		D	N	A	SA	
Dissimilarities of Products	SD	0	1	0	1	2
	D	0	1	0	2	3
	N	0	1	1	1	3
	A	0	2	0	0	2
	SA	1	0	0	1	2
Total		1	5	1	5	12

Source: Questionnaire

Islamic bank has dissimilarities in their product and by using that dissimilarities they can provide products at lower cost. But 17% said there is no dissimilarities in products and are able to compete with conventional bank. 17% agreed that there is difference in products but they are neutral in answering the ability of Islamic bank to compete with conventional bank.

© 2017 Global Journals Inc. (US)

Table 9: Cross-tab (Dissimilarities of Products * There Is High Potentiality of Islamic Banking Products in Bangladesh)

		There Is High Potentiality of Islamic Banking Products in Bangladesh				Total
		Disagree	Neutral	Agree	Strongly Agree	
Dissimilarities of Products	SD	0	2	0	0	2
	D	0	2	0	1	3
	N	0	0	1	2	3
	A	0	0	1	1	2
	SA	1	1	0	0	2
Total		1	5	2	4	12

Source: Questionnaire

Analyzed data above suggest that there are difference in products and also huge potential of Islamic banking in Bangladesh. Only 10% respondent is found to be said disagreed about potential of Islamic banking while 20% found agreed and 40% found to be strongly agreed remaining 40% neutral. So according to the common perception and analyzed data it's an obvious finding that there is potential of Islamic banking in Bangladesh.

VII. Recommendation

After scrutiny of the collected data and analyzed findings researcher reach to the point where there are some suggestions could be drawn from this study for Islamic bank in Bogra, and overall Bangladesh. Wider marketing activities can serve the purpose of perceiving well among non Muslims including Muslim customers also. Specially marketing activities about deposit products and loan products with products variation can be useful for Islamic bank to be perceived good among non-Muslims including Muslims. Competitive pricing is one of the most influential factors that attract customer towards Islamic bank. So to remain competitive and cutting competitive edge over conventional bank, Islamic bank can focus on the pricing of products they offer. Awareness of products of Islamic bank can be given focus as the respondents found to be aware of only deposit products of Islamic bank, so awareness of other Islamic banking products could be suggested for better cultivation of potential of Islamic banking in Bangladesh. Breaking religious misconception about Islamic bank can be said one of the suggestion to Islamic bank. Most of the non Muslims still think that Islamic banking products are designed for Muslims which is not correct. But due to lack of knowledge their perception goes wrong. Availability of Islamic bank to non-Muslims should be widened and broadened so that non Muslim customer through away the misconception that Islamic bank is only for Muslims.

VIII. Conclusion

The principal objectives of this research paper is finding of non Muslims perception about Islamic bank and influential factors for forcing or shaping the perception. The most essential primary objective satisfying finding is on an average non Muslims perceive Islamic bank as good and in cases better than conventional bank. The quality of products provided by Islamic banks is good and available for non Muslims also forces non Muslim's perception and cause them move toward Islamic banking products. Competitiveness, revealed but uncultivated potentiality, lower costing products with higher return on deposit are some of the important factors for which trend of moving to Islamic bank has started. While customer lacks awareness and faithful knowledge on Islamic banking products still it is Islamic bankers who can no longer depend on conventionally practiced marketing strategy to make it alluring to pious customers who thinks twice or more in selecting banking products and want to be sure about the principle of Shari'ah. As Islamic banking are restricted to go for usual marketing strategies which are not allowed in Islam so marketing difficulties should be handled with cautions to remain strong in the principle Shari-ah. Factor demanding attention can be as mentioned here is the one that necessitate increasing public education and awareness towards the distinguishing uniqueness of Islamic banks and how it may profitably suit the interest of customers in their financial dealings. Islamic banks have ushered the wider way towards its growth through attracting non Muslim along with Muslim customers. Hence it is required to focus on creating public awareness and removing misconception might bring a better position in the banking market.

References Références Referencias

1. Rahman, A.R.A, Islamic banking and finance: between ideals and realities, IIUM Journal of Economics and Management, 15(2) 2007, pp. 123-141
2. Kuran, Timur, Islam and Mammon: the economic predicaments of Islamism. Princeton, N.J.: Princeton University Press (2004).
3. Khan, M.S.N., Hassan, M.K., & Shahid, A.I, Banking behavior of Islamic bank customer in Bangladesh. Journal of Islamic Economics, Banking & Finance, (2008) 159-194.

© 2017 Global Journals Inc. (US)

4. Abdullah, A. A., Sidek, R., & Adnan, A. A., Perception of non Muslims Customers towards Islamic banks in Malaysia. International Journal of Business and Social Science, 3(11), (2012) pp. 151-163.
5. Hidayat, S.E., & Al-Bawardi, N.K., Non Muslims perception toward Islamic Banking Services in Saudi Arabia. Journal of US-China Public Administration, 9 (6) 2012, pp. 654-670.
6. Uddin, M.B., Shammo, A. M., Mahbub, M., Ahmed, N., Non Muslim Customers' Attitude and Perception roward the products and Services of Islamic Banks: An Exhaustive Study on Islamic Bank Bangladesh Limited. IOSR Journal of Business and Management, 18 (10) 2016, pp. 72-79.
7. Cohen, D., Gan, C. Young, H.H.A., & Choong, E., Customer Satisfaction: a study of bank customer relation in New Zealand, Commerce Division, Discussion Paper No. 109. Canterbury: Lincoln University, 2006.
8. Hawkings, D., Mothersbaug, D., & Best, R. Consumer Behavior: Building Marketing Strategy, 10th Edition .
9. Kaynak, E., Kucukemiroglu, O., & Odabasi,Y. Commercial bank: selection in Turkey, International Journal of Bank Marketing, 9(4), 1992.
10. Rose, P.S., & Marquis, M.H. Money and Capital Markets, financial institutions and instrument in a global market place, 9th ed., (Irwin, NY: Mcgraw-Hill-2006).
11. Haron, S., Ahmed, N. and Planisek, S.L., Bank patronage factors of Muslims and non- Muslim customers, International Journal of Bank Marketing, 12(1) 1994, pp. 32-40.
12. Okumus, H.S., Interest free banking in Turkey: a study of customer satisfaction and bank selection criteria, Journal of Economic Cooperation, 26(4), 2005, pp. 51-86.
13. Gerrard, P., & Cunningham, J,B., Islamic Banking: a study in Singapore, International Journal of Bank Marketing, 15(6), 1997.
14. Ali, F. & Zohu, Y. An Assessment of Perceived Service Quality: Comparison of Islamic and Conventional Banks in Pakistan, International Journal of Innovation and Business Strategy, 2, 2013, pp. 46-85.
15. Dusuki, A.W., and Abdullah, N.I, Why do Malaysian Customers Patronize Islamic Banks?, International Journal of Bank Marketing, 25(3), 2007, pp. 142-160
16. Sheikh, M.A., Tassen, U., Haider, S.A. and Naeem, M, Islamic Vs Conventional Banks in Pakistan: A case Study of Bahawalpur, Journal of Education Research, 2010.
17. Rezwan, F., Shabnaz, S., & Shajahan, B. Analyzing the Attitude of Customers towards Islamic Banking and Conventional Banking in Bangladesh. IOSR Journal of Economics and Finance 6(5), 2015, pp. 24-29.
18. Uddin, M. B., Shammo, A.M., Mahbub, M., Ahmed, N. Non Muslim Customers' Attitude and Perceptions toward the Products and Services of Islamic Banks: An Exhaustive Study on Islamic Bank Bangladesh Limited, IOSR Journal of Business and Management, 18(10), 2016, pp. 72-79, ISSN: 2319-7668.
19. Hamid,A.H., Nordin, N.Z. A Study on Islamic Banking Education and Strategy for the new Millennium–Malaysian Experience, International Journal of Islamic Financial Services 2(4) 2001.
20. Ahmad. N., & Haron, S. Perception of Malaysian Corporate Customers Towards Islamic Banking Products & Services, International Journal of Islamic Financial Services, 3(4) , 2002.
21. Thambiah, S., Nathan, R. J. and Eze, U. C. (2008). "Consumer Adoption of Islamic Banking in Malaysia", College Science in India. Retrieved from www.collegescienceinindia.com/oct 2008.
22. Bley, J., Kuehn K. Conventional versus Islamic finance: Students knowledge and perception in the United Arab Emirates. International Journal of Islamic Financial Services, 5(4), pp: 1-13, 2005.
23. Ahasanul, H., Jamil. O. and Ahmad, Z. (2007). "Islamic Banking: Customer Perception and its Prospect on Bank Product Selection towards Malaysian Customer Perspectives", 5th International Islamic Finance Conference 2007.
24. Amin, M., & Isa, Z. An examination of the relationship between service quality perception and customer satisfaction: A SEM approach towards Malaysian Islamic banking. International Journal of Islamic and Middle Eastern Finance and Management, 1(3), pp: 191-209.
25. Haque, A. Islamic Banking in Malaysia: A Study of Attitudinal differences of Malaysian customers. European Journal of Economics, Finance and Administrative Service, 18, pp: 7-18.
26. Dubai Islamic Bank, retrieved fromhttps://en.wikipedia.org/wiki/Dubai_Islamic_Bank, accessed at July 3, 2017, 11: 23 a.m.
27. Islami Bank Bangladesh Ltd, retrieved from https://en.wikipedia.org/wiki/Islami_Bank_Bangladesh_Ltd, accessed at July 3, 2017, 11:16 a.m.
28. https://www.bb.org.bd/fnansys/bankfi.php.

© 2017 Global Journals Inc. (US)

This page is intentionally left blank

© 2017 Global Journals Inc. (US)

Global Journal of HUMAN-SOCIAL SCIENCE: E
Economics
Volume 17 Issue 5 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460x & Print ISSN: 0975-587X

Economic Growth Nexus Trade Liberalization in Ethiopia: Evidence from the Johnson's Multivariate Cointegration Analysis

By Zewdu Bedasa & Minyahil Alemu
Jimma University

Introduction- The leading motivation behind every economy is to attain a high and sustained economic growth that could further support the overall objective of economic development. To achieve this broad objective, governments over the world have been pursuing various strategies compatible to their respective economies. Trade liberalization, hence is among the many alternatives being in effect towards facilitating the growth process. Countries have embarked themselves in popular economic policies that allow reduction and removal of barriers to trade such as tariff, quotas, and import controls. Among many policies that most countries including Ethiopia have decided to opt-for is trade liberalization of economies (Herath, 2010). Trade liberalization of economies via the reduction or complete elimination of trade barriers has become the most popular economic policy of developed and developing countries today. Import and export tariffs, quotas, export subsidies, technical barriers are the popular trade barriers which have been used during the last few decades. However with globalization of world economies all most all the counties in the world are actively involved with reducing trade barriers among their trade partners. Major objective of moving free trade is to achieve macroeconomic goals of their economies. Basically to achieve high economic growth developing economies are implementing free trade policies during the last few decades. As a result of that trade openness has been widening up in these economies. In the last three decades, trade liberalization increasingly evolved with the expectation of rapid economic growth in Ethiopia (Seid, 2012; Salvatore, 1993).

GJHSS-E Classification: FOR Code: 349999



Strictly as per the compliance and regulations of:

© 2017. Zewdu Bedasa & Minyahil Alemu. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Economic Growth Nexus Trade Liberalization in Ethiopia: Evidence from the Johnson's Multivariate Cointegration Analysis

Zewdu Bedasa [α] & Minyahil Alemu [σ]

I. Introduction

The leading motivation behind every economy is to attain a high and sustained economic growth that could further support the overall objective of economic development. To achieve this broad objective, governments over the world have been pursuing various strategies compatible to their respective economies. Trade liberalization, hence is among the many alternatives being in effect towards facilitating the growth process. Countries have embarked themselves in popular economic policies that allow reduction and removal of barriers to trade such as tariff, quotas, and import controls. Among many policies that most countries including Ethiopia have decided to opt-for is trade liberalization of economies (Herath, 2010). Trade liberalization of economies via the reduction or complete elimination of trade barriers has become the most popular economic policy of developed and developing countries today. Import and export tariffs, quotas, export subsidies, technical barriers are the popular trade barriers which have been used during the last few decades. However with globalization of world economies all most all the counties in the world are actively involved with reducing trade barriers among their trade partners. Major objective of moving free trade is to achieve macroeconomic goals of their economies. Basically to achieve high economic growth developing economies are implementing free trade policies during the last few decades. As a result of that trade openness has been widening up in these economies. In the last three decades, trade liberalization increasingly evolved with the expectation of rapid economic growth in Ethiopia (Seid, 2012; Salvatore, 1993).

Economies are seeking to diversify out of low income growth agriculture industries. For most developing countries the 1970s and1980s were decades of deepening economic crisis. These countries suffered from continuous economic recession, rapid inflation, deficits in balance of payment and government budget owing to adverse external and internal factors. As a result, the general conception about the benefit from international trade come to be questioned as the "Prebisch-singer hypothesis" revealed that the terms of trade of the countries was deteriorating this hypothesis has partly served as a basis for inwardly oriented trade regime that many developing countries soon adopted (Mannur,1995). Ethiopia has not been exceptional and suffered the disastrous economic crisis of the1970s and 1980s.The country experienced severe internal and external imbalance mostly owing to the past inappropriate trade policies. The imperial era was characterized by absence of quantitative restriction on trade. This policy focused on promotion export and encouraged import of capital and raw material, but there policies were soon shifted to a restricted one when the derg come to power and the government started to pursue import substitution stratagem. When the Ethiopian People's Revolutionary Democratic Front (EPRDF) took power, significantly policy reform were made to change the past restriction trade regime. The birr has been devalued by 142 %(from birr 2.07 per us dollar to 5:00 per us dollar). In addition custom duties were reduced and export duties were eliminated with the exception of coffee; and the licensing procedure has also been simplified (Befekadu and Berhanu, 1999/2000).

Trade liberalization is central to the structural adjustment program implemented by most sub-Saharan Africa including Ethiopia. According to Effiomt et al (2011), the corner stone of the SAP induced policy was the opening up of domestic economies to face increased competition in order to ensure efficiency in resources use, removal of wastages, elimination of persistent misalignment in the external and domestic sectors and a general redirection of the economy to the path of recovery and growth. Trade liberalization is one of the most controversial polices in international economics and finance. This is because in a competitive environment prices get lower and products became diversified through which increased welfare emerges gains from specialization and efficiency are also further advantage of economies openness. Therefore, it is quite reasonable that economies generally desire to be economically open.

For many developing countries, potential adjustment costs are of concern. The transition from restrictive to liberalized trade regime involves cost perhaps the most important cost in this process is

Author α: Economics Graduate, Jimma University, Ethiopia.
Author σ: Lecturer, Economics Department, Jimma University, Ethiopia.
e-mail: minale16@yahoo.com

© 2017 Global Journals Inc. (US)

unemployment (WDR, 1987). Removal of quantitative restriction and restriction in tariff rate, cheap imports that flood the domestic market drive out domestic industries from the global market and workers will be left out from their job. Because of high dependence on trade, the countries are also vulnerable to fluctuation in tax revenue induced by trade liberalization (Thomas et al,1991). On Top of there, the situation of developing countries like Ethiopia is being worse because the country's export primary commodities which suffer from low income and price elasticity in the global market. The commodities also face unfavorable and deteriorating terms of trade. Even worse, the countries face protectionist policy from industrial countries (Mannur, 1995). Certainly, Ethiopia is not an exception here. The country's bulk of export come from the agriculture sector and coffee remain to be the dominant export commodity, accounting for 50%-60%of the total export. The export earning of the country is unstable to the extent that it fails to cover the growing import bills, putting the country in a persistent balance of payment deficit position. Owing to the scanty of literatures on the issue, this paper investigates issues related to trade policy in a more systematic way by using a time series econometric analysis to capture the policy impact in the pre and post reform period. Hence, it particularly is concerned with determining whether trade liberalization has real impact on Ethiopian economic growth.

II. Literature Review

Trade liberalization is the removal or reduction of restrictions or barriers on the free exchange of goods and services between nations. This includes the removal or reduction of both tariff (duties and surcharges) and non- tariff obstacles (like licensing rules, quotas and other requirements). The easing or eradication of these restrictions is often referred to as promoting "free trade." It is a policy by which a government does not discriminate against imports or interfere with exports by applying tariffs (to imports) or subsidies (to exports) or quotas. According to the law of comparative advantage, the policy permits trading partner's mutual gains from trade of goods and services (Ikenson, 2006).

Trade liberalization allows countries to specialize in producing the goods and services where they have a comparative advantage (produce at lowest opportunity cost). This enables a net gain in economic welfare. Lower prices; the removal of tariff barriers can lead to lower prices for consumers. E.g. removing food tariffs in West would help reduce the global price of agricultural commodities. This would be particularly a benefit for countries who are importers of food. Increased competition; trade liberalization means firms will face greater competition from abroad. This should act as a spur to increase efficiency and cut costs or it may act as an incentive for an economy to shift resources into new industries where they can maintain a competitive advantage. For example, trade liberalization has been a factor in encouraging the UK to concentrate less on manufacturing and more on the service sector. Economies of scale; trade liberalization enables greater specialization. Economies concentrate on producing particular goods. This can enable big efficiency savings from economies of scale. There are different theories about the importance of trade liberalization on economy; in this respect we will see the three very important theories (Salvatore, 1995).

The absolute and comparative trade theories have long been a considerable influential role while the issue of regional or international trade integration is considered. According to Adam smith, trade between two nations is based on absolute advantage. When one nation is more efficient in the production of one commodity, but there is less efficient in the production of second commodity and the second nation is absolute advantage in the production of second commodity and absolute disadvantage in the first commodity, then both nations can gain by each specializing in the production of the commodity of its absolute advantage and exchanging part of its output with the other nation for the commodity of its absolute disadvantage, due to this trade can be important for efficient utilization of resources and to rise the production of both commodities. These increases in the output of both commodities measure the gains from specialization in the production available to be divided between the two nations through trade (Mankiw, 2010).

The theory of comparative advantage developed by David Ricardo is also of concern. It is the greater absolute advantage or the lower absolute disadvantage that one nation may have over another in the production of a commodity. David Ricardo developed the classical theory of comparative advantage in 1817 to explain why countries engage in international trade even when one country's workers are more efficient at producing every single good than workers in other countries. Ricardo demonstrated that if two countries capable of producing two commodities engage in the free market, then each country will increase its overall consumption by exporting the good for which it has a comparative advantage while importing the other good, provided that there exist differences in labor productivity between both countries. Widely regarded as one of the most powerful yet counter-intuitive insights in economics, Ricardo's theory implies that comparative advantage rather than absolute advantage is responsible for much of international trade. When nations practice the principle of comparative advantage, this explains that by specializing in goods where countries have a lower opportunity cost, there can be an increase in economic welfare for all countries. Therefore, According to the law of comparative

© 2017 Global Journals Inc. (US)

advantage, even if one nation is less efficient than (has an absolute disadvantage with respect to) the other nation in the production of both commodities, there is still a basis for mutually beneficial trade. The less efficient nation should specialize in the production of (and export) the commodity in which its absolute disadvantage is smaller (this is the commodity of its comparative advantage) and import the commodity in which it's absolute disadvantage is greater (Salvatore, 2004; Obstfeld and Rogoff, 1996)·

The Heckscher–Ohlin theory of trade reveals, on the other hand, that countries will have a comparative advantage in (and thus will export) products whose production uses their abundant factors intensively and comparative disadvantage in (and thus will import) products whose production uses their scarce factors intensively. Generally; Heckscher-Ohlin (H-O) theory advocated that trade between countries depends on relative factor abundance. There will be a great mutual beneficial trade if the trading countries have larger differences in technology and factor endowments. Little trade is expected between the countries with similar factor endowments.

a) Macroeconomics Policies and trade liberalization

Trade liberalization policies in the long run are expected to shift resources toward tradable, especially exportable and away from import substitutes. The policies are also said to improve economic welfare by achieving a better allocation of resources (Thomas et al, 1991). The scope of successful trade liberalizing policy depends on macroeconomic and other complementary policies that achieve and maintain stability in the economy and promote reallocation of resources in response to the reform. According to Thomas et al (1991), problems resulting from poor macroeconomic policies may cause liberalization to be perceived as a failure, prompting a return to protectionist policies.

Conventionally, providing a realistic exchange rate is considered vital for the successful introduction of trade reform (WDR, 1987). The real exchange rate should help ensure equilibrium in the balance of payment (POBs) and domestic markets and should be compatible with growth in tradable and output. An overvalued currency has an anti- export bias in that it indirectly taxes exportable while favoring non-tradable and importable (WDR, 1987). A real devaluation improves incentives for export industries and production of import substitutes. Trade liberalization must be associated with real devaluation if the current account is not to deteriorate and if the employment losses in protected import-substituting industries are to be compensated by employment gains elsewhere, especially in export industries. Normally, nominal devaluation will be needed to bring about the required real devaluation.

b) The Sequencing and Pacing of Trade Liberalization Measures

Sequencing and pacing trade reform are considered as pressing priority to avoid transitional complication of trade liberalization. Halevi (1989) suggested that the establishment of any general rule to formulate the intensity of liberalization measures to different nations is quite formidable as countries differ in their initial condition. This demands different sequences of reform. Elimination of export restrictions may be relevant in some cases, reduction of export and import restrictions simultaneously in others and a lowering of protection yet in others. Concerning the sequencing of liberalization measures, Halevi (1989) suggested certain rules of thumb that states "aspects of trade liberalization that involve only adjustment costs can be implemented as fast as technical factors permit". The order of sequence, according to the author, is to move from removing impediment to export, to replacing quantitative restriction on import by price mechanism and finally to reducing protective levels and differentials.

There is no consensus among economists regarding the speed of trade policy reform. Thomas et al (1991) stressed that an expedition reform program is preferable to a prolonged one because the benefits are greater and emerge sooner. Such a reform avoids a drawn-out process that gives opponents time to organize and lobby for a reversal. Also, the sooner the benefits of reform begin, the better the prospects for sustainability. However, there are two factors that are against rapid reforms. First, theoretically, unemployment might be larger than when changes are phased overtime. Second argument concerns the credibility of the reforms and the likelihood that they will be sustained. Gradual reforms may be preferable since they are more likely to be accepted.

Despite the highlighted theories of international trade policies, practice and principles in a relation to economic growth, various empirical literatures related to the issue under consideration are also reviewed. Dollar (1992) investigated the relationship between per capita income growth and distortions in the real exchange rate and its variability as well as investment rates in 95 countries for the period between1967-1985. The test showed that the high level of distortion and greater exchange rate variability are strongly correlated with per capita income growth. The result implied that that openness has a positive and significant impact on economic growth. Vamvakidis (1999) has taken 51 cases of broad liberalization and finds that countries have grown faster after liberalization. He used two measures of liberalization or openness. One is the standard measure used in much of the new growth theory literatures of the ratio of total trade (export plus import) to GDP. The second is the measure adopted by Sanchs and Warner (1995). This is named as the ratio of openness. The authors introduced five major criteria for

© 2017 Global Journals Inc. (US)

an economy to be regarded as open. These are (1) the an average tariff rate of less than 40%, (2) average non-tariff barriers equivalent to a tariff rate less than 40%, (3) no communistic government, (4) a black market exchange rate premium of less than 20% and (5) no state monopoly of major exports.

Herath (2010) examined impact of trade liberalization on economic growth of Sri Lanka. In identifying the impacts of trade liberalization on growth and trade balance, data were collected on a specific time interval before and after the trade liberalization. The time period selected was from 1960 to 2007. Using regression analysis and Chow test to the variables, findings of the study confirmed a significant positive relationship between trade liberalization and economic growth of Sri Lanka. The result of Chow test proved a clear change of economic growth before and after trade liberalization of the country.

Sinha (2000) conducted a time series analysis using total trade volume as an accurate measure of openness and examined the link between openness and growth for 15 Asian countries for the period 1950 to 1992. They developed a model that specified GDP growth as a function of growth rates of openness (exports plus imports), domestic investment, and population. The coefficient of the growth of openness was found to be significant for only eight of the 15 countries. However, they found support for the proposition that GDP growth rate is positively related to the growth rates of openness and domestic investment, whereas the relationship between GDP growth rate.

Herath (2010) examined impact of trade liberalization on economic growth of Sri Lanka. In identifying the impacts of trade liberalization on growth and trade balance, data were collected on a specific time interval before and after the trade liberalization. The time period selected was from 1960 to 2007. Using regression analysis and Chow test to the variables, findings of the study confirmed a significant positive relationship between trade liberalization and economic growth of Sri Lanka. The result of Chow test proved a clear change of economic growth before and after trade liberalization of the country.

Debel (2012) analyzed that trade liberalization seeks to reform a country's international commercial policies in order to improve economic welfare by achieving a better allocation of resources in the long-run. The results of the estimated model has confirmed undoubtedly that in the observed period, 1974-2009, trade liberalization has had a positive and significant impact on the export performance of the Ethiopian economy. This implies that policy makers should generate such policies for attracting exports from Ethiopia, which will focus on the utilization of the country's resource endowments in terms of developing new technologies, and improving national capabilities. As a result, openness has lead Ethiopia to economic growth. This suggests that when countries are more open, they are better able to exploit market opportunities through product diversification and differentiation. These results have important implications for national policies and strategies within the trading system of Ethiopia to open up its foreign trade policies in inter regional and global perspective.

Alemnesh (2012) examined the relationship between trade liberalization and economic growth by using time sires econometric analysis. She takes real GDP as a dependent variable and real private investment, real public investment, human capital and trade openness (proxy to determinant of trade liberalization) as independent variable in Ethiopian context. According to her finding trade liberalization have positive long run impact and significant effect on Ethiopian economic growth.

III. Research Methodology

The time series data set ranging from 1974/75-2014/15 is used in the analytical framework of this paper. Each observation has potentially sourced from domestic institutions like; MOFED, NBE and EEA. The data set has all passed through all the necessary tests required for time series data to be in effect. The common pre-tests undertaken are the unit root and cointegration tests to enable handle the long run behaviors of variables entered the growth model of this paper.

Trade liberalization variable which is proxied by the sum of export and import divided by nominal GDP, is a principal regressor in the estimated growth model; while, RGDP is a dependent variable. Moreover, variables like FDI and REER are also controlled for the growth model. The dependent and independent variables included in the adopted growth model are functionally linked as follows;

$$RGDPt = f(OPNt, FDIt, REERt) \quad (1)$$

Where; RGDP is Real Gross Domestic Product, FDI measures the level of foreign direct investment in the country each year and REER represents the real effective exchange rate; whereas, t is a time trend. However, to be able to capture the elasticity of each variable in a relation to the growth variable and squeeze the estimated coefficients of each regressor in the model, the growth model considering the effect of other stochastic factors which are not controlled in the model is econometrically specified as follows;

$$\ln RGDPt = \beta 0 + \beta 1 \ln OPNt + \beta 2 \ln FDIt + \beta 3 \ln REERt + st \quad (2)$$

Where; ln is the natural logarithmic operator and is the white noise error term assumed to follow normal distribution with zero mean and constant variance.

Owning to its implicit assumption of no-collinearity among variables already supposed to be integrated of order n, the traditional Dickey Fuller (DF)

© 2017 Global Journals Inc. (US)

procedure has not been applicable in empirical works. No doubt variables may be multi-collinearly related in practice. However, the traditional approach is modified to account for this issue thereby extending the equation by adding the lagged terms of the dependent variable; and hence, named Augmented Dickey Fuller Unit Root test (see Gujarati, 2004; Maddala, 1992). The regression specification considering both the drift and trending parameters together with the testing procedure under ADF are discussed below;

$$\Delta yt = \alpha + \eta 1t + \eth yt{-}1 + \sum^{m} \text{þ}_i \Delta y_{t-1} + st \ldots\ldots\ldots\ldots (3)$$

Where, εt; is the usual pure white noise error term, $\delta = \Pi - 1$ and $\Delta yt-1 = (Yt-1-Yt-2)$, $\Delta Yt-2 = (Yt-2-Yt-3)$, & the like. α is the intercept term, η1 is the trend coefficient, t – the time/trend variable and where; m, are the lag terms. For this test, the hypothesis would be;

H0: $\delta = 0$; there is unit root→ (implying the time series is non-stationary).

H1: $\delta < 0$; No unit root → the time series is stationary

Decision: reject the null hypothesis of ($\delta = 0$), hence the time series is stationary; if the computed t-statistic (in absolute terms) exceed the ADF critical values; the variable under consideration is stationary.

If the long run issue has to be examined, it is a priori to undertake the cointegration tests among the variables of interest. It can be a case in empirical analysis that, some certain linear transformation of variables already suspected of being nonstationary may be jointly stationary. It is what we call cointegration revealing the existence of long run equilibrium relationships between them. For our purpose, the Johnson's approach for cointegration is employed.

Though many more other options are available, the Johnson procedure has remained popular in most of the recent empirical analysis in economics. Because it makes the presumption that only one cointegrating rank in the model, the Engle-Granger (Two-way) approach for cointegration has not been a choice for many. Moreover, the Durbin-Watson test has also of less practical value as the calculated test statistics is inconsistent for various sample sizes. For detailed information on this issue refer Maddala (1994), Gujarati (2004) and Wooldridge (2013).

As far as the existence of cointegration is not meant to guarantee the existence of equilibrium relationship in the short run, we estimated the error correction model to capture the dynamic impact each regressor on the growth model adopted. A beautiful feature of ECM is that it instantaneously yields both the long and short run elasticities of the series under consideration with employed empirical model. Assuming variables x and y are the concerned variables, ECM in this study requires estimating the following regression;

$$\left.\begin{aligned} \Delta y_t &= d_1 + \alpha_1 \varepsilon_{t-1} + \sum_{i=0}^{n} \beta_i \Delta y_{t-i} + \sum_{i=0}^{n} \delta_i \Delta x_{t-i} + \sum_{i=0}^{n} \Omega_i Z_{t-i} \\ \Delta x_t &= d_2 + \alpha_2 \varepsilon_{t-1} + \sum_{i=0}^{n} \delta_i y_{t-i} + \sum_{i=0}^{n} \beta_i \Delta x_{t-i} + \sum_{i=0}^{n} \Omega_i Z_{t-i} \end{aligned}\right\} \quad (4)$$

The coefficient of the error term in both equations (i.e. the α parameter) measures the speed of adjustment by distortions in the long run towards the long run equilibrium point. A negative and significant coefficient of ε_{t-1} indicates convergence where as a positive coefficient shows the economy is rather diverging from the long run equilibrium point. However, convergence is the desirable property in principle.

IV. Results and Discussion

Table 1: Unit Root Properties of individual variables entered the growth model

Variables	ADF test statistics	Inferences
ln RGDP	-5.687***	I(1)
ln OPN	-5.021***	I(1)
ln REER	-5.021***	I(1)
ln FDI	-8.813****	I(1)

Source: Model Estimation Output

Where, *** indicates the level of significance at 1 percent. It is clear from table 1 that, the ADF approach has confirmed the variables are all integrated of order one. Therefore, the order of integration is one and it is also among the precondition for Johnson's cointegration test to be practical.

Johnson's approach requires the determination of appropriate lag length included in the estimation of VAR model. Hence, the AIC has been suggested minimum at the lag length of 1 and hence the appropriate lag size included was 1.

© 2017 Global Journals Inc. (US)

Johnson's Cointegration Test Result

Table 2: Cointegration Test Results

Cointegrating Rank	λ*max*	Critical @ 5%	λ*trace*	Critical @ 5%
r = 0	54.7643	33.46	101.8256	68.52
r ≤ 1*	20.7901	27.07	47.0614*	47.21
r ≤ 2	17.6011	20.97	26.2713	29.68
r ≤ 3	7.6017	14.07	8.6701	15.41
r ≤ 4	1.0684	3.76e	1.0684	3.76

Source: Model Output

As it is clearly indicative from the table 2 above, both the trace and maximum eigen test statistics have confirmed the existence of one cointegrating relationship between variables entered the growth model of this paper. Hence, test results suggest for the existence of at most one way for the variables to have stable equilibrium relationship in the long run.

Table 3: The Estimated Long run elasticities

Variables	Coefficients	Standard Errors	t-statistics
[D_lnRGDP_ce1]	.0483051[0.679]		
*ln*OPN	.2414934	.0240516	10.04**
*ln*REER	.3247612	.0452029	7.18**
*ln*FDI	.048355	.0540048	0.90**
Constant	4.90201		
Diagnosis Tests			
Breush-Godfrey: Chi2 = 0.283[0.5951] VIF: 4.95			
Heteroskedasticity condition: chi2 (1) = 0.01[0.9353]			
$R^2 = 0.96$			
Jarque-Bera test: Chi^2(14) = 4.493[0.99170]			

Source: Model Output

** *indicates significance level at 5 percent. Values in parenthesis are p-values of the corresponding test statistics representing various post model estimation diagnosis tests. Of course, all of the diagnosis test result has confirmed the fitness of the growth model estimated. Hence, it guarantees any inferences based on the estimation results of our model.*

From the table above we see that the coefficient for the error correction term is positive and insignificant revealing that there is no adjustment towards the long run equilibrium point in the growth model. Rather, the short run deviations are suggested to diverge in significantly by a speed rate of 4.8% in a year.

From the estimated output, we observe that all of the independent variables entered the growth model have significant impact on the economic growth of in the long run. That means; the trade openness variable, real exchange rate and the foreign direct investment variables have a positive and significant impact on the economic growth of Ethiopia in the long run. These findings are in line with many theories like; Romer (1996) and Obstfeld and Rogoff (1996) and many empirical literatures in economics. A 1% improvement in a country's level of exposure to international trade increases its economic growth by 24%; while a percentage rise in inflow of FDI improves the economic growth rate in the long run just by 4.8%. On the other hand, with a 1% increase in REER the economic growth rate increases by 32.4% in the long run. Of the variables considered in the model, the long run growth impact of exchange rate has been estimated to the dominant one. This may be because with highly depreciated currency the country's export increases thereby affecting its current account balance positively; and the real income as well since current account balance forms part of the national income. But, our justification holds true only if the positive effect of devaluation dominates its negative impact.

However, the VECM estimates reveal that the growth impact of each regressor on economic growth is insignificant in the short run. It is because growth in the short run is being explained by another variables not included in the growth model of the present study.

© 2017 Global Journals Inc. (US)

V. Conclusions and Policy Implication

Trade liberalization has long been said to influence favorably in the long run. In an attempt to confirm this theory in the context of Ethiopian economy, we adopted the Johnson's approach for cointegration tests to test the long run behavior of variables entered the growth model of this paper. The test result has suggested the existence of positive and significant impact of trade liberalization on economic growth in Ethiopia; its short run growth impact is estimated to be insignificant. Moreover, the impact of real effective exchange rate and foreign direct investment variables were found to be positive and highly significant in the long run. Therefore, there is a need to design and implement any policy action that could help improve the magnitude of the country's exposure to international trade integration.

References Références Referencias

1. Alemnesh T, (2012), "The Nexuses between Public Investment, Private Investment, Trade Openness and Economic Growth in Ethiopia: Co-Integrated Var Approach Analysis", *Unpublished master Thesis*, Addis Ababa University, Ethiopia.
2. Befekadu D. and Berhanu N. (1999/2000), EEA.
3. Debel G, (2004), "Export and economic growth in Ethiopia", *An empirical investigation proceeding of the first international conference on the Ethiopian economy*, EEA, Ethiopia.
4. Dollar D,(1992), "Out ward oriented developing economies really do grow more rapidly evidence from 95 LDCs, 1976-1985", Economic development and cultural changes.
5. Gujarati (2004), "Basic Econometrics", 4th edition, New York: The Mc Graw-Hill.
6. Maddala (1992), "Introduction to Econometrics", 2nd edition, Macmillan, New York.
7. Mankiw (2008), "Principles of Macroeconomics", Fifth edition, TSI Graphics Inc, USA.
8. Mankiw (2010), "Macroeconomics", 7th edition, 41 Madison Avenue, USA.
9. Mannur, H.G (1995): International Economics, Second Revised Edition.
10. Obstfeld and Rogoff (1996), "Foundations of International Macroeconomics", ISBN/0-262 MIT Press.
11. Romer (1996), "Advanced Macroeconomics: Advanced Series in Economics", McGraw-Hill.
12. Seid N. (2012): Impact of trade liberalization of growth and poverty in Ethiopia, published paper in Addis Ababa University Thirwall, A.P (2000): Trade, Trade Liberalization and Economic Growth; Theory and Evidence.
13. Thomas V., Nash. And Associates (1991): Best practices in trade policy reform", *World Bank publication*, Washington D.C.
14. Wooldridge (2013), "Introductory Economics: A modern Approach", Cenage Learning, 5th edition, Michigan State University, United States.

© 2017 Global Journals Inc. (US)

This page is intentionally left blank

© 2017 Global Journals Inc. (US)

Global Journal of HUMAN-SOCIAL SCIENCE: E Economics
Volume 17 Issue 5 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460x & Print ISSN: 0975-587X

Empirical Analysis on Determinants of Child labor and Associated Problems (The Case of Damot Gale District, Wolaita Zone, SNNPR, Ethiopia)

By Zegeye Paulos Borko
Wolaita Sodo University

Abstract- The study was carried out at Damot Gale district of Wolaita zone in Southern nation nationalities regional state with the main objectives to describe factors of child labor in the study area. In order to attain this objective the study made use of cross-sectional household survey data collected from 94 sample households .The data collected were analyzed and discussed by using descriptive statistics and binary log it regression model. To this end, identifying children's who were in child labor and those who were not in child labor; descriptive result shows that from different age category a total of 69(73%) of the children's were engaged in different activity and the remaining 25 (27%) responded as not working. Most children started working below the age of 8 and major sectors of work were unpaid family work such as agriculture (58% M & 7.24 % F) and Home service (7.3% F & 22% M). The result of the logistic regression model revealed that out of 8variables included in the model, 4 explanatory variables were found to be significant at 1percent, 5percent and 10% percent level. Accordingly, family size and loss of parents were found to have positive association with child labor and statistically significant up less than 1% and 10% respectively. Mean while occupation status of the parents and education level of were found out to have strong negative association with child labor and statistically significant up to less than 1 percent level of significance.

Keywords: *child labor, logit model, damot gale district.*

GJHSS-E Classification: *FOR Code: 140211*



Strictly as per the compliance and regulations of:

© 2017. Zegeye Paulos Borko. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Empirical Analysis on Determinants of Child labor and Associated Problems (The Case of Damot Gale District, Wolaita Zone, SNNPR, Ethiopia)

Zegeye Paulos Borko

Abstract- The study was carried out at Damot Gale district of Wolaita zone in Southern nation nationalities regional state with the main objectives to describe factors of child labor in the study area. In order to attain this objective the study made use of cross-sectional household survey data collected from 94 sample households .The data collected were analyzed and discussed by using descriptive statistics and binary log it regression model. To this end, identifying children's who were in child labor and those who were not in child labor; descriptive result shows that from different age category a total of 69(73%) of the children's were engaged in different activity and the remaining 25 (27%) responded as not working. Most children started working below the age of 8 and major sectors of work were unpaid family work such as agriculture (58% M & 7.24 % F) and Home service (7.3% F & 22% M). The result of the logistic regression model revealed that out of 8variables included in the model, 4 explanatory variables were found to be significant at 1percent, 5percent and 10% percent level. Accordingly, family size and loss of parents were found to have positive association with child labor and statistically significant up less than 1% and 10% respectively. Mean while occupation status of the parents and education level of were found out to have strong negative association with child labor and statistically significant up to less than 1 percent level of significance.

Keywords: child labor, logit model, damot gale district.

I. Introduction

a) Back ground of the study

According to the ILO, child labor is "work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development."The ILO classifies work conducted by children into three categories: children in employment, child labor, and hazardous work. The ILO condemns both child labor and hazardous work with the goal of eliminating hazardous child labor by 2016.

Child labor is often characterized as pernicious and evil, something that has to be unequivocally rejected. Around 60% of all exploitative child labor takes place in agriculture, the (labor) dominant sector in LDCs. Children in rural regions of LDCs are often the only available "means" for producing agricultural goods and sustaining a livelihood. There are at least three reasons why agricultural production based on fair trade schemes can better tackle the problem of exploitative child labor. Firstly, control mechanisms are much more elaborated. Secondly, the shorter supply chain allows traceability, an important precondition for an efficient control system. Thirdly, a guaranteed minimum price prevents absolute poverty a major cause of child labor – while the fair trade premium can be used to overcome long-term structural barriers, thus addressing the root causes of exploitative child labor (Etzensperger, 2012).

Of all children engaged in economic activities outside the house or household work, about 88 percent reside in rural areas. The highest rates of child labor are to be found in SNNP and Oromia (88.8 percent in each). The agriculture sector accounts the largest portion, which is 75 percent and service sector 12 percent and four percent in manufacturing (Guarcello & Rosati, 2007). This ranks the country among one of the countries with highest rates of child labor in the world. Poverty, lack of educational opportunity parent's choice, children's choice and societal attitudes are main factors in the Ethiopia (Habtamu, 2011).Since studies done in Ethiopia on child labor are far from adequate, and almost all of them were conducted in the major urban settings of the country, the rural community where high prevalence of the problem is expected is not yet studied. Therefore this particular study was done with the objective of determining the magnitude of child labor and associated problems in Damot Gale district.

b) Objectives

i. General Objective

The main objective of the study is to assess the magnitude of child labor and associated problems in the case of Damot Gale district.

ii. Specific Objectives

The study has the following specific objectives:

- To assess the challenges and abusive practices that these working children face
- To investigate the causes for the involvement of children in the labor market;

Author: Department of Economics, Wolaita Sodo University, PO box 138, Wolaita Sodo, Ethiopia. e-mail: pauloszegeye@gmail.com

© 2017 Global Journals Inc. (US)

II. Methodology

a) Description of the Study Area

Damot Gale is one of 12 districts in Wolaita zone of SNNPR of Ethiopia. It is located at 139km southwest of the Hawassa town which is the capital of southern regional state and 365km from Addis Ababa in the southern direction. Geographically, it is located between 6^0 53'- 7^0 6' 30" north latitude and 37^0 46' – 37^0 58' 40" east longitude. It has an altitude ranging from1501- 2950 meters above mean sea level. Mount Damota is the highest peak in the area. The study area covers an area of 24285.861 hectare. Damot Gale district is divided into three basic traditional agro-climatic zones such as *Dega* or highland (25.3%), *Woina dega* or midland (61.2%) and *Kola* or lowland (13%) (WARD office, 2014). *Woina dega* dominates the study area which has bimodal distribution of rainfall. Mean annual rainfall ranges between 1001-1400 mm (RFEDB, 2013) as cited in

The study area is bordered on the south west by Sodo zuria, on the northwest by Boloso sore and Damot Pulassa, on the north by Hadiya zone, on the east by Duguna Fango, and on the south east by Damot woyde. Based on the CSA (2011) estimation and district finance and economy development office report, Damot Gale has a population of 177,570 out of this103,011 are male and 74,559 are female. The total households of the district are 30,767 male households 26,417 and female 4,350.and has a total of 31 rural kebels. Children's age less than 15 year in the four kebele is 3148. Like other parts of the region agriculture is the main means of livelihood for the population both in terms of crop production and livestock.

b) Data Type and Source

The research work was mainly used a primary data which was collected from the study area. Information on the demographic and socio economic condition of the children's and their family data was collected through structured questionnaires having a close ended elicitation format with open ended follow up questions. The structured questionnaires were posted to the children's and to their parents with face to face interviews. The purpose of the study was explained to the study subjects and their willingness to participate in the study asked before conducting interviews. Interviews were conducted during late afternoons and evenings as these were found to be optimal time to find children at home. Child labor: economic exploitation and any other circumstance under which children perform paid or unpaid work that might be directly detrimental to their development, or that might prevent them from exercising their education, health and leisure in the study area.

Secondary data was used to supplement the primary data and obtained from different published and unpublished documents. Both quantitative and qualitative methods were employed about because these two types of data complement each other. Since the main aim of this research was mainly investigating statically the relation between dependant variable *i.e.* child labor and explanatory (independent) variables that determine child labor in the study area. In addition to statistical investigation key informant and focus group discussion were taken place.

c) Sample Size Determination

The sample size in this study was determined by using the minimum sample size formula of Fowler(2001) and then adjusted for the total population of the study area by Cochran's sample size formula (Cochran, 1977) as shown below.

Where, n=sample size, d=the level of risk the researcher has been decided to take that true margin of error may exceed the acceptable margin of error=0.06 (precision 6%) with confidence level 94%.

Therefore, the final sample size for the district becomes 94 which was the sum of four kebels as we can see in the table below.

Table 1: Sample size of the Kebeles

Name of kebels	Total Population	Total Children age < 15	Sample children age < 15
Damot Mokonissa	5212	834	25
Gacheno	3702	629	19
Wandara Gale	6073	971	29
Shasha Gale	4200	714	21
Total	19190	3148	94

d) Sampling Technique

The study population constituted of children aged 5-15 years residing in Damot Gale district in four kebels during the study period. For this study, multistage sampling procedures was used. In the first stage, Damot Gale district was selected purposively because it was one of the densely populated districts in zone level as well as regional level. In the second stage three kebels were selected from 31 kebels by simple random sampling. At the third stage, Systematic sampling technique was employed to identify the study subjects. The first household was selected by lottery method; a child from every 4th house was interviewed. If the number of children was above one in a household, only one child was selected by lottery method. If no child was found in the selected household, the next

© 2017 Global Journals Inc. (US)

household with a child was visited before going to the next fourth household. As the study was household based, homeless street children were not included in the study.

e) Data Collection Techniques and Instruments

The researcher used kebele agriculture development workers to collect primary source data. Before entering to survey, the development agents were given a training mainly focusing on the contents of the questionnaire and procedure of survey. Observation and discussion with district as well as kebele governmental officials and expertise was held by the researcher. The key points were prepared for discussion with key informant, employers and governmental officials. Structured and semi-structured interview questionnaires were designed to collect quantitative data.

f) Method of Data Analysis

To achieve the objectives of this study, different methods of data analysis were used. The study used both descriptive and econometric analysis. The descriptive analysis uses percentages, graphs, tabulations and multiple linear regression analysis was used to identify the effect of determinants of child labor. Tools and statistics used in descriptive and econometric are generated with the help of econometric software STATA version 11.

i. *Binary Logit Model*

In order to identify the determinants of child labor in the study area a binary response model is specified to be estimated by logit regression technique. The logit specification is designed to analyze qualitative data reflecting a choice between two alternatives, which in this case1 for being in child labor and 0 otherwise. The parameters of this model will be estimated by using the maximum likelihood estimation rather than the movement estimation in which OLS regression technique rely on. The logit method gives parameter estimates that are asymptotically efficient, and consistent. Indeed, the logit approach is known to produce statistically sound results (Gujarati & porter, 2009) Probability of being in child labor is specified as the value of the cumulative distribution function which is specified as function of the explanatory variables. The equation is of the form:

Where,

Y= probability of being in child labor or not in child labor

Coefficient of the explanatory variables.

Xi= Explanatory variable.

For the case of a single independent variable, the logistic regression model can be written as

Or equivalently

Where, β0 and β1 are coefficients to be estimated from data, X*i* is the independent variable e is the base of the natural logarithm.

For ease of exposition the model can be written as (for more than one independent variables)

Or equivalently

This particular study was deal about the probability of being in child labor or not and this expression expressed in mathematical form as follows:

The probability of a child being in labor market (an event occurring) as the form:

Note: The error termalso follows logistic distribution

For a non-event (not in child labor) cumulative logistic distribution, representing the probability is just (1-p*i*) i.e.

Therefore, by dividing equation (2.5) by equation (2.7) we can result in the odds-ratio in binary response, which is as stated below:

Equation (2.8) is simply the odd-ratio in favor of a children is falling labor exploitation. This is the ratio of the probability of a children will be in labor market to the probability that it will not be in child labor.

When we take the natural logarisim of odd-ratio of equation (2.8) will result in logit model as we can see below.

Assumptions of Logistic Model

1. Assumes a linear relationship between the logit of the independent variable and dependant variables, however, does not assume a linear relationship between the actual dependant and independent variable
2. Independent variables were not linear functions of each other, i.e. perfect multicollinearity makes estimation impossible.
3. The model was correctly specified i.e.
   - ❖ The true conditional probabilities are a logistic function of the independent variables;
   - ❖ No important variables are omitted;
   - ❖ No extraneous variables are included; and
   - ❖ The independent variables are measured without error.

Based on the above justification, we specified the logit model for probability of a children being child labor exploitation and determinants of child labor

Therefore Y*i*= 1 if child is involved in child labor and =0 if children is not in labor market, is regression parameters, is the error term and the explanatory variables defined in table 2.1 below. The regression was estimated by Maximum likelihood technique.

© 2017 Global Journals Inc. (US)

Table 1.1: Expected signs of Explanatory variables

No.	Variables	Measurement	Expected Signs
1	Occupation of parents (Ocu)	Dummy (takes= 1 if parent has occup; otherwise 0)	-
2	Dependancy Ratio (DR)	Continues	+
3	Distance from School (DitSch)	Continues	+
4	Loss of Parents/ Broken Marriages/ Divorsce (Los Pa)	Dummy (takes= 1 if broken/lost parent; otherwise 0)	+
5	Family Size (FS)	Continues	+
6	Sex	Categorial (1 stands for Male; 0 for Female)	-/+
7	Age (Ag)	Continues	+
8	Parents Education (Edu)	Continues	-

III. Results and Discussions

This chapter deals with the results of descriptive statistics and binary logistic regression results of the causes for the involvement of children in the labor market; The analysis was done in light of the objectives of the study. Section 3.1 deals with descriptive analysis and section 3.2 presents the results of the econometric analysis.

a) Descriptive Analysis

In this study a total of 94 children's family or their parents were interviewed concerning child labor and associated factors that lead to exploitation of child labor. Majority of the head of the household were male 71(76%) and the remaining 23(24%) were female parents of the children who were sampled for this study. 86(91.4%) of respondents were farmers, 2(2.1%) government employee, 3(3.1%), Daily laborers 1(1.06%) andmerchants2(2.1%).From the number of children's engaged in different activities children whose parents occupation was agriculture ranked first in number, followed by merchants and daily laborers and less in parents whose occupation was government employee. This is due to the fact that the government employees' access to participate/ easily understanding of different child related laws either by reading or attending in meeting than the rest of parents whose occupation was farming, merchant and daily laborers.

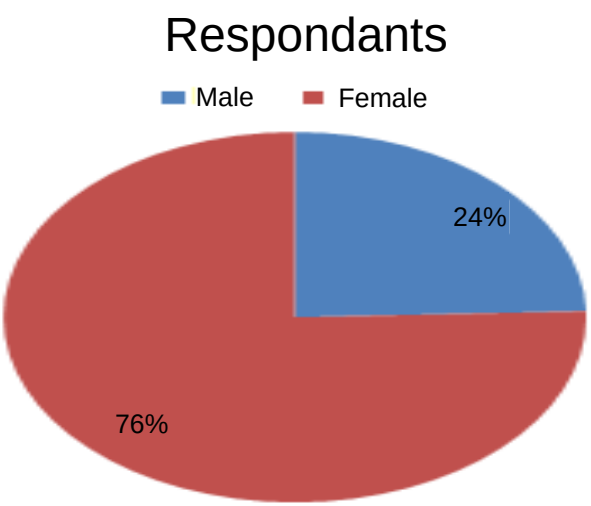


Figure 1

i. *Age and child labor*

The table 3.1 below shows that the number of children in age category 5-8 accounts 27 (28.7%) and, age 9-11 the number of children 38 (40.5%) and age category 12-15 the number of children 29 (30.8%). Accordingly, the age category 9-11ranked first in working which was 29 (42%), followed by age category 12-15 the number of children who were responded as working were 24 (35%) and the remaining 16 (23%) were from the age category 5-8. The survey result revealed that from different age category a total of 69 (73%) of the children's were engaged in different activity and the remaining 25 (27%) responded as not working. Most children started working below the age of 8 and major sectors of work are unpaid family work such as agriculture (58% M & 7.24 % F) ,Home service (7.3% F & 22% M) agriculture and home services were activates that children's were practicing.

© 2017 Global Journals Inc. (US)

Table 3.1: Age and child labor

No.	Age	No,	%	Working		Not Working	
				No.	%	No.	%
1	5-8	27	28.7	16	23	11	44
2	9-11	38	40.5	29	42	9	36
3	12-15	29	30.8	24	35	5	20
	Total	94	100	69	100	24	100

ii. *Schooling of the Children's*

The educational status of the children's was one of the variables under consideration of this study. The result of the survey shows that 68 (73%) of the children's were currently in the school, 22 (23%) never went to school and 4 (4%) students dropout in order to support their parents with different activities. As the focus group discussion members confirmed that the two major reasons for not attending school and for dropping were the need to work and financial problem to cover school expenses an d those children's who were attending school were also working different activities before and after school.

Table 3.2: Educational status of the children's

No.	Schooling	No.	%	Working		Not Working	
					%		%
1	Currently in school	68	73	53	77	15	60
2	Never went to school	22	23	12	17.2	10	40
3	Drop Out	4	4	4	5.8	0	0
	Total	94	100	69	100	25	100

b) Model Analysis

To identify the major determinants of child labor in the study area dependent variable i.e. Probability of being in child labor was regressed against various explanatory variables. The regression table revealed that binary logistic model managed to predict 69 percent of the responses correctly. Apart from percent correct predictions, the model Chi-Square with "n" degrees of freedom and Hosmer and Lemeshow's were used to test goodness-of-fit test. Accordingly, p-values associated the Chi-Square with 8 degrees of freedom. The value of .0000 indicates that the model as a whole is statistically significant that shows the model fit the data well (see table 3.3 below)

The variables included in the model were tested for the existence of multi-co linearity, if any. Contingency coefficient and variance inflation factor were used for multi-collinearity test of discrete and continuous variables, respectively. Contingency coefficient value ranges between 0 and 1, and as a rule of thumb variable with contingency coefficient below 0.75 shows weak association and value above it indicates strong association of variables. The contingency coefficient for the discrete variables included in the model was less than 0.75 that didn't suggest multi-collinearity to be a serious concern. As a common practice continuous variable having variance inflation factor of less than 10 believed to have no multi-collinearity and those with VIF of above 10 are subjected to the problem and should be excluded from the model (Gujarati, 2009).

Table 3.3: Logistic regression result

Prb. Of being in child labour	Cofficient	Std. Err.	z	P > |z|
Sex of parents	.8604187	1.298265	0.66	0.507
Age of the Households	.0131227	.0283364	0.46	0.643
Family Size	.8290725	.3150063	2.63	0.008***
Dependency Ratio	.7416148	.4888516	1.52	0.129
Head Eqations	-.1986955	.0379914	-5.23	0.001***
Occupation of parents	4.285659	1.599432	-2.68	0.007***
Distance from school	0067724	.0279624	0.24	0.809
Loss of parents	3.829672	2.057537	1.86	0.063*
cons	5.185204	3.1686	-1.64	0.102
Number of obs = 94Log likelihood = -19.87 LR chi2(8) = 90.40 Prob > chi2 = 0.0000 Pseudo R2 = 0.6946				

*NB: * significant at 1%, ** significant at % and *** significant at 10%*
Source: Survey result using STATA, 2017

© 2017 Global Journals Inc. (US)

In logistic regression analyses the variables that were positively related with the probability of being in child labor were household head sex, age, family size, dependency ratio, distance from school and loss of parents. The variables that were negatively correlated with the probability of being in child labor were head education and occupation of parents.

In the table above 8 explanatory variables were included in the model , 4 of the variables: household family size, distance from school, parents educational status and occupation have a significant effect on children's failing in to child labor at the significance level at 1 percent, 5 percent and 10 percent. The negative values of explanatory variables in the table above indicate that when the unit change in independent variable lead to decrease in probability of being in child labor.

i. *Marginal Effect for Logit Regression*

In order to identify the factors of child labor in the study area this study employed the logit model. Since the model used is not linear, the marginal effect of each independent variable on the dependant variable is not constant but it depends on the value of the independent variables. Thus, marginal effects can be a means for summarizing how change in a response is related to change in a covariate. For dummy variables, the effects of discrete changes are computed, i.e., the marginal effects for dummy variables show how P(Y = 1) is predicted to change as Xk changes from 0 to 1 holding all other Xs equal.

Whereas for continuous independent variables, the marginal effect measures the instantaneous rate of change, i.e. we compute them for a variable while all other variables are held constant that means in this study change in the probability of being in child labor with a unit change in continuous independent variable (Greene, 1993).Thus, opposed to linear regression case, it is not possible to interpret the estimated parameters as the effect of the independent variable up on being in child labor. However, it is possible to compute the marginal effects at some interesting values of the significant explanatory variables. As we can see in table 3.4 below:

mfx

Marginal effects after logit
y = Pr (prb ChildLabor) (predict)
= .31073238

Table 3.4: Marginal effects result

Prb. Of being in Child labour	dy/dx	Std.Err.	Z	p> |z|
Sex of Parents*	.1635031	.20486	0.80	0.425
Age of the Households	.0028106	.00604	0.47	0.642
Family size	.1775689	.06877	2.58	0.010**
Dependency Ratio	-.1588374	.11334	1.40	0.161
Head education	-.0425562	.00801	-5.31	0.000***
Occupation of Parents*	-.6764956	.13494	-5.01	0.000***
Distance from school	.0014505	.00606	0.24	0.811
Loss of Parents*	.5893056	.15177	3.88	0.000***

(*) dy/dx is for discrete change of dummy variable from 0 to 1
*NB: * **significant at 1%, ** and significant at less than 5%*
Source: Survey result using STATA, 2017

a. *Family Size and child labor*

The size of household was found positive in this finding and the coefficient is statistically significant at 5percent level. Other things remain constant, as it was expected that household family size increase by a unit, the probability of a child to be included in child labor increase by about 17.75 percent. This is due to the fact that additional household member shares the limited resources that lead the household to become poor and expose the children's of that family to child labor in order to fill their consumption short fall.

b. *Loss of Parents/ divorce and Child labor*

One of the determinants of child labor in the study area was loss of parents by different reason i.e by death, divorce etc. The variable is positively related with the probability of the child to be in child labor and the coefficient is statistically significant at 1 percent level. Holding all the model variables at their mean value, change from *having parent status to no parents' status* the probability of a children being in child labor increase by 58.9 percent. The possible explanation for this finding was Children who have broken family and those who lost parents early were forced to work for survival. A family with complain (mother and father), dysfunctional family, unproductive family, divorce, inability of mother or father or both by natural and artificial cases, and death of either father or mother or both by any cases increase the vulnerability of children to work.

c. *Education level of the households and child labor*

The level of education is negatively correlated to the probability of a children being in child labor and the coefficient was statistically different from zero at 1 percent significance level. As it was expected, other things remain constant when the education level of parents increased by one unites the probability of children to fail in to the child labor decrease by 4.2

© 2017 Global Journals Inc. (US)

percent. This is due to the fact that educated parents can capture easily any awareness creation to child labor and related problems and protect their children from child labor.

d. *Occupation of parents and child labor*

Occupation of parents is one of the factors determining child labor in the study area. The variable is negatively related to the probability of a children being in child labor and the coefficient was statistically significant at 1 percent level. Holding other variables constant change from no occupation status to occupation status of parents the probability of a children being in child labor decrease by about 67.64 percent.

This may be the case that the parents who have access to occupation that can feed their family have better chance of keeping their children's from child labor exploitation than those who were dependant on others(it may be relatives, government etc)

IV. Conclusion and Recommendations

a) Conclusion

This study analyzed the child labor and factors affecting child in the study area. The study used 94 sample parents of the children were included and which was collected from four kebeles i.e. Damot Mokonisa, Gacheno, Shasha Gale and Wandara Gale. To attain the stated objectives of the study we used both descriptive and Econometric model analysis i.e. binary logit model.

Despite several limitations like exclusion of homeless street children who were expected to encounter the worst forms of child labor, lack of uniformity in the definition of various forms of child labor and limited sample size, this study has tried to show the magnitude of child labor in a rural community setting.

The study showed that nearly 73% of the interviewed children were working and only 27% were not working. Result of this findings shows that most of the children were started working below the age of 8 and major sectors of working were unpaid family work such as agriculture(58% M&7.24 % F) ,Home service (7.3% F & 22% M)agriculture and home services were activates that children's were practicing.

The binary logit regression result shows that out of 8 variables included in this study to determine the influence of explanatory variable on probability of child to be failed in child labor4 variables were found significant at 1 percent, 5 percent and 10 percent level. Among the significant variables family size and loss of parents by different reason positively affect the probability of a child to be in child labor. On the other hand parent's occupational status and educational level affects negatively the probability of a child being in labor market.

b) Recommendation

- Child labor is serious negative phenomenon of our world that requires joint contributions of all societies. The desired areas of intervention stated by the subjects included family support education to children, raising community awareness about child labor, family planning, legislation, and implementation of law enforcement on child labor.
- Implementation of family planning and related measures should be taken to limit household family size.
- Creating job opportunity for parents can reduce child labor, large government infra structure construction such as rural roads, water, building constructions and others one way of creating job opportunities.
- In this study educational status of parents have negatively correlated to child labor exploitation. Education may be the most important tool to reduce child labor exploitation and it needs the close follow up of parents education implementation in rural area in order to hand over the problems related with child labor.

References Références Referencias

1. Basu, K. (1999) "Child Labor: Cause, Consequence, and Cure, with Remarks on International Labor Standards", Journal of Economic Literature 37, No. 3,1083–1119
2. Central Statistical Authority, 2001. The 2001 Child Labour Survey Report. Addis Ababa.
3. Cochran. (1977). Sampling techniques. New York: John Wiley& Son.
4. CSA. (2007). *Population and Housing Census of Ethiopia.* Addis Ababa.
5. Etzensperger (2012).Child labor discussion paper. Responsibility Social Investment AG, Swizerland
6. Federal Democratic Republic Of Ethiopia, 1995. The Ethiopian Federal Democratic Republic Constitution. Addis Ababa: Berhanena Selam Printing Enterprise.
7. Greene. (1993). Econometric Analysis, Fifth Edition. New York: Pearson Education, Inc., Upper Saddle River,New Jersey, 07458.
8. Guarcello and Rosati. (2007). Child Labor and Youth Employment: Ethiopia Country Study, *Working Paper*.
9. Gujarati & porter. (2009). Basic Econometrics (Fifth Edition ed.). New York, America: McGraw-Hill/Irwin.
10. Habtamu. (2011). Livelihoods And Survival Strategies Among The Migrant Sho - shinning Children: A case study at Arada Sub - City,Addis Ababa. Ma Thesis.

© 2017 Global Journals Inc. (US)

11. ILO (International Labour organisation). 1993. Bulletin of Labour Statistics 1993-3. Geneva.
12. Myers and Plateau, 2005:Not just avictam; the child as catalyst and witness of contamperary Africa
13. Tesema, A. (2015). Contribution of wotershade Manegment for climate Change.The Case Study of Wolayta Zone.Master Thesis. Addis Ababa,Ethiopia.
14. UNESAD (2013): World Population Prospects: The 2012 Revision: Key Findings and Advanced Tables. *Working Paper ESA/WP.227* .
15. Zerhun 2009. Child Labour: Social, Employment and Migration Working Papers, May 2009.

© 2017 Global Journals Inc. (US)

Global Journal of HUMAN-SOCIAL SCIENCE: E
Economics
Volume 17 Issue 5 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460x & Print ISSN: 0975-587X

Analysis of Macroeconomic Fluctuations and Economic Growth in Nigeria (1986-2014)

By Olaniran Oladotun Daniel & Olawoye Olaniran
Obafemi Awolowo University

Abstract- This paper analyzed macroeconomic fluctuations and economic growth in Nigeria between 1986 and 2014. The paper employed the Atheoretical Statistical Method of Analysis using cross correlations to examine the co-movement between key macroeconomic variables such as broad money supply, oil price, government expenditure, inflation, interest rate, exchange rate and general household consumption and real gross domestic product in Nigeria. Quarterly time series data between 1986 and 2014 was used for the study and were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin. The stationary component of the variables was extracted using the Hodrick-Prescott (HP) and Band-Pass (BP) filter and then analyzed. The paper found out that all the macroeconomic variables were countercyclical and contemporaneously related to real gross domestic product, except for oil price and inflation where the filters produced mixed results of countercyclical and procyclical relationship with economic growth in Nigeria. The paper suggests effective and better management of macroeconomic variables if the desired level of growth is to be achieved.

Keywords: hodrick-prescott filter, band-pass filter, countercyclical, acyclical, procyclical, real gross domestic product, money supply, oil price, inflation, interest rate, exchange rate, household consumption and contemporaneous.

GJHSS-E Classification: FOR Code: 910199



Strictly as per the compliance and regulations of:

© 2017. Olaniran Oladotun Daniel & Olawoye Olaniran. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Analysis of Macroeconomic Fluctuations and Economic Growth in Nigeria (1986-2014)

Olaniran Oladotun Daniel [α] & Olawoye Olaniran [σ]

Abstract- This paper analyzed macroeconomic fluctuations and economic growth in Nigeria between 1986 and 2014. The paper employed the Atheoretical Statistical Method of Analysis using cross correlations to examine the co-movement between key macroeconomic variables such as broad money supply, oil price, government expenditure, inflation, interest rate, exchange rate and general household consumption and real gross domestic product in Nigeria. Quarterly time series data between 1986 and 2014 was used for the study and were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin. The stationary component of the variables was extracted using the Hodrick-Prescott (HP) and Band-Pass (BP) filter and then analyzed. The paper found out that all the macroeconomic variables were countercyclical and contemporaneously related to real gross domestic product, except for oil price and inflation where the filters produced mixed results of countercyclical and procyclical relationship with economic growth in Nigeria. The paper suggests effective and better management of macroeconomic variables if the desired level of growth is to be achieved.

Keywords: hodrick-prescott filter, band-pass filter, countercyclical, acyclical, procyclical, real gross domestic product, money supply, oil price, inflation, interest rate, exchange rate, household consumption and contemporaneous.

I. Introduction

The issue of fluctuations in macroeconomic variables has been debated by several authors and scholars in the empirical literature. Most studies focused on developed countries of the world initially while only few focused on developing countries. This may understandably be attributed to the quality of data obtainable in developed countries and the possibility of using and adapting the findings in industrialised countries to predict the behavior of macroeconomic variables in developing countries of the world. Also, data frequency is an issue of concern in developing countries because macroeconomic fluctuations is best studied using high frequency data i.e quarterly, monthly or daily recorded data.

Previous researchers in developed and developing countries have used different econometric techniques to study macroeconomic fluctuations and business cycles in different countries or group of countries. The stylized facts they documented have been pivotal in formulating theoretical models for business cycle and macroeconomic fluctuations as an alternative to other existing classes of models (Agenor *et al*, 1999). Also, findings in industrialized economies could be useful in examining and possibly explaining macroeconomic fluctuations in developing economies and perhaps identify if there are similarities in the behavior of cyclical fluctuations between these classes of economies.

Nigeria, like other developing countries is affected by fluctuations in macroeconomic variables starting majorly with the oil boom and recessions of the early 1970's and 1980's respectively, fluctuations in government revenue and spending, unstable interest, exchange and inflation rates and the recent fall in the price of crude oil to mention a few. This paper will examine fluctuations in key macroeconomic variables and their relationship with economic growth in Nigeria using the atheoretical statistical method of analysis. This is a departure from most previous studies in developed and developing countries that have used different econometric techniques to examine macroeconomic fluctuations.

II. Literature Review

As earlier mentioned, most studies in the empirical literature used econometric techniques to examine macroeconomic fluctuations. Nevertheless, some studies used the atheoretical statistical methods, few of which includesKydland and Zarazaga (1997) in Argentina, who examined the empirical regularities of business cycle fluctuations using atheoretical statistical method of analysis(as against the DSGEM used in most business cycle analysis) and the Hodrick-Prescott (HP) filter. Their result showed high absolute volatility of output in Argentina and that the correlation of the cyclical component of real total consumption with that of Real GDP is within the range observed in other countries.

Also, in a cross country study aimed at examining main features of macroeconomic fluctuations for 12 developing countries including Nigeria using quarterly time series data between 1978:1 to 1995:4, Agenor, Mc Dermort and Presad (2000) found out that similarities exist between macroeconomic fluctuations in less developed countries and industrialized countries, stylized facts like pro-cyclical real wages, counter-cyclical variations in government expenditure and

Author α: Department of Economics, Obafemi Awolowo University, Ile-Ife, Nigeria. e-mail: olanirandotun@gmail.com
Author σ: Osun State Polytechnic, Iree, Nigeria.
e-mail: woyeolaniran@yahoo.com

© 2017 Global Journals Inc. (US)

counter-cyclical variation in the velocity of monetary aggregate were re-established.

Furthermore, Alege (2009) examined the sources of business cycles and draw implications for policy analysis using the Atheoretical Statistical Method of Analysis and the Bayesian-VAR method between 1970 and 2004. The results obtained in this study basically showed that the Nigerian business cycle is driven by both real and nominal shocks. The study found real gross domestic product, gross fixed investment, money supply, agricultural production, private consumption, government consumption expenditure and government revenue to be procylical while monetary aggregates such as inflation, interest and exchange rates to be countercyclical.

III. Methodology

Following previous studies such as Kydland and Zaragaza (1997), Agenor *et al* (2000) and Alege (2004), this paper adopts the atheoretical statistical method to analyse business cycle through the co-movements between key macroeconomic variables that are important sources of business cycles and real gross domestic product (RGDP) which serves as a proxy for economic growth. Variables such as RGDP, Broad Money Supply (M2), Oil Price, Inflation, Exchange rate, Consumption and Interest rates are examined.

In doing this, the stationary components or cyclical components extracted using both the Hodrick-Prescott filter (HP) and the Band-Pass filter (BP) for the purpose of robustness and comparism are examined. This means that the cyclical components of the variables are analyzedusing their cross correlations and the degree of co-movement of RGDP and any of the macroeconomic variables is measured by the correlation coefficients. Furthermore, a seriesis considered to be procyclical, acyclical or countercyclical if the contemporaneous correlation coefficient p (0) is positive, zero or negative respectively. Furthermore, if the correlation coefficient p(0) falls between 0.26 and 1, then it is strongly contemporaneously correlated, if it falls between 0.13 and 0.26, it is weakly contemporaneously correlated and it is however contemporaneously correlated if it falls between 0 and 0.13 (Agenor *et al*, 2000).

a) Data Source

The quarterly time series data on real gross domestic product, government expenditure, money supply, inflation rate, interest rate, exchange rate and household consumption expenditure were sourced from the Central Bank of Nigeria (CBN) statistical bulletin 2014.

IV. Discussion of Results

a) Co-movement between Real Gross Domestic Product and Money Supply in Nigeria

Table 1show that there is a negative relationship between money supply and economic growth in Nigeria based on the cross correlation results. Both the HP and BP filters at different lag lengths mostly indicate an inverse relationship between the observed variables. Thus, there is a clear evidence of countercyclical movements between money supply and economic growth in Nigeria. This implies that fluctuations in money supply (which generates business cycle) hinders economic growth in Nigeria. Also, the HP filter indicates that contemporaneous correlation exists between money supply and economic growth in Nigeria although the BP filter indicates a weak contemporaneous relationship between them. Therefore, the quantity of money in circulation must be checked and regulated appropriately by the monetary authorities in order to mitigate the countercyclical effect of money supply on economic growth in Nigeria.

Table 1: Co-movement of Real Gross Domestic Product and Money Supply in Nigeria

Lag/Lead		8	4	2	1	0	-1	-2	-4	-8
	HP	0.0095	0.0203	0.092	-0.0504	0.2401	-0.2652	-0.2652	-0.0995	-0.0773
	BP	-0.0021	-0.0024	-0.137	-0.2226	0.568	0.161	-0.4807	0.0233	-0.1041

b) Co-movement between Real Gross Domestic Product and Oil Price in Nigeria

Table 2 shows the co-movement of oil price and economic growth in Nigeria. It is observed from the result of the HP filter that there is a positive relationship between oil price and economic growth in Nigeria while the BP filter found a negative relationship between them. This implies that there is an evidence of procyclical movements between the observed variables using the HP filter while the movement between them is countercyclical based on the result of the BP filter. Furthermore, both the HP and BP filters indicates that there is a contemporaneous relationship between oil price and economic growth in Nigeria. This implies that oil price and economic growth can either move together or inversely although the movement is sensitive to the filter being observed. Therefore, the price of oil (which is determined in the international oil market) significantly affects the performance of economic output in Nigeria.

© 2017 Global Journals Inc. (US)

Table 2: Co-movement between Real Gross Domestic Product and Oil Price in Nigeria

Lag/Lead		8	4	2	1	0	-1	-2	-4	-8
	HP	0.0585	0.0316	0.0892	-0.003	-0.073	-0.0802	-0.1298	0.0324	0.0222
	BP	-0.0006	-0.0006	0.0035	-0.0029	-0.0146	-0.0894	0.1291	0.0602	0.136

c) Co-movement between Real Gross Domestic Product and Government Expenditure

Table 3 shows that there exists a negative relationship between government expenditure and economic growth in Nigeria based on the result of the HP and BP filters. Precisely, the nature of the relationship between them is countercyclical and this implies that the observed variables cyclically move in different directions. This supports the findings of Agenor (2000) and Kouparitsas (1996). Also, the observed variables are found to be contemporaneously correlated for both filters meaning that they affect each other in Nigeria. The negative and contemporaneous relationship found between them is consistent with the predictions of the intertemporal optimizing models with imperfect capital mobility and flexible prices (Agenor, 2000). Therefore, the government should review its expenditure pattern and fiscal actions as it plays a significant role in generating cyclical fluctuations which hinders economic growth in a developing country like Nigeria.

Table 3: Co-movement of Real Gross Domestic Product and Government Expenditure in Nigeria

Lag/Lead		8	4	2	1	0	-1	-2	-4	-8
	HP	-0.0309	-0.0602	-0.0838	-0.2508	-0.5532	-0.0209	0.0205	0.1957	0.6083
	BP	0.3784	-0.2836	0.0984	0.3215	-0.347	0.3215	0.0954	-0.2836	0.3784

d) Co-movement between Real Gross Domestic Product and Inflation in Nigeria

Table 4 shows that there is an inverse relationship between inflation and economic growth in Nigeria based on the result of the HP filter in most of the observed lags. However, BP filter found a positive relationship between the observed variables. This implies that the HP filter found the movement between them to be countercyclical while BP filter found the movement to be procyclical. Also, the two filters indicate a contemporaneous correlation (in most of the lags) between inflation and economic growth in Nigeria. Therefore, inflationary pressures in the economy affect output in Nigeria as argued by some economists that some level of inflation is good for the economy while it is detrimental if the level of inflation is high. Although its effect in this case is sensitive to the observed filters.

Table 4: Co-movement between Real Gross Domestic Product and Inflation in Nigeria

Lag/Lead		8	4	2	1	0	-1	-2	-4	-8
	HP	0.0012	0.0007	-0.0001	-0.0028	-0.0069	-0.0095	-0.0138	-0.0146	0.015
	BP	0	0.0004	0.0013	0.0034	-0.0007	0.0026	0	0.0118	0.0262

e) Co-movement between Real Gross Domestic Product and Exchange Rate in Nigeria

Table 5 shows that there is a negative relationship between exchange rate and economic growth in Nigeria based on the result of both filters in most of the observed lags. This implies that both the HP filter and the BP filter found the movement between them to be countercyclical. This indicates that RGDP and exchange rates cyclically move in different directions. This may be evident to the reduction in the value of the Nigerian naira (#) to other major currencies such as the US dollars ($), British pound sterling (£). Also, the two filters indicate a contemporaneous correlation (in most of the lags) between the two macroeconomic variables. Therefore, exchange rate in the economy hinders economic performance and the government and the monetary authorities have to pay attention to exchange rate management in Nigeria.

Table 5: Co-movement between Real Gross Domestic Product and Exchange Rate in Nigeria

Lag/Lead		8	4	2	1	0	-1	-2	-4	-8
	HP	0.02	0.027	-0.0063	-0.0304	-0.0532	-0.0739	-0.0789	-0.0859	-0.0596
	BP	-0.0005	-0.0006	0.0023	0.0034	-0.0048	-0.0006	0.001	0.001	-0.0144

f) Co-movement between Real Gross Domestic Product and Interest Rate in Nigeria

Table 6 shows that there is a negative relationship between interest rate and economic growth in Nigeria based on the result of both filters in most of the observed lags. This implies that both the HP filter and the BP filter found the movement between them to be countercyclical. This indicates that RGDP and interest rate cyclically move in different directions. This explains the fact that people are discouraged to invest

© 2017 Global Journals Inc. (US)

or borrow from banks when the interest rate is high thus leading to low level of investments in the economy. However, when the interest rates is low, people access loans from banks and are encouraged to invest in the domestic economy. Also, the two filters indicate a contemporaneous correlation (in most of the lags) between the two macroeconomic variables. Therefore, interest rate in the economy hinders economic performance and the monetary authorities have to pay attention to fluctuations in interest rate in Nigeria.

Table 6: Co-movement between Real Gross Domestic Product and Interest Rate in Nigeria

Lag/Lead		8	4	2	1	0	-1	-2	-4	-8
	HP	0.0009	-0.0164	-0.1023	-0.1177	-0.1109	-0.0668	-0.0369	0.0571	0.007
	BP	-0.0007	-0.0018	-0.009	-0.014	-0.0161	-0.0078	-0.042	0.1886	0.1097

g) Co-movement between Real Gross Domestic Product and Consumption in Nigeria

Table 7 shows that there is an inverse relationship between consumption and economic growth in Nigeria based on the result of both filters in most of the observed lags. This implies that both the HP filter and the BP filter found the movement between them to be countercyclical. This indicates that RGDP and consumption cyclically move in different directions. Also, the two filters indicate a contemporaneous correlation (in most of the lags) between the two macroeconomic variables. Therefore, consumption in the economy hinders economic performance because when people consume more of their income rather than invest it productively, economic growth is hampered and vice versa. The government should therefore come up with policies that will encourage people to invest their income productively in order to drive economic performance, rather than consume it.

Table 7: Co-movement between Real Gross Domestic Product and Consumption in Nigeria

Lag/Lead		8	4	2	1	0	-1	-2	-4	-8
	HP	0.01	0.1416	0.1405	-0.1238	-0.1517	-0.2034	-0.123	-0.0826	0.0324
	BP	-0.1573	-0.2855	-0.1087	0.0288	0.0747	-0.0428	-0.0128	-0.0714	0.0322

V. Conclusion

This paper analyzed macroeconomic fluctuations and economic growth in Nigeria using key macroeconomic variables such as real gross domestic product, money supply, oil price, government expenditure, inflation, interest rate, exchange rate and consumption. The atheoretical statistical method of analysis is used, the cross correlations of the stationary components (extracted using the HP and BP filters) of each of the variables and RGDP is examined in order to show the nature of movement between them. The movement between RGDP and variables such as broad money supply, government expenditure, exchange rate, interest rate and consumption was found to be countercyclical for both filters. Oil price exhibited procyclicality for the HP filter and counter cyclicality for the BP filter and the reverse was the case for inflation in Nigeria. This paper concludes that policies that will reduce fluctuations of macroeconomic variables should be put in place because these fluctuations (which are sources of business cycle) hinders economic growth in Nigeria

References References Referencias

1. Agenor, P.R. Mc Dermort, C.J. and Prasad, E.S. (2000) "Macroeconomic Fluctuations in Developing Countries: Some Stylized Facts", *World Bank Economic Review.*
2. Alege, P. O. (2004), Macroeconomic Policy and Business Cycle in Nigeria; a published Ph.D Thesis. http://thesis.covenantuniversity.edu.ng
3. Alege, P. O. (2009). A Business Cycle Model for Nigeria: *African Econometrics Societ Conference 3(1)*
4. Baxter, M. and Robert, G. K. (1995) "Approximate Band-Pass Filters for Economic Time Series" *National Bureau of Economic Research,* Working Paper No. 5022 (February)
5. Hodrick, J. and Prescott, E.C. (1997), "Post-War US Business Cycle: An Empirical Investigation," *Journal of Money, Credit and Banking*, 29 (1), 1-16
6. Kydl and, F. and Prescott, E. C. (1982). Time to Build and Aggregate Fluctuations.
7. *Econometrica: Journal of the Econometric Society*, 3(5): pp. 1345-1370.
8. McDermott, C. J. (1997) "An Automated Method for Choosing Smoothing Parameter in the HP Filter" *Internationa Monetary Fund.*

© 2017 Global Journals Inc. (US)

Global Journal of HUMAN-SOCIAL SCIENCE: E
Economics
Volume 17 Issue 5 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460x & Print ISSN: 0975-587X

International Trade and Economic Growth in Nigeria

By Babatunde Afolabi, Jonathan D. Danladi & Muhyideen I. Azeez

Afe Babalola University, Ado Ekiti, Nigeria

Abstract- This study examined the impact of international trade on economic growth in Nigeria, with the objective of identifying the major factors influencing economic growth through international trade and make policy suggestions. This study made use of time series secondary data obtained from Central Bank of Nigeria, National Bureau of Statistics and International Financial Statistics for a period between 1981 and 2014. Augmented Dickey-Fuller (ADF) test together with Phillip- Perron (PP) test of Unit Root Tests were employed to ascertain the stationarity properties of the variables. The Ordinary Least Square (OLS) technique was used to test for the significant relationship between the level of economic growth proxied by GDP as dependent variable and exchange rate, government expenditure, interest rate, foreign direct investment, import and export as independent variables. The result revealed that government expenditures, interest rate, import and export are all positively significant while exchange rate and foreign direct investment are negatively insignificant to the growth process of the Nigerian Economy.

Keywords: international trade, economic growth, interest rate and government expenditure.

GJHSS-E Classification: FOR Code: 910103, 910399



Strictly as per the compliance and regulations of:

© 2017. Babatunde Afolabi, Jonathan D. Danladi & Muhyideen I. Azeez. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

International Trade and Economic Growth in Nigeria

Babatunde Afolabi [α], Jonathan D. Danladi [σ] & Muhyideen I. Azeez [ρ]

Abstract- This study examined the impact of international trade on economic growth in Nigeria, with the objective of identifying the major factors influencing economic growth through international trade and make policy suggestions. This study made use of time series secondary data obtained from Central Bank of Nigeria, National Bureau of Statistics and International Financial Statistics for a period between 1981 and 2014. Augmented Dickey-Fuller (ADF) test together with Phillip-Perron (PP) test of Unit Root Tests were employed to ascertain the stationarity properties of the variables. The Ordinary Least Square (OLS) technique was used to test for the significant relationship between the level of economic growth proxied by GDP as dependent variable and exchange rate, government expenditure, interest rate, foreign direct investment, import and export as independent variables. The result revealed that government expenditures, interest rate, import and export are all positively significant while exchange rate and foreign direct investment are negatively insignificant to the growth process of the Nigerian Economy. The econometric results suggest that Nigerian government should give more emphasis to specialization on agriculture so as to diversify her production and export base in order to enable the country benefit all the gains of trade including economic growth. The country's trade should not only be on primary and oil exports but also the promotion of non-primary exports and non-oil exports i.e. manufactured goods. Promotion of exports within the context of sub-regional and regional economic integration should be vigorously pursued to expand Nigerian international market and the importation policy of the government should be strictly adhered to in order to control dumping and to encourage the local investors.

Keywords: international trade, economic growth, interest rate and government expenditure.

I. Introduction

The significance of international trade in economic development is vital. The neo-classical and classical economists attributed so much relevance to external trade in a development process of a nation which is regarded as an engine of growth. Over the past years, the nations of the world have been immensely linked together through globalization and external trade. Foreign trade has been recognized as the most crucial and longstanding part of a nation's international economic relationships. Its role in the development process of a contemporary global economy is very crucial and central. Its effect on the growth and development of countries has increased significantly over the years and has meaningfully contributed to the advancement of the world economy. The contributions of foreign trade on a nation's economy is not only restricted to the quantitative gains, but also foreign capital flow and facilitating structural change in the economy. Trade fosters the efficient production of goods and services via resources allocation to nations that have comparative advantage in their productions. Foreign trade has been described as a tool and catalyst of economic growth (Frankel and Romer, 1999).

The predication for foreign trade depends on the veracity that nations of the globe are different in their natural resources endowment, scale of production, capacity for growth, preferences, technology, and sustainable development. Because of these major discrepancies, the involvement in international trade is vindicated for the creation of thoroughfares for nations to exchange and consume goods and services they do not have capacity for. Differences in resources present a case where nations can only consume what they are capable of producing, but trade invigorates them to consume what other nations are able to produce. Therefore, trade motivates nations to enjoy motley of goods and services in a bid to improve their people's wellbeing.

Over the past few decades, the magnitude of external trade between nations of the world has increased significantly. In particular, Nigeria has experienced a sharp increase in the value and volume of trade with other countries of the world. Foreign trade statistics in 2014 by Economic Complexity Index (ECI) shows that Nigeria is the 119th most complex economy and the 41st largest export economy in the world. In 2013, Nigeria exported $94.8B and imported $53.3B, leading to favourable trade balance of $41.6B. In the same year, the per capita GDP of Nigeria was $5.6k and her GDP was $521B. Further analysis of the components of export and import indicates that the top exports of Nigeria are Refined Petroleum ($3.07B), Cocoa Beans ($561M), Crude Petroleum ($75.3B), Petroleum Gas ($10.3B), and Special Purpose Ships ($463M), while her top imports are Wheat ($1.42B), Rolled Tobacco ($1.34B), Refined Petroleum ($9.5B), Cars ($1.87B), and Special Purpose Ships ($1.01B). Expressed in percentage, the exports are led by Crude Petroleum which stands for 79.4% of the total exports of Nigeria, followed by Petroleum Gas, which accounts for

Author α σ ρ: Economics Department, Afe Babalola University, Ado Ekiti, Nigeria. e-mails: atunne@gmail.com, jonathandanladi@yahoo.com, muhyrad@gmail.com

© 2017 Global Journals Inc. (US)

10.9% whereas the imports are led by Refined Petroleum which accounts for 17.9% of the total imports of Nigeria, followed by Cars, which contribute 3.51%.

Nigeria recorded a trade surplus of N197, 187.70 millions in September, 2015. Balance of Trade in Nigeria averaged N201, 370.76 million from 1981 until 2015, reaching an all-time high of N217, 7553.08 Millions in October of 2011 and a record low of N -592200.72 Millions in March, 2011. The Nigerian Bureau Statistics (NBS) reported this Balance of Trade and this tendency is expected over the long term due to the unrelenting calls for heightened trade liberalization to foster economic growth across the globe.

The interest in the study of foreign trade has been increased because of its inherent benefits particularly to developing countries. Until now, there has been a general resolution that each nation of the world benefits from international trade. However, previous empirical investigations have shown that less developed nations have not really taken advantages from trade as much as their developed peers. Besides, the highly deplorable status of these nations' economies as regards per capita income, unemployment, gross domestic product, human capital and poverty level in spite of several decades of involvement in trade has further intensified the trade-development quiz. For instance, Nigeria's volume of trade has risen meaningfully over the years without a corresponding and major upsurge in growth and development. While the neo-classical and classical schools of thought observe international trade as beneficial to both growth and development, other schools/authors hold that external trade has only exacerbated international inequality, a situation where developed nations have become richer by taking away inherent growth from developing ones. Recent studies have also not been conclusive. For instance, Appleyard et al. (2006) asserted that there is a common misunderstanding that China's economic growth is taking new shape to the detriment of its many trading partners including Nigeria being its largest trading partner in African continent. However, contrary to the aforementioned averment, a critical outlook of the effect of Chinese investment and trade on the duo (growth and development) of Nigeria as elaborated by Nabine (2009) demonstrates that in the short run, the bilateral trade fails to impart positively on Nigeria's economic growth but the long-term relationship could promote economic growth in Nigeria.

However, it has been perceived that the Nigerian economy has grossly performed below expectation relative to its immense natural endowment and her compeer nations. Despite her numerous solid mineral resources and a population of over 170 million people, one of the largest gas and crude oil reserves in the globe, the economic performance of the country was affirmed rather weak when compared and contrasted to the emerging Asian nations such as India, Thailand, Malaysia, China, and Indonesia. These countries were far lagged behind Nigeria in terms of GDP per capita in 1970, but later they were better able to transmogrify their economies to become stellar players on the global economic arena. Sanusi, (2010) affirmed that while China, in 1970, was ranked 114th with a GDP per capita of US$111.82, Nigeria with a GDP per capita of US$233.35 was ranked 88th in the world economies. Today, China takes a promising and enviable stance in the global scheme of issues largely due to her self-esteemed trade status.

The difference in opinions and empirical findings on the effect of trade on economic growth has become a pain in the neck, especially to developing countries; and necessitates further researches. This is the gap that this paper seeks to fill. The study intends to contribute to the debate on the impact of trade on economic growth with Nigeria being a case study. The main aim of this study is to investigate the impact of international trade on Nigeria's economic growth between 1981 and 2014. It also identifies other factors that prevail on economic growth in the country. There are five sections in this study; the other sections are as follows: second section deals with conceptual and theoretical issues. The third section concerns the drawing of the significance of these theories to Nigeria. The fourth section deals with methodology and finally the fifth section concludes the study.

II. Empirical, Conceptual and Theoretical Issues

a) A Review of Empirical Evidence

International trade brings efficiency and welfare gains to all nations regardless of their initial conditions, technological capabilities, development level, and resources endowments (Krugman and Helpman, 1988).

Empirically, the impact of international trade on economic growth has been a crucial and disputable subject for many decades. Using various approaches, a lot of studies have discovered growth to be heightened by liberalization or trade openness (Krueger, 1978; Balassa, 1978 and 1985; Feder, 1983; Ram, 1985 and 1987; Dollar, 1992; Edwards, 1998; Ben-David et al., 2000; to mention but a few). On the other hand, Singer (1950), Prehisch (1962), Kavoussi (1985), Sachs (1987 and 1989) Singer and Gray (1988), and Taylor (1991) argued that trade expansion or trade liberalization may not be expedient for the economic growth of all nations at all times. Frankel and Romer (1999) ascertained significant contribution of trade openness to level of per capita income. They posited that trade promote growth through stock of education, greater capital stock, and higher total factor productivity. They however, cautioned explicitly against concluding for trade policies as a result of their findings as it brings various factors into play. Cooper (2001) addressed the impact of foreign trade and investment on growth via distribution of income and

© 2017 Global Journals Inc. (US)

inequality in less developed nations. He debated that study of empirical evidence and theory are inconclusive. He stated that there are no compelling theoretical reasons to believe, in general, that trade fosters growth and empirical works supporting a link at nation level has been heavily subjected to criticism on methodological rationalization (Rodriguez and Rodrick, 2000). He further asserted it would be difficult to learn credence to the postulations that trade has not impacted significantly on the growth of the economy of the world in the second part of the 20th century. He finalized that trade was a catalyst of growth; and that the economy of the world would have improved as quickly as it did even though trade barriers are as high as they were in 1950s signifying that other factors apart from trade also contribute to growth. Rodriguez and Rodrik (2000) provided a critique of the various surveys to resolve that trade liberality encourages growth. They discovered faults with the various, variables, specifications, data, and methodology adopted by most of these studies on the basis that they were hinged on anecdotes. However, they agreed with Dollar and Kraay (2000) that refuted the generalizations of these studies using international economic data for more than 100 nations. In another paper, Michael and Ruhwedel (2005) reviewed the nexus between economic growth and production variety with use of panel data for 14 transition nations. Their findings indicate open economies attain higher economic growth than closed ones. They ascribed the difference to the significance of co-operation and trade. Coe and Helpman (1995) used time-series data to demonstrate that trade contributes to economic growth positively via technological transfer.

With special regard to the impacts of foreign trade on average real wages, Edward, (2000) opined that there are too restricted studies to deduce much in the way of conclusion. He however stated the only notable study to deal with this prevailing issue is Lawrence and Slaughter (1993), who discovered almost no impact of liberalized trade on the wage stagnation of the post-1973 era. He affirmed there is no driving justification that the expansion of international trade since the early 1970s contributed substantially to either the decline in the real wage or in the surge of the wage differentials between unskilled and skilled labour.

Similarly, Bayoumi et al. (1999) state that research and development, its spillover and trade contribute immensely to promoting economic growth both in developing and industrial nations. The results of Coe and Moghadam (1993) postulate that trade and capital have positive impact on growth in France. Lin (2000) examined the link between trade and economic growth using China's national data for the period between 1952 and 1997, the findings disclose that growth rate of import, growth rate of the volume of trade, the growth rate of export, and labour force growth were positively connected to economic growth. Maddison (1998) exhibited that the gradual trade liberalization and capital flows in the OECD nations stimulated Western Europe's reconstruction, catch-up growth and recovery. Also, gradual trade liberalization, the outward orientation, and inward investment in some East Asian nations like China, Hong Kong and Singapore have significantly affected their economic growth. Drabek and Laird (1998) observed that developing nations with progressively more liberal trade programmes are those with growing ratios of inward investments, trade, and national income and its growth rates. Singer (1950) and Prehisch (1962) controverted the widely held inkling that trade and free market would solve the development problem in less developed nations. They worked out the net terms of trade of developing nations and discovered that the terms of trade of these nations have aggravated over the years. They resolved that the division of labour between poor nations and rich ones has culminated in a state of underdevelopment in poor nations.

International trade also affects the economic growth of nations via the attraction of FDI. Lall (2000) and Te Velde (2001) stated that the main boulevards through which FDI impacts positively to economic growth are access to international market, job creation, technology transfer, capital accumulation, marketing and managerial practices. Blomstrom and Kokko (2003) contributed that trade and FDI can only enhance growth after the minimum level of technology, infrastructure and human capital have been satisfied (Karbasi et al., 2005). Karbasi et al. (2005) analyzed the significance of FDI and trade in fostering economic growth in 42 selected developing nations. They stated that human capital, trade, FDI, and domestic investment are vital sources of economic growth for less developed nations. They ascertained a positive significant correlation between trade and growth. They agreed that the contribution of FDI to economic growth is facilitated by its positive interaction with sound macroeconomic policies, human capital and institutional stability. Jude and Pop-Silaghi (2008) also investigated this point and concluded that the FDI inspired a false impact on growth in the Romanian economy when other factors of growth are disregarded. In the same vein, Fogel (2006) asserted that for China to attain the desired target of quadrupled rate of GDP by 2020, improvement in political stability, institutional quality and quality of education should be prioritized. Fosu and Magnus (2006) studied the long-run effect of FDI and trade on economic growth in Ghana for the period 1970 and 2002. They discovered a long-run relationship between determinants of economic growth and economic growth itself in their model. The findings indicated a negative and positive growth impact of trade and FDI respectively. This finding is in consonant with Jude and Pop-Silaghi (2008) for Romania.

© 2017 Global Journals Inc. (US)

b) Conceptual Issues

International trade is described as an exchange of goods and services between the residents of a given country and those of the rest of the world (Mannur, 1995). It is, therefore, a tool which links the nations of the world via service flows, commodity trade, and factor movements. As noted earlier, international trade is based on the reality that no country is self-reliant in the production of all goods and services, which are required by her citizens for survival owing to the constraint and differences of resources (Mannur, 1995). Therefore, Morgan and Katsikeas, (1997) cited Coutts and Godley, (1992) as well as McCombie and Thirlwall, (1992) who asserted that this trade relationship paves way for an avenue for nations to exchange their goods and services for the generation of revenue to finance the goods and services imported whose production are impossible domestically.

On the other hand, economic growth commonly and interchangeably used for sustainable development is described as growth of economic development that meets the hungriness of the present generation without compromising the yearnings of the future ones (WCED, 1987 cited in Ite, 2003 and Ikeme, 2000). It is an engine of catalyst in which the direction of investments, institutional change, exploitation of resources, and the orientation of technological development are made pertinent to future as well as present needs (Bonn, n. d.). It is also an alternative development mechanism for fostering the living conditions of the human without undermining the merit of the society. The concept thus came into being following the realization that economic development and environment are closely related, Boon, (n. d.) affirmed that, by the year 2000 and beyond, even though it was popularized by the Brundtland Commission's report of which the United Nations General Assembly was assigned to utilize as long-term strategically environmental planning for the attainment of sustainable development.

The comprehension that economic growth consists of a number of aspects is very factual but the three most essential elements are: economic, social equity and environmental; and hence they are regarded as the Sustainable Development Triangle (Daud and Nor Azam, 2011). Economic sustainability is concerned about sound poverty alleviating growth, macroeconomic management, role of the state, appropriate agricultural policies, and cost. Sustainable social development is concerned with equity in the allocation of wealth, opportunity and resources to all citizens at all levels and it implies amongst other things access to minimum human rights, social benefits including food, education, health, standards of security, shelter and self-development opportunities. Environmental sustainability on the other hand is concerned with environmental protection and thus demands the employment of environmental goods and services in a way that their productive capacity are not countermined, nor their overall contribution to human wellbeing subverted (Ite, 2003). Based on the target of this study, all three dimensions are relevant but emphasis is laid on economic sustainability used interchangeably for economic growth.

c) Theories of International Trade

i. *Classical Theory of Trade*

Classical theory of trade postulated that countries are better capable to gaining and sustaining development if each commits resources to the generation of goods and services in which economic advantage is being enjoyed by them (Smith, 1776; Ricardo, 1817 cited in Morgan and Katsikeas, 1997). The theory elaborates the scenario where a nation produces goods and services in which it has an advantage not only for exporting the surplus but also domestic consumption and imports the goods and services they have an economic disadvantage in. Economic advantages and disadvantages usually emanate from country differences in factors such as capital, labour, technology resource endowments, or entrepreneurship. The theory, therefore, contends that the fundamentals for sustainable development and international trade can be traced to differences in resource endowments and production characteristics founded on domestic differences in naturally inherent economic advantages (Morgan and Katsikeas, 1997). Specifically, the theory was predicated on the principles of specialization and comparative cost advantage, which lead to benefits for the trading collaborators (Umo, 2007). One of the weak points of this theory is that investment resources are not internationally mobile, i.e. only commodities are movable and investment decisions are undertaken on a national basis (Caballero et al., n. d.). Capital, in today's world, is very mobile across national frontiers, and so also technology (Caballero et al., n. d.).

ii. *The Theory of Factor Proportion*

The theory of factor proportion on the other hand is capable of giving an explication for discrepancies in advantage demonstrated by trading nations. As lucubrated by the theory, nations have the tendency to produce and exchange internationally goods and services that exploit large amounts of abundant production factors that they have, while they import those that require large amounts of production factors which are comparatively and scarcely unavailable (Heckcher and Ohlin, 1933 cited in Morgan and Katsikeas, 1997). The theory fleshes out the concept of economic advantage in the context of costs of factors of production and endowment.

iii. *The Product Life Cycle Theory*

The Product Life Cycle Theory was propounded in relation with some developments to deal with the

© 2017 Global Journals Inc. (US)

ever-changing commercial facts like the role executed by multinational enterprises and technological advancement in sustainable development and trade of their nations. The theory stipulates that a trade cycle occurs where a product is generated by a parent company, then by its alien subsidiary firms and lastly anywhere in the world where costs are at their minimum possible (Wells, 1968, 1969; Vernon, 1966, 1971; Morgan and Katsikeas, 1997). It also expounds how a product may emanate as a nation's export and work through the life cycle to at long last transform to an import (Morgan and Katsikeas, 1997). As noted by the theory, market size and innovations in technology are very crucial for leveraging in external trade and naturally economic growth.

iv. *Challenges of Economic Growth and Trade Theories in Nigeria*

Almost nothing is efficiently operating in Nigeria and so also the tenets of trade theories are not much valued in the nation. For instance, the classical trade theory had emphasized on attaining economic growth via international trade on the foundation of comparative economic advantages and disadvantages. Harnessing the principles of this trade theory, Nigeria was expected to major in agriculture, especially taking cognizance of her enormous abundant labour resources and unexploited cultivatable land. Regrettably, since the oil price windfall of the early 1970s, the nation jettisoned the industrial and agricultural sectors of the economy. The economic agents of both public and private sectors of the economy devote their resources in the oil and gas sector so much that the key sectors of the economy are deprived of funding, managerial capabilities and even required investment. Thus, the keystone economy has been rendered uncompetitive internationally while the nation has become a trading settlement for foreign firms (Sanusi, 2010). The petroleum sector in Nigeria is bedeviled by wastage, low productivity, unchecked dominance of foreign multinationals and corruption (Hassan et al., 2002). The nation has been kicked downstairs to a mono-product economy with the lion share of government income emanating from oil exports which is vulnerable to volatility and shocks in the oil market internationally. Besides, several other solid minerals with which the nation is abundantly blessed remain generally undeveloped. More fundamentally, the economy has disproportionately focused on the primary sector (extractive industry and subsistence agriculture) with the dearth of any significant value addition. In view of this, the growth recorded in the economy is negligible which has thus far been devoid of corresponding positive attitudinal change, employment, equitable income distribution, and value re-orientation, to mention but a few.

Based on the theory of factor proportion, Nigeria, for many decades, has stupendously been expending on the importation of technologically oriented goods mainly from Western Europe, even though the nation was not aggressively exporting agricultural and industrial output. A scrutiny of the Nigeria's profile regarding imports during the period 1981-2015 (see appendix) for instance, revealed that due to high international oil prices, Nigeria's import trade has the capability of balancing export revenue. According to Nigeria's National Bureau of Statistics, 2016, imports to Nigeria decreased by 24.7 percent year-on-year to N507.4 million in December 2015. In the last quarter of the year, purchases declined 22.4 percent. Imports in the country averaged N164,266.67 millions from 1981 until 2015, reaching an all-time high of N1,554,732.90 millions in March of 2011 and a record low of N167.88 million in May, 1984. Nigeria imports mainly from: industrial supplies (27% of total in 2014), fuel and lubricants (14%), food and beverage (17%), consumer goods (7%), capital goods (23%), and transport equipment and parts (12%). 43% of total imports come from Asia; 34% from Europe; 15% from America and 7% from Africa.

As a technologically backward and weak nation, the product life cycle theory is to some level irrelevant to Nigeria, even though the nation used to be preeminent exporter of rice in the 60s but now relegated to be a prima importer of same product. For example, Nigeria consumes about five million metric tons of rice annually. Over the years, the local production, however, has not kept pace. The difference between what is produced and what is consumed is supplied via importation of about 2.1 million metric tons, at such huge annual import expenses of about N356 billion. This is devastating for an economy like Nigeria. Now, compare that with what can be produced locally at a cheaper cost, with a number of associated benefits. (Oyeleye, 2014).

Nigeria is as well incapable to attaining economic growth via international trade owing to factors such as lack of good governance, poor policy and hostile external environment, corruption, insecurity, poverty, infrastructural development and poor human capital among others. In Nigeria for instance, few people possess the requisite skills and technological knowhow in the productive sector and owing to the unsuitable match between productive training and education; the country has for long been witnessing an alarming rate of unemployment (Ogbimi, n. d.). It is disheartening to observe that after 55 years of independence, Nigeria is not even being near to gratifying the hungriness of needful economic development despite her vision 20-2020 (Abdullahi et al., 2012).

© 2017 Global Journals Inc. (US)

III. Methodology and Model Specification

This study focuses on the international trade in Nigerian economy from 1981–2014. Time series secondary data were used for the analysis. The secondary data were obtained from such publications as Nigerian Bureau Statistics (NBS), Central Bank of Nigeria 2014 Statistical Bulletin, International Financial Statistics, World Bank Datasets, etc. The secondary data used for the study were processed using E-view 7 for descriptive statistics, unit root tests and ordinary least square statistics technique.

a) Model Specification

This study adopted an economic model previously used by Edward (2000) with slight transmutation to estimate the determinants of economic growth. However, study tried to modify his work by employing additional independent variables. The new model is of the general form. Thus, economic growth trend model for Nigeria can be specified in a functional form as:

gdp = f (exc_rate, export, import, fdigdp, gov_exp, int_rate)

Where:

gdp	=	Real Gross Domestic Product
exc rate	=	Exchange Rate
export	=	Export
import	=	Import
fdigdp	=	Foreign Direct Investment, net inflows (% of GDP)
gov exp	=	Government Expenditure
int rate	=	Interest Rate

Economic growth is proxied by Real Gross Domestic Product. While Exchange Rate, Export, Import and Foreign direct investment (net inflows as % of GDP) represent international trade.

Government Expenditures and Interest rate stand for other determinants of economic growth

Therefore:

$$GDP = \pi_0 + \pi_1 EXC_RATE + \pi_2 EXPORT + \pi_3 FDIGDP + \pi_4 GOV_EXP + \pi_5 IMPORT + \pi_6 INT_RATE + U$$

Where:

$\pi_0, \pi_1, \pi_2, \pi_3, \pi_4, \pi_5$ and π_6 are the parameters to be estimated.

U = stochastic error term

In log linear, the model becomes:

$$LogGDP = \pi_0 + \pi_1 LogEXC_RATE + \pi_2 LogEXPORT + \pi_3 LogFDIGDP + \pi_4 LogGOV_EXP + \pi_5 LogIMPORT + \pi_6 LogINT_RATE + U$$

IV. Data Analysis and Interpretation of Results

Below are presented the descriptive statistics, unit root tests and ordinary least squares analysis. The unit root tests provide information on the stationarity properties of the variables and they were examined employing the Augmented Dickey-Fuller (ADF) and Phillip-Perron (PP) tests. The ordinary least squares technique was used to examine statistical significance between the logarithm of real gross domestic product, log of exports, log of foreign direct investment as percentage of GDP, log of exchange rate, log of interest rate and log of government expenditures in Nigeria.

Table 1: Summary of Descriptive Statistics of the Variables

	EXC_RATE	EXPORT	FDIGDP	GDP	GOV_EXP	IMPORT	INT_RATE
Mean	1.376670	2.766811	0.388301	3.456371	2.486548	2.592334	1.228526
Median	1.341799	3.084587	0.423169	3.613845	2.659646	2.925084	1.249611
Maximum	2.200173	4.183612	1.034628	4.949603	3.714775	4.041229	1.474216
Minimum	-0.214652	0.875206	-0.180456	1.974627	0.983919	0.776963	0.889302
Std. Dev.	0.839612	1.154166	0.301608	0.973062	0.945145	1.104431	0.131319
Skewness	-0.683368	-0.374214	-0.014619	-0.121095	-0.292553	-0.335386	-0.739642
Kurtosis	2.116693	1.736151	2.521907	1.733123	1.658671	1.701286	3.417379
Jarque-Bera	3.751613	3.056401	0.325022	2.356815	3.033806	3.026839	3.346858
Probability	0.153231	0.216926	0.850007	0.307768	0.219390	0.220156	0.187603
Sum	46.80678	94.07159	13.20223	117.5166	84.54264	88.13937	41.76988
Sum Sq. Dev.	23.26327	43.95924	3.001933	31.24606	29.47885	40.25235	0.569070
Observations	34	34	34	34	34	34	34

Source: Author's Computation using E-view 7, 2016

© 2017 Global Journals Inc. (US)

Table 1 show that the series are in high level of consistency as all the mean and median values are within the max and min values of the series. In addition, the low standard deviation of all the data shows that the deviations of the actual data from their mean values are small. The skewness and Kurtosis statistics provide vital information regarding the symmetry of the probability of the data and the thickness of the distribution respectively. Furthermore, it is apparent that the hypothesis that all the variables are normally distributed cannot be rejected since all the probabilities are less than the Jarque Bera chi-square distributions.

Table 2: Unit Root Tests and Interpretation

Variables	ADF Unit Root Test		Phillips-Perron Unit Root Test		Integration Status
	Level Data	1st Diff Data	Level Data	1st Diff Data	
Exc_Rate	-2.038658	-4.841457	-2.190202	-4.841457	I(1)
Export	-0.955560	-6.268794	-0.989514	-6.462581	I(1)
FDIgdp	-2.770023	-9.683442	-2.614087	-9.840369	I(1)
GDP	-0.197626	-5.378235	-0.183326	-5.393858	I(1)
Import	-0.690447	-6.648456	-0.461138	-6.621346	I(1)
Int_Rate	-3.336539	-5.162442	-3.317407	-8.459708	I(1)
Gov_Exp	-2.040153	-6.304524*	-0.992727	-6.887444	I(1)
Test critical values:	1% level		-3.646342		
	5% level		-2.954021		
	10% level		-2.615817		

Source: Author's Computation using E-view 7, 2016
** non stationary at level & 1st diff. but 2nd diff.*

Table 2 also demonstrates that the variables, that is, Gross Domestic Product (GDP), Export, FDI % of gdp, Interest rate, Import, Exchange Rate, and Government Expenditures are not significant at levels but are significant at first difference thereby stationary. However, only government expenditure is stationary at 2nd difference.

Table 3: Least Squares Result and Interpretation

Dependent Variable: LGDP
Method: Least Squares
Date: 03/17/16 Time: 13:42
Sample: 1981 2014
Included observations: 34

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.537068	0.355683	1.509962	0.1427
EXC_RATE	-0.257239	0.138337	-1.859508	0.0739
EXPORT	0.277169	0.151317	1.831708	0.0780
FDIGDP	-0.214214	0.067882	-3.155670	0.0039
GOV_EXP	0.808078	0.223812	3.610516	0.0012
IMPORT	0.087331	0.169314	0.515793	0.6102
INT_RATE	0.288173	0.234978	1.226384	0.2306

R-squared	0.992777	Mean dependent var	3.456371
Adjusted R-squared	0.991172	S.D. dependent var	0.973062
S.E. of regression	0.091429	Akaike info criterion	-1.765272
Sum squared resid	0.225699	Schwarz criterion	-1.451021
Log likelihood	37.00962	Hannan-Quinn criter.	-1.658103
F-statistic	618.4859	Durbin-Watson stat	1.287566
Prob(F-statistic)	0.000000		

Source: Author's Computation using E-view 7, 2016

Table 3 concentrates on the data analysis, interpretation of results and discussions. The results show the impact of econometrics of some explanatory variables such as: exchange rate, government expenditures, foreign direct investment, interest rate, import and export on GDP in Nigeria. The regression analysis was presented in this section with a test for ordinary least square (OLS).

© 2017 Global Journals Inc. (US)

Furthermore, table 3 depicts various statistical tests such as standard error, t-statistics, adjusted R2, Durbin-Watson (DW) and F-statistics were used to validate the results. That; GDP, exchange rate, government expenditure, foreign direct investment, interest rate, import and export were stationary at 1 percent, 5 percent and 10 percent respectively.

a) The Significance of the Parameter Estimates

From table 3, the significance of the parameter estimates can be verified by the adjusted R2, standard error test and the DW statistics. This shows that the values of parameters estimated are all significant statistically. The value of the adjusted R-squared (R2) for the model is very high, pegged at 99 percent. This implies that GDP, foreign direct investment, exchange rate, government expenditure, interest rate, import and export explained more than 99 percent systematic variations in the level of GDP over the observed years in the Nigerian economy with the indication of strong goodness of fit while the remaining less than 1 percent variation is explained by other determining variables represented by white noise in the model.

The value of Durbin Watson is 1.28. This resides within the determinate region and connotes the existence of a positive first order serial autocorrelation among the explanatory variables in the model. The result of the coefficients shows that GDP, government expenditures, interest rate, import and export are positively significant to country's GDP. An increase in these variables eventually leads to increase in total volume of GDP and economic growth of the country. Meanwhile, the result also reveals that exchange rate and foreign direct investment are negative and insignificant to GDP. This is consistent with Fosu and Magnus (2006) for Ghana and Jude and Pop-Silaghi (2008) for Romania.

V. Conclusion and Recommendations

We conclude from the foregoing that Nigeria has been unable to attain economic growth through international trade owing to obvious violations of trade doctrines particularly in the area of specialization on factor proportion and endowment.

a) Policy Recommendations

This research thus recommends that Nigerian government should give more emphasis to specialization in agriculture for diversification of her production and export base so as to enable the country gain all the benefits of trade including economic growth. This would go a long way to harness the Nigeria's abundant resources; land and labour inclusive which in turn would help in reducing prevalent menace of unemployment and poverty in the country. Similarly, government should take aggressive measures with the intent to overcoming the trade related challenges of economic growth identified by the study.

We also recommend that the country's trade should not only be on primary and oil exports but also the promotion of non-primary exports and non-oil export i.e. manufactured goods. International trade strategy must be hinged on the recognition that government is necessitated to take needful steps for the fostering of competitiveness and productivity of enterprises in the export sector, i.e. upgrading infrastructures, enhancing human capital development, developing and improving technology via an upsurge in allocation of resources to research and development via government spending.

In addition, Central Bank of Nigeria should intensify the deregulation policy of the exchange rate sector of the country by making available foreign currency to exporters and investors. Promotion of exports within the context of sub-regional and regional economic integration should be vigorously pursued to expand Nigerian international market and the importation policy of the government should be strictly adhered to in order to control dumping and to encourage the local investors.

Finally, the monetary authority of the country should maintain a double digit interest rate for now to motivate foreign investors and the commercial banks until development level of Nigerian economy reaches a significant level where interest rate can be reduced to single digit or zero free.

References Références Referencias

1. Abdullahi, H., Abdullahi, Y. Z., and Bello, A. A. (2012): Myth or Reality?, Paper Presented at the Annual Conference of the Faculty of Social Sciences, UDUS, on 50 years of Nigeria's Nationhood: Issues and Challenges for Sustainable Development, via Vision 2020 at Sokoto Energy Research Centre (SERC) Auditorium, UDUS, 16th–18th April, 18 pages.
2. African Forum and Network on Debt and Development. (2007): Nigeria: Foreign Debts, Stolen Wealth, IFIs and the West, A Case Study: AFRODAD.
3. Appleyard, R. D., Field, A. J. and Cobb, S. L. (2006): International Economics, (5th Ed.), McGraw Hill, New York.
4. Balassa, B. (1978): "Exports and economic growth: further evidence", Journal of Development Economics, Vol. 5, pp. 181-189.
5. Bayoumi, T., Coe, D. T. and Helpman, E. (1999): "Research and development and global growth", Journal of International Economics, Vol. 47, pp. 399-428.
6. Ben-David, D., Nordstrom, H. and winters, L. A. (2000): Trade, Income Disparity, and Poverty, World Trade Organization, Geneva.

© 2017 Global Journals Inc. (US)

7. Blomstrom, M. and Kokko, A. (2003): "The economics of foreign direct investment incentives", NBER working paper, No. 9489, National Bureau of Economic Research, Cambridge.
8. Boon, E. K. (n.d.). "An Overview of Sustainable Development in Africa", Regional Sustainable Development Review, Vol. 1.
9. Caballero, J. M., Quieti, M. G., and Maetz, M. (n. d.): "International Trade: Some Basic Theories and Concepts",http://www.fao.org/docrep/003/x7352e/x7352e02.htm.
10. Coe, D. T. and Helpman, E. (1995): "International research and development spillovers", European Economic Review, Vol. 39, pp. 859-887.
11. Coe, D. T. and Moghadam, R. (1993): "Capital and trade as an engine of growth in France", IMF Staff Papers, Vol. 40, pp. 542-566.
12. Cooper, N. R. (2001): "Growth and inequality: The role of foreign trade and investment", paper delivered at World Bank Conference on Development Economics, December.
13. Coutts, K. and Godley, W. (1992): "Does Britain's balance of payments matter anymore?" in Michie, J. (Ed.), The Economic Legacy 1979-1992, Academic Press, London, pp.60-67.
14. Dollar, D. (1992): "Outward-oriented developing economies really do grow more rapidly", Economic Development and Cultural Change, Vol. 40 No. 3, pp.523-544.
15. Dollar, D. and Kraay, A. (2000): "Growth is good for the poor", Journal of Economic Growth, Vol. 7, pp. 195 - 225.
16. Drabek, Z. and Laird, S. (1998): "The new liberalism: trade policy developments in emerging markets, Journal of World Trade, Vol. 32, pp. 241-269.
17. Edwards, S. (1998): "Openness, productivity and growth: what do we really know?" Economic Journal, Vol. 108, Pp 383-398.
18. Edward, N. W. (2000): "Trade and Inequality: A Review of the Literature". New York University, May.
19. Ekpe, A. E. (2011): "Poverty Alleviation in Nigeria through Capitalism Economic Framework: Problems and Challenges", Journal of Sustainable Development in Africa, Vol. 13, No. 2.
20. Feridun, M. and Akindele, S. T. (January, 2005): Nigerian Economy: Essays on Economic Development, 1st Edition. Morrisville, North Carolina, USA: Lulu Press Inc.
21. Fogel, R. (2006): "Why China is likely to achieve its growth objectives", NBER working paper No. 12122, National Bureau of Economic Research, Cambridge.
22. Fosu, O. A. E. and Magnus, J. F. (2006): "Bound testing approach to co-integration: An examination of foreign direct investment, trade and growth relationships", American Journal of Applied Sciences, Vol. 3 No. 11, pp. 2079-2085.
23. Frankel, J. A. and Romer, D. (1999): "Does trade cause growth?" American Economic Review, Vol. 89, pp. 379-399.
24. Hassan, C., Olawoye, J. and Nnadozie, K. (September, 2002): "Impact of International Trade and Multinational Corporations on the Environment and Sustainable Livelihoods of Rural Women in Akwa-Ibom State", Niger-Delta Region, Nigeria.
25. Hechsher, E. and Ohlin, B. (1933): Interregional and International Trade, Harvard University Press, Cambridge, MA.
26. Ikeme, J. (2000): "Sustainable Development, Globalization and Africa: Plugging the holes", Africa Economic Analysis, Environmental Change Unit, University of Oxford, United Kingdom, Jekun@yahoo.com
27. Ikeokwu, P. N. (2008): "The Global Food Crisis and the Challenges to Nigeria", The Nigerian Village Square, Wednesday 28 May, www.nigeria villagesquare.com
28. Ite, U. E. (2003): "Sustainable African Development: Issues and Challenges for the 21st Century"
29. Jude, C. and Pop-Silaghi, M. I. (2008): "Some determinants of economic growth in Romania: foreign trade and foreign direct investment", The Annals of the University of Oradea, Economic Sciences, Vol.17.
30. Karbasi, A., Mohamadi, E. and Ghofrani, S. (2005): Impact of foreign direct investment and trade on economic growth, Paper presented at the 12th Economic Research Forum Conference, 19th-21st December, Cairo, Egypt.
31. Kavoussi, R.M. (1985): "International trade and economic development: the recent experience of developing countries", Journal of Developing Areas, Vol. 19, pp. 379-392.
32. Krueger, A. (1978): Foreign Trade Regimes and Economic Development: Liberalization Attempts and Consequences, Ballinger, Cambridge, Massachusetts.
33. Krugman, P. and Helpman, E. (1988): Imperfect Competition and International Trade: Evidence from Fourteen Industrial Countries, Harvard University Press, Cambridge.
34. Lall, S. (2000): Foreign direct investment, technology development and competitiveness: Issues and evidence, Monograph.
35. Lin, S. (2000): "Foreign trade and China's economic development: A time-series analysis, Journal of Economic Development, Vol. 25 No. 1, pp. 145-153.
36. Maddison, A. (1998): Chinese Economic Performance in the Long Run, OECD, Paris.
37. Mannur, H. G. (1995): "The Principle of Trading", in International Economics, Second Revised Edition. New Delhi, India: Vikas Publishing House PVT LTD,

© 2017 Global Journals Inc. (US)

38. McCombie, J. S. L. and Thirlwall, A. (1992): "The re-emergence of the balance of payments constraint", in Michie, J. (Ed.), The Economic Legacy 1979-1982, Academic Press, London, pp.678-688.
39. Morgan, R. and Katsikeas, C. S. (1997): "Theories of International Trade, Foreign Direct Investment and Firm Internationalization: A Critique, Management Decision, pp. 68 - 78 Cardiff Business School, University of Wales, UK. MCB University Press.
40. Nabine, D. (2009): "The impact of Chinese investment and trade on Nigeria economic growth", Africa Trade Policy Centre work in progress No. 77, Economic Commission of Africa, Addis Ababa.
41. Obadan, M. I. and Elizabeth, O. I. (n. d.): "An Empirical Analysis of the Impact of Trade on Economic Growth in Nigeria", Jos Journal of Economics, Vol. 4, No. 1
42. Ogbimi, F. E. (n.d.): "Structural Adjustment is the Wrong Policy", http://web.mit.edu/africantech/www/articles/PlannningAdjust.htm
43. Oritsejafor, E. O. (n. d.): "Development in Nigeria: A Political and Economic Challenge", Research Effort.
44. Oyeleye, O. (2014): The Nigeria's Government Efforts to boost the nation's rice production" The Special Assistant on Media and Strategy to the Honourable Minister of Agriculture and Rural Development, in an interview with Charles Okonji and Kehinde Adegoke.
45. Prehisch, R. (1962): "The economic development of Latin American and its principal problems", Economic Bulletin for Latin America, Vol. 7 No. 1, pp. 1-22.
46. Ram, R. (1985): "Exports and economic growth: some additional evidence", Economic Development and Cultural Change, Vol. 33, pp. 415-425.
47. Ram, R. (1987): Exports and economic growth in developing countries: evidence from time -series and cross section data", Economic Development and Cultural Change, Vol. 36, pp. 51-72.
48. Ricardo, D. (1817): "Principles of political economy", in Saffra, P. (Ed.) (1951), The Works and Correspondence of David Ricardo, Vol. 1, Cambridge University Press, London.
49. Rodriguez, F. and Rodrik, D. (2000): Trade policy and economic growth: A skeptic's guide to the cross-national evidence, processed, May.
50. Sachs, J. D. (1987): "Trade and exchange rate policies in growth oriented adjustment programs", in Corbo, V., Goldstein, M. and Khan, M. (Eds.), Growth Oriented Adjustment Programs, IMF, Washington, DC.
51. Sachs, J. D. (1989): "The debt overhang of developing countries", in Calvo, G. A. et al (Eds.), Debt, Stabilization and Development: Essays in Memory of Carlos Diaz-Alejandro, Blackwell, Oxford, pp. 80-102.
52. Sanusi, S. L. (2010): "Growth Prospects for the Nigerian Economy", Convocation Lecture Delivered at the Igbinedion University Eighth Convocation Ceremony, Okada, Edo State.
53. Singer, H. W. (1950):"The distribution of gains between investing and borrowing countries, American Economic Review, Vol. 40, pp. 473-485.
54. Singer H. W. and Gray, P. (1988): "Trade policy and growth of developing countries: some new data, World Development, Vol. 16, pp. 395-403.
55. Smith, A. (1776): An Inquiry into the Nature and Causes of the Wealth of Nations edited by E. Cannan (1961) and reprinted by Methuen, London.
56. Taylor, L. (1991): Economic openness: problems to the century's end, in Banuri, T. (Ed.), Economic Liberalization: No Panacea, Clarendon Press, Oxford, pp. 99-147.
57. Te Velde, D. W. (2001): Government policies for inward foreign direct investment in developing countries: Implications for human capital formation and income inequality, Paper presented at OECD Development Centre conference on FDI and Human Capital.
58. Umo, J. U. (2007): "Gains from International Trade" in Economics: An African Perspective, Second Edition. Plot 6B, Block 22, Humanities Road, Unilag Estate, Magodo, Isheri, Lagos, Nigeria: Millennium Text Publishers Limited,.
59. Vernon, R. (1966): "International Investment and International Trade in the Product cycle", Quarterly Journal of Economics, May, pp.190-207.
60. Wells, L. T. (1968): "A Product life cycle for International Trade?" Journal of Marketing, Vol. 33, July, pp.1-6.
61. World Commission on Environment and Development (WCED) (1987): "Our Common Future", Oxford University Press, Oxford.

© 2017 Global Journals Inc. (US)

Appendix

Nigeria Trade	Last	Previous	Highest	Lowest	Unit
Balance of Trade	26385.50	174765.00	2177553.08	-592200.72	NGN Millions
Exports	533774.30	695652.40	2648881.76	322.93	NGN Millions
Imports	507388.90	520887.40	1554732.90	167.88	NGN Millions
Current Account	-2013.91	-5695.27	9455.37	-5695.27	USD Million
Current Account to GDP	2.60	3.90	37.90	-18.70	percent
Terms of Trade	100.61	102.28	160.25	49.48	Index Points
Foreign Direct Investment	501.83	1213.98	3084.90	501.83	USD Million
Capital Flows	-1125.67	406.61	20302.97	-15439.95	USD Million
Gold Reserves	21.37	21.37	21.37	21.37	Tonnes
Crude Oil Production	1787.00	1505.00	2475.00	675.00	BBL/D/1K
External Debt	10718.43	10617.35	10718.43	3627.50	USD Million
Terrorism Index	9.21	8.20	9.21	3.86	

Source: Nigeria's National Bureau of Statistics, 2016

© 2017 Global Journals Inc. (US)

This page is intentionally left blank

© 2017 Global Journals Inc. (US)

Global Journal of HUMAN-SOCIAL SCIENCE: E
Economics
Volume 17 Issue 5 Version 1.0 Year 2017
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-460x & Print ISSN: 0975-587X

Socio-Economic Determinants of Fuelwood usage by Bread Producers in Owerri North Local Government Area of Imo State, Nigeria

By Unaeze, Henry Chiaka & Anyanwu, Jecinta Adaugo
University of Port Harcourt

Abstract- This study was conducted to examine the socioeconomic determinants of fuelwood usage by bread producers in Owerri North Local Government Area of Imo state. A total of 50 bread producers were sampled using simple random sampling technique. The data realized were analyzed using simple descriptive statistics and multiple regression models. Results shows 48 years as the mean age of the respondents and their household size were 5 persons while the number of years spent in formal schooling were 18 years among others. From the regression results, bakery experience in years ($x=0.33$, $p<2.10$) and years of schooling ($x=0.43$ $p<2.10$) were statistically significant in increasing the quantity of bread produced. It was also learnt that the major constraints encountered were high cost of raw materials. Therefore government should ensure a stable price regime, regular power supply which reduces over dependence on fuel wood energy and GHG emission.

Keywords: *fuel wood, bread producers, imo state, nigeria.*

GJHSS-E Classification: *FOR Code: 149999*



Strictly as per the compliance and regulations of:

© 2017. Unaeze, Henry Chiaka & Anyanwu, Jecinta Adaugo. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Socio-Economic Determinants of Fuelwood usage by Bread Producers in Owerri North Local Government Area of Imo State, Nigeria

Unaeze, Henry Chiaka [α] & Anyanwu, Jecinta Adaugo [σ]

Abstract- This study was conducted to examine the socio-economic determinants of fuelwood usage by bread producers in Owerri North Local Government Area of Imo state. A total of 50 bread producers were sampled using simple random sampling technique. The data realized were analyzed using simple descriptive statistics and multiple regression models. Results shows 48 years as the mean age of the respondents and their household size were 5 persons while the number of years spent in formal schooling were 18 years among others. From the regression results, bakery experience in years (x=0.33, p<2.10) and years of schooling (x=0.43 p<2.10) were statistically significant in increasing the quantity of bread produced. It was also learnt that the major constraints encountered were high cost of raw materials. Therefore government should ensure a stable price regime, regular power supply which reduces over dependence on fuel wood energy and GHG emission.

Keywords: fuel wood, bread producers, imo state, nigeria.

I. Introduction

Fuel wood is a wood and pulp material obtained from the trunks, branches and other parts of trees and shrubs which is used for cooking, heating or generating of energy through direct combustion (De Montabembert & Clement, 1983). Fuel wood is needed for light, heat as well for cooking and access to this resource can help improve the health and education of households by improving air pollution quality and allowing light to study at night (Heltberg, 2005). Most people both in urban and rural areas; earn their income from the wood fuel business which involve growing, harvesting, processing, trading, transporting or retailing (FAO- Regional Energy Development Programme, 1999). Most women go into full time harvesting of fuel wood and to others; it is a source of extra income or even a survival strategy in times of hardship (FAO, 1999). Fuel wood is used not only for cooking by most rural women but also in the production and baking of bread by local bread producers.

Fuel wood is the predominant source of energy in rural and sub-urban areas as a result of its low cost and also because it serves as a means of livelihood for individuals who engage in the business. According to Ebe (2014) fuel wood rate of consumption in Africa rose by 23.08% from 154 million to 190.2 million metric tons in 1975 and about 95% consumed in Nigeria. Wood energy is the most important source of bio-energy in the world, providing 9% of the global primary energy supply (FAO, 2010). According to Maconachie, Tanko, and Zakariya. (2009) over dependence of wood energy by most people is as a result of several factors such as population increase, poverty as well as inconsistency in the supply of fossils fuels. Increased poverty has frequently been reported in both developed and undeveloped countries as one of the major driving forces for the increase rate of fuel wood consumption. According to Goldthau, & Witte (2010) fuel wood still accounts for up to 80% of Nigeria energy consumption due to poor access to modern energy sources. It has been estimated that the number of people using fuel wood will rise by more than 40% between 2000 and 2030 to about 70 million making, forest resources becomes most endangered natural resources.

Nigeria is losing about 351, 000 Km2 to the desert representing 38% of its total landmass. The strives for survival coupled with geometric population growth worsened by extreme poverty in most of the developing countries as well as the quest for more comfort are the major causes of natural resources depletion the world over. Regional analysis of the use of wood as a major source of energy requirements indicates that in Eastern, Western and Southern Africa, more than 90 percent of rural households depend on fuelwood and charcoal (Adeniyi, and Felix 2011). One of the environmental resources which have been over-exploited in Nigeria without adequate replacement is forest resources, especially wood products (Audu, 2013). Fuelwood consumption is estimated at about 80 million cubic meters (about 25 million tonnes) and this traditional energy source accounts for about 55 percent of Nigeria's primary energy requirements (Friends of the Environment, 2005). The rate of deforestation as a result of fuel wood consumption is about 350,000 hectares/year, which is equivalent to 3.6% of the present area of the forests and wood land, whereas, reforestation is only 10% of deforestation rate (ICCDD,

Author α σ: Department of Agricultural Economics and Extension, University of Port Harcourt, Port Harcourt, Rivers State, Nigeria.
e-mails: unaezehenry@yahoo.com, jecinta_anyawu@yahoo.com

© 2017 Global Journals Inc. (US)

2000). It is obvious that the use of fuel wood by bread producers has its social, economic as well as environmental consequences. So, there is need to establish the socio-economic determinants of fuel wood usage by bread producers in Owerri North local Government Area of Imo state, Nigeria.

a) Specific Objectives of this study are to

i. detetermine the socio-economic characteristics of bread producers in the study area.
ii. determine the socio-economic factors that influence the output by bread producers in the study area.
iii. determine the source of domestic energy used by the bread producers in the study area.
iv. identify the constraints faced by the bread producers in the study area.

II. Materials and Methods

a) Area of Study

This study was carried out in Owerri North Local Government area of Imo state with its headquarters are in the town of Orie Uratta. It has an area of 198 square km and a population of 175,395 at the 2006 census. It is a semi-urban government area and encircles Owerri Municipal like a peninsular. There are six major roads that lead out of the municipal and it cuts across Owerri North Communities. It is comprised of seven towns/ districts which are: Egbu, Emekuku, Emii, Ihite-Ogada, Naze, Obibi-Uratta, and Orji. Their major occupation is predominantly farming.

Imo state lies in the South East of Nigeria with Owerri as its capital and largest city occupying the area between the lower River Niger and the upper and middle Imo River. It lies within latitudes 4°45'N and 7°15'N, and longitude 6°50'E and 7°25'E with an area of around 5,100 sq km. There are 26 local governments in Imo state. It is rich with natural resources such as: crude oil, natural gas, lead, white clay, fine sand, limestone, as well as zinc. The economy of the Imo State depends primarily on agriculture and commerce. Their cash crops include oil palm, raffia palm, rice, groundnut, melon, cotton, cocoa, rubber, maize, etc. food crops such as yam, cassava, cocoyam and maize are also produced in large quantities.

III. Results and Discussion

a) Socio-economic characteristics of the bread producers in the study area

The socio-economic characteristics of the bread producers in Owerri North Local Government area of Imo State presented in the table 1 below revealed that, majority (84%) were males who dominates in the industry than females due to drudgery nature of bread production. However (50%) are within the age range of 41-50 years, while their mean age is 48 years, indicating activeness in age. Majority (90%) are married and (54%) had tertiary education signifying innovativeness as education influences individuals and household's rate of adoption of new and improved technology as well as choice of food commodities Fapojuwo (2010).Household size shows that (58%) have 4-6 persons and the average household size was 5 persons implying that respondents had a medium household size. Respondents had an average experience of 17 years implying that most of the bakeries are usually family owned. The bakery capacity is within 16-20bags, implying adequate use of flour for production which results to good quality product. Majority sampled have an income level of ₦2,000,000 annually and an average income of ₦1,570,020. This implies that small and medium scale bread enterprise is a viable venture being located mostly in the rural part of the study area.

Table 1: Frequency distribution of respondents according to their socio-economic characteristics in the study area

Socio-economic characteristics of bread producers in the study area.

	Items	Frequency	Percentage	Mean
Sex	Male	42	84	
	Female	18	16	
Age	21-30	03	06	
	31-40	06	12	
	41-50	25	50	48
	51-60	10	20	
	Above 60	06	12	
Marital Status	Married	45	90	
	Single	05	10	
Educational Level	Primary			
	Secondary	05	10	
	Tertiary	18	36	14
		27	54	
Household size	1-3	10	20	

© 2017 Global Journals Inc. (US)

	4-6	29	58	5
	7-9	11	22	
Bakery experience	1-10	14	28	
	11-20	21	42	17
	21-30	11	22	
	31-40	04	08	
Bakery capacity (number of bags used per day)	≤10	05	10	
	11-15	10	20	20
	16-20	15	30	
	21-25	11	22	
	26-30	08	16	
	≥30	01	02	
Income	≤100,000	08	16	
	100,001-500,000	10	20	
	500,001-1,000,000	01	02	N1,570,020
	1,000,001-	06	12	
	1,500,000	09	18	
	1,500,001-	16	32	
	2,000,000			
	≥2,000,000			
Bakery location	Rural	32	64	
	Urban	18	36	

Source: Field survey data, 2017

b) Sources of Energy used by Bread Producers in the study area

Table2, below shows the various energy sources used by bread producers in the study area. From the table 2, below majority 68% use fuel wood energy for production in the study area. This finding is in consonance with Adeniyi and Felix (2011) who stated that small scale enterprises in the informal sector, being essentially profit oriented, tend to use the cheapest and most reliable fuels (fuelwood), due to the periodic and chronic shortages of commercial fuels such as gas and kerosene experienced in the country from time to time. The table also asserts that only 12% producers make use of electric oven for their production. It was further revealed that electricity is also used by the producers alongside fuel wood in the study area. This implies that most of the bread producers in the area do not depends on one energy source. It should be noted that the usage of these two energy sources depends on the economic status of the producers. Also, other sources of energy are rarely used in the study area. This is in line with the findings of Schalag and Zuzarte (2008) who revealed that most rural areas predominantly utilize fuel wood energy. Asfuel wood constitutes a major source of domestic energy for production by the bread producers it therefore poses a major threat to forest resources which invariably lead to deforestation as noted by Energy Commission of Nigeria (2003) who accentuated that fuel wood supply/demand imbalance in some parts of the country is now a real threat to the energy security of the rural communities. Their findings conform to the findings of Ikurekong *et al*. (2009) that exploitation of fuel wood is intensified by inaccessibility ofother energy sources.

Table 2: Distribution of respondents according to Sources of energy used for production

Items	Frequency	Percentage
Fuelwood	34	68
Electric Oven	06	12
Both Fuelwood and Electricity	10	20
Total	**50**	**100**

Source: Field data survey, 2017

c) Sources of Fuel wood in the study area

Table 3 below shows the sources of energy used by the bread producers in the study area. In the table3 below, majority of the producers (62%) source their fuelwood on contract basis from suppliers who engages infuel wood collection as a source of livelihood activities, while 22% source from the open market and this agrees with the findings of FAO Regional Energy Development Programme (1999) who reported that, most people both in urban and rural areas; earn their income from the wood fuel business which involves growing, harvesting, processing, trading, transporting or retailing.

Table 3: Distribution of respondents according to Sources of fuel wood in the study area

	Frequency	Percentage
Individual	08	16
Contract	31	62
Open Market	11	22
Total	50	100

Source: Field data survey, 2017

© 2017 Global Journals Inc. (US)

d) Effects of respondents socio-economic factors on their output in the study area

Table4: shows the socio-economic factors that influence the output of the bread producers in the study area. The F- ratio for each functional form is significant at 1% and this imply that each of the functional form can be used for further analysis and are adequate. The model chosen was not only based on the strength of the R-squared but rather on the considerations of the signs of the coefficients with respect to economic theory, lowness of the Akaike information criterion or Schwarz criterion (Greene, 2008; Gujarati, 2006). Therefore the lead equation chosen is the double log model based on its F-ratio, R^2, and the low Akaike Information Criterion (AIC) value of -2.711736 which was significant at 1% and a better criterion for a non-tested model. From the table 4,below educational level and bakery experience were significant at 1% and this conforms to the *a priori* expectations because it believed that education improves one's knowledge and according to Fapojuwo (2010), it influences the level of adoption of improved technology which invariably should have a positive effect on the output of the bread producers. It also implies that the more years a producer spend in attaining formal education, the more the increase in their output and this conforms to the findings of Onoja and Emodi (2012) who reported that education has the power of giving trader an edge over their counterpart as their level of awareness of the use of efficient technology and market information will enhance their output thereby increasing their productive capacities. Bakery experience was significant and had a positive coefficient which implies that a unit increase in the experience of the bread producers will cause an increase in the income level of the bakers. The R^2 of 73.86% implies that explanatory variables of the double logged model were able to explain 73.86% of the output of bread produced in the study area.

e) Estimated Socio-economic factors that influence the output of the bread producers in the study area

Variables	Linear	Semi Log	Double Log
Constant Coefficient	-4319.77	7.52935***	5.63686***
Standard error	3005.74	0.346634	1.1097
Gender Coefficient	1819.37*	0.258056**	0.0240109
Standard error	946.811	0.10919	0.0137856
Age Coefficient	81.842	0.00786456	0.242923
Standard error	61.3194	0.00707159	0.258152
Marital status Coefficient	493.702	0.138561	-0.0247637
Standard error	1441.63	0.166255	0.0298699
School Coefficient	272.836**	0.0279007**	0.333435***
Standard error	102.317	0.0117996	0.115291
Household size Coefficient	284.566	0.026127	0.125755
Standard error	280.798	0.0323828	0.133801
Bakery experience Coefficient	153.497**	0.0198261***	0.430605***
Standard error	59.3907	0.00684917	0.0799721
Income Coefficient	3.26796e-05	1.94111e-09	0.0239088
Standard error	2.47026e-05	2.8488e-09	0.024519
R-Squared	0.622148	0.636311	0.738604
F-Statistics	9.879241	10.49763	16.95372
S.D dependent	3373.038	0.396494	0.396494
P- Value (F)	3.23e-07***	1.52e-07***	2.10e-10***
Akaike Criterion	920.5780	13.80141	-2.711736

*Source: Field data survey, 2017 ***, **, * = significant at 1%, 5% and 10% respectively*

f) Constraints encountered by the bread producers in the study area

Table 5, below shows the various constraints encountered by the bread producers in the study area. High cost of raw materials was identified as the major constraints affecting their production followed by price fluctuation, government policy and high cost of petroleum and diesel products. This result implies that the bread producer experienced increasing cost of raw materials for production ranging from flour to the least material needed for production. According to them, there have been a sharp increase of price of raw materials causing an increase in the cost of production which invariably will affect the price of bread and causes reduction in the purchase of the commodity because consumers will not be willing to purchase bread at a higher price which invariably will have an effect on their

© 2017 Global Journals Inc. (US)

income level and this conforms to the law of demand which states that the higher the price, the lower the quantity demanded ceteris paribus. They also lamented that on the substandard quality of the raw materials, which in turn , resulted to low output. Government policy is also seen as a major constraint and this arises from the payment of several fees ranging from tax, emblem, union fee among others. This also has an effect on their output as, according to them, they do not receive incentives from government but are mandated to pay huge sum of money monthly. They also suffer from various health issues associated with the usage of fuelwood which results from the inhalation of the smoke arising from the incomplete combustion of the fuelwood and this might lead to respiratory disease, cancer, among others and this is in consonance with the report by the WHO (2006) which stated that cooking with fuelwood is a major source of global ill health. According to respondents sampled, there has been an increasing rate of cost of raw materials ranging from flour to the least material needed for production. Also, they lamented that roadsnetworks affect their distribution which hinders their supply chain. Excessive rainfall affects the rising of yeast negatively as it requires heat.

Table 5: Distribution of respondents according to constraints encountered in the study area

Constraints	Frequency	Percentage
High cost of raw	50	100
materials	45	90
Price fluctuations	42	84
Government policy	40	80
High cost of petroleum	38	76
and diesel products	36	72
Power fluctuation		
Inadequate finance		
Health issues	35	70
High cost of labour	30	60
High cost of	25	50
transportation		
Inadequate fuelwood	22	44
Environmental	22	44
regulation		
Weather problem	22	44

Source: Field data survey, 2017. Multiple responses recorded

IV. Conclusion

It can be deduced that years of schooling and bakery experience are significant at 1% in influencing the output of bread produced in the study area. There was an over dependence of fuel wood energy by producers as compared to other energy sources due to erratic power supply. The major challenge is high cost of raw materials and government should endeavor to create conducive environment for producers in the study area.

Acknowledgments

The authors are indeed very grateful to bread producers association in Owerri North local Government Area of Imo State, for their cooperation and permission that facilitated data collection for this study.

References Références Referencias

1. Adeniyi, G, & Felix, O. (2011). Socio-Economic Aspects of Fuel Wood Business in the Forest and Savanna Zones of Nigeria: Implications for Forest Sustainability and Adaptation to Climate Change. *Global Journal of Human Social Science.11(1).*
2. Audu, B. E., (2013). Fuelwood consumption and desertification. *International Journal of Science and Technology. 3(1),* ISSN 2224-3577. Retrieved from http:// www.ejournalofscience.org
3. De Montalembert, M. R. & Clément, J.(1983). Fuelwood Supplies in the Developing Countries. Food and Agriculture Organization of the United Nations, Rome.
4. Ebe, F. E., (2014). Socio-Economic Factors Influencing the Use of Fuelwood in Urban Areas of Enugu State, *Nigeria. Journal of Business and Management.16(11), 147-15.*Retrieved from http:// www.iosrjournals.org.
5. *Albanian Jornal of Agricultural Science.*12(1): 111-116.
6. Energy Commission of Nigeria. (2003). National energy policy, Federal Republic of Nigeria, Abuja
7. Fapojuwo, O.E. (2010). Influence of socio-economic characteristics on use of moderm cassava processing technology among women processors in Ogun state, Nigeria. College of Agricultural management and rural development, university of Agriculture, Abeokuta Nigeria.
8. Food and Agricultural Organization of United Nation, FAO.(1999). Tree planting practice in African Savanna forestry paper FAO Rome, 170-185.
9. Food and Agriculture Organization of the United Nations (FAO) (2010). Global Forest Resources Assessment 2010-Forestry Paper; FAO: Rome, Italy, 2010.
10. Friends of the Environment (2005). Enabling Urban Poor Livelihood Policy Making: Understanding the Role of Energy Services. Nigeria Energy Study Report, Country Study Report Nigeria Prepared for Twente Centre for Studies in Technology and Sustainable Development, University of Twente, Netherlands.
11. Goldthau, A., & Witte, J. M. (Eds.). (2010). *Global energy governance: The new rules of the game*. Brookings Institution Press.

© 2017 Global Journals Inc. (US)

12. Greene, W. H. (2008). Econometric Analysis, Fifth Edition Prentice Hall. New Jersey.
13. Gujarati, D. N. (2006). Essentials of econometrics. 3rd edition. Mcgraw-Hill: Boston, Toronto & New Delhi.
14. Heltberg R (2005). Factors determining households' fuel choice in Guatemala. Environmental and Development Economics . 10: 337 – 361.
15. Ikurekong E. E., Esin J. O. & Mba, A. C. (2009). Rural Fuelwood Exploitation in Mbo Local Government Area : A Nigerian Coastal Settlement. *Ethiopian Journal of Environmental Studies and Management.* 2(3): 44-55.
16. Inter-Ministerial Committee on Combating Deforestation and Desertification (ICCDD) Report of August 2000.
17. Maconachie, R., Tanko, A. & Zakariya, M. (2009). Descending the energy ladder? Oil price shocks and domestic fuel choices in Kano, Nigeria. Land Use Policy, 26 (4): 1090-1099.
18. Onoja, A.O, &Emodi, A. (2012). Economic analysis of fuelwood production and consumption: Evidence from Nigerian state.*British journal of management and economic. 2(1): 13-23*. Retrieved from http://www.sciencedomain.org. http://www. energs-ustainsoc.com.
19. Schalag, N. and Zuzarte, F., (2008).Market barrier to clean cooking fuels in sub Saharan Africa. A review of literature, working paper, Stockholm Environment Institute.
20. World Health Organization.(2006). Fuel for life. Households Energy and Health Geneva: WHO.

© 2017 Global Journals Inc. (US)

Global Journals Inc. (US) Guidelines Handbook 2017

www.GlobalJournals.org

FELLOWS

FELLOW OF ASSOCIATION OF RESEARCH SOCIETY IN HUMAN SCIENCE (FARSHS)

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



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

FARSHS accrediting is an honor. It authenticates your research activities. After recognition as FARSHS, you can add 'FARSHS' 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:

FARSHS 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 FARSHS title is accorded, the Fellow is authorized to organize 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.

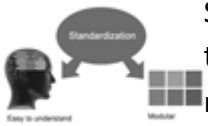


© Copyright by Global Journals Inc.(US) | Guidelines Handbook

The FARSHS 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 FARSHS, 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 FARSHS 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 FARSHS member can apply for grading and certification of standards of the educational and Institutional Degrees to Open Association of Research, Society U.S.A. Once you are designated as FARSHS, 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 FARSHS 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 FARSHS 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.

© Copyright by Global Journals Inc.(US)| Guidelines Handbook



The FARSHS is eligible to earn from sales proceeds of his/her researches/reference/review Books or literature, while publishing with Global Journals. The FARSHS 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 FARSS member can decide its price and we can help in making the right decision.

The FARSHS 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 HUMAN SCIENCE (MARSHS)

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



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

MARSHS accrediting is an honor. It authenticates your research activities. Afterbecoming MARSHS, you can add 'MARSHS' 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.



MARSHS 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 MARSHS, you willbegiven 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.



© Copyright by Global Journals Inc.(US) | Guidelines Handbook



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 MARSHS 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 MARSHS, 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.

© Copyright by Global Journals Inc.(US)| Guidelines Handbook

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.

© Copyright by Global Journals Inc.(US) | Guidelines Handbook

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.

© Copyright by Global Journals Inc.(US)| Guidelines Handbook

- 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 conveninet , 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.

© Copyright by Global Journals Inc.(US)| Guidelines Handbook

Preferred Author Guidelines

MANUSCRIPT STYLE INSTRUCTION (Must be strictly followed)

Page Size: 8.27" X 11'"

- Left Margin: 0.65
- Right Margin: 0.65
- Top Margin: 0.75
- Bottom Margin: 0.75
- Font type of all text should be Swis 721 Lt BT.
- Paper Title should be of Font Size 24 with one Column section.
- Author Name in Font Size of 11 with one column as of Title.
- Abstract Font size of 9 Bold, "Abstract" word in Italic Bold.
- Main Text: Font size 10 with justified two columns section
- Two Column with Equal Column with of 3.38 and Gaping of .2
- First Character must be three lines Drop capped.
- Paragraph before Spacing of 1 pt and After of 0 pt.
- Line Spacing of 1 pt
- Large Images must be in One Column
- Numbering of First Main Headings (Heading 1) must be in Roman Letters, Capital Letter, and Font Size of 10.
- Numbering of Second Main Headings (Heading 2) must be in Alphabets, Italic, and Font Size of 10.

You can use your own standard format also.
Author Guidelines:

1. General,

2. Ethical Guidelines,

3. Submission of Manuscripts,

4. Manuscript's Category,

5. Structure and Format of Manuscript,

6. After Acceptance.

1. GENERAL

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

Scope

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 .



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.



© Copyright by Global Journals Inc.(US)| Guidelines Handbook

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.



© Copyright by Global Journals Inc.(US)| Guidelines Handbook

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.



© Copyright by Global Journals Inc.(US)| Guidelines Handbook

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.



© Copyright by Global Journals Inc.(US)| Guidelines Handbook

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

A

Adeniyi · 69, 71, 74
Appleyard · 50, 60
Augmented · 22, 49, 57

C

Cointegration · 14, 24
Contemporaneous · 41, 43, 44, 45, 47
Countercyclical · 41, 43, 45, 46, 47

D

Damot · 29, 30, 31, 32, 39
Discriminate · 16
Drabek · 52, 62

G

Geneva · 40, 61, 76
Goldthau · 69, 75

H

Hodrick · 41

K

Kavoussi · 51, 63
Kuehn · 3, 12

O

Obstfeld · 18, 24, 26
Oromia · 30

P

Patronage · 5, 12
Perron · 49, 57
Predominantly · 70, 71
Prehisch · 51, 52, 64
Procyclical · 41, 43, 45

R

Regime · 15, 68
Regressor · 20, 22, 25
Ricardo · 17, 64
Ruhwedel · 52

S

Schalag · 71, 76

V

Vigorously · 49, 60



save our planet



Global Journal of Human Social Science

Visit us on the Web at www.GlobalJournals.org | www.SocialScienceResearch.org
or email us at helpdesk@globaljournals.org



ISSN 975587

© Global Journals