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

Global Journal

of Management and Business Research: B

Economics and Commerce

Highlights

- Facters of Customer Satisfactions
- Employees Performance and Health
- Green Economy in Bangladesh
- Security in Indian Energy Sector

Discovering Thoughts, Inventing Future

VOLUME 13 ISSUE 4 VERSION 1.0

© 2001-2013 by Global Journal of Management and Business Research , USA

Volume 13 Issue 21 was originally issued as B4

Volume 13 Issue 21
Originally issued as B4

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

Volume 13 Issue 4 (Ver. 1.0)

Open Association of Research Society

© Global Journal of Management and Business Research.2013.

All rights reserved.

This is a special issue published in version 1.0 of "Global Journal of Management And Business Research." By Global Journals Inc.

All articles are open access articles distributed under "Global Journal of Management And Business Research"

Reading License, which permits restricted use. Entire contents are copyright by of "Global Journal of Management And Business Research" 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 Inc., Headquarters Corporate Office, Cambridge Office Center, II Canal Park, Floor No. 5th, ***Cambridge (Massachusetts)***, Pin: MA 02141 United States
USA Toll Free: +001-888-839-7392
USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Open Association of Research Society, Marsh Road, Rainham, Essex, London RM13 8EU United Kingdom.

Packaging & Continental Dispatching

Global Journals, 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: *investers@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 Members (HON.)

John A. Hamilton,"Drew" Jr.,
Ph.D., Professor, Management
Computer Science and Software Engineering
Director, Information Assurance Laboratory
Auburn University

Dr. Henry Hexmoor
IEEE senior member since 2004
Ph.D. Computer Science, University at Buffalo
Department of Computer Science
Southern Illinois University at Carbondale

Dr. Osman Balci, Professor
Department of Computer Science
Virginia Tech, Virginia University
Ph.D.and M.S.Syracuse University, Syracuse, New York
M.S. and B.S. Bogazici University, Istanbul, Turkey

Yogita Bajpai
M.Sc. (Computer Science), FICCT
U.S.A.Email:
yogita@computerresearch.org

Dr. T. David A. Forbes
Associate Professor and Range Nutritionist
Ph.D. Edinburgh University - Animal Nutrition
M.S. Aberdeen University - Animal Nutrition
B.A. University of Dublin- Zoology

Dr. Wenying Feng
Professor, Department of Computing & Information Systems
Department of Mathematics
Trent University, Peterborough,
ON Canada K9J 7B8

Dr. Thomas Wischgoll
Computer Science and Engineering,
Wright State University, Dayton, Ohio
B.S., M.S., Ph.D.
(University of Kaiserslautern)

Dr. Abdurrahman Arslanyilmaz
Computer Science & Information Systems Department
Youngstown State University
Ph.D., Texas A&M University
University of Missouri, Columbia
Gazi University, Turkey

Dr. Xiaohong He
Professor of International Business
University of Quinnipiac
BS, Jilin Institute of Technology; MA, MS, PhD,. (University of Texas-Dallas)

Burcin Becerik-Gerber
University of Southern California
Ph.D. in Civil Engineering
DDes from Harvard University
M.S. from University of California, Berkeley & Istanbul University

Dr. Bart Lambrecht
Director of Research in Accounting and FinanceProfessor of Finance
Lancaster University Management School
BA (Antwerp); MPhil, MA, PhD (Cambridge)

Dr. Carlos García Pont
Associate Professor of Marketing
IESE Business School, University of Navarra
Doctor of Philosophy (Management), Massachusetts Institute of Technology (MIT)
Master in Business Administration, IESE, University of Navarra
Degree in Industrial Engineering, Universitat Politècnica de Catalunya

Dr. Fotini Labropulu
Mathematics - Luther College
University of ReginaPh.D., M.Sc. in Mathematics
B.A. (Honors) in Mathematics
University of Windso

Dr. Lynn Lim
Reader in Business and Marketing
Roehampton University, London
BCom, PGDip, MBA (Distinction), PhD, FHEA

Dr. Mihaly Mezei
ASSOCIATE PROFESSOR
Department of Structural and Chemical Biology, Mount Sinai School of Medical Center
Ph.D., Etvs Lornd University
Postdoctoral Training,
New York University

Dr. Söhnke M. Bartram
Department of Accounting and FinanceLancaster University Management SchoolPh.D. (WHU Koblenz)
MBA/BBA (University of Saarbrücken)

Dr. Miguel Angel Ariño
Professor of Decision Sciences
IESE Business School
Barcelona, Spain (Universidad de Navarra)
CEIBS (China Europe International Business School).
Beijing, Shanghai and Shenzhen
Ph.D. in Mathematics
University of Barcelona
BA in Mathematics (Licenciatura)
University of Barcelona

Philip G. Moscoso
Technology and Operations Management
IESE Business School, University of Navarra
Ph.D in Industrial Engineering and Management, ETH Zurich
M.Sc. in Chemical Engineering, ETH Zurich

Dr. Sanjay Dixit, M.D.
Director, EP Laboratories, Philadelphia VA Medical Center
Cardiovascular Medicine - Cardiac Arrhythmia
Univ of Penn School of Medicine

Dr. Han-Xiang Deng
MD., Ph.D
Associate Professor and Research Department Division of Neuromuscular Medicine
Davee Department of Neurology and Clinical NeuroscienceNorthwestern University Feinberg School of Medicine

Dr. Pina C. Sanelli
Associate Professor of Public Health
Weill Cornell Medical College
Associate Attending Radiologist
NewYork-Presbyterian Hospital
MRI, MRA, CT, and CTA
Neuroradiology and Diagnostic Radiology
M.D., State University of New York at Buffalo,School of Medicine and Biomedical Sciences

Dr. Roberto Sanchez
Associate Professor
Department of Structural and Chemical Biology
Mount Sinai School of Medicine
Ph.D., The Rockefeller University

Dr. Wen-Yih Sun
Professor of Earth and Atmospheric SciencesPurdue University Director National Center for Typhoon and Flooding Research, Taiwan University Chair Professor Department of Atmospheric Sciences, National Central University, Chung-Li, TaiwanUniversity Chair Professor Institute of Environmental Engineering, National Chiao Tung University, Hsin-chu, Taiwan.Ph.D., MS The University of Chicago, Geophysical Sciences
BS National Taiwan University, Atmospheric Sciences
Associate Professor of Radiology

Dr. Michael R. Rudnick
M.D., FACP
Associate Professor of Medicine
Chief, Renal Electrolyte and Hypertension Division (PMC)
Penn Medicine, University of Pennsylvania
Presbyterian Medical Center, Philadelphia
Nephrology and Internal Medicine
Certified by the American Board of Internal Medicine

Dr. Bassey Benjamin Esu
B.Sc. Marketing; MBA Marketing; Ph.D Marketing
Lecturer, Department of Marketing, University of Calabar
Tourism Consultant, Cross River State Tourism Development Department
Co-ordinator , Sustainable Tourism Initiative, Calabar, Nigeria

Dr. Aziz M. Barbar, Ph.D.
IEEE Senior Member
Chairperson, Department of Computer Science
AUST - American University of Science & Technology
Alfred Naccash Avenue – Ashrafieh

President Editor (HON.)

Dr. George Perry, (Neuroscientist)
Dean and Professor, College of Sciences
Denham Harman Research Award (American Aging Association)
ISI Highly Cited Researcher, Iberoamerican Molecular Biology Organization
AAAS Fellow, Correspondent Member of Spanish Royal Academy of Sciences
University of Texas at San Antonio
Postdoctoral Fellow (Department of Cell Biology)
Baylor College of Medicine
Houston, Texas, United States

Chief Author (HON.)

Dr. R.K. Dixit
M.Sc., Ph.D., FICCT
Chief Author, India
Email: authorind@computerresearch.org

Dean & Editor-in-Chief (HON.)

Vivek Dubey(HON.)
MS (Industrial Engineering),
MS (Mechanical Engineering)
University of Wisconsin, FICCT
Editor-in-Chief, USA
editorusa@computerresearch.org

Sangita Dixit
M.Sc., FICCT
Dean & Chancellor (Asia Pacific)
deanind@computerresearch.org

Suyash Dixit
(B.E., Computer Science Engineering), FICCTT
President, Web Administration and
Development , CEO at IOSRD
COO at GAOR & OSS

Er. Suyog Dixit
(M. Tech), BE (HONS. in CSE), FICCT
SAP Certified Consultant
CEO at IOSRD, GAOR & OSS
Technical Dean, Global Journals Inc. (US)
Website: www.suyogdixit.com
Email:suyog@suyogdixit.com

Pritesh Rajvaidya
(MS) Computer Science Department
California State University
BE (Computer Science), FICCT
Technical Dean, USA
Email: pritesh@computerresearch.org

Luis Galárraga
J!Research Project Leader
Saarbrücken, Germany

Contents of the Volume

i. Copyright Notice
ii. Editorial Board Members
iii. Chief Author and Dean
iv. Table of Contents
v. From the Chief Editor's Desk
vi. Research and Review Papers

1. Identifying the Factors of Customer Satisfaction in E-Banking System in Context of Bangladesh. *1-7*
2. Job Stress- Employees Performance and Health: A Study on Commercial Bank in Bangladesh. *9-13*
3. Prospect and Potential of Green Jobs towards Green Economy in Bangladesh: A Situation Analysis. *15-25*
4. Political, Economic, and Social Transformations in Post-Soviet Belarus, 1990-2012: A Research Brief and Overview. *27-29*
5. A Cointegration and Causality Analysis for Assessing Sustainability and Security in Indian Energy Sector. *31-41*
6. A Primer on Franchising in the United States: A Vehicle for Economic Mobility? *43-52*

vii. Auxiliary Memberships
viii. Process of Submission of Research Paper
ix. Preferred Author Guidelines
x. Index

Global Journal of Management and Business Research
Economics and Commerce
Volume 13 Issue 4 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Identifying the Factors of Customer Satisfaction in E- Banking System in Context of Bangladesh

By Md. Arafat Rahman & Abu Zafar Ahmed Mukul

Research Associate, Implementation of Monitoring and Evaluation (M & E) for IFC (World Bank Group) at A. D. S. L.
Email: arahman4@isrt.ac.bd

Abstract - The purpose of this paper is to identifying the factors of customer satisfaction in Bangladeshi commercial banks. In this study, purposive sampling technique was employed to recruit 120 customers classified as government service holder, private service holder and businessman from 10 Banks. We have done Kaiser-Meyer-Olkin Measure of Sampling Adequacy, Bartlett's Test of Sphericity, Cronbach's Alpha Reliability Statistics, inter-correlation, factor analysis and factor ranking. This research showed that management information service, service factor, time management and behavioral factor are the key factors which are representing customer satisfaction in banking sector of Bangladesh. Management information services is the combination of 7 variables such as computerized service, innovative service, smooth and hassel free, staff availability, skilled and knowledgeable employee, service charge, transparency in services.

Keywords : e-banking, customer satisfaction, corre-lation, factor analysis.

GJMBR-B Classification : JEL Code: E59, F43

IDENTIFYINGTHEFACTORSOFCUSTOMERSATISFACTIONINE-BANKINGSYSTEMINCONTEXTOFBANGLADESH

Strictly as per the compliance and regulations of:

Open Association of Research Society, USA
Research | Diversity | Ethics

© 2013. Md. Arafat Rahman & Abu Zafar Ahmed Mukul. 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 inany medium, provided the original work is properly cited.

Identifying the Factors of Customer Satisfaction in E- Banking System in Context of Bangladesh

Md. Arafat Rahman [α] & Abu Zafar Ahmed Mukul [σ]

Abstract - The purpose of this paper is to identifying the factors of customer satisfaction in Bangladeshi commercial banks. In this study, purposive sampling technique was employed to recruit 120 customers classified as government service holder, private service holder and businessman from 10 Banks. We have done Kaiser-Meyer-Olkin Measure of Sampling Adequacy, Bartlett's Test of Sphericity, Cronbach's Alpha Reliability Statistics, inter-correlation, factor analysis and factor ranking. This research showed that management information service, service factor, time management and behavioral factor are the key factors which are representing customer satisfaction in banking sector of Bangladesh. Management information services is the combination of 7 variables such as computerized service, innovative service, smooth and hassel free, staff availability, skilled and knowledgeable employee, service charge, transparency in services. In addition, service factor amalgamation of 3 variables which are service infrastructure, systematic, accurate service and cordial, customer friendly, helpful employee more over time management factor is also the combination of 3 variables such as waiting time, timely information and effective handling of complaint. Finally, commitment of employee and timely services are constitute of behavioral factor. Among major four factors behavioral factor obtain the highest rank comparing with other factor. The paper contributes to previous research by adding to existing knowledge regarding what constitutes e-banking service. The paper makes key recommendations towards enhancing current online financial services delivery.

Keywords : e-banking, customer satisfaction, correlation, factor analysis.

I. Introduction

In business field, Internet is used widely by masses, and has numerous benefits to offer, especially in E-banking services. Now-a-days, people are so busy in their work lives, that they don't even have time to go to the bank for conducting their banking transactions. All banks provide E-banking facility to their customers as an added advantage. E-commerce is about buying and selling information, products and services via computer networks such as the Internet and Electronic Data Interchange. E-banking is one form of e-commerce. More sophisticated e-banking services provide customer access to accounts, the ability to move their money between different accounts, and making payments or applying for loans via e-Channels. E-banking largely came into being as a result of technological developments in the field of computing and communications but there have been a number of other factors or challenges which played an important part in its development. The challenges for banks are fourfold. First, they need to satisfy customer requirements that are complex and ever changing. Second, they need to deal with increased competition from old as well as new entrants coming into the market. Third, they need to address the pressures on the supply chain to deliver their services quickly. Finally, they must continually develop new and innovative services to differentiate themselves from the competition, as having a large branch network is no longer seen as a main source of competitive advantage. E-banking is seen by many banks as a key tool to address these challenges. There are few number of commercial banks are providing e-banking service in the context of Bangladesh such as Dutch-Bangla Limited (DBBL), Hongkong Sanghai Banking Corporation (HSBC), Bank Asia Limited, Eastern Bank Limited (EBL), Citi Bank, Standard Chartered Bank (SCB), Brac Bank Limited, Arab Bangladesh Bank Limited etc. As a third world developing country, Bangladesh is far behind to reach the expected level in global banking system. So it is our urgent need to upgrade its banking system. Kumbhar (2011) found that study evaluates major factors (i.e. service quality, brand perception and perceived value) affecting on customers 'satisfaction in e-banking service settings. This study also evaluates influence of service quality on brand perception, perceived value and satisfaction in E-banking. Liao et. al (2002) conducted survey that banks have laid its emphasis on the implementation on mobile banking services because it shed the light on reduce costs, sustain competitive advantage, create greater convenience to users, and serving unbanked customers. Zeithaml, et al, (1988) they found that there is very strong relationship between quality of service and customer satisfaction. Parasuraman et al, (1985; 1988) they found that increase in service quality of the banks can satisfy and develop attitudinal loyalty which ultimately retains valued customers. Nadiri, et al (2009) also focused that the higher level of perceived service quality results in increased customer satisfaction. When perceived service quality is less than expected service quality customer will be dissatisfied. Cronin et.al (1992) also conducted survey that satisfaction super ordinate

Author α : Research Associate, Implementation of Monitoring and Evaluation (M & E) for IFC (World Bank Group) at A. D. S. L., Bangladesh. E-mail : arahman4@isrt.ac.bd
Author σ : Lecturer, Department of Management & Finance, Sher-e-Bangla Agricultural University (SAU), Dhaka.
E-mail : mukul_mgt@yahoo.com

© 2013 Global Journals Inc. (US)

to quality-that quality is one of the service dimensions factored in to customer satisfaction judgment. Pairot (2008) defined that Customer's satisfaction as the company's ability to fulfill the business, emotional, and psychological needs of its customers. However, customers have different levels of satisfaction as they have different attitudes and experiences as perceived from the company. Customer's satisfaction is affected by the importance placed by the customers on each of the attitudes of the product/ service. Santhiyavalli (2011) conducted survey that customer service is an integral part of any organization. It is necessary to identify the key success factors in terms of customer satisfaction so as to survive in intense competition and increase the market share. Oliver (1980) also concentration on cognition has been studied mainly in terms of the expectations/disconfirmation paradigm; also known as the confirmation/disconfirmation paradigm, which states that expectations originate from the customer's beliefs about the level of performance that a product/service would provide. Rangsan et. al (2013) find the internet banking service dimensions that will have the impact on customer satisfaction among top three banks in the Bangkok area: Bangkok Bank, Kasikorn Bank and Siam Commercial Bank. Questionnaires were used to collect data from by using quota sampling and providing online registration times were the important factors that have the impact on customer satisfaction. Ankit (2011) investigates that Banking Needs, followed by Core Services, Problem Resolution, Cost Saved, Convenience and Risk and Privacy Concerns were the major factors that strongly affect the overall satisfaction of online consumers. On the other hand, Feature Availability and Consumer Continuation were found to moderately affect the overall satisfaction of customers using Online or Internet banking services. Biswas (2012) identify the factors responsible for determining the customer satisfaction in respect of banking services and rank those factor responsible for customer satisfaction in banks. Santhiyavalli (2011) conducted a study that main objective are study the customer's perception of service quality of the select branches of State Bank of India and study the major factors responsible for their satisfaction. Singh. J. et. al (2011) identify the factors affecting satisfaction level of customers of Indian universal banks; and analyze the impact of these factors on customer satisfaction.

Objectives of the Study

Basic objectives of the study are given below:

i. To analyze the level of customer satisfaction towards e-banking service.
ii. To identify the factors responsible for customer satisfaction in respect of e-banking service quality.
iii. To rank factors affecting customer satisfaction towards e-banking service.

II. Methodology

The study has been done mainly based on primary and secondary sources of data or information. Primary data has been collected from Dhaka based 10 (ten) commercial banks names Dutch-Bangla Limited (DBBL), Hongkong Sanghai Banking Corporation (HSBC), Bank Asia Limited, Eastern Bank Limited (EBL), Citi Bank, Standard Chartered Bank (SCB), Brac Bank Limited, Arab Bangladesh Bank Limited, United Commercial Bank Limited (UCBL), EXIM Bank Limited which are taken randomly from January to March, 2013. These banks are considered as the private commercial banks and foreign banks respectively. Primary data collections are done by the interviewing method with proper questionnaire. A specifically designed questionnaire was used as a tool and the survey covered a sample of 120 respondents for the purpose of analysis for 10 different commercial banks. The criteria of respondent were 4 government service holder, 4 private service holder and 4 businessman total 12 respondent for each branch. Further, the 15 variables used for factor analysis were coded using 5 point scale likert scale ranging from 5 to 1 For example, 'Highly Satisfied' was ranked 5 followed by 'Satisfied' with 4, 'Neither Satisfied nor Dissatisfied' with 3, 'Dissatisfied' with 2 and 'Very Dissatisfied' with 1.

III. Discussion and Analysis

Table 1 : Descriptive statistics of variables

Variables	Mean	Standard Deviation
Computerized Service (V1)	3.76	1.145
Service Infrastructure (V2)	3.37	0.970
Innovative Service (V3)	3.28	0.945
Systematic and Accurate Service (V4)	3.77	0.932
Smooth ,Hassel free (V5)	3.86	1.183
Timely Services (V6)	3.87	0.970
Staff Availability (V7)	3.67	0.956
Waiting Time (V8)	3.39	1.125

© 2013 Global Journals Inc. (US)

Timely Information (V9)	3.68	0.979
Commitment of Employee (V10)	3.58	1.034
Skilled, knowledgeable Employee (V11)	4.05	1.107
Cordial, Customer friendly, Helpful employee (V12)	3.89	1.083
Service Charge (V13)	3.13	1.263
Transparency in Services (V14)	3.48	1.053
Effective Handling of Complaint (V15)	3.61	1.311

Source : Computed from Primary Data.

From this table, we can see that mean value for all variables are above 3 that mean the variables are lie between 'Satisfied' and 'Neither Satisfied nor Dissatisfied'. Surprisingly the mean value of Skilled, knowledgeable employee (V11) is 4.05 that mean the customers are more satisfied with e-banking service in respect to Skilled, knowledgeable employee.

To investigate the appropriateness of factor analysis Kaiser-Meyer-Olkin (KMO) and Bartlett's test statistic was used which were shown in table-2 and table-3 respectively. If, the KMO value is greater than 0.6 is considered as adequate (Kaiser and Rice, 1974). A value of greater than 0.5 is desirable. Bartlett's test measures the correlation of variables. A probability of less than 0.5 is acceptable (Singh and Jain, 2009). From our analysis we found that the value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .762 that is greater than 0.06 indicates the value of Kaiser-Meyer is acceptable and the value of Bartlett's Test of Sphericity is also statistically significant and acceptable.

Table 2 : KMO and Bartlett's Test result for e-banking

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.762
Bartlett's Test of Sphericity	Approx. Chi-Square	845.706
	df	105
	Sig.	.000

Source : Computed from Primary Data.

Table 3 : Cronbach's Alpha Reliability Statistics

Cronbach's Alpha	Number of Items
.877	15

Source : Computed from Primary Data.

To check multidimensionality of customer services and satisfaction, coefficient alpha was computed separately for all variables identified. In the present study, alpha coefficients value was 0.877, which is much higher than 0.7, indicating good consistency among the items variables and for a measure to be acceptable, coefficient alpha should be above 0.7 (Nunnally, 1978).

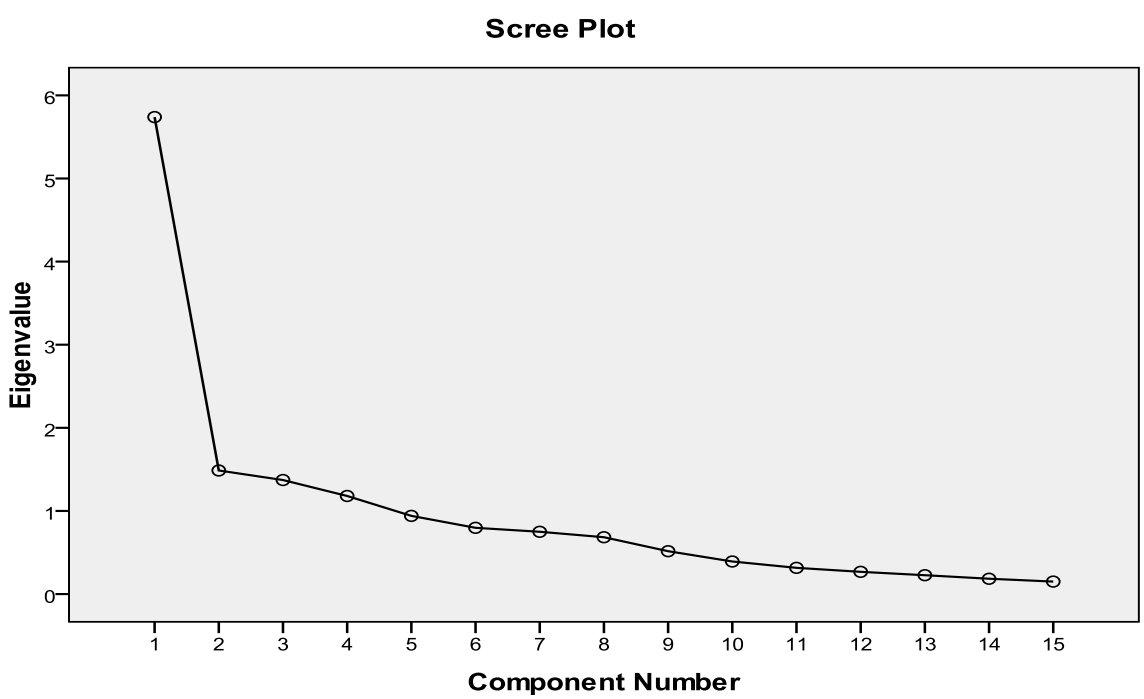


Figure 1 : Scree plot showing the eigen values

© 2013 Global Journals Inc. (US)

The scree test was used to identify the optimum number of factors that can be extracted before the amount of unique variance begins to dominate the common variance structure. The scree test was derived by plotting the latent roots against the number of factors in their order of extraction, and the shape of the resulting curve was used to evaluate the cutoff point (Cattel, 1966). The scree plot demonstrated (Figure 1) the eigen values for initial 15 components or factors extracted in the study. Starting with the first factor, the plot slopes steeply downward initially and then slowly became an approximately horizontal line. The point at which the curve first begins to straighten out was considered to indicate the number of factors to extract. In the present case, as we have the eigen value more than 1, hence, 4 factors have been considered. All factors beyond 1 for which these eigen value level off were excluded from consideration (Cattel and Vogelman, 1977).

Table 4 : Inter-correlation of variables

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15
V1	1														
V2	0.49**	1													
V3	0.60**	.35**	1												
V4	0.31**	.47**	.17	1											
V5	0.55**	.55**	.33**	.41**	1										
V6	0.27**	.23*	.133	.31**	.42**	1									
V7	0.54**	0.41**	.37*	.29**	.58**	0.2*	1								
V8	0.22**	0.23*	0.08	0.12	0.30**	0.19*	0.30**	1							
V9	0.16	0.08	-0.13	0.20*	0.32**	0.09	0.23*	0.24**	1						
V10	0.45**	0.35**	0.24**	0.26**	0.29**	0.61**	0.27*	0.37**	-0.04	1					
V11	0.53**	0.38**	0.41**	0.31**	0.46**	0.34**	0.60**	0.05	0.13	0.46**	1				
V12	0.53**	0.31**	0.42**	0.43**	0.29**	0.35**	0.40**	0.19*	0.36**	0.33**	0.39**	1			
V13	0.39**	0.29**	0.32**	0.19*	0.28**	0.19*	0.22*	0.07	0.13	0.38**	0.43**	0.28**	1		
V14	0.54**	0.36**	0.57**	0.01	0.60**	0.25**	0.47**	0.18*	0.06	0.22*	0.47**	0.32**	0.43**	1	
V15	0.62**	0.34**	0.39**	0.25**	0.56**	0.18*	0.52**	0.39**	0.31**	0.43**	0.49**	0.37**	0.25**	0.33**	1

Source : Computed from Primary Data.

Inter-correlation among the variables were calculated and presented in the table-4. Almost all the cases, correlation coefficient of variables were found statistically significant, hence included as the factor influencing the level of customer satisfaction in respect of banking services. The inter-correlation analysis suggests that out of 15 variables 4 were closely related as the values of correlation co-efficient were relatively high in their cases. This indicated that all these variables could be reduced to 4 factors. These variables demonstrated higher correlation coefficients and were statistically significant at 1 percent and 5 percent level. The meaningful way was to look for substantive significance by deciding on the minimum contribution a factor should make 1 percent and 5 percent (Cattel, and Vogelman, 1977).

Table 5 : Total variance explained

Total Variance Explained									
Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.739	38.258	38.258	5.739	38.258	38.258	3.911	26.072	26.072
2	1.487	9.911	48.169	1.487	9.911	48.169	1.991	13.274	39.346
3	1.372	9.145	57.314	1.372	9.145	57.314	1.988	13.252	52.598
4	1.180	7.867	65.181	1.180	7.867	65.181	1.888	12.583	65.181
5	.941	6.271	71.453						
6	.797	5.314	76.766						
7	.749	4.996	81.762						
8	.684	4.559	86.321						
9	.516	3.438	89.759						
10	.392	2.612	92.371						
11	.316	2.103	94.475						

© 2013 Global Journals Inc. (US)

12	.267	1.783	96.258						
13	.227	1.512	97.770						
14	.184	1.230	98.999						
15	.150	1.001	100.000						

Source : Computed from Primary Data.

The first step in interpreting the output was to look at the factors extracted, their eigen values and the cumulative percentage of variance. We could see from the cumulative percentage column that the importance of the attributes (i.e. 4 factors) extracted together account for 65.18 % of the total variance (information contained in the original 15 variables). This indicates that we lost only 34.82% of the information contained into the original variable. Now, the most important thing was that of interpreting what these 4 extracted factors represent out of 120 samples.

Table 6 : Factor loading along with eigen value

Component Matrix				
	Component			
	Factor-1	Factor-2	Factor-3	Factor-4
Transparency in Services(V14)	**.820**	-.097	.138	.098
Innovative Service(V3)	**.805**	.132	-.115	.019
Computerized Service (V1)	**.728**	.307	.225	.178
Skilled, knowledgeable Employee(V11)	**.643**	.314	.102	.238
Smooth, Hassle Free(V5)	**.621**	-.055	.540	.210
Staff Availability(V7)	**.602**	.230	.452	.009
Service Charge(V13)	**.509**	.203	-.059	.233
Systematic and Accurate Service(V4)	.045	**.881**	.062	.170
Coradial, Customer friendly, Helpful Employee(V12)	.324	**.685**	.240	.130
Service Infrastructure (V2)	.440	**.463**	.071	.170
Timely Information(V9)	-.085	.322	**.761**	-.158
Waiting Time(V8)	.035	-.085	**.644**	.428
Effective Handling of Complaint(V15)	.499	.183	**.569**	.127
Commitment of Employee(V10)	.255	.168	.039	**.867**
Timely Services(V9)	.126	.204	.103	**.790**

Source : Computed from Primary Data.

In this study, we have considered the highest value in a given row which is shown in table-6.From this table, we can see that factor-1 is a group of 7 (seven) variables names Computerized service, Innovative Service, Smooth and Hassel free, Staff availability, Skilled and knowledgeable employee, Service Charge, Transparency in services had loading 0.728, 0.805, 0.621, 0.602, 0.643, 0.509, 0.820 respectively. Factor-2 is combination of 3 variables Service Infrastructure, Systematic, Accurate Service and Cordial, Customer friendly, Helpful employee had loading 0.463, 0.881, and 0.685 respectively. Factor-3 is combination of 3 (three) variables Waiting Time, Timely Information and Effective handling of Complaint had loading 0.644, 0.761, and 0.569 respectively. Factor-4 is included 2 (two) variables Commitment of employee and Timely Services had loading 0.790, 0.867 respectively.

Table 7 : Factor affecting customer satisfaction

Factor	Variables
Management Information service (Factor-1)	Computerized Service (V1), Innovative Service (V3), Smooth and Hassel Free (V5), Staff Availability (V7), Skilled and Knowledgeable Employee(V11), Service Charge(V13), ransparency in Services(V14).
Service Factor (Factor-2)	Service Infrastructure (V2), Systematic, Accurate Service (V4) and Cordial, Customer friendly, Helpful Employee (V12).
Time Management (Factor-3)	Waiting Time (V8), Timely Information (V9) and Effective handling of Complaint (V15).
Behavioral Factor (Factor-4)	Commitment of Employees (V10) and Timely Services (V6).

Source : Computed from Primary Data.

© 2013 Global Journals Inc. (US)

Table 8 : Factor Ranking

Factor	Mean value	Factor ranking
Management Information service (Factor-1)	3.60	3
Service Factor (Factor-2)	3.67	2
Time Management (Factor-3)	3.55	4
Behavioral Factor (Factor-4)	3.73	1

Source : Computed from Primary Data.

Mean value of each factor is calculated based on the mean value of all variables included under a particular factor. In addition, factor ranking has been done based on the mean value.

IV. Conclusion

In our study most of the variables are correlated with each other. Among 15 variables 4 major factors are responsible for customer satisfaction in banking system. These factors are named Management Information service (Factor-1), Service Factor (Factor-2), Time Management (Factor-3) and Behavioral Factor (Factor-4). Moreover, basis on mean value factor ranking has been made. E-banking, the latest generation of electronic banking transactions, opened up new window of opportunity to the existing banks and financial institutions. Most of the banks have their own websites but not all of them offered internet facilities. The main reason of this was that the banks did not have the IT infrastructure and proper security features. The Ministry of Science, Information and Communication Technology went out the policy for the development in the IT sector. This research seeks to make an original contribution to knowledge by investigating the impact of e-banking factors on outcomes of customer satisfaction in the commercial banks industry in Bangladesh. This research contributes to the services marketing discipline in finding out the role of the e-banking in enhancing customer satisfaction and loyalty. However, with banking customers growing increasingly comfortable with the digital lifestyle, but Bangladeshi customers were not aware about e-banking in Bangladesh. They were not fully understand the power of technology and seek to leverage it to enjoy better control over their banking operations. To conclude that e-banking also provided other benefits. For instance, creating new markets, and reducing operational costs, administrative costs and workforce are increasingly important aspects for the banks competitiveness, and e-banking improved these aspects as well. So, Bangladeshi banks should take these advantages of e-banking in Bangladesh economy as early as possible.

References Références Referencias

1. Ankit. S. (2011), Factors Influencing Online Banking Customer Satisfaction and Their Importance in Improving Overall Retention Levels: An Indian Banking Perspective, Information and Knowledge Management, Vol. 1, No.1.
2. Augustyn, M.M. and Ho, S.K. (1998), Service quality and tourism, Journal of Travel Research, Vol. 37 No. 1, pp. 71-6.
3. Biswas (2012), Determinants of Customer Satisfaction in Bank – An Empirical Investigation, Anvesha, Vol. 5 No. 1.
4. Cattel, R. B. (1966), The Scree Test for the Number of Factors. Multivariate Behavioral Research, April, 1, 245-276.
5. Cattel, R. B. & Vogelman, S. (1977), A Comprehensive trial of the Scree and the K G Criteria for Determining the Number of Factors. *Multivariate Behavioral Research,* 289-325.
6. Cronin, J. and Taylor, S.A. (1992), Measuring service quality: a Reexamination and extension, Journal of Marketing, 56 (July), pp. 55-68.
7. Cronbach, L. J. (1951), Coeffiecient Alpha and the Internal Structures of Tests. *Psychrometrika,* 16 (3), 297-333.
8. Hair, J. F. Jr.; Anderson, R. E.; Tatham, R. L. & Black, W. C. (1995), *Multivariate Data Analysis.* NJ: Printice-Hall, Engelwood Cliffs, 4th edition.
9. Hair, J. F. Jr.; Anderson, R. E.; Tatham, R. L.; Black, W. C. & Babin, B. J. (2008), Multivariate Data Analysis. New Delhi: Pearson Education, 6th edition.
10. Kaiser, H. F. (1958), Varimax Criterion for Analytical Rotation in Factor Analysis. *Psychrometrica,* 23, 187-200.
11. Kaiser, H. F. and Rice, J. (1974), Little Jiffy Mark IV. *Educational and Psychological Measurement,* 34(1), 111-17.
12. Kumbhar V.M (2011). Factor Affecting the Customer Satisfaction in E-banking: Some Evidences From Indian Banks Management Research And Practice Vol. 3 Issue 4 PP 1-14.
13. Nadiri, H., Kandampully, J. and Hussain, K. (2009), Zone of tolerance for banks: a diagnostic model of service quality, *The Service Industries Journal,* 29: 11, pp. 1547 - 1564.
14. Nochai, Rangsan and Nochai, Titida; (2013), The Impact of Internet Banking Service on Customer Satisfaction in Thailand: A Case Study in Bangkok, International Journal of Humanities and Management Sciences (IJHMS) Volume 1, Issue 1.
15. Nunnally, J. C. (1978), *Psychometric Theory.* New York: McGraw-Hill.
16. Pairot R. (2008), "Members' Satisfaction Of Fitness Service Quality : A Case Study Of California Wow Xperience Public Company Limited, Presented In Partial Fulfillment Of The Requirements For The Master Of Arts Degree In Business English For International Communication" At Srinakharinwirot University, October 2008.

© 2013 Global Journals Inc. (US)

17. Santhiyavalli G. (2011), Customer's perception of service quality of State Bank of India - A Factor Analysis, International Journal of Management & Business Studies, Vol. 1, Issue 3.
18. Shah, Mahmood; Clarke, Steve E-Banking Management Issues, Solutions and Strategies, Information Science Reference, London, UK.
19. Singh. J. and Kaur G. (2011), Customer satisfaction and universal banks: an empirical study, International Journal of Commerce and Management, Vol. 21 No. 4, 2011, pp. 327-348.
20. Singh, R. and Jain, M. (2009). Metro Trains and Customer Satisfaction – an Empirical Study in Delhi. *Cabell's Management Directory,* USA, 6(2).
21. Solomon, M.R. (1996), Consumer Behaviour, Prentice-Hall, Englewood Cliffs, NJ.
22. Stewart, D. W. (1981). The Application and Misapplication of Factor Analysis in Marketing Research. *Journal of Marketing Research,* February, 38, 51-56.
23. Weber, K. (1997), "Assessment of tourist satisfaction using the expectancy disconfirmation theory: a study of German travel market in Australia", Pacific Tourism Review, Vol. 1, pp. 35-45.
24. Zeithaml, V.A., Parasuraman, A. and Malhotra, A. (2000). *A Conceptual Framework for Understanding e-Service Quality: Implications for Future Research and Managerial Practice,* working paper, report No. 00-115, Marketing Science Institute, Cambridge, MA.

© 2013 Global Journals Inc. (US)

This page is intentionally left blank

© 2013 Global Journals Inc. (US)

Global Journal of Management and Business Research
Economics and Commerce
Volume 13 Issue 4 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Job Stress- Employees Performance and Health: A Study on Commercial Bank in Bangladesh

By Md. Hasebur Rahman
Pabna University of Science and Technology, Bangladesh

Abstract - Stress is an inevitable feature of work and personal life. Some organizations are low stress, healthy environment, whereas others are high-stress environments that may place their employees' health at risk. The experience of orga-nizational justice and fairness is emerging as one contextual factor at work that leads to a positive low-stress work environment. This study is an initiative to explore how does job stress influences on work performance and health of employees in contemporary commercial banks in Bangladesh. It is statistically significant that stress has a positive relationship with employee's performance. Study also reveals that there is an adverse relationship with stress and health of employee's wellbeing in commercial banks in Bangladesh. Long working hour and workload have perceived as top most stressors of both public and private commercial banks in Bangladesh.

Keywords : stress, employees, bank, commercial, performance, health.

GJMBR-B Classification : JEL Code: J28, J64

JOBSTRESS-EMPLOYEESPERFORMANCEANDHEALTHASTUDYONCOMMERCIALBANKINBANGLADESH

Strictly as per the compliance and regulations of:

© 2013. Md. Hasebur Rahman. 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 inany medium, provided the original work is properly cited.

Job Stress- Employees Performance and Health: A Study on Commercial Bank in Bangladesh

Md. Hasebur Rahman

Abstract - Stress is an inevitable feature of work and personal life. Some organizations are low stress, healthy environment, whereas others are high-stress environments that may place their employees' health at risk. The experience of organizational justice and fairness is emerging as one contextual factor at work that leads to a positive low-stress work environment. This study is an initiative to explore how does job stress influences on work performance and health of employees in contemporary commercial banks in Bangladesh. It is statistically significant that stress has a positive relationship with employee's performance. Study also reveals that there is an adverse relationship with stress and health of employee's wellbeing in commercial banks in Bangladesh. Long working hour and workload have perceived as top most stressors of both public and private commercial banks in Bangladesh.

Keywords : stress, employees, bank, commercial, performance, health.

I. Introduction

Job stress becomes an important agenda for managers and management scholars now a days and it will remain in future. There is considerable evidence that most managers and employees report feeling work related stress (Cavanaugh, Wendy, Boswell, Mark, Roehling, Boudreau, 2000) and resent environment is making things worse. Stress is still one of the most important and serious problems facing the field of organizational behavior.

Banking job is now one of the challenging and dynamic professions in Bangladesh. Large number employees serve banking customer at competitive pressure. Due to increasing workload, job insecurity, and pressure to perform, employees of commercial bank in Bangladesh working long hours. As a result, there is much concern that stress level are on the rise, which leads to negative organizational outcomes such as absenteeism, decreased performance, and escalating medical expenses. Employees who become distress mentally and physically due to working long hours experience work overload.

Author : Lecturer, Department of Business Administration, Pabna University of Science and Technology, Pabna, Bangladesh.
E-mail : hasebur7208@yahoo.com

II. Literature Review

a) Concept Job Stress

Stress is still one of the most important and serious problems facing the field of organizational behavior. Stress is usually thought of in negative term applied to the pressures people feel in life. The presence of stress at work is almost inevitable in many jobs. Although there are numerous definitions and much debate about the meaning of job stress, Ivancevich and Matteson (1993) defines stress simply as "the interaction of the individual with the environment". Beehr and Newman (1978) define job stress as "a condition arising from the interaction of people and their jobs and characterized by changes with in people that force them to deviate their normal functioning." Stress can be comprehensively defined as an adaptive response to an external situation that results in physical, psychological, and/ or behavioral deviations for organizational participants (Luthans, 2011).

b) Job Stress and Employees Performance

Applied to the work place, a large study by researchers at Cornell University of 1800 managers identified examples of "bad" stress as office politics, red tape, and a stalled career and "good "stress as challenges that come with increased job responsibility, time pressure, and high quality assignments. A recent Meta– analysis found that hindrance stressors (organizational politics, red tape, role ambiguity, and in general those demands unnecessarily thwarting personal growth and goal attainment) had a negative effect on organizational performance. On the other hand, so called challenge stressors (high workload, time pressure, high responsibility and in general those demands that viewed as obstacles to be overcome in order to learn and achieve) were found to have effect on motivation and performance. The Yerkes-Dodson law (1908) indicates that stress leads to improved performance up to an optimum point. Beyond the optimum point, further stress and arousal have detrimental effect on performance. Therefore, healthy amounts of eustress are desirable to improve performance by arousing a person to action. It is in the midrange of the curve that the greatest performance benefits from stress are achieved.

© 2013 Global Journals Inc. (US)

c) Job Stress and Employees Health

i. *Physical Health*

Stress also leads to physical disorder, because the internal body system changes to try to cope with stress (Newstrom 2010). "Some physical disorders are short-range, such as an upset stomach. Others are longer-range, such as a stomach ulcer. Stress over a prolonged time also leads to degenerative diseases of the heart, kidneys, blood vessels, and other parts of the body. It can result in angina (severe chest pain) and tension headaches." When stress becomes excessive, employees develop various symptoms of stress that can harm their job performance and health, and even threaten their ability to cope with the environment.

ii *Mental Health*

Work related psychological disorders are among ten leading health disorders and diseases in United States, according to the National Institute for Occupational Safety and Health. The most common types of psychological distress are depression, burnout and psychosomatic disorders. Behavior-related symptoms include changes in productivity, absence, and turnover, as well as changes in eating habits, increasing smoking or consumption of alcohol, rapid speech, fidgeting, and sleep disorders (Croon, Sluiter, Blonk, Broersen, and Frings-Dresen 2004). Individual and organization can buffer the ill effects of stress by enhancing coping strategies. Exercise regularly, eating a healthy diet, and taking time to relax are some ways individual can reduce stress. Organizations, too, can help by establishing a supportive climate, having well-designed jobs, and reducing role conflict and role ambiguity.

III. Research Hypotheses

From the literature review it is seen that, there has been a significant amount of research investigating the stress-performance relationship. Most widely studied pattern in the stress performance literature is the inverted–U relationship. The logic underlying the inverted U is that low moderate levels of stress stimulates the body and increase its ability to react. Individuals than often perform their task better, more intensely, or more rapidly. But too much stress places unattainable demand on a person, which result in lower performance. Therefore, first hypothesis of the study is:

H_1 : Higher job stress result in lower employee performance in commercial bank in Bangladesh.

Previously discussed literature also shows that high level of job stress wear down the individual and saps energy resources (physical, psychological and behavioral damage). Even though moderate levels of stress can have a negative influence on performance over the long term period of time. From these evidences found in the literature, researcher developed the following hypothesis:

H_2 : Higher job stress has negative impact on employee health.

According to the theory developed by Hans Selye (1976) the human body cannot instantly rebuilt its ability to cope with stress once it is depleted. Most the early concern with stress was directed at physiological symptoms lead to the conclusion that stress increase heart and breathing rates, increase blood pressure, bring on headaches, and induce heart attacks. Stress shows itself psychological states- for instance, tension, anxiety, irritability, boredom and procrastination (Robbins 2009).

Job stress, employee performance and employee health in commercial bank in Bangladesh were studied with respect to these constructs. In order to measure the constructs, ten questions are presented.

IV. Methodology

a) Instrument for Data Collection

This study mainly based on primary data originating from a survey. For this purpose a constructed questionnaire was developed. Excepting the questions regarding demographic characteristics of the respondents the issues relating to job stress, employee performance and employee health were investigated through 5 point Brayfield-Rothe Scale (1951) based questions.

A pilot study on 10 respondents was conducted using the draft questionnaire. As the outcome of this phase few initially selected variables were dropped to avoid multicoliniarity problem. As well some rephrasing was done to arrive at final version of questionnaire for this study. Final questionnaire was put into operation by the way of mail and personal survey.

b) Sample

Because of the lack of sampling frame, convenient method of sampling was used. There was no source available for the address of the employees of commercial bank. Therefore, friends, relatives, and other informal reference group were used to locate the potential respondents from commercial bank in Bangladesh. Questionnaires were sent by email and postage mail to 120 employees working in commercial bank in sample organization. Number of initial replies received was 65. After a screening first round replies a second round personal contract conducted by researcher and finally 80 respondents were taken for this study.

c) Analysis of Data

A sample consists of 80 employees working at the executive positions in the sample organization. The data for the present study are obtained by the administration of a questionnaire comprising two parts.

© 2013 Global Journals Inc. (US)

The first part contains columns for personal information and the second one includes 'job stress, employees performance and employees health' scale as constructed and standardized by Brayfield-Rothe Scale (1951). The scale consists of 10 statements concerning Job stress-employee performance and job stress-employee health. For each statement has five options/ points such as strongly agree/ 5, agree/ 4, undecided/ 3, disagree/ 2, and strongly disagree/ 1.Descriptive-statistical technique such as mean and standard deviation were used to measure the mean scores and their variability. One sample t test was used to scores of each statement.

V. Results and Discussion

a) *The Relative Intensity of Stressors Perceived by Employees*

Table 1 represents the relative intensity of stressors perceived by employees.

Table 1 : The Relative intensity of stressors perceived by employees at work

Stress Stressors	Public Commercial Bank			Private Commercial Bank		
	Ranking	$\overline{X}$	σ	Ranking	$\overline{X}$	σ
Long working hour	1	4.42	1.010	1	4.50	.751
Workload	2	4.23	.862	2	4.15	.802
Family Sympathy	3	4.03	.862	5	3.52	1.132
Management Pressure	4	3.65	1.099	4	3.63	1.005
Mental Depression	5	3.55	1.218	7	3.00	1.062
Deadline	6	3.48	1.132	3	3.65	.893
Poor Working Conditions	7	3.23	1.310	10	2.08	1.248
Physiological sickness	8	2.78	1.387	9	2.15	1.122
Role Ambiguity	9	2.50	1.155	8	2.30	1.137
Job Insecurity	10	2.38	1.234	6	3.20	1.305

Source : Field Survey, 2013.

It is found from the table1 that as a whole, the long working hour and workload remain top most stressors of both public and private commercial banks. Family sympathy holds 3rd perceived stressor for public commercial bank and 4th for private commercial bank. Pressure from management remain modest perceived rank both types of commercial banks. Employees of public commercial bank perceive relatively slightly high mental depression than private commercial bank, ranking 5th and 7th respectively. There is relatively low deadline perceived by public commercial banks than private commercial bank, ranking 6th and 3rd respectively. Relatively high poor working condition for public and low perceived stress for private, ranking 7th and 10th issues respectively. Physiological sickness is slightly high for public than private ranking stress 8th and 9th respectively. There slightly high role ambiguity for public than private ranking 8th and 9th relative perceived stressor respectively. However job insecurity remains last stressor for public and 6th issue for private commercial bank.

b) *Perception about Job Stress and Employees Performance*

This section represents and discusses the result of test of hypothesis (H_1). Table 2 shows the perception scores of the respondents on job stress and job performance.

Table 2 : The perceptions scores of the respondents on job stress and job performance

One-Sample Statistics						
Statements	N	$\overline{X}$	σ	t	df	Sig. (2-tailed)
Competitiveness at work	80	4.31	.704	54.766	79	.000
Fast working speed at work	80	4.09	.697	52.447	79	.000
Pressing deadline at work	80	3.58	1.065	30.033	79	.000
Doing Multiple tasks	80	3.76	1.022	32.934	79	.000
Perform better for promotion	80	4.29	.766	50.045	79	.000
Average:	80	4.00	.850	44.047	79	.000

Table 2 summarizes the findings of the statements related to the employee's perception of public and private commercial about relationship on job stress and work performance. From the table, it can be

© 2013 Global Journals Inc. (US)

observed that there is positive relation between job stress and performance of employees of commercial bank in Bangladesh. Above the table summarized five stressful statements, scoring mean is above the middle value (2.5) and there for average value of competitiveness at work, fast working speed at work, pressing deadline at work, doing multiple tasks and perform better for promotion are statistically significant to work performance ($p>.05$). Therefor H_1 hypothesis *"Higher job stress result in lower employee performance in commercial bank in Bangladesh"* is statistically rejected at 5% level of significance.

c) Perception about Job Stress and Employees Health

This section represents and discusses the result of test of hypothesis (H_2) Table 3 shows the perception scores of the respondents on job stress and employees health.

Table 3 : The perceptions scores of the respondents on job stress and employees health

One-Sample Statistics						
Statements	N	$\overline{X}$	σ	t	df	Sig. (2-tailed)
Boringness at work	80	2.90	1.420	18.272	79	.000
Family sickness at work	80	3.34	1.312	22.761	79	.000
Medical expenditure for stress at work	80	2.34	1.201	17.413	79	.000
Feeling tension at work place	80	3.23	1.273	22.666	79	.000
Behavior modification by jobs	80	3.81	1.159	29.412	79	.000
Average:	80	3.124	1.273	22.105	79	.000

Table 3 summarizes the findings of the statements related to the employee's perception of public and private commercial about relationship on job stress and employees health. From the table it can be observed that there is positive relation between job stress and employees health of commercial bank in Bangladesh. Above the table summarized five stressful statements relate to mental and physical health of employees scoring mean is above the middle value (2.5) and there for average value of, boringness at work, family sickness at work, medical expenditure for stress at work, feeling tension at work place and behavior modification by jobs are statistically significant to employees health ($p>.05$). Therefor H_2 hypothesis *"Higher job stress has negative impact on employee health"* is hold good and statistically accepted at 5% level of significance.

VI. Conclusion

The study reveals that employees of commercial banks do stressful jobs due to stressors like long working hour, workload, deadline, management pressure etc. there has been positive relationship observed between stress and employees performance in Bangladesh. It also statistically proved that employees wellbeing psychologically and physically depress if stress prolong over the period of time. Effective job design, healthy working environment, justifiable remuneration should be offered to employees being motivated in competitive jobs like employees of commercial bank in Bangladesh.

This research also open the avenue for further research on various issues relating to job stress, employees performance and physical & mental health of organizational participants. Further research can be carried out to find out what are the factors responsible for positive relationship observe on stress-performance relationship in commercial bank in Bangladesh.

References Références Referencias

1. Cavanaugh, Wendy R. Boswell, Mark V. Roehling, and John W. Boudreau, "An Empirical Examination of Self-Reported Work Stress among U.S. Managers," *Journal of Applied Psychology*, Vol.85, 2000, pp.65-74.
2. Beehr, "The Current Debate about the Meaning of Job Stress" *Journal of Organizational Behavior Management,* Fall/Winter 1986, pp. 5-18.
3. T. A. Beehr and J.E. Newman, "Job Stress, Employee Health, and organizational Effectiveness: A Facet Analysis, Model, and Literature Review," *Personnel Psychology*, Winter, 1978, pp. 665-699.
4. Reported in "HR *Focus*, April 1999, p.4.
5. Jeffery A. Lepine, Nathan P. Podsakoff, and Marcie A. Lepine," A Meta-Analytic Test of The Challenge Stressor –The Hindrance Stressor Framework: An Explanation for Inconsistent Relationship Among Stressors and Performance," *The Academy of Management Journal*, Vol. 48, No.5,2005, pp. 764-775.
6. R. M. Yerkes and J. D. Dodson, "The relation of strength of stimulus to rapidity of habit-formation,"

© 2013 Global Journals Inc. (US)

Journal of Comparative Neurology and Psychology 18 (1908): pp.459-482.

7. Newstrom W.,Organizational Behavior, Twelfth Edition, Tata -McGraw Hill, India, 2010, pp.353.
8. S. Sauter, L. R. Murphy, and J. J. Hurrel, Jr., "Prevention of Work –Related Psychological Distress: A National Strategy Proposed by the National Institute for Occupational Safety and Health." *American Psychologist* 45 (1990): pp. 1146-1158.
9. Yitzhak Fried, and Arie Shiom, "The Effect of Hours of Work on Health," *Journal of Occupational and Organizational Psychology*, Vol.70, 1997, pp. 391-408.
10. S. Zivnuska, C. Kiewitz, W. A. Hochwater, P.L. Perrewe, and K.L. Zellars, '' What is Too Much or Too Little? The Curvilinear Effect of Job Tension on Turnover Intent, Value Attainment, and Job Satisfaction, "*Journal of Applied Social Psychology*, July 2002, pp. 1344-1360.
11. Hans Selye, *The stress of Life*, rev.ed., New York: McGraw-Hill, 1976.

© 2013 Global Journals Inc. (US)

This page is intentionally left blank

© 2013 Global Journals Inc. (US)

Global Journal of Management and Business Research
Economics and Commerce
Volume 13 Issue 4 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Prospect and Potential of Green Jobs towards Green Economy in Bangladesh: A Situation Analysis

By Khalid Md. Bahauddin & Nayma Iftakhar
International University of Business Agriculture and Technology, Bangladesh

Abstract - The prospects and potential of green jobs in Bangladesh are huge. There are many potential sectors such as renewable energy, buildings and construction, tran-sportation, basic industries, agriculture and forestry etc are the priority areas for the future green job market. In 2009, numbers of approximate green jobs were 748,701 while it increased in 2010 which was about 811,268. It is true the green jobs sector is growing in Bangladesh, but there are also challenges that need to be overcome to accelerate growth. This paper tried to investigate the outlook and potential of green jobs in Bangladesh as well as also make recommendation some ideologies, basic principles as well as reform of policy mechanism to promote and develop of green jobs in Bangladesh.

Keywords : green jobs, bangladesh, green economy, policy, principal.

GJMBR-B Classification : JEL Code: J64, J62

Strictly as per the compliance and regulations of:

© 2013. Khalid Md. Bahauddin & Nayma Iftakhar. 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 inany medium, provided the original work is properly cited.

Prospect and Potential of Green Jobs towards Green Economy in Bangladesh: A Situation Analysis

Khalid Md. Bahauddin [α] & Nayma Iftakhar [σ]

Abstract - The prospects and potential of green jobs in Bangladesh are huge. There are many potential sectors such as renewable energy, buildings and construction, transportation, basic industries, agriculture and forestry etc are the priority areas for the future green job market. In 2009, numbers of approximate green jobs were 748,701 while it increased in 2010 which was about 811,268. It is true the green jobs sector is growing in Bangladesh, but there are also challenges that need to be overcome to accelerate growth. This paper tried to investigate the outlook and potential of green jobs in Bangladesh as well as also make recommendation some ideologies, basic principles as well as reform of policy mechanism to promote and develop of green jobs in Bangladesh.

Keywords : green jobs, bangladesh, green economy, policy, principal.

I. Introduction

Bangladesh is a low energy-consuming though energy starved country. About 60% of the population is not connected to the national grid. A large majority of the 40% that do have access to the national grid live in urban areas. Although Bangladesh has made impressive gains in key human development indicators, more than 63 million people remain below the poverty line. Under employment is pervasive, unemployment levels high amongst the youth, and the informal economy estimated to account for 88% of the overall employment. The Gender Empowerment Measure ranking of 76 shows continued low levels of female ownership of economic assets. To overcome this situation, green jobs can play an additional vital role to achieve green economy as there are many potential sectors in Bangladesh which can generate green jobs. In Bangladesh, green jobs create opportunities for employment for the poor in the renewable energy sector such as solar home systems and bio-gas. Other green jobs could be created in organic, plastic waste and lead acid battery recycling, or by construction projects – such as digging rivers and canals, constructing water reservoirs and building roads. It is true the green jobs sector is growing in Bangladesh, but there are also challenges that need to be overcome to accelerate growth. So to conquer the challenges, some ideologies and basic principles as well as reform of policy must be taken to develop and promote the green jobs in Bangladesh.

Author α : Bangladesh Society of Environmental Scientists, Bangladesh. E-mail : khalid.bahauddin@gmail.com
Author σ : International University of Business Agriculture and Technology, Bangladesh.

II. Concept of Green Jobs

The concept of green job is a new one. "Green jobs" does not lend itself to a tight definition but certainly includes direct employment that contributes to the reduction of environmental impact to levels that are ultimately sustainable. This includes jobs that help to reduce the consumption of energy and raw materials, decarbonizes the economy, protect and restore ecosystem and biodiversity and minimize the production of waste and pollution. Thus green job aims to preserve the environment for both present and future generations and to be more equitable and inclusive of all people and all countries.

a) Environmental Dimension of Green Jobs

For a modern economy, even in the least developed countries, a complete mapping of links between the environment and economy is a major challenge given the many positive and negative feedback loops that would need to be examined.

The range of green job profiles thus defined is broad. It stretches from highly skilled research and development or management functions through technical and skilled levels to relatively low-skilled roles. In developed economies, environment related jobs tend to be concentrated in sectors/activities directly linked to decarbonizing energy supply and improving energy efficiency, pollution control and eco-friendly services. Examples of those sectors that hold the promise of the green jobs of the future include:

- Delivering improvements in energy and resource efficiency, particularly in the building sector (new and existing built stock), but also industry and transport;
- Renewable energy (including bio-fuels and renewable technologies);
- Sustainable mobility (i.e. mass transportation);
- Waste management and recycling of raw materials;
- Eco-industries related to pollution control (air, water, waste, site decontamination, noise); and "eco-friendly" services (conservation, ecotourism, etc.).

© 2013 Global Journals Inc. (US)

In developing economies other sectors may be at least as important, in particular:

- Those involving the sustainable use of natural resources, including agriculture, forestry and fisheries; and
- Activities relating to adaptation to climate change.

b) Social Dimension of Green Jobs (the "Decent Work" Criterion)

The green job definition used here encompasses more than just the extent to which a particular job contributes to a more environmentally sustainable economy. It also captures a measure of job quality. Effectively, a job may be associated with an economic activity that is more environmentally sustainable than the norm or which contributes to such improvement in other sectors, but it cannot be considered a "green job" if it does not meet conditions of decent work.

The decent work definition is built upon a set of social and labor rights and obligations. The eight basic conventions of the ILO, which are recognized as defining the various aspects of socially responsible production, also apply to green jobs.11 Indicators and criteria have been developed and endorsed at the international level through adoption of the ILO labor standards which are relevant to the further characterization of the social and labor dimension of green jobs (see box 1). Many jobs would not be considered decent. This is due to a number of factors. The so-called "green sectors" in developing countries include sectors where achieving decent work conditions remain a challenge. Examples of "green but not decent jobs" include low-wage jobs installing solar panels, and jobs in ship breaking or electronic waste recycling where occupational safety is inadequate or child labor is used. In many instances, these sectors are defined by their informal nature, hardship and occupational and health hazards.

Box 1: the ILO definition of Decent Work

Decent work has been defined by ILO representatives of governments and employers' and workers' organizations in over 180 countries as: "opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity, in which women and men have access on equal terms". Decent work combines adequate income from productive work with social security, respect for worker and social rights and the opportunity to voice and defend interests collectively.

Decent work is relative and country-specific because countries differ socially and economically. None can aim for the same absolute conditions of work. Each country must set its own targets for decent work.

The following integrated agenda of policies and measures across four mutually reinforcing areas is required to achieve decent work goals:

1. Respect for and protection of basic human rights at work
2. Promotion and creation of opportunities for full productive and remunerative employment
3. Broad social protection
4. Sustained social dialogue among social partners: workers, employers and private business, and government.

A universal social "floor" applies to all countries, and includes respect for the following basic human rights:

- Freedom of association and the effective recognition of collective bargaining rights
- Elimination of all forms of forced or compulsory labour
- Effective abolition of child labour and the right of children to learn and develop rather than work
- Elimination of discrimination in respect of employment and occupation.

Gaps between people's decent work aspirations and reality exist everywhere. The challenge is to reduce these gaps. Progress towards decent work should be the central goal of all economic and social policies and strategies.

© 2013 Global Journals Inc. (US)

III. The Environmental Agenda and Green Jobs in Developing Countries

International debate on global environmental issues has evolved over the last two decades since the adoption of the 1992 Rio Conventions on desertification, climate change and biodiversity. 36 more favorable conditions are being created for the development of an enlarged "environmental economy", and the emergence of new economic sectors and services. In response, demand for jobs with new qualifications and skills has increased and other jobs have evolved. The green jobs concept highlights labour market shifts that are directly dependent on various aspects of environmental management and low carbon development, as well as climate change adaptation in accordance with the definition given by the United Nations Framework Convention on Climate Change (UNFCCC).

A growing literature suggests that millions of green jobs already exist. The economic restructuring due to green growth will lead to changes in prices, in international trade and in the output of countries, and therefore in employment. These effects have been the subject of a number of studies seeking to quantify the net employment effects. Results show that net effects on jobs are modest but the economic structural shift can be quite substantial. Essentially, the number and nature of jobs will change as the relative importance of sectors changes, with some expanding, others contracting, and others remaining stable but with changes in processes and products. But this transition has been documented mostly in industrialized countries.

Research on developing countries is comparatively scarce. Alongside the growing need to assess the contribution of these sectors and activities to national economies, methodologies and analytical tools that integrate the complex interactions between the socio-economic and environmental fields are also required. Indeed, there is demand for a comprehensive analytical framework that can better assist policy-making in this fast-evolving field, including in developing countries.

Green growth can create new and additional employment demand. This is the case, for example, when jobs in renewable energy replace those depending on fossil fuels, or when new jobs are created by expenditure on adaptation activities.

In developing countries, which tend to have unutilized or underutilized labour, this provides opportunities to raise total employment.

IV. Country Level Support of the Green Jobs Programme

The number of countries the Green Jobs Programme is actively collaborating with increased over the past years and the areas of work cover a great variety of issues. The map below displays the current and expected country level support of the Green Jobs Programme.

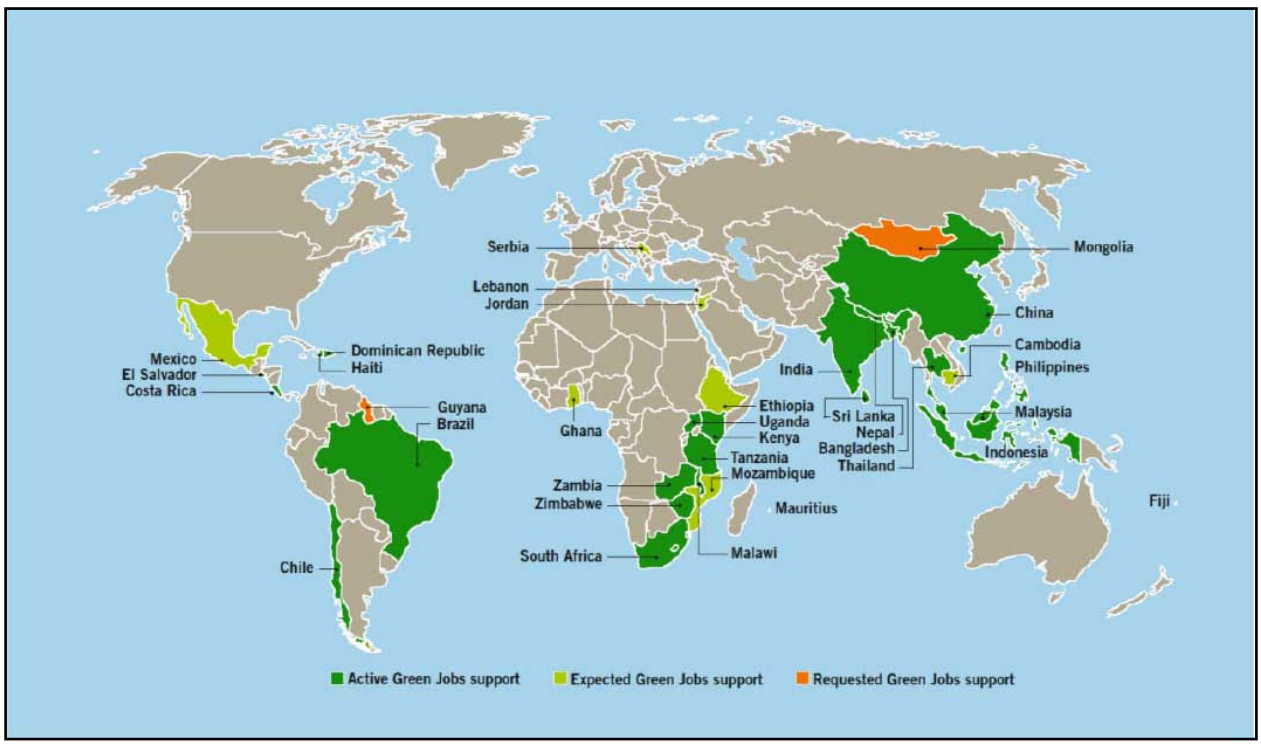


Figure 1 : Current and expected country level support of the Green Jobs Programme

© 2013 Global Journals Inc. (US)

The Programme contributes to the establishment of green jobs and greener economies, among others, in the following sectors: construction and green buildings, tourism, renewable energy and energy efficiency, forestry, natural resource management, recycling and waste management and sustainable agriculture. It supports national initiatives through advocacy workshop and capacity building, assessments on green jobs potential, policy advice and strategic planning. It also supports local initiatives by promoting green entrepreneurship, the greening of enterprises and local development for adaptation to climate change.

The regional activities in Africa focus mainly on strengthening green entrepreneurship. In South Africa several studies and projects focus on the building and construction sector. The Asia and the Pacific Green Jobs Programme encourages ILO constituents to participate in social dialogue on green jobs through capacity building, promotes inclusive jobs centred and environmentally sustainable growth models and advocates for green jobs creation through demonstration projects. In 2010, two projects were initiated by the regional Programme, the Green Jobs in Asia project funded by the Australian government and the Green Business Asia funded by the Japanese government. Green Jobs Programme activities in the Arab States are at the initial stages. In Lebanon, an assessment on the green jobs potential was conducted and a Green Jobs Kick-Off Workshop was held in Beirut from 28 to 29 July. In Latin America and the Caribbean, the main focus is on waste management, renewable energy, tourism, forestry, sustainable agriculture and green social housing. Haiti receives support in the area of adaptation to climate change.

V. Green Jobs Initiatives and Implementation in Bangladesh

Bangladesh is a low energy-consuming though energy starved country. About 60% of the population is not connected to the national grid. A large majority of the 40% that do have access to the national grid live in urban areas. Although Bangladesh has made impressive gains in key human development indicators, more than 63 million people remain below the poverty line. Under employment is pervasive, unemployment levels high amongst the youth, and the informal economy estimated to account for 88% of the overall employment. The Gender Empowerment Measure ranking of 76 shows continued low levels of female ownership of economic assets.

In July 2008, a national workshop on Green Jobs Initiatives (jointly organized by Ministry of Labour and Employment, Bangladesh and ILO) was held in Dhaka to raise awareness of the concept of Green Jobs and recommend steps forward. Participants at the workshop expressed support for Bangladesh as a participating country on ILO Green Jobs initiatives, noting that as a first step, there was a need to undertake an inventory of existing green jobs. A formal launching of the green jobs initiative was held on 04 December 2008, in which it was agreed, among others, that:

- A draft action plan on green jobs would be formulated following a series of regional level consultations;
- An inventory on green jobs on "who is doing what" needs to be carried out which would support the draft action plan, and other policy interventions.

As a follow up to the initiatives mentioned above, the ILO, in consultation with the Ministry of Labour and Employment has launched two assessment studies in selected sectors: one assessment would focus on three sectors viz. waste management, renewable energy and construction; the other study would focus on agriculture sector including forestry. The agriculture sector assessment on green jobs would include both an inventory and assessment of the intensive green technologies which are currently on going or are being planned in the future and those have an impact on poverty reduction, employment creation, sustainable environment and decent work.

Since 2008, the Green Jobs Programme has implemented activities in Bangladesh (first phase: 2008 to 2010). Various awareness raising activities on green jobs took place at national and regional levels. They helped to improve the effective implementation and enforcement of green jobs in the country. Baseline knowledge on green jobs was generated through a national assessment and complemented by sector based analysis and by a separate study on skills needs for green jobs.

Training in renewable energy (i.e. solar home systems) and soft skills (i.e. entrepreneurship capacity development) were provided to equip the project target groups (mostly women in rural areas) with adequate techniques and skills for employment opportunities. The training was provided through a Public Private Partnership (PPP) with Grameen Shakti (a non-profit company) and the Bureau for Manpower Employment and Training (BMET). The promotion of green jobs in Bangladesh provides employment opportunities through training on solar techniques and facilitates a low-carbon development by promoting renewable energy.

The lessons learned from the first phase have been successfully integrated into the Green Jobs in Asia project, under the ILO – Australian Partnership (2010 – 2015). The Private-Public Partnership will be expanded to cover a larger market scope, not only including Grameen Shakti, BMET but also the Infrastructure Development Company Limited (IDCOL).

VI. Potential Sectors for Green Jobs in Bangladesh

Table 1 showing the potential sectors for green jobs in Bangladesh.

© 2013 Global Journals Inc. (US)

Table 1 : Potential sectors for green jobs in Bangladesh
Sector Scope/Field of Green Jobs

Sector	Scope/Field of Green Jobs
Agriculture	• Soil conservation • Water efficiency in Irrigation • Organic farming (tea cultivation already started in Bangladesh) • Reducing distance between farm and market
Forestry	• Reforestation and afforestation • Sustainable forestry management by community • Halting of deforestation
Energy	• Renewable Energy (solar, biogas, improved stove, biomass) • Manufacturing of energy efficient appliances such as CFL, efficient air conditions etc.
Transport	• Fuel switching in vehicles (petrol, diesel to CNG) • Use of hybrid or fuel efficient vehicles • Mass transit • Bus rapid transit (BRT)- modal shift, • Car Pooling
Construction	• Cement factory (energy efficiency) • Brick Manufacturing (energy efficiency) • Concrete Blocks • Green Building/Energy efficient Buildings
Manufacturing	• Pollution control technologies such as ETP • Energy and materials efficiency
Waste Management	• Recycling of municipal organic and inorganic waste (composting, biogas, biogas to energy, RDF etc, plastic waste recycling) • Recycling of lead acid battery • Extended producer responsibility (product take back and remanufacturing)

VII. Sector Wise Distribution of Green Jobs in Bangladesh

There were two study conducted on number of green employments held in different sectors of Bangladesh which showing in Table 2 and Table 3.

Table 2 : Sector wise distribution of green jobs estimated by Waste Concern, 2009

Sector	Green Jobs (Numbers)
Agriculture and Forestry	8725
Transportation	147987
Manufacturing (energy Efficiency, Brick Kilns)	11,081
Renewable Energy	14966
Waste Recycling (compost, production, sales and distribution)	29942
Building Construction	536,000
Total	**748,701**

Table 3 : Sector wise distribution of green jobs estimated by GHK Consultants for ILO, 2010

Sector	Core Environment Related Jobs	Green Jobs
Sustainable agriculture	41,548	Not possible to estimate
Sustainable and participatory forestry	28,813	Not possible to estimate

© 2013 Global Journals Inc. (US)

Sustainable energy	18,823	18,823
Waste management and recycling	189,180	Not possible to estimate
Collection purification and distribution of water	8,441	Not possible to estimate
Climate adaptation activities	1,726,755	Not possible to estimate
Manufacturing and energy efficiency	10,934	10,934
Sustainable transportation	178,510	178,510
Sustainable construction	1,340,000	536,000 – 670,000
Total	3,543,004	811,268

VIII. Constraints and Challenges of Green Jobs in Bangladesh

It is true the green jobs sector is growing in Bangladesh, but there are also challenges that need to be overcome to accelerate growth. The burning constraints and challenges of green jobs in Bangladesh perspectives are following

- Lack of awareness and capacity building to understand the concept of Green Jobs
- Insufficient incentives & promotional measures.
- Inadequate research and development initiatives; and
- Insufficient Public Private Partnerships.

IX. Suggestion towards Promoting Green Jobs in Bangladesh

a) Basic Principles for the Promotion of Green Employment

Green employment directly leads to increases in productivity and efficiency, helps to promote faster income growth for workers and increases the amounts of income distributed across workers. The promotion of various environmental protection measures lead to an ever-expanding green industry chain with numerous direct and indirect employment opportunities which have the potential to offset the numbers of jobs lost in conventional industries. The newly created jobs would be safer, more economical and stable. Policies in human resources, therefore, have no option but to follow the trend of green development and effectively promote green employment.

i. *Promotion of Green Employment through Classification*

Different kinds of ideas and principles must be used to promote different types of green jobs, as they cannot be generalized nor standardized. For green jobs born out of demand, the government should follow market mechanisms, eliminating factors which might obstruct the proper functioning of the market and try to provide more and better employment services. For the government directed type of green jobs, policy interference needs to occur to design specific employment promotion policies.

ii. *Industrial/ Sectoral, Environmental and Employment Policies are Equally Important and should be Considered Concurrently*

Economic development, environmental protection and employment promotion are all bring about improvements to people's lives, all three equally important. The economy cannot be developed by ignoring the environment or employment, nor could the environment be well protected by limiting economic growth and job creation or a development model be created without employment growth be adopted.

Policy should provide leverage for integrated support, coordinating the promotion of industrial/ sectoral structure optimization, the environment's continuous improvement, job increases and improvement to job quality. All these mean that, under the premise that employment goals are given full consideration, we should encourage industries/sectors in the environmental sector to promote the transformation of traditional industries towards more sustainable production and gradually improve environmental standards.

The key to realizing the coordinated development of the three dimensions outlined above is to have synchronized policy making, i.e. when deciding on industrial/sectoral policy and planning, there should be simultaneous drafting of employment policies and plans; when drafting employment policies and plans, the effects on economic development and the environment must be taken into account.

iii. *Policies that Promote Green Employment Require Further Scrutiny of the Concept of Green Employment*

Further scrutiny of the green job concept is required before green policy is promoted because: some green jobs do not offer decent employment; some green jobs are good for the environment but do not promote low carbon employment, some low carbon jobs are work against environmental protection, such as the growing of biomass energy crops using of fertilizer that generates pollution; some green jobs do not meet the need for industrial development, such as photovoltaic power plants and PV power generation equipment manufacturing where over capacity is pervasive; some green jobs do not meet the characteristics of resource endowments.

© 2013 Global Journals Inc. (US)

Therefore, green job development should not solely involve promotion without policy constraint and control. When the government is drafting green employment promotion policies, it must take into account Bangladesh's unique position and identify the areas and levels of intervention for green employment.

iv. *Industry-Specific Green Job Promotion Policies*

Green jobs exist in all different industries, sectors and levels and impact all kinds of workers, varying widely across different industries. Therefore, under the general guiding ideology and principles, industry/sector-specific survey and research must be conducted, and industry/sector specific green employment promotion policies must be devised.

v. *Policy Suggestions for the Promotion of Green Employment*

Setting green employment promotion policies is the greening of a more active employment policy system. On the one hand the "green" concept must be implanted into the policy system. Accelerating economic growth and expanding employment are still the government's most urgent tasks. In this scenario, the green employment promotion must give proper consideration to the following issues: firstly, green employment promotion should not cause great employment fluctuation, with respective employment plans well designed. Secondly, when it is difficult to fully transfer surplus agricultural labour to meet job demand, the government should support the greening of labour intensive employment in the agricultural. Thirdly, like other policies, green job promotion should focus on non-public sectors, including individual, privately-owned, and village and township enterprises etc. On one hand, these enterprises generate the majority of jobs, and on the other hand, the greening potential is quite considerable. Fourthly, flexible employment is still the key channel for job creation and green employment promotion must not strangle this employment channel.

In accordance with the research findings, the following policy suggestions are made:

vi. *Ensure Green Employment is Developed through Legal Channels*

- *Conduct an Employment Evaluation of Industrial/ Sectoral and Environmental Policies*

First of all, employment must be the centre of a social evaluation index system set up for environmental protection.

In industrial and environmental planning, employment evaluation indexes must use scientific methods, including the number of new jobs a project could possibly create, the number of lost jobs brought about by the project's existence, the impact on the local human resource supply-demand position, the impact on local income levels and the identification of potential human resources for the project, etc.

Secondly, designing of employment evaluation indexes should be followed by employment planning. This means the design of policies and measures to address the project's impacts on employment. If job losses are likely, plans must be made to counteract unemployment; if there are additional human resource needs, a supply plan must be devised. At the crux of such planning is the provision of adequate financial resources to address the project impacts.

Thirdly, employment evaluation indexes and plans should be accompanied by employment budgeting, i.e. the cost benefit t of the project on employment including accounting for the cost of employment and funding.

Lastly, project evaluation should be conducted. The impacts on employment of evaluation of the industrial and environmental policies should a pre-condition for project approval.

- *Modify and Improve Relevant Laws and Industrial and Environmental Policy*

Firstly, clear goals for green employment must be raised during the process of drafting any plan or policy. Ultimately, targets for employment and environmental protection must be clearly stated so to ensure the development of green employment in Bangladesh for future. Secondly respective laws and regulations should be modified.

vii. *Policy Measures for Promoting Green Employment*

- *Green HR Market Mechanisms to Promote Green Employment*

A green employment certification system should be set up to promote green employment. Companies or organizations in green industries and green companies in non-green industries could be acknowledged with the title of 'Green Employer', a reference for receiving related policy support. For example, Green Employers could qualify to join suppliers on the government's green procurement list.

A professional green job certification system could be set up to promote workers' transformation towards "green collar" jobs. Improvements to the professional certification system, setting up standards for green jobs and encouraging workers to take part in certification will help to get more people to join the ranks of green employment.

The third point concerns the public employment service system. A green job service zone should be set up in public employment service agencies, in order to collect and advertise green job information and promote matching between demand and supply for green jobs. The labour and social security community platform should be used so that green job information can reach every worker.

© 2013 Global Journals Inc. (US)

viii. *The Greening of Existing Employment Policy to Promote Green Employment*

Jobs in those industries which were affected for institutional reasons and due to the State's industrial policies and as such they should be provided with support on employment policies, including those that promote job stabilization and employment.

The first is to encourage companies to expand employment. Policy leverages such as tax benefits, social insurance subsidies, guaranteed loans and interest subsidies should be used to encourage employment of those affected in the transformation towards green economy. Policy supports such as tax benefits should be provided to those companies that use multiple channels to relocate their own affected workers by the use of their existing facilities, sites and technology for diversification.

The second is to help companies overcome difficulties to create as many jobs as possible. Preferential treatments such as delaying payment of social insurances, reducing social insurance rates, and providing social insurance subsidies, job subsidies, and worker training subsidies, should be given to those companies who are in the transformation towards green production and have the potential to absorb surplus workers, so that they could maintain stable employment, and eliminate or minimize redundancy.

The third is to encourage self-employed entrepreneurs. Entrepreneurship should be encouraged by providing free training, set tax relief and loan credit. Administrative fees and taxes could be reduced or waived for those starting their own businesses such as in small industry and privately owned businesses.

The fourth is to promote reemployment through public employment services and reemployment training. The government's public employment agencies should provide free employment services to people looking to be reemployed. Employees from the sunset industries should be retrained with a focus on the industries that are transforming their resource use, making it easier for those out of work to be reemployed in industries where there is growing demand.

The fifth is to provide employment support for those in financial difficulties. The government could create volunteer or charitable positions which have social security subsidies and job subsidies, which are open to those who are experiencing difficulty in finding reemployment. The government could provide social security subsidies to those who are expected to find reemployment relatively easily and coordinate placements for those that are finding it difficult to become reemployed.

ix. *Develop Green Job through Policy Support*

Some green jobs very competitive and will develop strongly without additional policy support. Environmental equipment, cleansing products and organic food are examples of such industries. However, generally speaking, green employment is an emerging phenomenon which still needs to rely on the quick set up of supportive policy. This does not necessarily refer to big investment but offers enormous potential for employment.

For example, some cities piloted waste collection and recycling stations which could not compete with private recycling operators. To build their size, jobs in waste recycling were created in communities to build up a network, using subsidies or social welfare subsidies in the early phases of growth. When green employment develops into a formal industry, it will be able to operate free from government intervention.

x. *Develop Green Employment in the Process of Rural Development and Building the West*

There is broad potential for green employment in rural areas. Agriculture is the foundation of the Bangladesh economy. Building the ecological environment is the basis of Bangladesh national policy and the rural economy is a miniature national economy.

The first is in developing employment in eco-agriculture. Eco-agriculture combines labour with green knowledge to produce energy saving green food.

The second is in developing employment in specialized agriculture. Specialized agriculture based on market and regional advantages will be the development direction for modern agriculture. This would lead to the creation of groups of specialized households and villages, also helping to increase farmers' incomes. The third is developing employment in processing the products of specialized agriculture. This processing combines agriculture, industry and commerce, lead by an enterprise or farmer's cooperative linking farmers and the processing industry in an operational chain. The fourth is developing rural eco-tourism, which could achieve significant growth in production, revenue and employment. The fifth is developing new energy industries. Energy consumption in rural areas is undergoing a fast increase. The development of biomass energy, straw manure biogas etc, not only helps to meet countryside energy demand, but also are important areas for green employment. The sixth is to drive up demand for rural public services and create green public service positions on the basis of developing the rural economy.

xi. *Drive Employment Growth by Supporting the Development of Green Jobs in Small Business*

Small business has always played a key role in creating and absorbing employment and this is also true for green employment. Green Employer Certificates should be given out to small enterprises classified as green-jobs employers so that businesses can enjoy preferential policies. Founders of new small green businesses should be provided with micro loans; have their industrial and commercial registrations simplified. A

© 2013 Global Journals Inc. (US)

policy to support the promotion of green technology should be made to drive the implementation and popularization of green scientific research results, and to promote green collar entrepreneurship.

xii. *Develop A Green Skills Development Plan for the Promotion of Green Employment*

Skills development is the key in the transformation towards green employment. All existing training should be greened, such as practical skills training in agriculture and skills training for transforming rural employment. Green skills should be incorporated into all these training programs. A new skills development plan should also be drawn up.

xiii. *Plan for Technical and Technological Enhancement for Green Industry*

This refers to drawing up and implementing a plan for the technical and technological enhancement of China's green industry, improving workers' overall green skills levels and supplying the necessary human resources for green development.

To achieve this, industry-specific outlines for green technology and skills and human resource planning must be drawn up. For new technologies and skills, industries and universities can work together to establish the most suitable training methods.

- *Greening Existing Corporate Training*

Greening of existing corporate training includes topics such as green entrepreneurial philosophies, green industrial skills and green entrepreneurship etc.

- *Developing Green Job Qualifications and Skills Appraisals*

Green-collar assessment and evaluation should be developed according to green job standards so to gradually develop green job practitioner qualifications and green skills appraisals.

- *Setting up A Green Skill Development System for all Workers*

As green jobs exist in every industry and involve all kinds of workers, green skills development should extend to all workers. All kinds of channels such as vocational schools, community training centers, public sector employment agencies and companies should be used to spread the concept of green employment and green skills so that the next generation of workers are aware of green jobs; to provide green return-to-work training for the unemployed; offer up-skilling and re-training for workers in struggling companies; provide green vocational skills training for migrant workers; provide free green vocational training for demobilized soldiers; provide green entrepreneurial training for university graduates and those wanting to start their own businesses; and hold green vocational training as part of skills development for existing workers. Policies offering subsidized training could be used to encourage the scope of training. Extensions to the duration of training courses as well as improvements to training focus and effectiveness could also be made.

xiv. *Working with Social Partners to Promote Green Employment*

Mutual understanding must be reached between the government, employers and workers. Employers must take on the social responsibility for green development, aligning green employment with economic benefits.

xv. *Improving Publicity and Creating an Atmosphere for the Development of Green Employment*

Different methods can be employed to promote an atmosphere where green employment is well understood, respected and developed. Awareness raising can be achieved through increasing publicity for green employment and important green projects and events, as well as road shows, activities to collect suggestions from workers, releasing news of innovative or energy efficient practices, hosting environmental knowledge contests and issuing awards to selected groups and individuals in recognition of their contribution to green employment.

xvi. *Improving the Environment for Promoting Green Development*

- *Improving Environmental Standards*

Development of the environmental standards system (industries either lacking standards or with standards partially complete) must be sped up and able to be met by the majority of businesses. The government should give thorough consideration to the position of the country when setting up the standards: firstly allowing companies to comply step by step and secondly, using funding or policy support to make it feasible for companies to implement the standards. Full consideration must be giving to the impact on society and in particular, the impact on employment when implementing environmental standards.

- *Incentives and Punitive Measures to Encourage the Sustainable Development of Enterprise*

Refusing to fulfill environmental responsibilities equates to externalizing responsibilities for the environmental and social costs of doing business. Firstly, promoting a company's transformation towards green development requires incentives, putting green technology and its users in an advantageous market position such as increasing government subsidies on environmental products and services that will not or do not yet generate financial returns. Secondly, law enforcement must be improved. Some enterprises are generally able to follow national environmental policies, while some small private enterprises aren't able to strictly follow the national standards. Rectification of environmental practices and environmental law enforcement should be strengthened for those enterprises.

© 2013 Global Journals Inc. (US)

- *Improving the Finance Mechanisms for Green Development*

The development, utilization and popularization of environmental technologies are critical in promoting transformation toward a green economy, and the key for the adapting environmental technology is funding. Financing facilities must be continuously improved, including the imposition of resource, environment and carbon taxes etc, to generate funding for green economic development and green job creation. International support in terms of technology and funding should also be sought.

X. Conclusion

The prospects and potential of green jobs in the country are huge. There are many potential sectors such as renewable energy, buildings and construction, transportation, basic industries, agriculture and forestry will be the priority areas for the future green job market. According to an ILO study, around 2.8 million people are currently involved in green or environmental jobs. The global environmental job market is projected to be doubled every year from $1,370 billion at present to $2,740 billion by 2020. More than two million people have, in recent years, found new jobs in the renewable energy sector, and the potential for job growth is huge. Being a new concept in Bangladesh, green jobs need not only be defined in our country's context but it also needs to identify the areas and sectors where green jobs can be promoted and the specific measures to be adopted. In this perspective, it is high time for Bangladesh to explore the alternative areas of cooperation in creating job opportunities.

References Références Referencias

1. Apollo Alliance. 2008. Green-Collar Jobs in America's Cities, United States.
2. Anker, R. et al. 2002. Measuring decent work with statistical indicators, Working Paper No. 2, Policy Integration Department, Statistical Development and Analysis Group (Geneva, ILO).
3. BBS (Bangladesh Bureau of Statistics). 2005. Yearbook of Agricultural Statistics of Bangladesh. Pp 186. Ministry of Planning Govt. of Bangladesh.
4. Briggs C., et al. 2007. Going with the Grain? Skills and Sustainable Business Development: Project Report, Workplace Research Centre, University of Sydney, Australia.
5. Connection Research. 2009. Who are the Green Collar Workers?, Department of Environment and Climate Change NSW and the Environment Institute of Australia and New Zealand, Australia, available at: www.eianz.org/sb/modules/news/attachments/-71/Greenper cent20Collarper cent20Workerper cent20reportper cent20Final.pdf, accessed 26 October 2009.
6. Esty, Daniel C., & Winston, Andrew S. 2009. Green to gold: How smart companies are using environmental strategy to innovate, create value, and build competitive advantage. Hoboken, NJ: John Wiley and Sons.
7. GED (General Economics Division). 2008. Moving Ahead- National Strategy for Acceleration Poverty Reduction II (FY 2009-11) Planning Commission, Govt. of Bangladesh.
8. Green Jobs: Towards decent work in a sustainable, low-carbon world. Source http:/www.ilo.org/ global/ About_the ILO/Mainpillars/what is Decentwork/ index.htm.
9. ILO. (International Labour Organization). 2008. Global Challenges for Sustainable Development: Strategies for green jobs in ILO Background Note of G8 Labour and Employment Ministers Conference, Niigata, Japan, 11-13 May 2008.
10. ILO. (International Labour Organization). 2009. Green Job Assessment In Agriculture And Forestry Sector Of Bangladesh, P 37-38.
11. ILO. (International Labour Organization). 2011. Assessing green jobs potential in developing countries: A practitioner's guide, P 5-13.
12. Institute of Labor Studies, Ministry of Human Resources and Social Security .2010. Study on Green Employment in China, P 63-72.
13. Islam, M S, M S Khan, R Sen, K M Hossain, S Noor and M S Islam. 2008. Effect of Grameen Shakti Jaibo sar on the yield and yield component of tomato. Bangladesh J. Agric. and Enviro. 4(2): 1-9.
14. Jones, Van. 2008. The green collar economy: How one solution can fix our two biggest problems. New York: HarperCollins Publishers.
15. Kammen D., K. Kapadia, and M. Fripp. 2004. "Putting Renewables to Work: How many Jobs can the Clean Energy Industry Generate?", Energy Resources Group, Goldman School of Public Policy, University of California, Berkley.
16. Mujeri, M. J. 2004. Bangladesh decent work statistical indicators: A fact-finding study (Dhaka, ILO).
17. OECD. 2004. Environment and Employment: An Assessment, Working Party on National Environmental Policy, Environment Policy Committee, May 2004, OECD, Paris.
18. Pollin, R. and J. Wicks-Lim. 2008. Job Opportunities for the Green Economy: a State-by-State Picture of Occupations that Gain from Green Investments, Political Economy Research Institute, University of Massachusetts, Amherst.
19. Ong, Paul M., & Patraporn, Rita Varisa. 2006. The economic development potential of the green sector. Retrieved June 2, 2013, from http://-repositories.cdlib.org/lewis/pb/Policy_Brief_06-06/.

© 2013 Global Journals Inc. (US)

20. UNEP. 2008. Green Jobs – Towards Decent Work in a Sustainable, Low-Carbon World, report produced by Worldwatch Institute and commissioned by UNEP, ILO, IOE, ITUC, Nairobi.
21. Waste Concern. 2011. Options for Green Jobs in Bangladesh: Overview of Sectors, P 9-13.

© 2013 Global Journals Inc. (US)

This page is intentionally left blank

© 2013 Global Journals Inc. (US)

Global Journal of Management and Business Research
Economics and Commerce
Volume 13 Issue 4 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Political, Economic, and Social Transformations in Post-Soviet Belarus, 1990-2012: A Research Brief and Overview

By Jonathan H. Westover
Utah Valley University, Utah, USA

Abstract - With the economic collapse of the former Soviet Union, Belarus was faced with new political and economic realities. In the two decades since, these new realities have also impacted other aspects on Belarusian's day-to-day lives, including their societal values and attitudes. Utilizing primary data collected from in-depth interviews, focus groups, and participant observation, along with secondary data analysis of multiple waves of the World Values Survey, this research brief and overview proposes a research agenda to examine and explore the political, economic, and social transformations in post-Soviet Belarus from 1990-2012 and these impacts on societal and work values and attitudes.

GJMBR-B Classification : JEL Code: P16, Z13

POLITICALECONOMICANDSOCIALTRANSFORMATIONSINPOST-SOVIETBELARUS1990-2012ARESEARCHBRIEFANDOVERVIEW

Strictly as per the compliance and regulations of:

© 2013. Jonathan H. Westover. 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 inany medium, provided the original work is properly cited.

Political, Economic, and Social Transformations in Post-Soviet Belarus, 1990-2012: A Research Brief and Overview

Jonathan H. Westover

Abstract - With the economic collapse of the former Soviet Union, Belarus was faced with new political and economic realities. In the two decades since, these new realities have also impacted other aspects on Belarusian's day-to-day lives, including their societal values and attitudes. Utilizing primary data collected from in-depth interviews, focus groups, and participant observation, along with secondary data analysis of multiple waves of the World Values Survey, this research brief and overview proposes a research agenda to examine and explore the political, economic, and social transformations in post-Soviet Belarus from 1990-2012 and these impacts on societal and work values and attitudes.

I. Introduction to Research Scope and Objectives

With the collapse of the former Soviet Union, Belarus was faced with new political and economic realities. In the two decades since, these new realities have also impacted other aspects on Belarusian's day-to-day lives, including their societal values and attitudes. Additionally, it has been argued that the economic collapse of the former Soviet Union and the transformation of political and economic systems in post-Soviet Belarus resulted in a decline in the material circumstances of households, reduced social integration and social cohesion, and a decline in the ability of people to take control over their own lives (Muradyan 2011; Abbott and Wallace 2010). Furthermore, previous research has shown that labor management practices in Belarus are more negative for workers than those under the Soviet system (Danilovich and Croucher, 2011).

Building upon these and other studies, this research will utilize:(1) the results of in-depth interviews with key government, industry, and higher education stakeholders, (2) the results of multiple industry employee and higher education student focus groups, (3) participant observation, and (4) descriptive attitudinal data from multiple waves of the World Values Survey to examine and explore the political and economic structural country contextual factors impacting the labor transformation in the country, with a focus on changing societal and work attitudes and values in post-Soviet Belarus from 1990-2012[1].

Author : Ph.D., Utah Valley University, Orem, Utah, USA.
E-mail : Jonathan.westover@uvu.edu

II. Brief Overview to Belarus Political, Economic, and Labor Management Transformations

Many scholars have pointed to the extensive disrupting economic and social changes that followed the collapse of communism in the USSR in 1991 (e.g., Burawoy 2001; Sztompka 2002; Abbott and Wallace 2009; Shevchenko 2009). Furthermore, Rotman and Veremeeva (2011) examined these impacts among post-Soviet countries and argue that "Belarus's location in the geographical heart of Europe places the country in a strategically important position between Russia and the European Union (EU)" (p. 73). Despite its central geographic location and cultural and political history and current economic ties with its neighbors, to this point Belarus has largely been an understudied country, particularly within the context of the shifting political and economic landscape following the Soviet collapse.

Abbott and Wallace (2010) examined the economic collapse of the former Soviet Union on the lives of Belarusian citizens and found that a majority of the population have a poor quality of life and good reason to be dissatisfied with their lives. More specifically, they found that the collapse has not only resulted in a decline in economic security of households but also on social integration, social cohesion and the ability of people to take control over their own lives, leaving many unable to develop capabilities in order to adequately function. They state, "The economic transition from planned market economies was accompanied by economic crisis exemplified in declining GDP, hyperinflation and cuts in state welfare spending. The social impact of transition can be seen in the increase in inequalities, rising poverty, unemploy-ment, and violent crime, a decline in trust, a decline in well-being and demodernisation with the majority of the population being 'losers'" (2010, p. 653-654; see also Danilovich 2010).

However, it was not merely the collapse of the Soviet Union that resulted in these difficulties for

[1] In-depth interviews, focus group sessions, and all participant observation were conducted between April and August, 2012 as part of a Fulbright Scholar Fellowship. The host institution was Belarusian State University, with heavy collaboration with the Belarus High Tech Park.

© 2013 Global Journals Inc. (US)

Belarusian citizens. Koktysh (2005) pointed out, "The overnight disintegration of the Soviet identity in August 1991, combined with the failure of the nationalization project…, left society in a somewhat complicated position. Like the rest of the post-Soviet space, Belorussia had no 'framework' ideology, no national idea that could integrate society" (p. 86), thus leaving it in an untenable position culturally, politically, and economically. Within the context of this political and economic "vacuum" and the shifting political landscape, Abbott (2007) added, "that lived experience-how people evaluate their condition-is as significant an influence on their welfare as the actual circumstances in which they live" (p. 219) and found that most Belarusians perceive the post-1991 economic and political changes negatively, and that levels of general satisfaction and happiness are comparatively low in relation to other post-Soviet countries.

The emerging political "populous revolution" and Lukashenka's authoritarian orientation towards a "social market economy" had impacts on labor management practices in the country as well (see Karbalevich, 2001). Danilovich and Croucher (2011) have explored the changing nature of human resource practices within the country following the Soviet collapse and the Lukashenka rise to power and found that "Labour management practices at enterprise level in Belarus are more negative for workers than those under the Soviet system. Welfare has largely disappeared, as has Soviet-style informal bargaining; wage payment may be in kind; training is minimal; job insecurity is extreme and trade unions perform a corporatist role" (2011, p. 241). Additionally, Sokolova and Ermakov (2005) examined the changing nature of human capital in Belarus in and found that Belarus has seen significant declines in each of three spheres of human capital (science, education, and health care), putting the future competitive nature of the labor force and growth in the economy in question. Finally, Muradyan (2011) specifically examined work values and work ethos in Belarus and found that the values of self-realization, personal responsibility, and initiative are still not a firm part of the Belarusian labor consciousness, while materialistic needs dominate the perceived needs of employees.

III. Example Comparison of Attitudes in Belarus to other Countries Around the Globe

Below are a few interesting key areas of attitudinal comparison in looking at how Belarus "stacks up" within a comparative global context:

- Out of 81 countries around the globe (global mean is 6.51), only the 7 countries have a lower mean life satisfaction score than Belarus (4.8): Tanzania (3.9), Zimbabwe (3.9), Armenia (4.3), Moldova (4.6), Ukraine (4.6), Russia (4.7), and Georgia (4.7). Note that general life satisfaction in Belarus is very close to the mean scores of several of its post-Soviet neighbors.
- Out of 80 countries around the globe (global mean is 6.74), only the following 4 countries have a lower mean "freedom of choice and control" score than Belarus (5.6): Pakistan (4.7), Turkey (5.3), Ukraine (5.4), and Egypt (5.5). As with general life satisfaction, "freedom of choice and control" in Belarus is very close to the mean scores of several of its post-Soviet neighbors.
- Out of 33 countries around the globe (global mean is 7.14), Belarus (5.5) has the lowest mean job satisfaction score. The next closet countries are the Ukraine (5.9), Turkey (6.1), and Russia (6.2), followed by a significant jump in mean scores before you reach the next tier of countries.
- Out of 33 countries around the globe (global mean is 6.34), only 2 countries have a lower mean "freedom of making decision in taking a job" score than Belarus (5.1): Turkey (4.5) and Lithuania (4.9).
- Out of 15 countries around the globe (global mean is 6.59), Belarus (5.5) has one of the lowest mean "satisfaction with job security" score, trailed only by Lithuania (4.6), the Ukraine (5.2), and Turkey (5.3).

One can easily see that Belarus is at or near the rear for each of these 5 key variables (and many more I have not listed here), significantly below worldwide averages for each. Additionally, within the post-Soviet/Eastern European geopolitical/cultural context, attitudes in Belarus appear to be fairly similar to several of its post-Soviet neighbors. The question to be answered is what are the reasons for these comparative differences and similarities and what do they mean for the future of Belarus and its neighbors?

IV. Conclusion and Future Research

Preliminary research demonstrates that there have been substantial shifts in societal and work conditions, attitudes and values as Belarus experienced the transition from being a part of the Soviet Union, to post-Soviet political and economic adaptation and the eventual adoption of its own government. Almost overnight, Belarus was faced with new political and economic realities, which in turn impacted labor and work realities. In the more than two decades since, these new realities have impacted other aspects on Belarusian's day-to-day lives, including their work values and attitudes. Future research needs to further explore the political, economic, and labor transformation in post-Soviet Belarus, particularly as they relate to shifting conditions, values and attitudes. Additionally, future research should explore how Belarus compares to other countries with regard to various political, economic, and social conditions and attitudinal indicators and seek for explanations of the causes of these differences and of

© 2013 Global Journals Inc. (US)

what they may mean for the future of the country and its interactions with its neighbors.

References Références Referencias

1. Abbott, Pamela. "Cultural Trauma and Social Quality in Post-Soviet Moldova and Belarus." *East European Politics & Societies*21, no. 2 (2007): 219-258.
2. Abbott, Pamela and Wallace, Claire. "Explaining Economic and Social Transformations in Post Russia, Ukraine and Belarus."*European Societies*12, no. 5(2010): 653-674.
3. Abbott, Pamela and Wallace, Claire. "Patterns of Participation in the Formal and Informal Economies of the Commonwealth of Independent States." *International Sociology* 39 (2009):12-38.
4. Burawoy, Michael. "Transition without Transformation: Russia's Involuntary Road to Capitalism." *East European Politics and Societies* 15 (2001): 269-90.
5. Danilovich, Natalia. "Growing Inequalities and Reproductive Health in Transitional Countries: Kazakhstan and Belarus." *Journal of Public Health Policy*31, no. 1 (2010): 30-50.
6. Fehey, Tony and Smyth, Emer. "Do subjective indicators measurer welfare?" *European Societies* 6 (2004): 5-27.
7. Karbalevich, Valerii. "The Belarusian Model of Transformation: Alaksandr Lukashenka's Regime and the Nostalgia for the Soviet Past." *International Journal of Sociology*31, no. 4 (2001): 7.
8. Koktysh, Kirill. "The Post-Soviet Transformation of Belorussia."*Russian Politics & Law*43, no. 5 (2005): 79-94.
9. Rotman, David and Veremeeva, Natalia. "Belarus in the context of the neighbourhood policy: Between the EU and Russia." *Journal of Communist Studies and Transition Politics*27, no. 1 (2011): 73-98.
10. Sen, Amartya. "Capability and well-being."In *The Quality of Life,* edited by N. Nussbaum and Amartya Sen, 31-53, Oxford: Clarendon Press, (1993).
11. Shevchenko, Olga. *Crisis and the everyday in Postsocialist Moscow.* Bloomington, IN: Indiana University Press, (2009).
12. Sztompka, Piotr. "Cultural Trauma: The other Face of Social Change." *European Journal of Social Theory* 3(2002): 441-65.

© 2013 Global Journals Inc. (US)

This page is intentionally left blank

© 2013 Global Journals Inc. (US)

Global Journal of Management and Business Research
Economics and Commerce
Volume 13 Issue 4 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

A Cointegration and Causality Analysis for Assessing Sustainability and Security in Indian Energy Sector

By Vivek Soni, Surya Prakash Singh & Devinder Kumar Banwet
Indian Institute of Technology Delhi, India

Abstract - The purpose of the paper is to establish the long run relationship between gross domestic product (GDP) and energy consumption in India. This is known that energy plays a vital role for all the economies and the relationship relates to levels and changes in economic development approximated by GDP. Literatures also reveal that the greater is region's GDP, the greater is the energy consumption. The data of three decades (1981-2011) has been taken for analysis and results are analyzed in the software package Stata/SE10.0. The time series analysis is used to develop conceptual framework, which includes testing of stationary using unit root test, Granger causality, cointegration and error correction mechanism (ECM). On applying cointegration, it is found that two variables are co-integrated of order one (I~ (1)).

Keywords : gross domestic product (GDP), energy consumption, stationary, unit root test, granger causality, cointegration, error correction mechanism (ECM), stata/se/10.0, India.

GJMBR-B Classification : JEL Code: O13, P28

ACOINTEGRATIONANDCAUSALITYANALYSISFORASSESSINGSUSTAINABILITYANDSECURITYININDIANENERGYSECTOR

Strictly as per the compliance and regulations of:

© 2013. Vivek Soni, Surya Prakash Singh & Devinder Kumar Banwet. 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 inany medium, provided the original work is properly cited.

A Cointegration and Causality Analysis for Assessing Sustainability and Security in Indian Energy Sector

Vivek Soni [α], Surya Prakash Singh [σ] & Devinder Kumar Banwet [ρ]

Abstract - The purpose of the paper is to establish the long run relationship between gross domestic product (GDP) and energy consumption in India. This is known that energy plays a vital role for all the economies and the relationship relates to levels and changes in economic development approximated by GDP. Literatures also reveal that the greater is region's GDP, the greater is the energy consumption. The data of three decades (1981-2011) has been taken for analysis and results are analyzed in the software package Stata/SE10.0. The time series analysis is used to develop conceptual framework, which includes testing of stationary using unit root test, Granger causality, cointegration and error correction mechanism (ECM). On applying cointegration, it is found that two variables are co-integrated of order one (*I*~ (1)). The Granger test results confirmed the existence of unidirectional causality running from electricity consumption to economic growth. The same has been verified by ECM approach and a long-run relationship has been developed. This implies that over time higher electricity consumption in India give rise to more economic growth. The proposed framework and results draw a rough road map with much accurate estimations for national policy strengthening in the future to assess the sustainability in Indian energy sector.

Keywords : gross domestic product (GDP), energy consumption, stationary, unit root test, granger causality, cointegration, error correction mechanism (ECM), stata/se/10.0, India.

I. Introduction

Energy plays vital role in development of long-range policies to help guide the future of a local, national, regional or even the global energy system. Country like India is the fourth largest consumer of energy in the world after USA, China and Russia. It is not endow with copious energy resources. It must, therefore meet its development needs by using all available domestic resources. This may includes the supplementing domestic production by imports also. The import of energy is costly affairs given the prevailing energy prices, which are not likely to liberal, and thus impinges adversely on nations' energy security. Therefore meeting the energy needs by achieving set and targeted economic growth reflects one side of coin, while meeting energy requirements of the population at affordable prices on another side of the coin, presents a major faces. In this context it is necessary to have glimpse up of linkages that how energy consumption of related to economic growth. Thus lying down the reasons and logical framework for energy security indicator like energy consumption and related issues with the economic growth, is significant research contribution in the mainstream of the energy sector in particular.

It is, therefore important to establish the relationship between consumption and national output and also their direction of causality to get a better understanding of the issues involved and determine the policy strategies. That is why in this study the main purpose is made to examine the causal relationships between electricity consumption, economic growth using three-decade time series data spanning from 1981 to 2011. This paper flows in six parts and has numbered accordingly. The part one of this study is the introductory part. The rest of the study is organized into another five parts. The second part of the study will present contextual information of the study where it discussed regarding current and future situation of Indian power sector. Part three is the literature review section, where it presents relevant literatures that will gives the sound conception of the fact. This section also draws the gaps in the literature review, the nature and sources of data used for this study. The part four provides a path regarding research methodological approach and the relevant key statistics on the time series data sets used, while part five is discussed the empirical results. Finally, part six will provide the conclusion and limitations that will point out the possible policy recommendations of the study.

II. Contextual Information of the Study

a) Recent Issues Related to Energy Security

Energy security involves ensuring uninterrupted supply of energy to support the economic and commercial activities necessary for sustained economic

Author α : Ph.D. Scholar, Dept. of Management Studies, Indian Institute of Technology Delhi, Vishwakarma Bhawan, New Delhi, India.
E-mail : soninitian@gmail.com
Author σ : Assistant Professor, Indian Institute of Technology Delhi, Vishwakarma Bhawan, New Delhi, India.
E-mail : surya.singh@gmail.com
Author ρ : Emeritus Professor, Indian Institute of Technology Delhi, Vishwakarma Bhawan, New Delhi, India.
E-mail : dbanwet@gmail.com

© 2013 Global Journals Inc. (US)

growth. Thus, it is obviously more difficult to ensure if there is large dependence on imported energy. This discusses the several areas. First one and most importantly, the domestic production from resources like coal, oil and gas and others, are to used and increased for own use. Recent issues involve E and finds in this regard, have been primarily the availability of land, clearances for environment and forest for compliance of international negotiations. Second issue is that, there has to be a stable and attractive policy regime, which provide and ensure substantial private investment including foreign investment in oil and natural gas blocks and new capacities for renewable energy. Further, to add in this section, the producers must have clarity in the price they will receive and an assurance of a stable tax regime. Since then, oil exploration is a global industry the terms India offers must be comparable with those offered elsewhere. In this context the entire structure of country's New Exploration Licensing Policy (NELP) contracts for oil and gas need to be look again. Third, investments in renewable energies need to be monitor and be strongly emphasised. Referring to the present projections by the international organizations, the share of renewable energy in total energy consumption will only reach 2% by 2021. Fourth, investments in energy assets in foreign countries, especially for coal, oil and gas and uranium should be enhanced. Fifth, to meet any possible disruption in oil supplies, on which country is import-dependent to the extent of more than 80 per cent, storage capacities need to be created. As per, Organisation for Economic Cooperation and Development (OECD), countries has generally created these capacities to the extent of 90 days of their domestic demand. While in India, it has created the capacity for 5 million tonnes. It has, however, not been fully utilised so far. There will be a need to increase this gradually and utilise it fully. Innovation in required to fill up these gaps *(Sources: Twelfth five year Plan 2012-17, Planning Commission, Govt. of India).*

b) Economic Growth: A Human Development Perspective

The world has been noticed the continuous growth in the developing countries including in India, especially when developed economies stopped growing during the 2008–2009 financial crises. As per the United Nations Human Development Report 2013 released recently titled on rise of the southern economics of the world, within the developing world has given as an overdue global rebalancing. This discussion has typically focused narrowly on economic growth and trade growth in a few economies. As this Report also commented and reflected, the rise of the South is both the result of continual human development investments and achievements and an opportunity for still greater human progress for the world as a whole. Making that progress a reality will require informed and enlightened global and national policymaking, drawing on the policy lessons analyzed *(Sources: United Nations Human Development Report, 2013).*

c) Gross Domestic Product as an Indicator of Economic Growth

Gross domestic product (GDP), is defined as the value of all officially recognized final goods and services produced within a country in a given period. GDP per is capita often considered as an indicator of a country's standard of living, GDP per capita is not a measure of personal income. Under economic theory, GDP per capita exactly equals the gross domestic income (GDI) per capita. In general, GDP is related to national accounts, a subject in macroeconomics. The term is different from gross national product (GNP) which allocates production based on ownership. It was first developed by Simon Kuznets for a US Congress report in 1934. In his report, Kuznets warned against its use as a measure of welfare. After the Bretton Woods conference in 1944, it became the main tool for measuring a country's economy.

d) Energy Intensity of GDP and Expanding Access to Energy

Energy intensity, defined as the energy input associated with a unit of GDP, is a measure of the energy efficiency of a nation's economy. As per the United Nation's Human Development Report, 2013, India's energy intensity has been declining over the years and it is expected to decline further. Falling energy intensity implies that the growth in energy used is less than the growth of GDP, which in turn implies that energy elasticity, that is, the ratio of the growth of energy to the growth of GDP is less than unity. In reality, this elasticity has been declining over the years. Total primary energy GDP elasticity was around 0.73 during the period 1980–81 to 2000– 01 and it declined to 0.66 in the period 1981–81 to 2010–11 *(Sources: Twelfth five-year plan 2012-17 document, Planning Commission, Govt. of India).*

Higher levels of GDP will obviously require higher levels of energy as an input but in addition to this requirement India's energy, planning must allow to expand access to clean energy at affordable prices for the bulk of the population. Various government funded schemes supports and found critical ways of its implementation for village electrification and connection of rural households to electric supply. On the same time, the supply of kerosene/liquefied petroleum gas (LPG) at affordable prices is equally important. There is ample evidence of unmet demand in rural areas indicating the need to expand access even as we expand total supply.

© 2013 Global Journals Inc. (US)

e) Framework for Creating Linkages between Energy Consumption and GDP

The assessment of the linkages between use of energy i.e. energy consumption (kWh/capita or kWh/year) and economic growth has been a subject of greater importance as energy is considered to be significant driving force of economic growth in all economies. In recent years, non-oil dependent countries and international associations are facing energy deficiency, as the oil producing economies are unable to meet up the world demand for oil. The reason behind for this is the supply constraint of energy could be attributed to the frequent geo-political tensions between the nations or may be natural physical supply constraints in the oil extracting which is most emerging from and prominent in Gulf region of the world. Further it seen from the various literature and reports of global importance that the increasing world energy demand for oil, leads to abrupt escalation in the oil prices worldwide and subsequently in developing countries like India. Therefore likewise shortage of oil, there is also shortage of electricity and other types of energies viz. importantly energy from natural gas from the aspect of clean environment. The shortage can significantly affect the consumption in household all together and production of goods and export in the economy. This linkage and impact of energy demand, fulfilling national deficit as whole for the economy, on the consumption, production and thus minimization of current account deficit is very much essential to control the inflation and GDP of the economy like India.

f) Framework for Creating Linkages between Energy Consumption and GDP

India's current account deficit was a surplus 2.3% of GDP in 2003–04. Since then it has gone into deficit, reaching 2.7% of GDP in 2010–11 and 4.2% in 2011–12. A large part of the increase in 2011–12 was due to imports of gold, which are not expected to be repeat. Even so, the current account deficit in the first year of the Twelfth Plan will be around 5%, which exceeds what has traditionally regarded as a sustainable level. The macroeconomic analysis in prescribes that policies must be calibrated to ensure that the current account deficit in future planning, averages around 2.9%. On current prospects, it is likely to be somewhat higher. The ability to finance this deficit through stable capital flows is therefore critical *(Sources: Twelfth five-year plan 2012-17, Govt. of India).*

As regard the relative consumption of various sources of energy as percent of the world total, India occupies the third place following China and Japan among the emerging Asian economies. This raises the question whether India's energy consumption levels commensurate with levels of economic growth similar to other high as well as low energy consuming economies of the Asian region. In this context, this paper attempts to explore the possible long-run impact of energy consumption on economic growth, which has not been examined so far using three decades of data at once. The prime motivation of the study relates to addressing the puzzle of the increasing levels of energy consumption to induce economic growth in the event of the increasing cost associated with it as well as apprehensions regarding its sustained supply in future. Therefore, the study undertakes an empirical analysis, towards verifying this nexus of energy consumption and economic growth and suggesting policies that strikes a balance between consumption and conservation of energy in sustaining and speeding up the growth momentum of the economy.

III. Review of Related Study

a) Literature Review

Given the importance of establishments for long run relationship and causality running between time series variables, many studies has been carried out in both developed and developed countries. The Table 1 laid downs the details of authors who have conducted the studies in various part of the world. (Refer Table1 on next page).

b) Gaps Identified in the Literature Reviewed

It is to be noted that the previous studies tried to relate the energy consumption with economic growth in India, but not established the long- run relationship. The cumulative data for long duration has not ever analyzed. In this context, the first issue related to importance of present research work, is the specific changes in the economic growth during the last decade 2001 to 2011. The decade has seen the global recession in the economy and there by up downs in energy sector with variations in national GDP figures. Thus it is important to assessing the long run or short run relationship between the energy consumption in such a circumstances. Which may give warning in futures for policy framework and such type of analysis gives the new imperatives to the sector. This will help to have policy strategies for assessment of energy security with inclusive economic growth. In such a scenario, the application traditional time series cointegration technique is seems to be viable. The next section discusses the data sources, and methodological framework.

c) The Nature and Source of Data for Analysis

The type of data used becomes important specifically the empirical analysis of time series. A time series is set of observations on the values that a variable takes at different times. Such data may be collected at regular time intervals, such as daily, weekly, monthly, quarterly, annually, quinquennially that is for every 5 years or decennially that is, every 10 years. Some data available both quarterly as well as annually as in case of economic development indicator like GDP. The time series data used for heavily in econometric studies and present a social problem. The success of any econometric analysis - ultimately depends on the

© 2013 Global Journals Inc. (US)

availability of the appropriate data. It is therefore essential to discuss about the nature, sources, and limitations of the data that one may encounter in empirical analysis. This paper considers the annual data of last three decades 1981-2011 for energy consumption and GDP. The source of these data is Ministry of Power, Govt. of India, Planning Commission, National Sample Survey Organization (NSSO), Central Statistical Organization (CSO) India and Ministry of Statistics and Programme Implementation Govt. of India.

Table 1 : Overview of the related literature

Year	Author name	Country	Variables used for identifying relationship	Identifying research issues
1978	Kraft and Kraft	United States	Total energy consumption and income	Unidirectional causality
1985	Yu and Choi			No causal relationship
1989	Abosedra and Baghestani			Unidirectional causality
1995	Cheng	United States	Total energy consumption and income	No causal relationship
1996	Masih and Masih	Asian economies	Total energy consumption and real income	Neutral w. r. t. income for some countries
1998	Yan	Hong Kong	Residential electricity consumption models using climatic variables	Examine the relationship
2002	Ogulata	Turkey	Industrial energy consumption and primary energy demand	Major component is electricity consumption
2003	Soytas and Sari	G7	Energy consumption and GDP	Causality: GDP to energy consumption
2004	Ediger	Turkey	Energy and economy	Close relationship exists between energy and economy
2004	Sari & Soytas	Turkey	GDP and energy consumption	Total energy consumption explained around 21 percentage of forecast error variance of GDP
2005	Ghosh	India	Total petroleum products consumption and economic growth	Long-run equilibrium relationship
2006	Lee	Major industrialized countries	Energy consumption and income	Neutral to each other in countries like UK, Germany, and Sweden
2010	Atanasiu and Bertoldi	EU-27	Electricity consumption for energy efficient equipments	Examine the relationship , the energy efficiency progress and electricity-saving potential

Table 2 : Statistics of time series variables

Statistics description	ECt (Energy Consumption) Billion kWh	*GDPt (Gross Domestic Product) Rs. Cr.
No. of observations	32	32
Mean	2922.588	1981433
Minimum	1012.58	695361
Maximum	7558.47	5202514
Std. Dev.	1655.64	1262409

* From 2008-09 GDPt estimates are with 2004-05 base year, while figure for the year 2011-12 is provisional. Sources: Reserve Bank of India, Ministry of Power and Ministry of Statistics and Programme Implementation Govt. of India.

© 2013 Global Journals Inc. (US)

III. Research Methodology

In order to investigate the relationship between energy consumption and GDP in India, a two-step standard time series econometric model procedure has adopted.

a) Step-1

In Step-I, time series properties of data investigated by use of unit root test and long-run relationship investigated by use of cointegration analysis.

i. *Step 1 (a): Testing Stationarity*

To carry out stationary analysis, unit root test is used. Dickey and Fuller approach was applied using following model. To minimize autocorrelation in the error term, the lagged difference terms are used. The null hypothesis in each case is H_0: $\delta=0$. It means there is a unit root. Failing to reject the null hypothesis implies that the series contain the unit root hence non –stationary at levels. The ADF test is performed on logGDPt and logECt time series.

$$\Delta Y_t = a_0 + a_1 t + \delta Y_{t-1} + \Sigma\, i\alpha\, \Delta Y_{t-1+} u_t \quad (1)$$

ii. *Step 1(b) : Test for Cointegration*

The test for cointegration is applied using the Engle-Granger two-step procedure (Granger, 1986 and Engle and Granger, 1987). The procedure includes the testing whether the regression residuals of the following long –run regression were stationary:

$$logGDPt = a_0 + a_1\, logECt + u_1 \quad (2)$$

$$logECt = a_0 + a_1\, logGDPt + u_2 \quad (3)$$

Where u_1, u_2 are error terms assumed uncorrelated with zero mean and constant variance. The above two equations were estimated using ordinary least square (OLS) method. The term a1 is elasticity of GDP with respect to energy consumption in equation (3). Some time it is called as consumption elasticity. Supposing that ut is subject to unit root analysis and find that it is stationary; that is, it is *I*~ (0). This is an interesting situation, for although logECt and logGDPt, is individually *I*~ *(1)*, that is, they have stochastic trends, their linear combination is *I*~ (0). So to speak, the linear combination cancels out the stochastic trends in the two series. In this case, we say that the two variables are co-integrated. Economically speaking, two variables are cointegrated, if they have a long-term, or equilibrium, relationship between them. In short, provided it can be checked that the residuals from regressions are *I*~ (0) or stationary. The traditional regression methodology is F-test that have considered extensively is applicable to data involving (nonstationary) time series.

b) Step-2

The Step-II follows the investigation of casual relationship between energy consumption and GDP of India. If the variables were non-stationary at levels and linear combination of them is non-stationary, the Granger causality test is used. Further, if the series were non-stationary and there is long-run relationship between the variables, then Error Correction Mechanism (ECM) is used (Yang, 2000).

i. *Step 2 (a) : Granger Causality Test*

The standard Granger causality analysis is done before ECM. This was investigated by using the following two-regression model of Eq. (4) and Eq. (5).

$$logGDP_t = \sum_{i=1}^{n} a_i \log(GDP)_{t-i} + \sum_{j=1}^{n} \beta_j \log(EC)_{t-i} + u_{1t}$$

$$logEC_t = \sum_{i=1}^{m} b_i \log(EC)_{t-i} + \sum_{j=1}^{m} \alpha_j \log(GDP)_{t-i} + u_{2t}$$

Where u_{1t}, u_{2t} are error terms assumed to have zero means and uncorrelated, n and m are lag lengths. The null hypotheses are that $logEC_t$ does not Granger cause $logGDP_t$ in the regression (4) and that is $logGDP_t$ does not Granger cause $logEC_t$ in regression (5). This was done by using F-test for the joint significance of the parameters α_i and β_j.

ii. *Step 2 (b): Error Correction Mechanism*

The error correction mechanism (ECM) first used by Sargan and later popularized by Engle and Granger corrects for disequilibrium. Thus, an ECM is a theoretically driven approach useful for estimating both short term and long-term effects of one time series on another. The approach is employed because many time series appear to be 'first-difference stationary,' with their levels exhibiting unit root or non-stationary behavior. Conventional regression estimators, including Vector Auto regression (VAR), have good properties when applied to covariance-stationary time series, but encounter difficulties when applied to non-stationary or integrated processes. These difficulties were illustrated by Granger and Newbold (J. Econometrics, 1974), when they introduced the concept of spurious regressions. Granger and Engle theoretically developed in their celebrated paper (Econometrica, 1987), raised the possibility that two or more integrated, non-stationary time series might be cointegrated, so that some linear combination of these series could be stationary even though each series is not. If two series are both integrated (of order one, or *I*~ *(1))*, it could model their interrelationship by taking first differences of each series and including the differences in a VAR or a structural model. However, this approach would be suboptimal if it was determined that these series are indeed cointegrated. In that case, the VAR would only express

© 2013 Global Journals Inc. (US)

the short-run responses of these series to innovations in each series. This implies that the simple regression in first differences is misspecified. If the series are cointegrated, they move together in the long- run. A VAR in first differences, although properly specified in terms of covariance-stationary series, will not capture those long-run tendencies. Accordingly, the VAR concept maybe extended to the vector error-correction model (VECM), where there is evidence of cointegration among two or more series. The model fits to the first differences of the non-stationary variables, but a lagged error-correction term is added to the relationship. In the current study of two variable i.e. $logGDP_t$ and $logEC_t$, this term is the lagged residual from the cointegrating regression, of one of the series on the other in levels. It expresses the prior disequilibrium from the long-run relationship, in which that residual would be zero. When using the ECM method causality is tested by estimating the following regressions (6) and (7).

$$\Delta logGDP_t = u_0 + \sum_{i=1}^{n} \varphi_i \log(GDP)_{t-i} + \sum_{j=1}^{n} \theta_j \log(EC)_{t-i} + \pi \hat{u}_{t-1} + e_{1t} \quad (6)$$

$$\Delta logEC_t = u_1 + \sum_{i=1}^{m} b_i \log(EC)_{t-i} + \sum_{j=1}^{n} y_j \log(EC)_{t-i} + \rho \hat{u}_{t-2} + e_{2t} \quad (7)$$

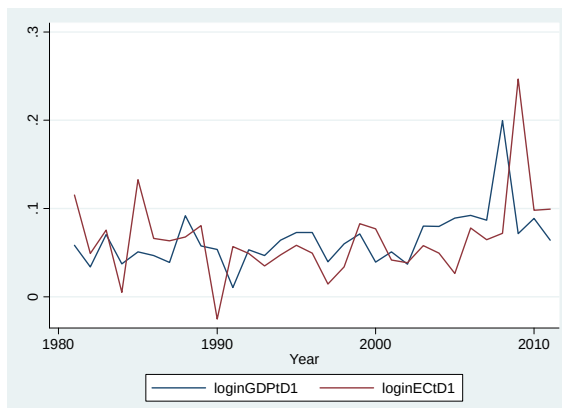
Where Δ, is the first difference operator, while $\hat{u}_{t-1}$ and $\hat{u}_{t-2}$, are estimated residuals from equations (2) and (3), respectively. In this method $logEC_t$ Granger causes $logGDP_t$ if either the coefficients on lagged $logEC_t$ as statistically significance or the coefficient on lagged error term (π) is statistically significant. Similarly, the same is applicable vice-versa for the equations (7). The choice of lag length was determined by testing significance of the parameters used in the equations (6) and (7). All the data were, converted in to natural log before causality analysis.

IV. Empirical Results

The data analyzed in software Stata/SE10.0. The empirical results includes analysis using graphs representations, tables outputs, have been laid down in five sub-sections. Sub-section (a), there is a preliminary analysis using graphs analysis. Sub-section (b), stationary test followed by cointegration results in sub-sections (c). The sub-section (d) presents the causality analysis. In later part of analysis i.e. sub-section (e), the VECM approach is discussed.

a) Preliminary Analysis and Lag Selection Criteria

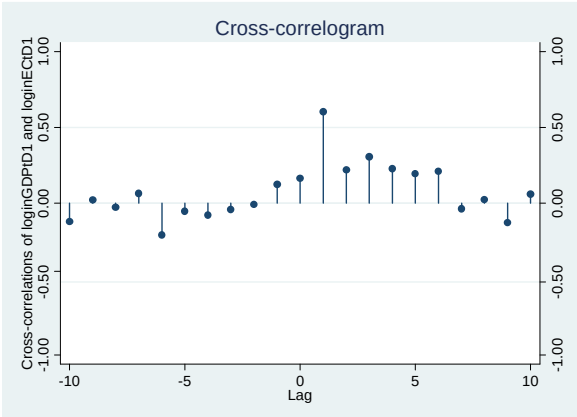
Before testing stationarity, the trends of time series variables have been analyzed and drawn in the form of the Graphs. The variables found increasing in levels trends. Therefore, first difference of them has reported here. The first difference trend seems to be cointegrated.



Graph 1(a) : Variables trends at first difference

To explore autocorrelation function (AFC), which is the correlation between a variable and its previous values, use the command corrgram. The time series theory and experience showing, the rule of thumb is to compute autocorrelation function (ACF) up to one-third (1/3) to one-quarter (1/4) the length of the time series. Apart from the best practical advice given by Akaike or Schwarz information criterion (AIC) or (SIC), ACF is analyzed using lag length of 10. Since the auto-correlations at various lags hover around zero, it resembles the correlogram of a white noise time series. This gives a correlogram of a stationary time series. Since the autocorrelation coefficients vanishing or diminishing in nature over the lags (1 to 12), this confirms the stationary of the variables $logGDP_t$ and $logEC_t$

© 2013 Global Journals Inc. (US)



Graph 1(b) : Cross- correlation between the variables at first difference

When running regressions on time-series data, it is often important to include lagged values of the dependent variable as independent variables. In technical terminology, the regression is called a vector autoregression (VAR). When trying to sort out the determinants of $logGDP_t$, it is likely that last year's $logGDP_t$ is correlated with this year's $logGDP_t$, if this is the case, $logGDP_t$ lagged for at least one year should be included on the right-hand side of the regression. If the variable is persistent that is, values in the far past are still affecting today's value's more lags will be necessary. In order to determine how many lags to use, several selection criteria may be used. Three commonly used are the Akaike's information criterion (AIC), the Hannan and Quinn information criterion (HQIC) and the Schwarz's Bayesian information criterion (SBIC). The default number of lags Stata checks is four (4). In order to check a different number, maxlags operator is used. Since data set is yearly for the period 1981 to 2011 and as seen from the many studies the maximum lag length of eight (10) is used for estimating optimal lag length. The maximum lag is (1/4) of the whole range of the data on time series variables.

b) Stationary Test

Alternative to section I (a), one can use the unit room test to carry out stationarity analysis. Dickey and Fuller approach was applied. To minimize auto-correlation in the error term, the lagged difference terms are used. The null hypothesis in each case is H_0: $\delta=0$. It means there is a unit root. Failing to reject the null hypothesis implies that the series contain the unit root hence non-stationary at levels. The ADF test is performed on $logGDP_t$ and $logEC_t$ time series.

Table 3 : Unit root rests for stationary

Variable	Levels	Mackinnon p-values
$logGDP_t$	2.992	1.000
$logEC_t$	1.140	0.995

Variable	First Difference	Mackinnon p-values
$logGDP_t$	-4.117	0.0009
$logEC_t$	-4.846	0.000

If considering constant, trend and drift term in the regression is not included, the null hypothesis of non-stationary of the two of two series at levels not rejected. The $logEC_t$ and $logGDP_t$ were stationary at first difference levels. Thus both time series are therefore, integrated of order one $I\sim(1)$.

c) Cointegration Test

It has noticed that the regression of a nonstationary time series on another non-stationary time series may produce a spurious regression. On analysis, of $loginEC_t$ and $loginGDP_t$ time series individually to have stationarity, it has found that they both are containing a unit roots.

A number of methods for testing cointegration have been proposed in the literature. Out of few, the only two are comparatively simple methods. First one is the DF or ADF unit root test on the residuals estimated from the co-integrating regression and second one the co-integrating regression Durbin-Watson (CRDW) test. The first one used for this purpose of this study. Cointegration refers to the fact that two or more series share a stochastic trend (Stock & Watson). Engle and Granger (1987) suggested a two-step process to test for cointegration (an OLS regression and a unit root test), the EG-ADF test. The results for cointegration analysis are presented in the Table 4.

Table 4 : Cointegration Test

Regression	Result (ADF table)	Mackinnon p-values	Optimal lag length as per AIC/HQIC/ SBIC
$logGDP_t$ on $logEC_t$	-1.171	0.686	7
$logEC_t$ on $logGDP_t$	-1.447	0.5597	7

The lag length is determined by AIC was estimated seven (7) for both the regression equation. The results for both equations showed that the residuals of both equations found to be stationary providing evidence that GDP and energy consumption are Co-integrated or order $I\sim(1)$.

d) Granger Causality Test

Table 5, presents the outputs from the standard Granger causality test between energy consumption and GDP. On regress, '$logGDP_t$' on lagged values of '$logGDP_t$' and '$logEC_t$' and the coefficients of the lag of

© 2013 Global Journals Inc. (US)

'logEC$_t$' are statistically significantly different from 0, then it can be said that *'logEC$_t$'* Granger-cause *'logGDP$_t$'*. Thus in this way, the time series data on 'logGDP$_t$' can be used to predict the *'logGDP$_t$'* (Stock & Watson, 2007 and Green, 2008). Table 5, noted down the F-values of the regression analysis.

Table 5 : Granger causality test

Regression	F-Value
logGDP$_t$ on *logEC$_t$*	0.17
logEC$_t$ on *logGDP$_t$*	4.65

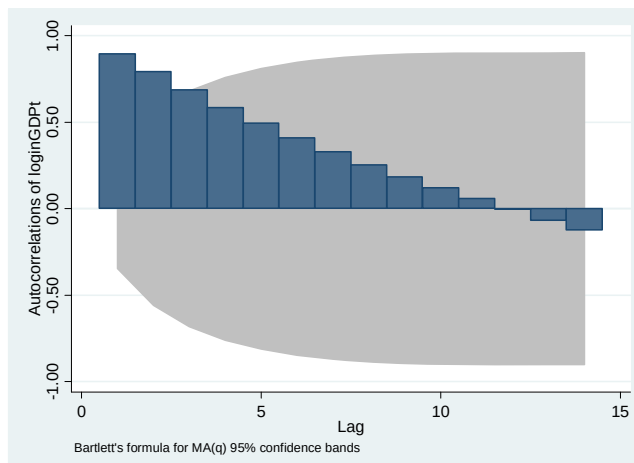
As shown from the table 5, only regression *logEC$_t$* on *logGDP$_t$* is statistically significant suggesting that there is unidirectional causality running from economic growth to energy consumption. It means, past values of *logGDP$_t$* in *logEC$_t$* equation, provides the good estimation of current values of *logEC$_t$*. In other terms, it can be said that economic growth causes energy consumption. The characterization that non-stationary variables may obey a long-run relationship with each other, whose residual is stationary, is the central perception of cointegration. ECM provides the formalization of this intuition.

e) Estimation of Cointegrating Relationship and Vector Error Correction Model

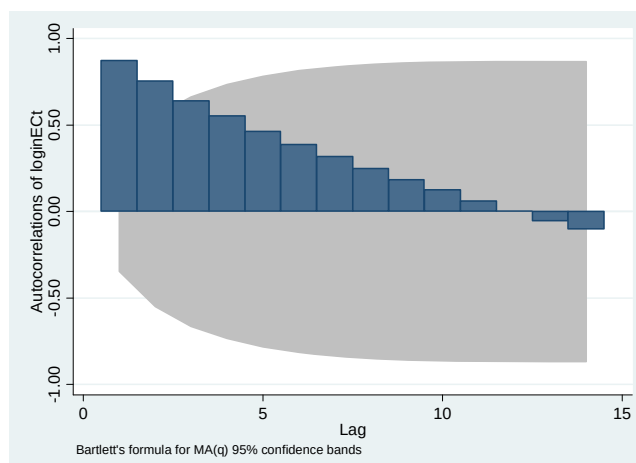
By using the EG or AEG test one can find that two time series are co-integrated, that is, there is a long-term, or equilibrium, relationship between the two. Of course, in the short run there may be disequilibrium. Therefore, one can treat the error term as the "equilibrium error." Further to say that, this error term used to tie the short-run behavior to its long-run value. Referring to the ECM equations (6), (7) and results from the causality test, the ECM approach found to be appropriate in testing the causality between energy consumption and GDP. For analyzing the causality, obtained the first difference operator for both the time series variables and estimate residuals the $\hat{u}_{t-1}$ and $\hat{u}_{t-2}$ from equations (2) and (3). In this method, *logEC$_t$* Granger causes *logGDP$_t$* if either the coefficients on lagged *logEC$_t$* as statistically significance or the coefficient on lagged error term (π) is statistically significant. Similarly, this is applicable for the equation (7). ECM modeling in Stata is based on the maximum likelihood framework of Johansen (J. Ec. Dyn. Ctrl., 1988). In that framework, deterministic trends can appear in the means of the differenced series, or in the mean of the Co-integrating relationship. The constant term in the VECM implies a linear trend in the levels of the variables. Thus, a time trend in the equation implies quadratic trends in the level data. Based on Johansen criteria for estimation of the VECM unrestricted constant specifications are used.

i. *Confirm the Unit Root*

The autocorrelations of the two variables displayed here. While these autocorrelations do not provide a formal test for unit root, they appear consistent with that hypothesis. The ACF falls off approximately linearly rather than exhibiting either exponential decay or sudden drop to zero value. The Dickey-Fuller test statistic using a generalized least squares (GLS), also provide more formal support for the hypothesis of a unit root in both the variables. The test statistics is not smaller than any of the critical values at any of the lags, so accept the null hypothesis of a unit root.



Graph 2(a) : ACF of *logGDP$_t$*



Graph 2(b) : ACF of *logEC$_t$*

ii. *Identify Number of Lags*

The varsoc command in Stata used to estimate the number of lags. It places an asterisk by the test statistics associated with the recommended lag length. The likelihood-ratio test suggests one lag.

© 2013 Global Journals Inc. (US)

```
varsoc loginGDPt loginECt
```

Selection-order criteria
Sample: 1984 - 2011 Number of obs = 28

lag	LL	LR	df	p	FPE	AIC	HQIC	SBIC
0	22.1593				.000812	-1.43995	-1.41086	-1.34479
1	116.147	187.98*	4	0.000	1.3e-06*	-7.86764*	-7.78037*	-7.58216*
2	117.564	2.8349	4	0.586	1.6e-06	-7.68317	-7.53771	-7.20738
3	118.486	1.8437	4	0.764	2.0e-06	-7.4633	-7.25967	-6.7972
4	119.083	1.1932	4	0.879	2.6e-06	-7.2202	-6.95838	-6.36378

Endogenous: loginGDPt loginECt
Exogenous: _cons

iii. *Identify the Number of Cointegrating Relationship*

The number of linearly independent cointegrating relationships, r, lies between, 0 and K-1. Where, K is the number of dependent variables in a time series. The vecrank command provides three different approaches that can help identify value of r. By default, Stata calculates and displays a trace statistics (Johansen, 1995). The other two approaches provided by vecrank are the maximum eigen value test and assortment information criteria. The later identify the value of r that minimizes the SBIC, HQIC and AIC criteria. The unrestricted constant specification has chosen by default.

With this specification, the null hypothesis that r ≤ 0 is accepted (trace statistics = 14.5876 with a 5% critical value of 15.41). Which seems little unfeasible. While other test statistics on maximum eigenvalue and information –criterion tests reported that maximum value of *r =1.* Thus, it is concluded that there is one cointegrating vector.

iv. *Fitting VECM*

With the specifications of one lags, one cointegrating relationship and constant trend, the model was fitted. From the table of coefficients, in the $logGDP_t$ equation, the L1._ce1 term is the lagged error correction term. It corresponds to the speed of adjustment to nonzero values of cointegrating relationship. The short-run coefficients in this equation are not significantly different from zero. The final table on VEC from Stata output reports the estimated coefficients in the cointegrating equation. The relationship is estimated as:

$$logGDP_t - 1.033 logEC_t - 6.20 \qquad (8)$$

The relationship equations suggest that it is in equilibrium, the index of construction $logGDP_t$ is 103% of the index in $logEC_t$.

v. *Test for Stability and White Noise Residuals*

On testing stability of the VECM, it is found that VECM specifications impose a unit root. Aside from the unit root, there is no evidence of instability. Nor is there evidence of auto-correlated errors. The null hypothesis is rejected for the Δ $logGDP_t$ equation by skewness test.

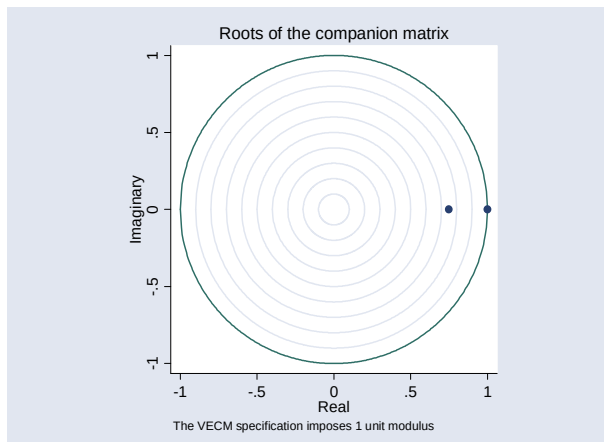
Table 6 : Eigenvalue stability condition

Eigenvalue	Modulus
1	1
0.7474953	0.7474953

Remarks : The VECM specification imposes a unit modulus.

Table 7 : Skweness test

Equation	Skewness	Chi2	df	Prob> Ch2
D_*loginGDPt*	1.8206	16.02	1	0.00006
D_*loginECt*	0.04009	0.008	1	0.92976
ALL		16.028	2	0.00033



Graph 3 : The VECM specifications imposes unit modulus

The VECM specifications impose a unit root and single root is found (modulus<0), thus variables cointegration shows as best long run relationship exits.

V. Conclusion and Further Implications

This paper aimed at investigating causality linkage between economic growth and GDP in India using secondary data over the period 1981-2011. According to Engle–Ganger cointegration methodology, there is a long-run relationship between energy consumption and GDP. The study used the error correction mechanism and compared the results with the standard Granger causality mythology of econometrics. Results show that economic growth causes total energy consumption in India. There was hardly any difference founds between the results from both the techniques. The result agreed with the other studies done in past (Hrushikesh Mallick). One reason for support causality is that India's Agriculture and allied sectors accounted for 15.7% of the GDP till end of 2010, employed roughly half of the total workforce, and

© 2013 Global Journals Inc. (US)

despite a steady decline of its share in the GDP, is still the largest economic sector and a significant piece of the overall socio-economic development of the country. Second reason is that power is one of the key sectors driving India's infrastructure growth. Therefore, it is essential for the country's power sector to meet planned capacity additions and reduce power deficits to all time contribute to the country's GDP growth. The power sector in the country currently in the developing stage, and supports the growth of various other important sectors. To this effect, the sector need 100 per cent foreign direct investment through the automatic route, setting up of ultra mega power projects and encouraging joint ventures through the PPP route to step up private sector participation.

India is the fourth largest producer of electricity and oil products and the fourth largest importer of coal and crude oil in the world. Coal and oil together account for 66% of the energy consumption. It is less dependent on energy as an input in it's GDP output as compared to the developed countries and emerging economy like China. The results obtained in this study, has important implications on India's energy and economic growth policy. The country uses many type foreign exchanges to finance energy imports. The other policy implication is that increase economic growth in India, will lead to increase use of energy by keeping other factors constant. Therefore, planning renewable energy sub-sector phase wise and investing in it, seems to be much viable that has more advantages compared to fossil-based energy on environment protection background. In addition, given that there are some factors like coal potential, its import and petroleum potential with in the country, it will save lot of money spent on refining sector.

Therefore, it is concluded that results from this study draws a road map for the country to meet its growing needs of energy faces both energy constraints from the supply side and demand management policies. Hence securing the energy security related issues. The findings implications also suggests for adapting an energy growth policy in order to stimulate economic growth rate in the country.

On the limitations grounds, much of the same post-estimation apparatus as developed for VARs for VECMs may be used. Impulse response functions orthogonalized IRFs, FEVDs etc., maybe constructed for VECMs. The VECM has the capability to compute dynamic forecasts, due to limitations of the scope of work; the present study do not includes the forecasting. These are the relevant issues for the future research, which needs to be addressed for a rational national energy policy in the country.

References

1. Abosedra, S. and Baghestani, H. (1989); "New Evidence on the Causal Relationship between U.S. Energy Consumption and Gross National Product", Journal of Energy and Development, Volume 14, pp 285-92.
2. Atanasiu and Bertoldi (2010): "Analysis of the Electricity End Use in EU-27", European Commission, Ispra, Italy.
3. Cheng, B. S. (1995); "An Investigation of Cointegration and Causality between Energy Consumption and Economic Growth", Journal of Energy and Development, Volume 21, pp.73-84.
4. Cleveland, C. J. (2003); "Biophysical Constraints to Economic Growth", Encyclopedia of Life Support Systems, EOLSS Publishers Company Oxford, UK.
5. Dickey, D. and Fuller, W. (1979); "Distribution of the Estimators for Autoregressive Time Series with a Unit Root", Journal of the American Statistical Association, Volume 74, pp. 427-31.
6. Ebohon, O. J. (1996); "Energy, Economic Growth and Causality in Developing Countries: A Case Study of Tanzania and Nigeria", Energy Policy, Volume 24 (5), pp. 447-53.
7. Ediger, V. S. (2004); "Energy Productivity and Development in Turkey", Energy and Cogeneration World, Volume 25, pp.74–78.
8. Ediger, V. S. and Huvaz, O. (2006); "Examining the Sectoral Energy Use in Turkish Economy (1980–2000) with the Help of Decomposition Analysis", Energy Conversion and Management, Volume 47, pp.732–45.
9. Ediger V. and Tatlidil H. (2002), "Forecasting The Primary Energy Demand in Turkey and Analysis of Cyclic Patterns", Energy Conversion and Management, Volume 43 (4), pp. 473- 487.
10. Erol, U. and Yu, E. S. H. (1987); "On the Causal Relationship between Energy and Income for Industrialized Countries", Journal of Energy and Development, Volume 13, pp. 113– 122.
11. Ghosh, S. (2006); "Future Demand of Petroleum Products in India", Energy Policy, Volume 34, pp 2032-37.
12. Government of India (2011); "Faster, Sustainable Inclusive Growth: Twelfth five-year plan 2012-17", Planning Commission, India.
13. Government of India (2013); "Energy Statistics 2013" NSSO, Ministry of Statistical and Programme Implementation, India.
14. Government of India (2012); "Annual Reports 2005-2012", Ministry of Power, India.
15. Government of India (2012-13); "Union Budget and Economic Survey", Ministry of Finance, India.
16. Hwang, D. and Gum, B. (1991); "The Causal Relationship between Energy and GNP: the Case of Taiwan", Journal of Energy and Development, Volume 16, pp.219-26.
17. Imons S. Kuznets 1901-1985; "Biographical Memoirs", National Academy of Science, Volume 79.
18. Koop, G., Pesaran, M. H. and Potter, S.M. (1996); "Impulse Response Analysis in Nonlinear Multivariate

© 2013 Global Journals Inc. (US)

Models", Journal of Econometrics, Volume 74, pp.119-47.
19. Kraft, J., and Kraft, A. (1978); "On the Relationship between Energy and GNP" Journal of Energy and Development, Volume 3, pp.401-03.
20. Lee, Chien-Chiang (2006); "The Causality Relationship between Energy Consumption and GDP in G-11 Countries Revisited", Energy Policy, Volume 34, pp.1086-93.
21. Masih, A. M. M. and Masih, R. (1996); "Energy Consumption, Real Income and Temporal Causality: Results from a Multi-country Study based on Cointegration and Error-correction Modeling Techniques", Energy Economics, Volume 18, pp.165-83.
22. Masih, A. M. M. and Masih, R. (1997); "On the Temporal Causal Relationship between Energy Consumption, Real Income, and Prices: Some New Evidence from Asian-energy Dependent NICs Based on a Multivariate Cointegration and Vector Error-correction Approach", Journal of Policy Modeling, Volume 19, pp.417-40.
23. Tugrul Ogulata, R. (2002), "Energy Consumption in Turkish Industrial Sector" Journal of Green Energy, Volume 2, 3, pp. 273- 285.
24. Pesaran, M. H. and Shin, Y. (1998); "Generalized Impulse Response Analysis in Linear Multivariate Models", Economics Letters, Volume 58, pp. 17–29.
25. Phillips, P. C. B. and Perron, P. (1988); "Testing for Unit Root in Time Series Regression", Biometrica, Volume 75, pp.335-46.
26. Sean Becketti (2013); "Introduction to Time Series Using Stata", Stata Press Publications, Texas, pp. 375-422.
27. Sari, R. and Soytas U. (2004); "Disaggregate Energy Consumption, Employment and Income in Turkey", Energy Economics, Volume 26, pp.335-44.
28. Soytas, U. and Sari R. (2003); "Energy Consumption and GDP: Causality Relationship in G-7 Countries and Emerging Markets", Energy Economics, Volume 25, pp.33– 37.
29. United Nations Human Development Summary Report (2013); "The Rise of the South", Communications Development Incorporated, Washington DC.
30. Yang, H. Y. (2000); "A Note on the Causal Relationship between Energy and GDP in Taiwan", Energy Economics, Volume 22, pp.309-17.
31. Yu, S.H. and Choi, J.Y. (1985): "The Causal Relationship between Energy and GNP: An International Comparison", Journal of Energy and Development, Volume 10 (2), pp. 249-272.

© 2013 Global Journals Inc. (US)

This page is intentionally left blank

© 2013 Global Journals Inc. (US)

Global Journal of Management and Business Research
Economics and Commerce
Volume 13 Issue 4 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

A Primer on Franchising in the United States: A Vehicle for Economic Mobility?

By Richard J. Hunter, Jr. & Héctor R. Lozada
Stillman school of Business Seton Hall University, USA

Abstract - Part I of this two-part study introduces the concept of franchising, outlines its unique elements, delineates the categories or types of franchises and lines of businesses involved in franchising, describes the benefits of franchising in the U.S. economy, provides a guide to the various types of fees associated with the franchise relationship, and discusses the issues surrounding performance measurement and master franchising. In Part II, the authors will discuss the important legal aspects of franchising centering on the franchise contract, important Federal Trade Commission required disclosures associated with the Franchise Disclosure Document (FDD), and aspects of antitrust law applicable to the franchise relationship.

Keywords : franchising; quality control; distributorship; "business format franchise"; master franchise; franchise fees; benchmarking.

GJMBR-B Classification : JEL Code: J60, O10

APRIMERONFRANCHISINGINTHEUNITEDSTATESAVEHICLEFORECONOMICMOBILITY?

Strictly as per the compliance and regulations of:

© 2013. Richard J. Hunter, Jr. & Héctor R. Lozada. 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 inany medium, provided the original work is properly cited.

A Primer on Franchising in the United States: A Vehicle for Economic Mobility?

Richard J. Hunter, Jr. α & Héctor R. Lozada σ

Abstract - Part I of this two-part study introduces the concept of franchising, outlines its unique elements, delineates the categories or types of franchises and lines of businesses involved in franchising, describes the benefits of franchising in the U.S. economy, provides a guide to the various types of fees associated with the franchise relationship, and discusses the issues surrounding performance measurement and master franchising. In Part II, the authors will discuss the important legal aspects of franchising centering on the franchise contract, important Federal Trade Commission required disclosures associated with the *Franchise Disclosure Document* (FDD), and aspects of antitrust law applicable to the franchise relationship.

Keywords : franchising; quality control; distributorship; "business format franchise"; master franchise; franchise fees; benchmarking.

I. Overview

There are an estimated 3,000 different franchise businesses, commonly called *franchises*, operating in the United States, with approximately 746,828 franchise businesses across 300 business categories. Franchising is said to provide 8,100,000 million Americans with direct employment, and nearly 18 million total jobs in franchise-related operations. Franchising generates $769 billion of output and $454 billion towards the United States GDP (or 4.6% of total GDP). The International Franchise Association estimates that franchising involves 40% of all retail sales and that nearly 4% of all small businesses in the United States are franchises. (A-Z Franchises.com, 2013).

II. What Exactly is Franchising?

From the legal point of view, there is no *one* universally accepted definition of a franchise. The following definition is found in the text of the State of Washington *Franchise Investment Protection Act:*

"*Franchise* means an oral or written contract or agreement, either expressed or implied, in which a person (the franchisor) grants to another person (the franchisee) a license to use a trade name, service mark, trade mark, logotype or related characteristic in which there is a community of interest in the business offering, selling, distributing goods or services at wholesale or retail, leasing or otherwise and in which the franchisee is required to pay, directly or indirectly, a franchise fee." (Revised Code of Washington (RCW), Chapter 19.100, 2013.)

A second definition is found in the relevant Illinois statute:

"*Franchise* means a contract or agreement, either expressed or implied, whether oral or written, between two or more persons by which: (a) a franchise is granted the right to engage in the business of offering, selling or distributing goods or services, under a marketing plan or system prescribed in substantial part by a franchisor; and (b) the operation of the franchisee's business pursuant to such plan or system is substantially associated with the franchisor's trademark, service mark, trade name, logo-type, advertising, or other commercial symbol designating the franchisor or its affiliate; and (c) the person granted the right to engage in such business is required to pay a fee of $500 or more." (Illinois Franchise Disclosure Act of 1987, 2013.)

III. Setting up the Franchise Relationship

Franchisors usually recruit potential franchisees by advertising their particular businesses either in the general media or in specialized "trade publications." Additionally, in the United States, there is an annual *"Franchise Expo,"* where all of the major franchisors are represented and where interested individuals can speak face-to-face to franchisor representatives. [See Appendix I.] The franchisor then will send detailed "franchise information kits" to those who answer the advertisements. Typically, this franchise kit points out the great potential for success in this particular industry. It may offer either a single-location franchise or, in some cases, a "master franchise." Thus, from the outset, the prospective franchise relies heavily on the franchisor for guidance, support, and critical "business information," such as market studies, profit projections, location analysis, leasing information, and information relating to procurement of supplies and equipment for the individual franchise location.

Although there are many individual variables, the details of the arrangement usually follow a set pattern. Once the parties have decided to enter into a franchise relationship, the parties will sign a detailed

Author α : Professor of Legal Studies & Chair, Department of Economics and Legal Studies Stillman school of Business Seton Hall University USA. E-mail : hunterri@shu.edu
Author σ : Associate Professor of Marketing & Director, Division of Teaching and Research Stillman School of Business Seton Hall University USA.

© 2013 Global Journals Inc. (US)

franchise agreement. (Slawson, 1971; Burke, 2003). In the franchise agreement, the franchisor will grant the franchisee the right to use the trade mark or the service mark or distribute the standardized product (in a distributorship) in exchange for the payment of an initial franchise fee. The franchisor will often use its real estate expertise (or the services of a designated third party) to determine a specific franchise location, to design or arrange for the standardized construction of the facility, and to install standardized fixtures and equipment on the premises (such as signs, menu boards, logos, lighting, décor, etc.). The franchisor may lease these premises itself to franchisees or may sell such an operation to the franchisee as a "turn-key" operation. (Principe v. McDonald's Corp., 1980).

The franchisor will intensively advertise the product (sometimes on a national basis) in exchange for an advertising fee, usually calculated on the basis of a percentage of the gross sales, on average 3-7%. (Franchise fees will be discussed in greater detail, below.) In addition, the franchisor, in fulfillment of its legal obligation under the *Lanham Act* (1946) to maintain "*quality control*," will create a training program (the most famous may be McDonald's "*Hamburger U*"), prepare training manuals, and will set out stringent guidelines in such areas as the hiring of personnel, a company's uniform requirements or dress code, procurement of supplies, and cleanliness and employee grooming standards for the day-to-day operations of the business.[1]

Among other requirements, "the Lanham Act places an affirmative duty upon a licensor of a registered trademark to take reasonable measures to detect and prevent misleading uses of his mark by his licensees or suffer cancellation of his federal registration." (Dawn Donut Co. v. Hart Food Stores, Inc., 1959. p. 366.) This duty "derives from the Lanham Act's abandonment provisions, which specify that a registrant's mark may be canceled if the registrant fails to control its licensees' use of the licensed mark." (Dawn Donut Co. v. Hart Food Stores, Inc., 1959, p. 366, citing Mini Maid Servs. Co. v. Maid Brigade Sys., Inc., 1992, p. 1519.) As a result, in order to avoid non-compliance with the *Lanham Act,* a licensor of a trademark has a legal obligation to maintain adequate control over the use of its mark. (Gilson, 2013.) In this regard, Professor Gilson (2013, Section 6.04) notes: "Control over the nature and quality of the licensee's goods or services is the touchstone of a valid trademark license."

Once the franchise becomes operational, the franchisee must follow the procedures set out in the franchisor's *confidential operating manual* or risk the termination of the franchise. The *operating manual* usually requires strict accounting procedures (the franchisor will sometimes provide this necessary service, again at a fee), and authorizes the franchisor to inspect the franchisee's books and records. The franchisee will pay a set royalty (usually based on a percentage of gross sales, on average 5-8%) on a monthly or semi-monthly basis. The franchise agreement will usually obligate the franchisee to secure liability insurance to protect the franchisee and franchisor from casualty losses or law suits—although it would be rare for a franchisor to be held liable for the tortuous or improper conduct of a franchisee under the theory of *respondeat superior* because the franchisee is generally considered to be an independent contractor. (Cano v. DPNY, Inc., 2012; Haller & Weisbord, 2013.)

Only by maintaining *uniform standards of quality and appearance* can the franchisor preserve its unique reputation and foster the public's perception and acceptance of its product—often generically termed "good will." (E.g., State Department of Transportation v. Cowan, 2004; Scott, 2003.) In *Cowan*, the court noted: "While different jurisdictions vary slightly in their definitions of goodwill, the term generally is used to describe that component of value attributed to a business's reputation in the community, loyal customer base and ability to attract new customers." (State Department of Transportation v. Cowan, 2004, p. 5, citing Rohan & Reskin, 2004, § 29.01[1].) In *Dugan v. Dugan* (1983, p. 3), the Supreme Court of New Jersey stated that "goodwill is essentially reputation that will probably generate future business." David Logan Scott (2003, p. 170) stated that "A business may build goodwill over time as loyalty builds among its customer base."

Professor Emerson (2013, p. 375) cites certain specific topical concerns as they relate to the ownership of the good will associated with franchising: "termination, nonrenewal, trademark infringement, non-compete covenants, antitrust tying, vicarious liability, taxes, and equitable estoppel. In each area, one can find inconsistent approaches with regard to who owns the goodwill, franchisor or franchisee."

For this reason (and also for important economic reasons) franchisors will typically attempt to obligate a franchise to procure products and supplies from them at set prices (the legality of this practice, termed a "tie-in," will be discussed at length in Part II of our study) or will attempt to "designate" suppliers who

[1] Typically, franchisor control is almost 100 percent. For example, a McDonald's franchise agreement reads:
"The McDonald's System is a comprehensive restaurant system for the retailing of a limited menu of uniform and quality food products, emphasizing prompt and courteous service in a clean, wholesome atmosphere.... The foundation of the McDonald's System and the essence of this License is adherence by Licensee to standards and policies of Licensor providing for the uniform operation of all McDonald's restaurants... including, but not limited to, serving only designated food and beverage products; the use of only prescribed equipment and building layout and designs; strict adherence to designated food and beverage specifications and to Licensor's prescribed standards of Quality, Service, and Cleanliness...." (Husain v. McDonald's Corp., 2012, p. 869.)

© 2013 Global Journals Inc. (US)

can meet the franchisor's specifications and standards.[2] Critics of franchising have argued that these practices, and others which permit the franchisor to "suggest" resale prices (Biggers, Mann & Roberts, 1999), may mean that franchisees will pay inflated prices for supplies or services either to the franchisor or related parties.

The *termination provisions* of the franchising agreement will often constitute "legal traps for the unwary!" (Lederman & Steinberg, 2012.) The franchise agreement will usually set out the duration of the franchise, and will contain provisions for renewals after the initial time period. (Emerson, 2008.) The franchisee will usually be required to agree to a "*covenant not to compete*" which may severely restrict its ability to continue in the same or similar line of work for a set time after the termination of the franchise. (Klarfeld & VanderBroek, 2011; Emerson, 1995.)[3] Also considered are the conditions of default, such as the franchisee's insolvency or the failure to pay the monthly or semi-monthly franchise fee when due. In these and other circumstances, the agreement will usually provide that the franchisor must give the franchisee a "reasonable time" (usually ten days) to "*cure*" any instances of default. Most agreements provide for a notice of termination, and several state laws have set out a "good faith" or similar standard for termination, or have a required "notice period" of up to ninety days before the franchisor can effect a final termination. (Sanders, 1981; Lederman & Steinberg, 2012; Emerson, 2013.)[4]

IV. Parties to the Relationship

The person or business entity that grants a franchise to another is called the franchisor or franchiser. [For this paper, the authors will use the term *franchisor*.] The person receiving the franchise is known as the franchisee. Franchises may be involved in retail businesses and may involve the sales of products or services to consumers. In the late 1990s, the "profile" of a typical franchisee in the United States would have revealed the following:

- 42% of all franchises are sold to husband-wife teams;
- 35.2% of franchisees have "significant" corporate experience (5-8 years);
- 49.7% have "some college," and 38.1% have a bachelor's degree;
- The average franchisee had a median income of $66,617 prior to becoming a franchisee, and a "net worth" of $329,704 (including the value of any home);
- The average age of a franchisee is 40 years old; the percent sold to women is roughly 11%; and
- The percent of minorities is 5%. (See, e.g., Fibre new.com (Website), 2013).

Interestingly, the 7-Eleven franchise has put forth several questions that they deem relevant in determining if an individual "fits the profile" of a potentially successful franchisee:

"These basic qualifications are only half the story. When considering if 7-Eleven is the right choice, candidates should consider if they possess the traits most common to successful 7-Eleven franchisees: Can you manage multiple tasks simultaneously and adapt to market and company changes? Can you hire, train and supervise employees? Are you willing to empower them and delegate responsibilities to them? Are you dedicated to operations excellence? Do you focus on the details? Are you committed to creating and managing an organization that effectively recruits, trains, retains and motivates people? Do you have a strong desire to build incremental income through execution and the ability to implement company programs and strategies? Do you have food service management or retail experience? Can you deliver an exceptional customer experience while maintaining a commitment to the core values of 7-Eleven? Do you support and understand your local community? Do you have strong ties to your community?" (7-Eleven.com (Website), 2013.)

V. Categories of Franchising

a) Franchises Fall into two General Categories

A distributorship, which is also termed a *product or trade name franchise,* is a franchise relationship in which a manufacturer/franchisor licenses a franchisee to sell its product either exclusively or in combination with other products. The franchisee is often given the "exclusive right" to sell the product in a

[2] Among the issues raised in determining whether a practice is legal or is illegal as an impermissible tie-in are (1) whether there are one or two products involved in the arrangement, i.e., are the trademark and a product sold at the franchise one or two products; (2) whether the franchisor has coerced its franchisees to take the tied product; (3) whether the franchisor has the requisite economic power in the tying product market; and, (4) the application of defenses. (Schlotzsky's, Ltd v. Sterling Purchasing and National Distribution Co., Inc, 2008; McCarthy, 1970.)

[3] *See also* Casey's Gen. Stores, Inc. v. Campbell Oil Co., 441 N.W.2d 758, 761 (Iowa 1989), which found that "[n] on competition agreements between a franchisor and a franchisee are designed not only to protect the interests of the immediate parties but also to protect other franchisees against competitive activities. Thus, to the extent that such non-competition agreements are exacted from all franchisees, each franchisee is thereby protected from competition from other franchisees." This is certainly a *different view* of the purposes of these covenants, rather than the standard one of the protection of the franchisor's business interests.

[4] The Virginia Automobile Dealers Association (2013) has compiled the "Top Ten" reason for termination. They include: lack of capitalization; loss of floorplan; bankruptcy; apathy; lack of effort; conviction of a crime; loss of license; fraud; change of control (ownership) without consent; and breach of a supplemental agreement such as a "promise to build a new facility, to relocate, to meet certain sales requirements, or for other purposes."

© 2013 Global Journals Inc. (US)

designated area or territory, or in a "primary area of responsibility." (Klein, 1995; Lockerby, 1986; Gumick & Vieux, 1999.) The franchisee will often pay a royalty fee to the franchisor and a "per product" fee on products sold in some combination.

A second category of franchising is a c*hain-style business,* which is also termed a "*business format franchise*," in which a franchisee operates a business under the franchiser's trade name and is thus identified as a member of a "select group" of persons who deal in the particular business. The franchisee is ordinarily obligated to follow a standardized or prescribed format or "method of doing business" and may be subject to the franchisor's control with regard to the materials used in making the product, the design of the facility, site selection, lease negotiation, the hours of business, the qualifications and training of personnel, and the like. In consideration of receiving these services, the franchisee pays an up-front franchise fee and agrees to pay an on-going royalty. The on-going royalty allows the franchisor to provide continued training, research, product development, and support for the entire franchise system. (Perkins, Yatchak & Hadfield, 2010.) In addition, franchisees may be required to pay a percentage of gross sales for advertising expenses or, in some cases, for accounting or other ancillary services provided by the franchisor. (See Krehl v. Baskin-Robbins Ice Cream Company, 1982).

It may be interesting to note that the overall number of distributorships has *decreased* in the United States since 1972, owing to the closing of many gasoline stations, and automobile and truck dealerships (GM and Chrysler announced plans to terminate about 2,200 dealerships)-most especially in the period following the recession of 2008-2009. (See, e.g., Lafontaine & Morton, 2010.) In contrast to this decline in distributorships, chain-style franchises have increased in numbers. Large franchisors (with more than 1,000 units each) seem to dominate this category of franchising; most of these franchisors engage in either the restaurant business (Burger King, McDonald's, KFC, Pizza Hut, etc.) or in the retail sales of automotive products and services.

VI. Franchise Fees

Most franchise systems charge franchisees a *royalty* based on a percentage of gross sales. The average royalty fee is 6.7 percent; however, the percentage varies by type of industry, ranging from 4.6 percent for restaurant and hotel franchises to 12.5 percent for personnel services franchises. Some franchise systems use a *percentage range* that allows for more flexibility based on the nature of the franchise relationship or the age or experience of the franchisor.[5] An example of a flexible formula is a sliding percentage scale that adjusts downward as unit revenues rise or is lower for new units.

a) Advertising Fees

A second category of fees revolves around marketing and advertising. Keup and Keup (2012) outline the six critical "pillars" of a marketing strategy especially relevant to franchising: advertising, television commercials and interactive TV, sales, direct mail, public relations, and the Internet. These "pillars" may apply both to the efforts of the franchisor initially to market its franchise opportunities or to the franchise organization or their individual franchisees to interact with the public. Franchise systems employ different types of marketing and advertising programs based on their individual industry, location and density of franchise operations, and the business model employed. There are three common advertising models: national/general, local, and cooperative/regional. National advertising is generally for established brands and "large-scale" advertising campaigns; local advertising is usually determined by the individual franchisee and specifically advertises the individual franchise operation; cooperative/regional programs usually promote the generic franchise within a geographically designated market area. Smaller or "start up" systems may only have one general advertising program, especially at the outset of operations, and may leave advertising to the individual franchise units until a national brand has developed.

Advertising fee percentages vary greatly. The average advertising fees range from 4-5%, again calculated on the basis of a percentage of gross sales; however, in practice, some franchise companies charge lower fees than those stipulated in their franchise agreements based on the ability of the franchisee to pay. In some cases, local advertising costs (including sponsoring of local sports teams, "couponing," or "special promotions") can be credited towards regional/cooperative or national requirements. Further, cooperative/regional advertising may not be fully-assessed until a national franchise operation reaches a larger size in its market.

Total franchise fees, which are a combination of royalties and advertising fees, thus may range from a low of 6.3 percent to more than double at the high end of 14 percent. As might be expected, differences in industries, the nature and frequency of services provided by the franchisor, and the perceived value of the franchisor's brand are among the factors accounting for the variance in total fees vary charged to franchisees in a franchise system.

VII. Lines of Business

It is interesting to note the wide variety of *business format franchises* which include:

[5] An excellent depiction and summary of the top 48 U.S. franchises may be found at *AwsomeFranchises.com*, *at* http://awesomefranchises.com/a-to-z-franchise-listings. The website states: "A comprehensive franchise directory containing all the information you need on current franchising available including franchise fees, franchise costs and franchise training."

© 2013 Global Journals Inc. (US)

- *Automotive*, including motor vehicle parts and supply stores, tire dealerships, automotive equipment rental and leasing, and automotive repair and maintenance: approximately 2%;
- *Commercial and Residential Services*, including building, developing, and general contracting; heavy construction; special trade contractors; facilities support services; services to buildings and dwellings; and waste management and remediation services: approximately 4%;
- *"Quick Service"("Fast Food") Restaurants*, including limited-service eating places, cafeterias, fast-food restaurants, beverage bars, ice cream parlors, pizza delivery establishments, carryout sandwich shops, and carryout service shops with on-premises baking of donuts, cookies, and bagels: approximately 37%;
- *Table/Full Service Restaurants*: approximately 13%;
- *Retail Food*, including includes food and beverage stores, convenience stores, food service contractors, caterers, and retail bakeries: approximately 6%;
- *Lodging*, including hotels, motels, and other accommodations: approximately 9%;
- *Real Estate*, including lessors of buildings, self-storage units, and other real estate; real estate agents and brokers; and property management and other related activities: approximately 4%;
- *Retail Products and Services*, including furniture and home furnishings stores, electronics and appliance stores, building material and garden equipment and supplies dealers, health and personal care stores, clothing and general merchandise stores, florists and gift stores, consumer goods rentals, photographic services, and book and music stores: approximately 6%;
- *Business Services*, including printing, business transportation, warehousing and storage, data processing services, insurance agencies and brokerages, office administrative services, employment services, investigation and security services, tax preparation and payroll services, and heavy equipment leasing: approximately 11%; and
- *Personal Services*, including educational services, health care, entertainment and recreation, personal and laundry services, veterinary services, loan brokers, credit intermediation and related activities, and personal transportation: approximately 8%.

a) *Product distribution franchising includes the following major categories*

- *Automotive and Truck Dealers*;
- *Gasoline Service Stations*; and
- *Beverage Bottling*, including soft drink and bottled water manufacturing, beer and ale wholesalers, and beer, wine, and liquor stores.

b) *Statistics gathered from FranchiseKnowHow. com (2013) indicate the following industries with the highest percentages of franchise operations*

- Quick Service Restaurants: 211,313; franchise operated: 125,000 or 59%;
- Mail and Copy Centers: 5,200; franchise operated: 3,546 or 68%;
- Children Exam Preparation and Tutoring: 7,192; franchise operated: 2,361 or 33%; [Dominated by Huntington, Kumon and Sylvan].
- Tax Preparation Services: 25,000; franchise operated: 5,416 or 22%; [Dominated by HR Block and Liberty].
- Real Estate Brokers: 109,400; franchise operated: 22,000 or 20%; [Led by Century 21].
- New Car Dealers: 24,888; franchise operated: 24,888 or 100%.

c) *Industries with the lowest percentages of franchise operations include*

- Beauty Salons: 81,632; franchise operated: 6,500 or 8%;
- Senior Home Care: 20,433; franchise operated: 1,677 or 8.2%;
- Home Health Care: 23,000; franchise operated: 565 or 2.5%;
- Pet Care: 11,353; franchise operated: 252 or 2.2%.

VIII. Performance Measurement

Meeting profit or other financial expectations is critical to franchisee satisfaction. Franchisees who are satisfied are more likely to comply with system requirements that build the value of the franchised brand. Growth in franchising is generally defined by rising royalties on rising sales. Carper (2010) insists that profitability is key to both franchisee retention and franchise growth. Moreover, to be successful, the franchisor must develop a serious commitment to franchisee profitability. In order for the franchisor to determine when and how to best invest in that commitment, many turn to internal financial benchmarking as their solution. The main difficulty that franchisors may confront is that franchisees may lack critical financial and management skills, do not know how to comply with financial reporting requirements, and/or provide inaccurate or unreliable financial information because they do not understand its importance.

Financial benchmarking entails identifying a point of reference from which measurements of any sort may be made, and in doing so, it provides a process for educating franchisees on the importance of appropriate measurement. It has become customary and inarguably a good business practice to stay up-to-date with the financial performance of franchises. Note that most franchise agreements will require *benchmarking* and frequent reporting from franchisees.

© 2013 Global Journals Inc. (US)

Recently, Griffith University (Southeast Queensland, Australia) has determined that a higher the reporting compliance of performance metrics the better the franchise relationship tends to be. (FranchiseWire.com, 2011.) Several metrics such as inventory turnover, gross margins, repeat customers, labor costs, weekly sales, average order per customer, and employee turnover are now strongly recommended to evaluate the financial/economic success of a franchise. (Small Biz Viewpoints, 2010.) By gaining insight into how they are performing financially, franchisees and franchisors alike are in a position to better allocate resources (FranchiseWire.com, 2011) and to work toward the success of the relationship.

IX. Benefits from Franchising

There are several general benefits to franchisees who engage in franchising. Franchising offers the opportunity to start a business despite limited capital (in the form of the initial fee) and limited business experience-which typically ranges from 0 to 7 years. Franchising also is based on the existence of that important business intangible-the *goodwill* that results from marketing a nationally or internationally known, high-quality trademark or service mark, which not only benefits the individual franchisees but also raises customer acceptance and recognition throughout the franchise system. (See, e.g., Shell Oil Co. v. Marinello, 1973). Franchising provides a unique access to the franchisor's business expertise in such areas as inventory control, warehousing, advertising, market research, product sourcing, and product innovation. Franchising also provides an assured supply of materials in a distributorship arrangement, the use of bulk-buying techniques based upon the concept of "economies of scale," and access to proven methods of employee training and supervision. (Mendelsohn, 1970; Chisum, 1973.)

On the other side of the equation, the franchisor also reaps enormous benefits from a successful franchise operation. These include a steady stream of income garnered from the franchisee's investment of capital in the business enterprise, generated through the initial franchise fee and collection of on-going franchise fees. The franchisor also will experience the influx of goodwill and other advantages flowing from the franchisee's entrepreneurial abilities, including the enhanced value of the trademark or service mark through its usage and visibility in the market place, resulting from a successful franchise operation. The franchisor will be able to avail itself of an assured distribution network, which also brings about symmetrical "economies of scale" for the franchisor in managing labor costs, producing a more certain demand curve which will also reduce wide fluctuations in sales. (Ungar v. Dunkin' Donuts of America, Inc., 1976.) On a more practical level, the operation of a franchise also provides an opportunity for employment, albeit at the "entry level," or in recent years, for seniors and younger workers who might be available at the "low end" of wage rates. From a financial point of view, franchising will often provide the franchisor with a larger asset base, the ability to secure a larger line of credit, the possibility of enhanced profits, and the diffusion of financial risks. (Brown, 1982).

X. Master Franchising

A master franchisor has the ability to open numerous franchise locations either individually ("single unit") or by a process called "sub-franchising." (Steinberg & Campbell, 2013.) This practice is especially prevalent in two circumstances: when a "new franchise opportunity" is being created and the franchisor wishes to expand locations rapidly; or, in international franchising, where the franchisor wishes to establish large area (city/region/nation) franchises through one individual or entity which will then be responsible to create sub-franchisees either on the basis of a plan or according to the dictates of the market. (Lozada, Hunter & Kritz, 2005.) It is important to understand the distinction between a "contractual obligation" to create additional locations (which may involve expansion before time or financial realities dictate such expansion) and the "ability" or *option* to open new franchise locations.

Most franchisees awarded by U.S. franchisors to foreign entrepreneurs have been either to award "multiple-unit-franchises" to aggressive entrepreneurs who will be responsible for the development of an entire geographic region (perhaps even an entire country), either through their own efforts and resources; by sub-franchising to third parties; through some form of a "joint venture" (E.g., Weinberg & Shaw, 2012); or a licensing agreement.

a) Multi-Unit Franchising

The two primary types of multiple-unit franchise development strategies involve *sub-franchisors*, who act as *independent marketing agents* and who are responsible for the recruitment and ongoing support of franchisees within their region-frequently through the use of option-contracts or "rights of first refusal"; or area *developers*, who have no resale rights but rather are themselves responsible for meeting a "mandatory development schedule" in their given region. (Steinberg & Campbell, 2013).

The inclusion of multiple-unit franchises in a franchisor's overall development strategy (through the adoption of a "strategic plan") allows for even more market penetration and less administrative burdens and costs to the franchisor. The key issues in structuring an area development agreement usually revolve around the size of the territory, fees, and the "mandatory timetable"

© 2013 Global Journals Inc. (US)

for development of the units. The franchisor will usually retain certain rights in the event the franchisee defaults on its development obligations. The area developer will usually pay an "umbrella fee" for the development of individual franchises in a region, over and above the initial fee that is due and payable as each unit becomes operational within the territory. The amount of the fee will vary, depending on factors such as the strength of the franchisor's trademarks and market share, the size of the territory, and the term (including any renewal) of the agreement. The *development fee* is essentially a payment to the franchisor that prevents the franchisor from offering any other franchises within that region (unless there is a default, as where the franchisee fails to meet any "mandatory development schedule").

b) Structuring Sub-Franchising Agreements

Sub-franchising agreements present a variety of issues and problems that are not raised in the sale of a single-unit franchise or an area development agreement. In most sub-franchising relationships, the franchisor will share a portion of the initial franchise fee and ongoing royalties with the sub-franchisor, in exchange for the sub-franchisor *assuming many responsibilities associated with the "quality control" function in the given region*. The proportion in which fees are shared usually has a direct relationship to the exact responsibilities of the sub-franchisor. In addition, the sub-franchisor will receive a *comprehensive regional operations manual* that covers sales and promotions, and training and field supervision over and above the information contained in the operations manuals provided to the individual franchisees.

A sub-franchisor will enter into what is typically referred to as a *Regional Development Agreement* (RDA) with the franchisor, under which the sub-franchisor is granted certain rights to develop a particular region. The RDA is not in itself a franchise agreement to operate any individual franchise units; rather, it grants the sub-franchisor the *right* to sell franchises to individuals using the franchisor's system and proprietary marks solely for the purpose of recruitment, management, supervision, and support of individual franchisees. To the extent that the sub-franchisor itself develops units, then an individual franchise agreement for each unit must be executed.

The relationship between the franchisor and sub-franchisor is unique and complicated. The advantages to the franchisor ("Master Franchisor") include rapid market penetration, the delegation of obligations the franchisor would otherwise be required to fulfill to each franchisee in its "network," and the ability to collect a percentage of the initial franchise fee and the ongoing royalty fee from each franchisee, generally without the same level of effort that would be required in a single-unit relationship.

c) Joint Ventures

In the franchising context, many American franchisors have entered into foreign markets through a joint venture agreement in which parties have co-ownership and are responsible for co-development of the market. (Weinberg & Shaw, 2012). A good example is China. U.S. franchisers are continuing to play the leading role in China's franchise market since its inception in 1987 when KFC's first Chinese outlet was opened in Beijing. Major U.S. franchisers in China include:

- Catering sector: KFC, McDonald's, Pizza Hut, T.G.I. Friday's, Subway, Haagen Dazs, Starbucks Coffee;
- Retailing sector: Wal-Mart, 7-Eleven;
- Real estate brokerage: Century 21;
- Photo developing: Kodak;
- Printing service: Kinko's; and
- Footwear: Athlete's Foot. (Franchising Industry in China, 2013.)

Risks are shared by both joint venture partners and the trade marks/systems are licensed by the franchisor to the joint venture entity. A joint venture may also be established when the existing franchisor wishes to offer products or services to an existing franchise.

Before a joint venture (or partnership) can be undertaken, the following preliminary questions should be addressed:

- Exactly what type of tangible and intangible assets will be contributed by each party? Which party will possess ownership rights to the property?
- Who will own property developed as a result of the joint development efforts?
- What covenants of nondisclosure or non-competition will be expected of each joint venture partner during the term of the agreement and thereafter?
- What timetables or performance quotas for completion of the projects contemplated by the joint venture will be included in the agreement? What are the rights and remedies if these performance standards are not met?
- How will the issues of management and control be addressed in the agreement?
- What are the procedures for resolving disputes, disagreements, or deadlocks between the joint venture partners?

XI. Some Concluding Remarks

According to the forecast of the *Franchise Business Economic Outlook* (Haller & Weisbord, 2013), the number of franchise establishments in the United States will increase by 1.5 percent in 2013. The number of jobs in franchise establishments will increase 2.0 percent in 2013, following a gain of 2.2 percent in 2012. The output of franchise establishments in nominal dollars in 2013 will increase 4.3 percent, following a 4.9

© 2013 Global Journals Inc. (US)

percent increase in 2012. The gross domestic product (GDP) of the *franchise sector* is projected to increase to $472 billion in 2013.

James Gillula, of *HIS Global Insights*, noted: "We continue to expect that the economy is headed for another 'spring swoon,' this time brought on by the federal government's spending sequester." However, he continued: "The primary sources of the expected slow pace of GDP growth in 2013 will have a less direct impact on the franchise sector, and we expect the franchise sector will continue to outperform within many of the industries where franchises are concentrated." (Haller & Weisbord, 2013.)

What might be expected is that *Business Services and Commercial & Residential Services* will rank as the top two sectors in both franchise employment growth and growth of the number of establishments in 2013. Surprisingly, *Real Estate* (making a remarkable comeback from the depths of 2008-2009) will rank first in output growth and will be among the top three in franchise growth for establishments and employment. *Quick Service Restaurants*-the largest franchise business line-will rank third in the growth of output. While growth of *full-service restaurant* sales industry-wide slowed in the first quarter of 2013, the 2013 forecast for full service restaurants was revised downward slightly.

It seems as if franchising is and will remain an important sector of the American economy.

References Références Referencias

1. Biggers, Sara M, Richard A. Mann & Barry S. Roberts. 1999. "Intellectual Property and Antitrust: A Comparison of the European Union and the United States," *Hamline Journal of Public Law and Policy*, Vol. 22, pp. 209-289.
2. Brown, Harold. 1982. *Franchising: Realities and Remedies*, § 7.04[1]-[2] at pp. 7-31-7-34, New York: Law Journal Press.
3. Burke, J.A. 2003. "Reinventing Contract," *Murdoch University Electronic Law Journal*, Vol. 10(2), *available at* www.murdoch.edu.au/elawiththisissues/v1010n2/burke102_texthtml (last accessed June 20, 2013).
4. Carper, Barbara. 2010. "Benchmarking franchise performance: Eight steps to best practices for your organization," *available at* www.profitsoup.com/downloadable-files/Benchmarking%20Whitepaper.pdf (last accessed June 21, 2013).
5. Chisum, Donald S. 1973. "State Regulation of Franchising: The Washington Experience," *Washington Law Review*, Vol. 48(2), pp. 291-390.
6. Emerson, Robert W. 1995. "Franchising Covenants Against Competition," *Iowa Law Review*, Vol. 80, pp. 1049-1092.
7. Emerson, Robert W. 2008. "Franchise Termination: Legal Rights and Practical Effects When Franchisees Claim the Franchisor Discriminates," *American Business Law Journal,* Vol. 35(4), pp. 559-645.
8. Emerson, Robert W. 2013. 'Franchise Goodwill: Take a Sad Song and Make It Better," *University of Michigan Journal of Law Reform*, Vol. 46, pp. 349-416.
9. *Franchise Business Economic Outlook*. 2013.
10. Gilson, Anne (Jerome Gilson, original author from 1974-2005). 2013. *2 Gilson on Trademarks,* Section 6.04, Lexis-Nexis.
11. Gumick, David & Steve Vieux. 1999. "Case History of the American Business Franchise," *Oklahoma City University Law Review*, Vol. 24, pp. 37-63.
12. Haller, Matthew & Jenna Weisbord. 2013. "Franchise Growth Rate Flat in Second Half of Year," *available at* http://www.franchise.org /Franchise-News-Detail.aspx?id=60266 (last access -ed June 20, 2013).
13. Haller, Matthew & Jenna Weisbord. 2013. "New Delaware Law Clarifies Franchisees as Independent Contractors," *available at* www.franchise.org/ IFA_-NEWS/New_Delaware_Law_Clarifies_Franchisees_as_Independent_Contractors (last accessed June 19, 2013).
14. *Illinois Franchise Disclosure Act*. 1987. 815 ILCS.
15. Judd, Richard J. & Robert T. Justis. 2008. *Franchising: An Entrepreneur's Guide, 4th ed.,* Cengage Custom Publishing.
16. Keup, Edwin & Peter E. Keup. 2012. *Franchise Bible,* Irvine, Cal.: Entrepreneur Press.
17. Klarfeld, Peter J. & Mark S. VanderBroek. 2011. "Law on Covenants Against Competition Shifts Toward Greater Enforceability by Franchisors," *Franchise Law Journal*, Vol. 31, pp. 76-84.
18. Klein. Benjamin. 1995. "The Economics of Franchise Contracts," *Journal of Corporate Finance*, Vol. 2(1-2), pp. 9-37.
19. Lockerby, Michael J. 1986. "Franchise Termination Restrictions: A Guide for Practitioners and Policy Makers," *Antitrust Bulletin*, Vol. 30, pp. 791-ff.
20. Lozada, Hector, Richard J. Hunter, Jr. & Gary Kritz. 2005. "Master Franchising as an Entry Strategy: Marketing and Legal Implications," *Coastal Business Journal*, Vol. 4, pp. 16-28.
21. Lafontaine, Francine & Fiona Scott Morton. 2010. "State Franchise Laws, Dealer Terminations, and the Auto Crisis," *Journal of Economic Perspectives*, Vol. 24(3), pp. 233-250.
22. *Lanham Act.* 1946. 15 U.S.C. §§ 1051-1129.
23. Lederman, Howard Yale & David L. Stenberg. 2012. "Contrasting Perspectives on Franchise Terminations," *Michigan Bar Journal*, pp. 29-32.
24. McCarthy, J. Thomas. 1970. "Trademark Franchising and Antitrust: The Trouble with Tie-ins," *California Law Review*, Vol. 58, pp. 1085-1119.
25. Mendelsohn, Martin. 1970. *The Guide to Franchising,* Elmsford, New York: Pergamon Press.

© 2013 Global Journals Inc. (US)

26. Mendelsohn, Martin. 2004. *The Guide to Franchising, 7th ed.*, London: Cengage Learning EMEA.
27. Perkins, Heather Carson, Sarah J. Yatchak & Gordon M. Hadfield. 2010. "Franchisor Liability for Acts of the Franchisee," *American Bar Association Franchise Law Journal*, Vil. 29, pp. 174-182.
28. *Revised Code of Washington* (RCW). 2013. *Washington Franchise Disclosure Law,* Chapter 19.100.
29. Rohan, Patrick J. & Melvin A. Reskin. 3d ed., 2004. *Nichols on Eminent Domain,* § 29.01[1], Lexis-Nexis (Matthew Bender).
30. Sanders, Pannal Alan. 1981. "At Will Franchise Terminations and the Abuse of Rights Doctrine," *Louisiana Law Review,* Vol. 42(1), pp. 210-238.
31. Scott, David Logan. 2003. *Wall Street Words: An A to Z Guide to Investment Terms for Today's Investor,* New York: Houghton Mifflin Harcourt.
32. Slawson, W.D. 1971. "Standard Form Contracts and Democratic Control of Law Making Power," *Harvard Law Review,* Vol. 84, pp. 529-566.
33. Small Biz Viewpoints. 2010. "Key Performance Metrics for Retail and Restaurants," July 16, *available at* www.smallbizviewpoints.com/2010/ 07/19/key-performance-metrics-for-retail-and restau rants/ (last accessed June 21, 2013).
34. Steinberg, Wayne A. & Callum Campbell. 2013. "International Expansion: Is Master Franchising the Best Approach?" *The Franchise Lawyer*, Vol. 16(2), pp. 9-12.
35. Virginia Automobile Dealers Association. 2013. "Your Franchise: Avoid the Top Ten reasons for Termination," *available at* www.vada.com/Dealer shipResources/CurrentNewsletter (last accessed June 20, 2013).
36. Weinberg, Larry & Geoffrey B. Shaw. 2012. "An Overview of the Canadian Market for American Franchise Systems," *Franchise Law Journal*, Vol. 31, pp. 220-231.

Cases Cited

1. Cano v. DPNY, Inc., 2012 U.S. Dist. LEXIS 161284 (S.D.N.Y. 2012).
2. Casey's Gen. Stores, Inc. v. Campbell Oil Co., 441 N.W.2d 758, 761 (Iowa 1989).
3. Dawn Donut Co. v. Hart Food Stores, 267 F.2d 358 (2d Circuit 1959).
4. Dugan v. Dugan, 457 A.2d 1, 3 (N.J. 1983).
5. Husain v McDonald's Corp, 205 Cal App 4th 860, 869; 140 Cal Rptr 3d 370 (2012).
6. Ketterling v. Burger King Corp., 152 P.3d 527 (Idaho 2012).
7. Krehl v. Baskin-Robbins Ice Cream Company, 664 F.2d 1348 (9th Circuit 1982).
8. Mini Maid Servs. Co. v. Maid Brigade Sys., Inc., 967 F.2d 1516, 1519 (11th Circuit 1992).
9. Principe v. McDonald's Corp., 631 F.2d 303 (4th Circuit 1980).
10. Schlotzsky's, Ltd. V. Sterling Purchasing and National Distribution Co., 520 F. 3d 393 (3rd Circuit 2008).
11. Shell Oil Co. v. Marinello, 307 A.2d 598 (N.J., 1973).
12. State Dep't of Transp. v. Cowan, 103 P.3d 1, 5 (Nev. 2004).
13. Ungar v. Dunkin' Donuts of America, Inc., 531 F.2d 1211, 1222-1223 (3rd Circuit 1976).

Websites

1. *AwsomeFranchises.com. At* http://awesomefranchises.com/a-to-z-franchise-listings (last visited June 25, 2013).
2. *A-ZFranchises.com.* (last visited June 22, 2013).
3. *Fibrenew.com* (Website). *At* http://www.fibrenew.com/franchisee-faq/what-is-the-background-of-your-typical-franchisee (last visited June 20, 2013).
4. *7-Eleven.com* (Website). *At* http://franchise.7-eleven.com/franchise-process/candidate-profile/#sthash.CJyDL8OJ.dpuf (last visited June 18, 2013).
5. *FranchiseKnowHow.com.* (last visited June 22, 2013).
6. *Franchising Industry in China. At* www.franchise.org/ uploadedFiles/Franchise_Industry/International_Development/franchising%20in%20China.pdf (last accessed June 20, 2013).
7. *FranchiseWire.com*. 2011. "Research reveals franchise performance metrics," June 16, *at* www.franchisewire.com/article.php?id=5958 (last accessed June 21, 2013).

© 2013 Global Journals Inc. (US)

Appendix I

Program Sponsors

Show Sponsors

© 2013 Global Journals Inc. (US)

Global Journals Inc. (US) Guidelines Handbook 2013

www.GlobalJournals.org

FELLOW OF INTERNATIONAL CONGRESS OF MANAGEMENT AND BUSINESS RESEARCH (FICMBR)

- 'FARSB' title will be awarded to the person after approval of Editor-in-Chief and Editorial Board. The title 'FARSB" can be added to name in the following manner. eg. **Dr. John E. Hall, Ph.D., FARSB or William Walldroff Ph. D., M.S., FARSB**
- Being FARSB is a respectful honor. It authenticates your research activities. After becoming FARSB, you can use 'FARSB' title as you use your degree in suffix of your name. This will definitely will enhance and add up your name. You can use it on your Career Counseling Materials/CV/Resume/Visiting Card/Name Plate etc.
- 60% Discount will be provided to FARSB members for publishing research papers in Global Journals Inc., if our Editorial Board and Peer Reviewers accept the paper. For the life time, if you are author/co-author of any paper bill sent to you will automatically be discounted one by 60%
- FARSB will be given a renowned, secure, free professional email address with 100 GB of space eg.johnhall@globaljournals.org. You will be facilitated with Webmail, SpamAssassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.
- FARSB member is eligible to become paid peer reviewer at Global Journals Inc. to earn up to 15% of realized author charges taken from author of respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account or to your PayPal account.
- Eg. If we had taken 420 USD from author, we can send 63 USD to your account.
- FARSB member can apply for free approval, grading and certification of some of their Educational and Institutional Degrees from Global Journals Inc. (US) and Open Association of Research,Society U.S.A.
- After you are FARSB. You can send us scanned copy of all of your documents. We will verify, grade and certify them within a month. It will be based on your academic records, quality of research papers published by you, and 50 more criteria. This is beneficial for your job interviews as recruiting organization need not just rely on you for authenticity and your unknown qualities, you would have authentic ranks of all of your documents. Our scale is unique worldwide.
- FARSB member can proceed to get benefits of free research podcasting in Global Research Radio with their research documents, slides and online movies.
- After your publication anywhere in the world, you can upload you research paper with your recorded voice or you can use our professional RJs to record your paper their voice. We can also stream your conference videos and display your slides online.
- FARSB will be eligible for free application of Standardization of their Researches by Open Scientific Standards. Standardization is next step and level after publishing in a journal. A team of research and professional will work with you to take your research to its next level, which is worldwide open standardization.

- FARSB is eligible to earn from their researches: While publishing his paper with Global Journals Inc. (US), FARSB can decide whether he/she would like to publish his/her research in closed manner. When readers will buy that individual research paper for reading, 80% of its earning by Global Journals Inc. (US) will be transferred to FARSB member's bank account after certain threshold balance. There is no time limit for collection. FARSB member can decide its price and we can help in decision.

MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (MARSB)

- 'MARSB' title will be awarded to the person after approval of Editor-in-Chief and Editorial Board. The title 'MARSB" can be added to name in the following manner. eg. Dr. John E. Hall, Ph.D., MARSB or William Walldroff Ph. D., M.S., MARSB
- Being MARSB is a respectful honor. It authenticates your research activities. After becoming MARSB, you can use 'MARSB' title as you use your degree in suffix of your name. This will definitely will enhance and add up your name. You can use it on your Career Counseling Materials/CV/Resume/Visiting Card/Name Plate etc.
- 40% Discount will be provided to MARSB members for publishing research papers in Global Journals Inc., if our Editorial Board and Peer Reviewers accept the paper. For the life time, if you are author/co-author of any paper bill sent to you will automatically be discounted one by 60%
- MARSB will be given a renowned, secure, free professional email address with 30 GB of space eg.johnhall@globaljournals.org. You will be facilitated with Webmail, SpamAssassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.
- MARSB member is eligible to become paid peer reviewer at Global Journals Inc. to earn up to 10% of realized author charges taken from author of respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account or to your PayPal account.
- MARSB member can apply for free approval, grading and certification of some of their Educational and Institutional Degrees from Global Journals Inc. (US) and Open Association of Research,Society U.S.A.
- MARSB is eligible to earn from their researches: While publishing his paper with Global Journals Inc. (US), MARSB can decide whether he/she would like to publish his/her research in closed manner. When readers will buy that individual research paper for reading, 40% of its earning by Global Journals Inc. (US) will be transferred to MARSB member's bank account after certain threshold balance. There is no time limit for collection. MARSB member can decide its price and we can help in decision.

ANNUAL MEMBER

- Annual Member will be authorized to receive e-Journal GJMBR for one year (subscription for one year).
- The member will be allotted free 1 GB Web-space along with subDomain to contribute and participate in our activities.
- A professional email address will be allotted free 500 MB email space.

PAPER PUBLICATION

- The members can publish paper once. The paper will be sent to two-peer reviewer. The paper will be published after the acceptance of peer reviewers and Editorial Board.

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

Process of submission of Research Paper

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

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

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

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

(II) Choose corresponding Journal.

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

(B) If you are using Internet Explorer, then Direct Submission through Homepage is also available.

(C) If these two are not convenient, and then email the paper directly to dean@globaljournals.org.

Offline Submission: Author can send the typed form of paper by Post. However, online submission should be preferred.

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 .

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

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

TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:

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

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

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

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

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

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

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

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

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

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

11. Revise what you wrote: When you write anything, always read it, summarize it and then finalize it.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

26. Go for seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

27. Refresh your mind after intervals: Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

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

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

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

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

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

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

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

Informal Guidelines of Research Paper Writing

Key points to remember:

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

Final Points:

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

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

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

General style:

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

To make a paper clear

· Adhere to recommended page limits

Mistakes to evade

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

In every sections of your document

· Use standard writing style including articles ("a", "the," etc.)

· Keep on paying attention on the research topic of the paper

· Use paragraphs to split each significant point (excluding for the abstract)

· Align the primary line of each section

· Present your points in sound order

· Use present tense to report well accepted

· Use past tense to describe specific results

· Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives

· Shun use of extra pictures - include only those figures essential to presenting results

Title Page:

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

Abstract:

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

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

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

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

Approach:

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

Introduction:

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

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

Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.

- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

Procedures (Methods and Materials):

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

Materials:

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

Methods:

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

Approach:

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

What to keep away from

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

Results:

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

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

Content

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

What to stay away from

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

Approach

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

Figures and tables

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

Discussion:

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

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

Approach:

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

Administration Rules Listed Before Submitting Your Research Paper to Global Journals Inc. (US)

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

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

- The **major constraint** is that you must independently make all content, tables, graphs, and facts that are offered in the paper. You must write each part of the paper wholly on your own. The Peer-reviewers need to identify your own perceptive of the concepts in your own terms. NEVER extract straight from any foundation, and never rephrase someone else's analysis.

- Do not give permission to anyone else to "PROOFREAD" your manuscript.

- Methods to avoid Plagiarism is applied by us on every paper, if found guilty, you will be blacklisted by all of our collaborated research groups, your institution will be informed for this and strict legal actions will be taken immediately.)
- To guard yourself and others from possible illegal use please do not permit anyone right to use to your paper and files.

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

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals Inc. (US).

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

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

Index

A

Absenteeism · 11
Arousal · 11
Asterisk · 56
Authoritarian · 36

B

Boredom · 14

C

Couponing · 66

D

Delineates · 61
Detrimental · 11
Dwellings · 67

E

Escalation · 48
Estoppel · 63
Ethos · 36
Exemplified · 34

G

Glimpse 46

H

Hassel · 1
Hindrance · 11

I

Inevitable · 11
Infringement · 63

L

Leverages · 28
Likert · 3

M

Midrange · 12
Miniature · 28
Multicoliniarity · 14

P

Pervasive · 19, 24, 26
Procrastination · 14

R

Recruit · 1, 61
Rephrasing · 14, 42
Repositories · 31

S

Skewness · 57
Spurious · 50, 54
Stalled · 11
Steeply · 6
Stimulus · 16

T

Thwarting · 11

U

Underutilized · 22

V

Versa · 41, 43, 52

save our planet

Global Journal of Management and Business Research

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

ISSN 9755853

© Global Journals