Online ISSN: 2249-4588
Print ISSN: 0975-5853
DOI: 10.17406/GJMBR

Global Journal

of Management and Business Research: B

Economics and Commerce



The Impact of Remittances

Maternal Education and Child Health

Highlights

Partnership Opportunities to SMEs

Assessment of Crowdfarming Diversity

Discovering Thoughts, Inventing Future

VOLUME 22 ISSUE 3 VERSION 1.0

© 2001-2022 by Global Journal of Management and Business Research, USA

Volume 22 Issue 13 was originally issued as B3

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

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

Volume 22 Issue 3 (Ver. 1.0)

Open Association of Research Society

© Global Journal of Management and Business Research. 2022.

All rights reserved.

This is a special issue published in version 1.0 of "Global Journal of Science Frontier Research." By Global Journals Inc.

All articles are open access articles distributed under "Global Journal of Science Frontier Research"

Reading License, which permits restricted use. Entire contents are copyright by of "Global Journal of Science Frontier 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® Headquarters
945th Concord Streets,
Framingham Massachusetts Pin: 01701,
United States of America
USA Toll Free: +001-888-839-7392
USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

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

Packaging & Continental Dispatching

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

Find a correspondence nodal officer near you

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

eContacts

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

Pricing (Excluding Air Parcel Charges):

Yearly Subscription (Personal & Institutional)
250 USD (B/W) & 350 USD (Color)

Editorial Board

Global Journal of Management and Business Research

Dr. John D. Theodore

American Military University
JDT Management Consultants, President.
D.B.A., Business Economy
University of South Africa
Ph.D. Aristotelian University
Business Administration
Ph.D. Administration, University of Kansas
USA

Prof. Moji Moatamedi

Honorary Vice Chair
Ph.D., at The University of Sheffield,
MBA, Manchester Business School
University of Manchester
UK

Dr. R. Allen Shoaf

B.A., M.A., Ph.D. Cornell University
Cornell University, Teaching Assistant in the English Department,
University of Florida, US

Professor Maura Sheehan

Professor, International Management
Director, International Centre
for Management & Governance Research (ICMGR)
Ph.D. in Economics
UK

Dr. Mehdi Taghian

Senior Lecturer
Faculty of Business and Law
BL Deakin Business School
Melbourne Burwood Campus
Australia

Dr. Carl Freedman

B.A., M.A., Ph.D. in English, Yale University
Professor of English, Louisiana State University, US

Dr. Agni Aliu

Ph.D. in Public Administration,
South East European University, Tetovo, RM
Asociater profesor South East European University,
Tetovo, Macedonia

Dr. Tsutomu Harada

Professor of Industrial Economics
Ph.D., Stanford University, Doctor of Business Administration, Kobe University

Dr. Wing-Keung Won

Ph.D., University of Wisconsin-Madison,
Department of Finance and
Big Data Research Center
Asia University,
Taiwan

Dr. Xiaohong He

Professor of International Business
University of Quinnipiac
BS, Jilin Institute of Technology; MA, MS, Ph.D.,.
(University of Texas-Dallas)

Dr. Carlos García Pont

Associate Professor of Marketing
IESE Business School, University of Navarra
Doctor of Philosophy (Management),
Massachussetts Institute of Technology (MIT)
Master in Business Administration, IESE, University of Navarra
Degree in Industrial Engineering,
Universitat Politècnica de Catalunya
Web: iese.edu/aplicaciones/faculty/facultyDetail.asp

Dr. Söhnke M. Bartram

Department of Accounting and Finance
Lancaster University Management School
Ph.D. (WHU Koblenz)
MBA/BBA (University of Saarbrücken)
Web: lancs.ac.uk/staff/bartras1/

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. Dodi Irawanto

Ph.D., M.Com, B.Econ Hons.
Department of Management
Faculty of Economics and Business
Brawijaya University
Malang, Indonesia

Dr. Ivona Vrdoljak Raguz

University of Dubrovnik,
Head, Department of Economics and Business Economics,
Croatia

Dr. Yongbing Jiao

Ph.D. of Marketing
School of Economics & Management
Ningbo University of Technology
Zhejiang Province, P. R. China

Dr. Charles A. Rarick

Ph.D.
Professor of International Business
College of Business
Purdue University Northwest
Hammond, Indiana US

Yue-Jun Zhang

Business School,
Center for Resource and Environmental Management
Hunan University, China

Dr. Albrecht Classen

M.A. (Staatsexamen), Ph.D. University of Virginia, German
Director, Summer Abroad Program, Medieval Europe Travel Course

Dr. Brandon S. Shaw

B.A., M.S., Ph.D., Biokinetics, University of Johannesburg, South Africa
Professor Department of Sport and Movement Studies
University of Johannesburg, South Africa

Contents of the Issue

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

1. Maternal Education and Child Health Production: Case of the Central African Republic. *1-13*
2. Assessment of Crowdfarming Diversity in Lagos State using Shannon's Entropy Index. *15-20*
3. The Impact of Remittances from Overseas Workers on Economic Expansion at Home: Evidence from Bangladesh. *21-28*
4. Reimagining Theory of Planned Behaviour in Exploitation of Public Private Partnership Opportunities to SMEs. *29-39*

v. Fellows
vi. Auxiliary Memberships
vii. Preferred Author Guidelines
viii. Index

Volume 22 Issue 13
Originally issued as B3

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 22 Issue 3 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Maternal Education and Child Health Production: Case of the Central African Republic

By Gbangoula Seremandji Alain Hyacinthe & Christian Zamo Akono
University of Yaounde II

Abstract- The effect of education on health has increased over the last decades. This paper investigates the effect of the maternal education on antenatal care use. Based on the behavioural model and regression analyses with ordered multinomial logit model. We testthis hypothesis using data from the Mics survey, 2010 on the CAR. In terms of results, we find that an additional year increases, other things being equal, the probability of making all visits by 2.14 times. We find that more educated mothers have a greater advantage in using more prenatal health care during pregnancy.

Keywords: *maternal education; prenatal care; CAR; child health production.*

Classification JEL: *I12, I30*

GJMBR-B Classification: *DDC Code: 610.3 LCC Code: R121*



Strictly as per the compliance and regulations of:

© 2022. Gbangoula Seremandji Alain Hyacinthe & Christian Zamo Akono. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at https://creative commons.org/licenses/by-nc-nd/4.0/.

Maternal Education and Child Health Production: Case of the Central African Republic

Gbangoula Seremandji Alain Hyacinthe [α] & Christian Zamo Akono [σ]

Abstract- **The effect of education on health has increased over the last decades. This paper investigates the effect of the maternal education on antenatal care use. Based on the behavioural model and regression analyses with ordered multinomial logit model. We test this hypothesis using data from the Mics survey, 2010 on the CAR. In terms of results, we find that an additional year increases, other things being equal, the probability of making all visits by 2.14 times. We find that more educated mothers have a greater advantage in using more prenatal health care during pregnancy.**

Keywords: maternal education; prenatal care; CAR; child health production.

Classification JEL: I12, I30

I. Introduction

Millions of women in developing countries experience life-threatening health problems related to pregnancy or childbirth. The demand for prenatal health care is what economists call the production of health. It has theoretical explanations in the approach of Andersen (1968) Grossman (1972) Evans (1974). In research on the factors that explain the demand for health care, Andersen (1968a, 1995b) and Andersen and Newman, (1973a, 1995b) show that the use of health services depends on predisposing factors, including women's education, facilitating or inhibiting factors, and a perceived need to improve health. For Grossman (1972) 'good health' is a commodity produced by the individual which is considered to be part of their human capital. This approach is used to explain the investments that pregnant women make during pregnancy. Grossman explains that health capital, which depreciates with age, can be maintained and even appreciated by combining, in a process of transformation from medical to health care, the stock of education and the time available. The induced demand theory of Evans (1974) explains that the patient-consumer of medical care is unaware of the characteristics of the good to be consumed, which is the treatment during pregnancy.

Complications of pregnancy and childbirth cause more deaths than any other reproductive health problem. The World Health Organization (WHO) estimates that 600,000 women of childbearing age die each year from pregnancy-related complications, with a high proportion of these deaths occurring in sub-Saharan Africa averaging 546 per 100,000 live births (WHO, 2018). Over the past few decades, measures to reduce maternal mortality have been implemented in many countries. In addition to these measures, we are seeing an increase in initiatives related to maternal and child health. Among these initiatives are the Millennium Development Goals, whose goals 4 and 5 were to reduce maternal and child mortality by two-thirds by 2015 (Tabutin and Masquelier 2017). These initiatives have certainly reduced global under-five mortality by more than 50%. This decline has accelerated since 2015, to 3.8% per year, compared to 2% in the 2000s. Unfortunately, this progress masks disparities in the demand for antenatal care in some African countries, including the Central African Republic. Yet the antenatal period offers important opportunities for the care and well-being of pregnant women and their infants. It allows for a better understanding of the growth and development of the fetus and its relationship to the health of the mother (WHO, 2019).

For Beldjerd et al (2021), pregnancy is an event in a woman's life that requires special medical monitoring. Indeed, for a pregnant woman, it is important to check that she is in good health. To this end, how should prenatal consultations take place during the nine months of pregnancy? Prenatal consultations are a series of examinations that a woman must undergo during her pregnancy either by a qualified person (midwife, gynaecologist, nurse, etc.). WHO, (2017) recommends in fact, eight mandatory examinations to be carried out. During pregnancy, the first one should take place between 2e and 3e months. It consists of ascertaining the pregnancy and determining the medical follow-up with the health care staff. However, the rest of the visits will be used to check the development of the foetus through ultrasound scans, blood tests, blood pressure tests and urine tests. The second visit takes place in the 4e month of pregnancy. It consists of a screening for trisomy 21 and to see if the pregnancy presents a risk or not[1]. The

Author α σ: University of Yaounde II. e-mails: alaingbang@gmail.com, zchristy2@yahoo.fr

[1] The health care staff check the development of the foetus and carry out a cervical and oral examination throughout the pregnancy. The third prenatal visit takes place at 5e months of pregnancy. This is an important examination date for any pregnancy as the second ultrasound will reveal the sex of the child. A new urine test may be performed to check that the kidneys are functioning normally. The 6e month check-up is to see if the pregnant woman has tested positive for hepatitis B and is also the time to put your feet up. The 5e prenatal visit

© 2022 Global Journals

examinations in the 9e month of pregnancy check the position to determine the conditions of the delivery (vaginal or caesarean) and the pregnancy an aesthesia consultation and propose an epidural if necessary. In developing countries such as CAR, just over half of pregnant women have received the eight visits recommended by the World Health Organisation. For example, the 2010 MICS survey shows that only 18% of pregnant women were registered for antenatal care in their first trimester, 56% in their second trimester and 26% in their third trimester. The CAR MICS Multiple Indicator Cluster Survey, (2019) also reveals a similar result, namely that only 22% of all women surveyed were registered for antenatal care in their first trimester and only 34% of all deliveries are attended by health professionals.

At the national level, according to the 2016 National Health Development Plan (PNDS), antenatal care coverage is higher in urban areas. And only 68% of pregnant women in urban areas received antenatal care at least once during their pregnancy by qualified personnel compared to 57% in rural areas. In the prefectures, the highest level of this indicator (use of antenatal care) is observed in Bangui 91% due to the greater concentration of health personnel, while the lowest level is found in Basse-Kotto [2] 43%. Antenatal care is more often provided by paramedical staff 63% than by doctors 6%. Among the reasons for this low use of care during pregnancy we have the level of education of the mothers. The higher the educational level of the woman, the more she aspires to a higher income and the more she uses the services of qualified personnel during prenatal care. However, 54% of pregnant women with no education seek antenatal care services from qualified personnel, compared to 73% of pregnant women with primary education and 93% of pregnant women with secondary education or higher. It is important to note that the possible mechanisms of the relationship between education and health raise the question and require a clear understanding of the reasons for not using health care during pregnancy.

The issue of health in general and maternal health in particular is of interest to many authors, hence the existence of numerous research papers, articles and books on health issues around the world. Researchers continue to pay attention and point to the level of education as one of the factors that can explain the demand for prenatal health care. According to these studies, there is generally a positive relationship between maternal education and women's education, particularly with regard to the use of health care (Caldwell, 1981; Elo 1992; Yang et al 2010; Anita Anima Daniels 2013; Daniels 2013; Menda, 2020). Caldwell (1981) confirms this relationship and argues that education produces changes in a woman's values, attitudes and behaviour. It gives women greater decision-making power in the household and in their communities, resulting in an increased demand for preventive care. Educating women and girls will help achieve other goals such as food security and nutrition, maternal and child health, and the prevention and treatment of communicable diseases. Elo (1992) The study shows that an educated mother is more likely to be aware of the need for antenatal visits or assistance by trained health personnel. The author also highlights the importance of the spouse's level of education. According to him, the spouse's level of education is equally important in the decision to use maternal health care, although it seems to have less influence than women. Daniels (2013) works on factors influencing maternal health utilisation among rural women in Ghana. He finds that respondents' level of education was not significantly associated with all maternal health outcomes. In Indonesia, Efendi, et al (2017) analyze factors influencing maternal health care service use with data from the 2012 Demographic and Health Survey. They conclude on the link between the education gap of spouses, and show that the likelihood of using maternal health care increases when husbands have a higher education level than their wives. Wives whose husbands were better educated were almost twice as likely to receive all three maternal care interventions as those whose husbands had the same or lower levels of education. According to a study by Menda, (2020), each additional year of education in a girl's life reduces the risk of her unborn baby dying by 10%.

The non-optimal use of antenatal care remains a significant public health problem given the high maternal and neonatal mortality rates in the country. Access to maternal health care in CAR remains restrictive despite major efforts to create, build and equip health facilities and the existence of a national health technology strategy document. Indeed, a significant proportion of the Central African population does not have access to essential health care, either because adequate services are not available, or because these services are not affordable for the poorest. This situation is attributable to several constraints that limit access to health care, thereby increasing maternal mortality. Utilization of maternal

takes place in the 7e month of pregnancy. This is a routine pregnancy check-up to ensure that the pregnancy is going well and to start preparing for the birth. The consultation in the 8e month of pregnancy is the last ultrasound. This will check the growth of the foetus, the proper functioning of all organs and its positioning in preparation for the birth.

[2] Basse-Kotto is one of the prefectures in the south-east of CAR. It should be noted that the relatively high rate of antenatal care coverage in the prefectures of Nana-Grébizi (79%) and Haut-Mbomou (76%) in a conflict or post-conflict situation is due to the actions of humanitarians (United Nations agencies and international NGOs), whose interventions have improved physical and financial access (free of charge) to health care services and the availability of basic care.

© 2022 Global Journals

health services is a complex phenomenon and is influenced by several factors. The factors affecting the use of these services must therefore be clearly understood. For this reason, we set out to analyse the effects of maternal education on the demand for antenatal care. If the level of education is a fundamental element of the demand for care, it is important to ask the question: How does the mother's level of education influence the demand for prenatal care in the Central African Republic? The remainder of the paper is composed as follows. In the section following the introduction, we present the data and the method used, followed by the results and discussion in section 3. Section 4 is reserved for the conclusion.

II. Methods and Data

In this section, we present the econometric estimation method and the data used followed by the definition of the variables.

a) Theoretical model

The study of health care seeking behaviour has, for the most part, been approached through the prism of theoretical behavioural modelling which emphasises the health rationality of the patient. The theoretical model often used to explain health care seeking behaviour is the "Behavioural model" developed by Anderson. The paradigm proposed by Anderson provides an understanding of individual factors in health care seeking by developing a model that integrates three groups of factors, namely predisposing factors, enabling factors and needs (Anderson, 1968). According to Anderson (1968), individuals face a health problem in different ways. Their responses depend on so-called predisposing factors which may be derived from demographic characteristics (age, gender), social structure or belief. For example, beliefs may encourage early demand for maternal health care if women believe that formal demand can help to heal. However, these predisposing factors alone are not sufficient to trigger a demand for antenatal care, but rather the resources must be available, i.e. the enabling factors. Based on this seminal model, two theoretical models were developed, first Anderson and Newman (1973) and then Kroeger (1983), to improve relevance by taking into account other variables. For Anderson and Newman (1973), in addition to the three factors of the demand for care, societal determinants such as technology and norms as well as the care system must be integrated. Kroeger (1983) develops a theoretical model for developing countries. The author shows that the decision to seek care varies not only according to individual characteristics and the level of health facilities but also according to social, cultural and historical contexts. In this paper, we use Kroeger's (1983) theoretical model to analyse maternal health care seeking behaviour in the context of developing countries such as the Central African Republic.

b) Empirical model

The econometric model in this paper is based on the theoretical model of Kroeger (1983) to estimate the maternal health care use behaviour of educated women. We use the ordered multinomial logit to estimate the production function of child health. The empirical model estimated in this work is formalised as follows:

$$H_i = \alpha + \beta\, predisp_i + \gamma\, facili_i + \phi besoin_i + \varepsilon_i$$

Where H_i is the dependent variable that measures the number of visits made by the mother during pregnancy.

$$H_i = \begin{cases} 0 \text{ if she does no visite} \\ 1 \text{ if she does less than four visites} \\ 2 \text{ if she does all the eight visites} \end{cases}$$

α is the constant term β is a $k \times 1$; predisp, represents in our work the variables that predispose the demand for prenatal health care (level of education, age, sex of the head of household, marital status and religion) and $facili_i$ represents the vector of factors facilitating the use of care during pregnancy (standard of living, area of residence, number of people in the household and distance to a health centre) and besoin, which takes into account the factors of need for care during pregnancy (morbid state of the mother etc.); u is the error term. The nature of our dependent variable leads us to use an ordered multinomial logit since H_i is categorical J ($J \geq 3$) mutually exclusive ordered categories.

Let $V_{ij} = \Pr\ (\ H_i = j / X_i\ )$, $j = 1, 2, ..., J$ denote the conditional probability that the randomly selected i^{th} mother with factors is in the jth response category. X_i is a p-dimensional vector of predisposing, facilitating and maternal health care needs variables. Let P_{ij} be the corresponding cumulative probability that the ith pregnant women belong to less than equal to the jth response category with the dependent variables X_i .

$$P_{ij} = \Pr(Y_i \leq j / X_i) = V_{i1}(X_i) + V_{i2}(X_i) + .\ +.V_{ij}(X_i)$$
$$i = 1, 2, ..., n \text{ and } j = 1, 2, ..., J$$

The link function is used to transform the cumulative probabilities into a linear function of independent variables. In other words, the link function is used to maintain a linear relationship between the coefficients and parameters on the right-hand side of

© 2022 Global Journals

the equation and the dependent transformed by the link function on the left-hand side of the equation.

Let $f(.)$ be the logit link function, then the logistic model of the proportion scores would be:

$$f(P_{ij}) = \log\left[\frac{P_{ij}}{1-P_{ij}}\right] = \theta_j - X_i^t\beta$$

Here, only θ_j varies on the $j-1$ multinomial logit, the value of the regression coefficients remains identical for each equation. The maximum likelihood method is used to estimate the parameters.

Assume that the probabilities of ith woman in J response categories Y_i in the presence of X_i independent variables are: $V_{i1}(X_i)$ $V_{i1}(X_i)$ ....., $V_{iJ}(X_i)$.

$$\Pr(Y_i \le j / X_i) = \frac{\exp(\theta_j - X_i^t\beta)}{1+\exp(\theta_j - X_i^t\beta)}$$

The derivation of this model is generally attributed to Walker and Ducan (1967) and McChullagh (1980) who called this model the "proportional odds model".

c) Source of data

The data used for this study come from the Central African Republic (CAR) Multiple Indicator Cluster Survey (MICS) conducted in 2010 by the Institut Centrafricain des Statistiques et des Études Économiques et Sociales (ICASEES) with financial and technical support from the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA). The sample for the fourth MICS4 survey in the Central African Republic was designed to provide estimates for a large number of indicators on the situation of children and women at the national level, by place of residence, and for all 16 prefectures of the country covered by the survey. In the households surveyed, 12507 women (aged 15-49) were identified. In our study, we are particularly interested in women and children. Women who had made at least one prenatal visit.

i. *Definition and measurement of variables*

- Dependent variable

In this work we seek to see whether or not a pregnant woman has received care as recommended by the WHO. Antenatal care (ANC) is provided to enable healthy motherhood through early detection of risk factors and to intervene in a timely manner if necessary. Information on ANC coverage was obtained from women who had given birth in the two years preceding the survey. For women who had two or more live births in the two-year period, the data refer to the most recent birth only. The dependent variable is prenatal consultation during pregnancy. This variable is discrete and we will make them polysemous has more than two modalities which will take the value 1 if the woman did not make any visits during pregnancy, 2 if she made less than four antenatal visits and 3 if she made the eight visits as recommended by the World Health Organization (WHO, 2006, Mohammad et al, 2017). The selected indicators of maternal health care utilization and their components are based on the guidelines developed by the World Health Organization (WHO 2006). The independent variables, on the other hand, can be of any nature: categorical or quantitative.

- Independent variables

The explanatory variables in this work are divided into three categories based on Anderson's (1968) conceptual framework of care-seeking, according to which care-seeking during pregnancy is a function of three factors, namely: predisposing factors and facilitating factors and the need factor. The predisposing factors used include the mother's level of education, her age during pregnancy, the sex of the head of the household and the ethnicity of the head of the household, marital status and religion of the head of the household.

The mother's education refers to the level of education achieved by the individual at each period. The level of education plays a fundamental role in explaining women's behaviour in society. The lower the educational level of the woman, the lower or non-existent the use of modern health care. In the context of this study, this variable takes three forms: no level, primary level and secondary level or higher. The choice of this variable is based on studies such as that of Wan and Arling (1983) who find that women with a high level of education are more likely to seek antenatal care. Thus, access to maternal health services increases with a woman's level of education. Therefore, lack of education is a barrier to pregnancy management and continuity of antenatal care. Out of 2909 pregnant women who made at least one visit during their pregnancy, only 10.69% had secondary school education or higher, compared to 44.33% who had primary school education and 44.98% who had no education. These percentages explain that the level of education is still a concern for the demand for maternal health care.

Studies have shown that the use of care is dependent on the age of the mother. Por et al (2008) find that older women have a high demand for antenatal care, probably because they have had more deliveries and have a medical history during previous deliveries. The variable age of the mother during pregnancy is an indicator of the demand for maternal health care. In this work, the age of the mother concerned is those aged

© 2022 Global Journals

15-49 and has seven modalities: 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, and 45-49.

Previous work has shown that marital status affects the use of maternal health services during pregnancy and childbirth. Unmarried women rarely have the resources to access modern care, as they tend to have less adequate antenatal care than other women due to the unwanted nature of the pregnancy and are therefore less likely to make an antenatal visit. In contrast, married women make more visits, especially as they have financial support from their spouses for ongoing obstetric care. According to our database, 78.14% of mothers are unmarried and the majority are adolescents aged 15-19 and 20-24 years. This may have influenced the use of antenatal care, as adolescents may lack independence and power to make decisions and may be forced to accept decisions made on their behalf. In this article, this variable takes three forms, single, common-law and married. Hence the choice of this variable to explain the demand for care during pregnancy.

Religion also has a significant influence on access to maternal health care. Indeed, certain religious practices are directly linked to social life: clothing, food, use of modern health care. In CAR, there are three main religions: Catholicism, Christianity and Islam, which are generally associated with a variety of perceptions of the use of modern health care. This results in a set of traditional health system practices specific to each religion. Therefore, the management of pregnancy and childbirth is likely to be influenced by religious affiliation. Our analyses show that almost 30.42% of women living in Catholic households and 56.66% of Protestants have regular access to health care. On the other hand, we note only 10.92% of Muslim women and 1.30% of other religions (Mics, 2010). In our work this variable takes four modalities 1 if the head of the household is Catholic, 2 if she is Christian and 3 if she belongs to a Muslim religion and 4 others.

According to Anderson's (1969) theoretical model, the factors that facilitate the demand for maternal health care are standard of living, place of residence, distance to the nearest health facility and household size. The standard of living of the household plays a fundamental role in the demand for care during pregnancy. For Bass and Noelker (1987), families with a low standard of living are more likely to use home care than those with a high standard of living. Standard of living is defined as the total assets owned by the household. This variable has three modalities: 1 if the household is poor, 2 if the household has an average standard of living and 3 if it is rich.

Studies have shown that women from urban and rural areas have different perceptions of health service use. To account for the influence of the woman's childhood environment, we included the woman's reported place of residence in childhood as a categorical explanatory variable. Place of residence has a significant impact on access to health care. Living in a rural area has a negative impact on the use of health care, since health facilities in rural areas are under-equipped in terms of equipment and health personnel. In CAR, 67.52% of women live in rural areas compared to 32.48% in urban areas. This facilitating variable takes the value 1 if the woman lives in the rural area and 0 otherwise.

Access to health care is found to decrease with increasing household size. This means that if a household's income is distributed equally among household members, those from large households are relatively disadvantaged compared to those from small households, regardless of the socio-economic status of the household. This variable is quantitative.

Among the factors facilitating the use of care we have the distance to a public facility or distance to the nearest health facility. It represents the supply of care during pregnancy. Previous work on the effect of distance on the use of health services shows a decrease in utilisation rates with increasing distance. The distance between a pregnant woman's home and the health centre is important for access to maternal health care. It was found that women living less than 5 km away were more likely than those living more than 5 km away to use the services.

The variables selected above are derived from the conceptual framework of the Anderson (1968) model. We have written three methods of analysis namely: univariate descriptive statistics as well as an econometric analysis by an ordered multinomial logit model to estimate our model. The statistical analysis and estimations will be done by Stata 14 software.

III. Results and Discussion

To achieve the objectives set out in this article, we used two approaches. The descriptive approach allows us to characterize the variables, based on the frequencies (in %) and to evaluate the influence of the mother's level of education on the probability of making the eight prenatal visits, we used the ordered multinomial log it regression model.

a) Descriptive statistics

The results in the table below show the characteristics of the variables (central tendency, dispersion). The analysis of our dependent variable which is the number of times a woman has made the prenatal consultation shows that out of 10497 women 2.909 responded that they had made at least one visit during pregnancy.

© 2022 Global Journals

Table 1: Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
Prenatalcare				
No	0.0006875	.0262161	0	1
Inadequate	0.5149536	.4998623	0	1
Adequate	0.4843589	.4998412	0	1
Education of the mother				
No	0.4499116	.4975107	0	1
Primary	0.4431499	.4967834	0	1
Secondary	0.1069385	.3090511	0	1
Age of the mother during pregnancy				
15-19	0.2047228	.4035199	0	1
20-24	0.2122126	.4088959	0	1
25-29	0.1835015	.3870973	0	1
30-34	0.1308645	.3372696	0	1
35-39	0.1099553	.3128503	0	1
40-44	0.0880058	.2833181	0	1
45-49	0.0707375	.2563993	0	1
Gender of the head of the household				
Male	0.7908715	.4067063	0	1
Female	0.2091285	.4067063	0	1
Ethnicity of the head of the household				
Haoussa	0.0502656	.2185032	0	1
Sara	0.0478064	.2133669	0	1
Mboum	0.0437734	.2046005	0	1
Gbaya	0.2456227	.4304769	0	1
Mandja	0.1066299	.3086574	0	1
Banda	0.2840842	.4509993	0	1
Ngbaka-Bantou	0.0667913	.2496724	0	1
Yakoma-Sango	0.0405272	.197202	0	1
Zande/Nzakara	0.0493803	.2166714	0	1
Marital status				
Single	0.7815458	.4132187	0	1
Free union	0.1189015	.3236894	0	1
marry	0.0995527	.2994182	0	1
Religion of the head of the household				
Catholic	0.3046429	.4602787	0	1
Protestant	0.5668896	.4955299	0	1
Muslimwoman	0.1094826	.3122591	0	1
Other	0.0189849	.1364781	0	1
Number of persons in the household				
	4.565021	2.69653	1	28
Household standard of living				
poor	0.2217387	.4154363	0	1
Medium	0.4883474	.4998884	0	1
Rich	0.2899139	.4537442	0	1
Place of residence				
Urban	0.3246301	.4682591	0	1
Rural	0.6753699	.4682591	0	1
Media Access				
No	0.4028133	.4904879	0	1
Yes	0.5971867	.4904879	0	1
Distance to Heathpost				
Lessthan 1 km	0.3614007	.48043	0	1
1 to 5 km	0.3864844	.4869677	0	1
6 à 95	0.2521149	.4342482	0	1
N= 2,909				

Source: Author, using 2010 MICS data, CAR

The descriptive results show that women who did not make the prenatal visit represent 0.06%, those who made less than four visits represent 51.49% and those who made more than four visits are 48.43%. In

© 2022 Global Journals

Mics 2010, information on educational level was collected for women aged 15-49 years. About 45% of women had no education, 44.31% had primary education, 11% had secondary or higher education. The age at which childbearing begins has important consequences for the overall level of fertility and for the health and well-being of the mother and child. As indicated in the descriptive analysis (see table above), early pregnancy is common in CAR, with the majority of women becoming mothers after the age of 15. Approximately 20.47% of women aged 15-19, 21.22% of women aged 20-24 and over and 11% of women under 20 had given birth to their first child before the age of 15. The average age at first birth for women aged 15-49 is 28 years. Marriage is one of the main indications of women's exposure to the possibility of pregnancy and is therefore important for understanding fertility. Early age at first marriage in a population is generally associated with a longer period of exposure to the risk of pregnancy and thus with higher levels of fertility. The early initiation of childbearing associated with early marriage can also be detrimental to the health of women and children. compared to the 2002 EDHS, which was 23%. In this study, the Mics report (2010) currently married women represent 9.95%, single women 78.15% and women in common-law relationships represent 11.89%. The average distance to a health centre is 5 km.

b) Interpretation and Discussion

Good women's health in the world generally depends first and foremost on the care of women, and in particular women in pregnancy through to childbirth. However, in most developing countries, these ordeals are still fatal for some women who lose their lives in the process. Indeed, this is due to the fact that access to maternal health care is becoming constrained despite the improvement seen in some developing regions (WHO, 2018). We aim to identify the link between the mother's level of education and the likelihood of making at least one visit during pregnancy as recommended by the WHO in the Central African context. In other words, we seek to see if the number of visits during the nine months of pregnancy can be explained by the mother's level of education. The variable number of visits during pregnancy, which is 1 if she made no visits, 2 if she made less than four visits and 3 if she made all eight visits. The results of this article show that women do not systematically benefit from follow-up during their pregnancy or assistance at the time of delivery because of various barriers that limit access to health care. Considering the predisposing variables among which the mother's level of education, we observed that mothers with primary, secondary and higher levels of education are more likely to have a full antenatal consultation.

Table 2: Multinomial ordered logit model estimation

Variable	Model 1	Model 2	Model 3
Level of education			
No level	ref	ref	ref
Primary	0.165**(0.0794)	0.208**(0.0821)	0.804***(0.240)
Secondary or higher	0.915***(0.134)	0.975***(0.138)	2.146***(0.473)
Age of the mother			
15-19		ref	ref
20-24		-0.0360(0.113)	-0.0347(0.114)
25-29		0.173(0.118)	0.185(0.119)
30-34		0.130(0.136)	0.131(0.137)
35-39		0.351**(0.153)	0.360**(0.154)
40-44		-0.0769(0.221)	-0.0837(0.222)
45-49		0.394(0.476)	0.414(0.479)
Gender of the head of the household			
male		ref	
Female		-0.0298(0.0929)	-0.0516(0.0965)
Ethnicity of the head of the household			
Haoussa		ref	
Sara		-0.292(0.282)	-0.287(0.283)
Mboum		0.135(0.309)	0.166(0.310)
Gbaya		-0.261(0.266)	-0.281(0.267)
Mandja		-0.265(0.283)	-0.270(0.285)
Banda		-0.323(0.266)	-0.351(0.267)
Ngbaka-Bantou		-0.185(0.290)	-0.162(0.291)
Yakoma-Sango		-0.835**(0.331)	-0.898***(0.335)
Zande/Nzakara		-0.919***(0.312)	-0.954***(0.317)
Other local ethnic groups		-0.400(0.294)	-0.385(0.295)

© 2022 Global Journals

Other ethnic groups		-0.333(0.348)	-0.336(0.350)
Marital status			
single		ref	ref
Free union		-0.277*(0.146)	-0.288**(0.146)
Married		0.426*(0.244)	0.436*(0.244)
Religion of the head of the household			
Catholic		ref	ref
Protestant		0.102(0.0866)	0.0991(0.0870)
Muslim woman		-0.333*(0.198)	-0.293(0.199)
Other		0.145(0.266)	0.133(0.268)
Standard of living			
Poor			ref
Medium			-0.0473(0.0972)
rich			0.0498(0.121)
Workforce			0.00785(0.0145)
Place of residence			
Urban			ref
Rural			0.229*(0.134)
Access to the media			
not			ref
Yes			0.165**(0.0820)
Distance			
Less than 1 km			Ref
1 to 5 km			0.0512(0.0886)
6 à 90			0.266***(0.102)
Interaction			-0.350***(0.133)
/cut1	-7.130***(0.709)	-7.217***(0.782)	-6.999***(0.778)
/cut2	0.241***(0.0596)	0.201(0.335)	0.423(0.327)
Comments	2,909	2,875	2,875

Source: Analysis of MICS data, 2010

Model 1 is globally significant and the chi-square of the model is 49.19 which is highly significant and tells us that the variable level of education of the mother has a significant effect of 5% and 1% respectively according to the primary and secondary level and more on the number of prenatal visits. Model 2 is also significant with a chi-square of 106.10 which means that the predisposing variables strongly affect the number of prenatal visits. The third estimate is significant with a chi-square that increases from 126.14 to 33 degrees of freedom. From model 1, it is clear that there is a highly significant unadjusted association between maternal education and complete prenatal visits. The coefficients of the education variable are 0.165 and 0.915 at 5% and 1% respectively for primary, secondary and higher education. These results show that a woman's attainment of primary, secondary and higher education gives her a 16.5% and 91% probability respectively of making all eight visits during pregnancy compared to uneducated women. In other words, mothers with primary and secondary education are 20.8% and 97.5% less likely to have full antenatal visits, respectively, than mothers with no education. The results of the ordered multinomial logit model analysis with all factors of care demand according to the theoretical framework of Anderson (1968) and Anderson and Newman (1973) showed that mother's education level, mother's age, mother's marital status and media exposure are related to the use of antenatal care (Table 4 above) The results further showed that antenatal coverage is highest among the most educated women. For example, 80% of primary school mothers use antenatal care. The mother's secondary education level is significant at a threshold of 1%. We can see that the mother's education has a positive effect on the use of care during pregnancy. In other words, an additional year increases the probability of making all visits by a factor of 2.14 (WHO, 2015).

Some of the results show that an improvement in these indicators is even greater for women with secondary education. In Peru, a study by Elo (1992) found similar results to ours but comparing maternal and paternal education on child health. According to this study, maternal education on child survival was on average twice as important as paternal education. Anima D (2013) who finds that maternal education is inversely related to the risk of her child dying. Although the relationship is not linear, children born to

© 2022 Global Journals

uneducated mothers suffer the highest mortality at all ages. Brixiova et al (49) report that the infant mortality rate of children whose mothers have primary education is 25% lower than that of children whose mothers have no education. The gap between children of mothers with at least secondary education and children of mothers with no education is 36%. About 60 percent of women with at least secondary education are able to read dosages and remember the date of appointments, compared to 90 percent of women with no education. A woman with secondary or higher education is twice as likely to receive antenatal care from a doctor as a woman without education (Mics, 2019). The finding of a strong effect of education is consistent with findings elsewhere in the world Pelto G (1987) Becker S, Peters D, Gray R, Gultiano C, Black R (1993) Celik Y, D Hotchkiss (2000). There are a number of explanations for why education is a key determinant of health service utilisation. Education is likely to improve women's autonomy so that women develop greater confidence and ability to make decisions about their own health Caldwell J (1981) Raghupathy (1996) Akin A, Munevver B (1996). It is also likely that educated women seek better quality services and have a greater ability to use health inputs that provide better care. Interestingly, some results from indicated that respondents' level of education was not significantly associated with all maternal health outcomes. On the other hand, contrary to ideas that maternal education has a linear effect on care, Kone (2012) shows that when the mother is educated, she tends to self-medicate rather than use a health facility. Undoubtedly, these findings stem at least in part from the fact that women are primarily responsible for their own and their child's health and therefore their attitudes and skills are particularly important with regard to antenatal care. Similarly, Audibert et al (1998) in Côte d'Ivoire do not find statistically significant links between level of education and the number of children born to women. If educated mothers consider that they are sufficiently informed, then given their time constraint, it is understandable that they tend to bypass health care facilities by going directly to the pharmacy or using the family pharmacy to treat themselves (Habtom, 2017). This result could be due to the fact that most of the interviewees had some knowledge of the antenatal care, regardless of their level of education. This suggests that knowledge about the antenatal care is not related to formal education. Thus, people could be educated through informal means such as radio among others.

Most of the factors studied are related to women's predisposing factors to seeking antenatal care. The study identified several factors that have a significant influence on the use of maternal health services in CAR. These include maternal age. The results of the estimation of model 2 as a whole reinforce the importance of maternal age as the second most important determinant of antenatal care utilisation. Women who were between 35 and 39 years of age were 35.1% more likely to receive antenatal care. Analysis of the results of model 3 according to the mother's age during pregnancy shows that being between 35 and 39 years old positively influences the chance of using antenatal care. That is, mothers aged between 20 and 24 have a 36% chance of making more visits during pregnancy. Among the factors that positively and significantly influence the number of visits during pregnancy, we have the marital status of the mother. That is, when the pregnant woman is married, the probability of making the prenatal visit is 42.6%. In other words, married pregnant women are 42.6% more likely to seek care during pregnancy. However, belonging to a Yakoma/Sango and Zande/Nzakara ethnic group reduces the chance of attending antenatal visits during pregnancy by 83% and 91.9% respectively. In addition, when the woman is in a common-law union, the number of visits during pregnancy is negatively affected by 27.7%. In model 3, belonging to the Yakoma/Sango and Zande/Nzakara ethnic groups reduces the chance of making all eight antenatal visits. Married women are 43.6% more likely to receive antenatal care from a health professional than single women. The practice of Muslim religion negatively and significantly influences the chance of making all visits during pregnancy i.e. a woman with a Muslim husband has a 33.3% probability of making all prenatal visits. However, the interaction between level of education and area of residence negatively affects the demand for care during pregnancy. In other words, being educated and living in a rural area negatively influences the amount of care during pregnancy.

In the Central African Republic, religion has a strong influence on women's access to health care. This result is similar to that of Beninguisse (2001), who links the use of health services with social institutions such as religion and thus allows us to understand women's behaviour towards the health care system during different maternity-related events. Regional variations in access to health services are significant in CAR. Women living in rural areas are unlikely to visit health facilities during pregnancy. A higher proportion of women living in rural areas receive less antenatal care and give birth at home. As a result, maternal mortality and child malnutrition are higher in rural than in urban areas. In addition, 80% of health professionals are in the urban area. Thus, the reason for the high level of maternal health service utilisation among urban women compared to their rural counterparts is easy to understand. As in most sub-Saharan countries, rural women do not have greater knowledge and access to maternal health services than their urban counterparts. This is because health facilities are more accessible in urban areas and the various health promotion programmes that use urban-oriented mass media work

© 2022 Global Journals

to the advantage of urban residents and explain the strong link between urban residence and maternal health service use. In addition, rural women are more easily influenced by traditional practices that are contrary to modern health care. Furthermore, women in common-law relationships may have a lower chance of seeking care than married women. We consider married women to be those who make alliances with their spouse. Our results allow us to conclude that married women are more likely to seek prenatal care than those living in a common-law relationship and not married. This was confirmed by Trop (2008) in his work on the knowledge, attitudes and practices of women on malaria in the rural area of Poponguine, Senegal. He shows that 92.9% of married women used the health facility compared to 91.2% of unmarried women. This means that married women have a high chance of benefiting from their spouses' help.

Proportionality hypothesis test

- Testing the proportional hypothesis

The strict assumption of this model is proportional probability in the response category. This means that the ordinal regression assumes that the coefficients describing the relationship between less than or equal to the jth category versus greater than the jth category have the same log-odds as those describing the relationship between less than or equal to $(j+1)^{ième}$ response category versus greater than the $(j+1)^{ième}$ categories, etc. The adequacy of the 'proportional odds' assumption in the response category for each covariate as well as combined must be carefully assessed before applying the proportional odds model. There are three methods for testing the overall proportional hypothesis: (i) the likelihood ratio test (ii) the Lagrange multiplier or score test, and (iii) the Wald test.

Brant: Test of parallel regression assumption

	chi2	p>chi2	df
All	**1.94**	**0.983**	**8**
Level of education	0.01	0.914	1
Age of mother	0.69	0.407	1
ethnicity of the head of the household	0.00	0.994	1
Religion of the head of the household	0.58	0.446	1
Household standard of living	0.02	0.875	1
Household size	0.38	0.536	1
Access to the media	0.15	0.703	1
Distance to a health centre	0.31	0.575	1

A significant test statistic provides evidence that the parallel regression assumption has been violated.

Oparallel: Tests of the parallel regression assumption

	Chi2	df	P>Chi2
Wolfe Gould	2.055	8	0.979
Brant	1.941	8	0.983
score	1.958	8	0.982
likelihood ratio	2.07	8	0.979
Wald	1.996	8	0.981

Source: Author

These tests are asymptotically equivalent in large samples and produce the same response. For individual tests, some authors suggest either plotting the log-odds generated by each threshold as a complementary analysis of proportional odds, or applying Brant's (1990) test to test proportional odds for an individual independent variable. The series of tests performed show that the proportionality assumption is not significant on our data indicating that the odds ratios are proportional between categories.

IV. Conclusion and Policy Implications

The aim of this study was to analyse the effects of the mother's education on the demand for maternal health care. Based on Anderson's (1963) conceptual framework of household behaviour as applied to the health of a pregnant woman, the hypothesis of this chapter is that We were able to use Anderson's (1963) conceptual framework of household behaviour applied

© 2022 Global Journals

to the health of a pregnant woman to formulate the hypothesis of this chapter, according to which the mother's education has a positive influence on the use of prenatal consultations in the Central African context. The data we used are from the CAR Multiple Indicator Cluster Survey, conducted in 2019. The population concerned consists of 2909 women who were pregnant or had given birth two years before the survey. The results present some expectations regarding the association of variables with the likelihood of seeking care during pregnancy. It appears that predisposing and facilitating factors contribute more to the demand for and access to maternal health care in CAR. CAR has not achieved the Millennium Development Goals 4 and 5 with regard to reducing the maternal mortality rate. The country had a high mortality rate in 2018, making it the third highest in the world in terms of maternal mortality with a rate of about 900 deaths per 100,000 births. This rate is slightly higher than post-neonatal deaths (19 per 1000 live births) during the same period; implying that children are not lucky to survive in CAR. This study shows that the most important factors influencing the use of maternal health services in CAR are predictive and facilitative.

In conclusion, pregnancy in developing countries remains a risk for women. Access to and use of good quality antenatal care undeniably contributes to reducing maternal and infant mortality and morbidity. In CAR, although women are aware of the risks associated with motherhood, for the majority of women the demand for antenatal care remains relatively low. These findings can therefore serve as a basis for a number of policy recommendations. First, the fact that education has a significant impact on the use of maternal health services suggests that improving educational opportunities for women can have a significant impact on improving the use of these services. However, this is a long-term investment. Over the past 10 years, the social benefits of women's education have been observed in CAR. The basic education and gender equality programme has produced good results, particularly in the areas of access and equity in education. Successful approaches, such as supplementary elementary education and plans to make education free, have been able to reach the most remote areas of the country and enrol children (45% of whom are girls) for the first time. The continuation of the adult literacy programme and the inclusion of health education in the curriculum will improve women's use of maternal and child health services. There is scope to accelerate progress in antenatal care services. These services need to be strengthened and coverage of emergency obstetric care expanded. Intensive awareness raising and advocacy campaigns should be undertaken to increase community knowledge and attitudes about the danger signs of pregnancy, childbirth and postnatal and neonatal risks.

Acknowledgement

This study benefited immensely from comments from various Biannual AERC conferences for which I am deeply grateful particularly members of group A views expressed in this paper are solely those of the author and do not represent the views of the authors' respective Global journal of Management and Business Research and AERC. Any errors and omissions in this paper are entirely mine.

References Références Referencias

1. Habtom GK. Factors affecting the use of maternal and child health services in Eritrea. Journal of Complementary Medicine & Alternative Healthcare. 2017; 2(3).
2. Tabutin D, Masquelier B, Grieve M, Reeve P. Mortality inequalities and trends in low-and middle-income countries, 1990-2015. Population. 2017; 72(2):221-96.
3. Beldjerd MH, Lafouge A, Soriano AG, Quarello E. Asynchronous Tele-Expertise (TEAS) in obstetrical ultrasound: is it equivalent to face-to-face consultation? Gynaecology Obstetrics Fertility & Senology. 2021 Nov 1; 49(11):850-7.
4. World Health O. WHO information note on the use of dual HIV/syphilis rapid diagnostic tests. World Health Organization; 2017.
5. World Health O. WHO recommendations for antenatal care to make pregnancy a positive experience: summary guidance. World Health Organization; 2016.
6. Muurinen JM. Demand for health: a generalised Grossman model. Journal of Health economics. 1982 May 1; 1(1): 5-28.
7. Grossman M. 1. On the Concept of Health Capital and the Demand for Health. Columbia University Press; 2017 Sep 25.
8. ADASKOU M, HOUMAM I, ONBOUH H. The determinants of the productive performance of public hospitals in Morocco. Revue Internationale Du Chercheur. 2021 Feb 28; 2(1).
9. Evans RG. Supplier-induced demand: some empirical evidence and implications. In The economics of health and medical care 1974 (pp. 162-173). Palgrave Macmillan, London.
10. Andersen R. A behavioral model of families' use of health services. A behavioral model of families' use of health services. 1968(25).
11. Andersen R, Newman JF. Societal and individual determinants of medical care utilization in the United States. The Milbank Memorial Fund Quarterly. Health and Society. 1973 Jan 1:95-124.
12. Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? Journal of health and social behavior. 1995 Mar 1:1-0.

© 2022 Global Journals

13. Menda PB. Participation, Suivi et Implicationdes Parents dans la Scolarité de Leurs Filles en République Démocratique du Congo: Analyse Diagnostique de Disparités Scolaires.
14. Kroeger A. Anthropological and socio-medical health care research in developing countries. Social science & medicine. 1983 Jan 1; 17(3):147-61.
15. Fortney JA, Susanti I, Gadalla S, Saleh S, Feldblum PJ, Potts M. Maternal mortality in Indonesia and Egypt. International Journal of Gynecology & Obstetrics. 1988 Feb 1; 26(1):21-32.
16. Bishaw A, Lasser J. Education in Ethiopia: Past, Present and Future Prospects. African Nebula. 2012 Jan 1(5).
17. Sagna M. Maternal education and use of maternal and child health care in Burkina Faso.
18. Boco AG, Bignami S. Religions and survival of children aged 0-5 years in sub-Saharan Africa: the example of Benin. In Demography and Cultures (Proceedings of the Quebec City Conference, 2008), Association Internationale des Démographes de Langue Française 2008 (pp. 1119-1137).
19. Newhouse JP, Phelps CE, Marquis MS. On having your cake and eating it too: Econometric problems in estimating the demand for health services. Journal of Econometrics. 1980 Aug 1; 13(3): 365-90.
20. Newhouse JP, Marquis KH, Morris CN, Phelps CE, Rogers WH. Measurement issues in the second generation of social experiments: The Health Insurance Study. Journal of Econometrics. 1979 Sep 1; 11(1): 117-29.
21. Arrow KJ. Th1e American.'. The American Economic Review. 1963 Dec; 53(5): 941-73.
22. Yang Y, Zhang N, Xue M, Tao S. Impact of soil organic matter on the distribution of polycyclic aromatic hydrocarbons (PAHs) in soils. Environmental Pollution. 2010 Jun 1; 158(6): 2170-4.
23. Elo IT. Utilization of maternal health-care services in Peru: the role of women's education. Health transition review. 1992 Apr 1:49-69.
24. Daniels AA, Ahenkan A, Poku KA. Factors influencing the utilisation of maternal health services: the perspective of rural women in Ghana. Journal of Public Administration and Governance. 2013; 3(2): 121-41.
25. Visscher PM, Yang J, Goddard ME. A commentary on 'common SNPs explain a large proportion of the heritability for human height'by Yang et al.(2010). Twin Research and Human Genetics. 2010 Dec; 13(6): 517-24.
26. Efendi F, Chen CM, Kurniati A, Berliana SM. Determinants of utilization of antenatal care services among adolescent girls and young women in Indonesia. Women & health. 2017 May 28; 57(5): 614-29.
27. LeGrand TK, Mbacké CS. Teenage pregnancy and child health in the urban Sahel. Studies in family planning. 1993 May 1: 137-49.
28. Gross A, Zaffarano PL, Duo A, Grünig CR. Reproductive mode and life cycle of the ash dieback pathogen Hymenos cyphuspseudoalbidus. Fungal genetics and biology. 2012 Dec 1; 49(12): 977-86.
29. Yahyaoui A, Lakhdar DB. Cultural beliefs. The family couch. 2014(1): 103-21.
30. Nikiéma B, Beninguisse G, Haggerty JL. Providing information on pregnancy complications during antenatal visits: unmet educational needs in sub-Saharan Africa. Health policy and planning. 2009 Sep 1; 24(5):367-76.
31. Rwenge MJ, Nguemaleu HT. Social factors in the use of obstetric care services among Cameroonian adolescents. African journal of reproductive health. 2011; 15(3): 87-99.
32. Anoko JN. Communication with rebellious communities during an outbreak of Ebola Virus Disease in Guinea: an anthropological approach. Ebola Response Anthropol Platf. 2014 Oct 7: 1-21.
33. Van Eijk AM, Bles HM, Odhiambo F, Ayisi JG, Blokland IE, Rosen DH, Adazu K, Slutsker L, Lindblade KA. Use of antenatal services and delivery care among women in rural western Kenya: a community based survey. Reproductive health. 2006 Dec; 3(1): 1-9.
34. Ridde V, Robert E, Meessen B. A literature review of the disruptive effects of user fee exemption policies on health systems. BMC Public health. 2012 Dec; 12(1): 1-7.
35. Gabrysch S, Cousens S, Cox J, Campbell OM. The influence of distance and level of care on delivery place in rural Zambia: a study of linked national data in a geographic information system. PLoS medicine. 2011 Jan 25;8(1):e1000394.
36. Audet MP, Drolet M. Mental health services for young Francophones in the Ottawa region. Reflets: revue d'intervention sociale et communautaire. 2014;20(2):190-200.
37. Lucas-Gabrielli V, Nabet N, Tonnellier F. Les soins de proximité: une exception française? Credes; 2001 Jul.
38. Cissé B, Luchini S, Moatti JP. Progressivity and horizontal equity in health care finance and delivery: what about Africa? Health policy. 2007 Jan 1; 80(1): 51-68.
39. Wan TT, Arling G. Differential use of health services among disabled elderly. Research on Aging. 1983 Sep; 5(3):411-31.
40. Por I, Horeman D, Narin S, Van Damme W. Improving poor pregnant women's access to skilled care at delivery: a case study of a voucher distribution system combined with a Health Equity Fund in three health districts in Cambodia.

© 2022 Global Journals

Reducing Financial Barriers to Maternity Care in Low Resource Countries. 2008.
41. Bass DM, Noelker LS. The influence of family caregivers on elder's use of in-home services: An expanded conceptual framework. Journal of health and social behavior. 1987 Jun 1:184-96.
42. Brant R. Assessing proportionality in the proportional odds model for ordinal logistic regression. Biometrics. 1990 Dec 1:1171-8.
43. Davison AC, Hinkley DV. Bootstrap methods and their application. Cambridge university press; 1997 Oct 28.
44. Efron B, Tibshirani RJ. An introduction to the bootstrap. 57 Boca Raton.
45. Williams R. Generalized ordered logit/partial proportional odds models for ordinal dependent variables. The Stata Journal. 2006 Feb;6(1):58-82.
46. Wolfe R, Gould W. An approximate likelihood-ratio test for ordinal response models. Stata Technical Bulletin. 1998; 7 (42).
47. Andersen R, Newman JF. Societal and individual determinants of medical care utilization in the United States. The Milbank Memorial Fund Quarterly. Health and Society. 1973 Jan 1:95-124.
48. Kroeger A. Anthropological and socio-medical health care research in developing countries. Social science & medicine. 1983 Jan 1; 17(3): 147-61.

© 2022 Global Journals

This page is intentionally left blank

© 2022 Global Journals

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 22 Issue 3 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Assessment of Crowdfarming Diversity in Lagos State using Shannon's Entropy Index

By Olowa Olatomide Waheed & Olowa Omowumi Ayodele

Abstract- The global growth rate of equity crowdfunding of which Crowdfarming is a brand has surpassed the projected limits. Crowdfarming serves as alternative finance and platform for interested small scale investors in farming in many countries. This Paper investigates the diversity of crowdfarming platforms among investors in all the five administrative divisions of Lagos state. Three hundred participants were selected using purposive sampling techniques and used for the study. The data were summarized using frequencies and percentages, while Shannon Entropy Index was applied to analyse the diversity of crowdfarming among participants in the administrative divisions. The results showed majority of the participants were male (59%) with average family size of all crowdfarming participants being 5.83. Average household size was highest in Lagos Island (Eko) (7) and Epe (7) and lowest in Ikeja (4). Younger respondents (22-55 years) constitute the majority of crowdfarming participants (72%). Average total amount invested was #566,634; highest in Ikeja (#230,000) and lowest in Epe (#95,155).

Keywords: crowdfunding, crowdfarming, alternative finance, farmers, shannon's entropy index, lagos state.

GJMBR-B Classification: DDC Code: 658.15224 LCC Code: HG4751



Strictly as per the compliance and regulations of:

© 2022. Olowa Olatomide Waheed & Olowa Omowumi Ayodele. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at https://creative commons.org/licenses/by-nc-nd/4.0/.

Assessment of Crowdfarming Diversity in Lagos State using Shannon's Entropy Index

Olowa Olatomide Waheed [α] & Olowa Omowumi Ayodele [σ]

Abstract- The global growth rate of equity crowdfunding of which Crowdfarming is a brand has surpassed the projected limits. Crowdfarming serves as alternative finance and platform for interested small scale investors in farming in many countries. This Paper investigates the diversity of crowdfarming platforms among investors in all the five administrative divisions of Lagos state. Three hundred participants were selected using purposive sampling techniques and used for the study. The data were summarized using frequencies and percentages, while Shannon Entropy Index was applied to analyse the diversity of crowdfarming among participants in the administrative divisions. The results showed majority of the participants were male (59%) with average family size of all crowdfarming participants being 5.83. Average household size was highest in Lagos Island (Eko) (7) and Epe (7) and lowest in Ikeja (4). Younger respondents (22-55 years) constitute the majority of crowdfarming participants (72%). Average total amount invested was #566,634; highest in Ikeja (#230,000) and lowest in Epe (#95,155). Thus showing high rate of investment flow to crowdfarming. The Shannon diversity index was 1.16 depicting crowdfarming platforms were evenly distributed across the state. Ikeja and Badagry have uniform diversity of Crowdfarming participants (H=1.07), followed by Ikorodu (H=0.89). Lagos Island has the lowest diversity (H0.80). Even distribution of crowdfarming platforms investment should signal improved monitoring for financial security of Lagosians; and eye-opener to step up measures to stem or prevent market failures.

Keywords: crowdfunding, crowdfarming, alternative finance, farmers, shannon's entropy index, lagos state.

I. Introduction

Crowdfunding is the practice of funding a project or venture by raising small amounts of money from a large number of people, typically via the Internet. Crowdfunding is a form of crowdsourcing and alternative finance. In 2015, over US$34 billion were raised worldwide by crowdfunding (Calic, 2018). Crowdfunding has been used to fund a wide range of for-profit, entrepreneurial ventures such as artistic and creative projects, medical expenses, travel, and community- oriented social entrepreneurship projects. Though crowdfunding has been suggested to be highly linked to sustainability, empirical validation has shown that sustainability plays only a fractional role in crowdfunding. Its use has also been criticised for funding quackery, especially costly and fraudulent medical treatments.

Author α σ: Department of Agricultural Education, Federal College of Education (Technical) Akoka. e-mail: owolowa@gmail.com

Globally, studies on Crowdfunding have revealed varied models defined by the way rewards are designed. World Bank (2013) modeled all crowdfunding business models into two categories namely Donation crowdfunding and investment crowdfunding. In Mas solution (2015) models, crowdfunding types include donation-based, reward-based, equity-based, pre-order, lending-based and hybrid. While According to Diya (2020) there are four broad types/models of Crowdfunding, namely, Donation-Based Crowdfunding, Loan-Based Crowdfunding, Reward-Based Crowdfunding and Equity Crowdfunding. Of note is equity-based model which according to Belleflamme et al., (2015) is an investment crowdfunding platform where a campaigner invites the public to invest in a project or idea in return for an ownership interest and due to concerns for financial security and growth, has continued to receive attention. However, in all of the categories or types, campaigner solicit for donations/charity or investment. The rewards could range from monetary to non-monetary, materials to non-material and tangible to non-tangible.

Crowdfunding regulation varies from country to country (Gabison, 2014). In Nigeria, crowdfunding is regulated by the Securities and Exchange Commission (SEC).The new rules for crowdfunding activities came into effect on June 21, 2021. The rules prima facie addresses several ethical concerns in Crowdfunding ranging from strict governance, reporting, accounting, and other requirements. Equity-based has grown considerably in the US and the UK with the help of enabling legislations. The World Bank (2013) forecasts equity crowdfunding to reach $90 billion by 2020 but as at 2017, the projection has been surpassed and the outlook today should be double what is projected. The equity model of crowdfunding is the basis upon which crowdfunding is considered as the alternative finance. This model provides that investors receive a proportion of ownership interest or returns in the project thereby entitling them to share in the profits accruable from the project.

Crowdfarming which is a new crowdfunding niche entails sourcing funds from several individuals to invest in smallholder agricultural enterprises. Crowdfarming is an equity-based alternative finance to smallholder agriculture. Alternative finance refers to financial channels, processes, and instruments that have emerged outside of the traditional finance system

© 2022 Global Journals

such as regulated banks and capital markets. Examples of alternative financing activities through 'online marketplaces' are reward-based crowdfunding, equity crowdfunding, revenue-based financing, online lenders, peer-to-peer consumer and business lending, and invoice trading third party payment platforms (Schueffel, 2017). This modern crowdfunding model is generally based on three types of actors namely: the project initiator who proposes the idea or project to be funded, the individuals or groups who support the idea (the investor/funder), and a moderating organization (the "platform") that brings the parties together to launch the idea.

In Nigeria, Twenty platforms for crowdfarming exist with five being the major types namely, Farm Crowdy, Thrive Agric, Farmkart, Pork Money and E-farms Nigeria. Among the five, Farmcrowdy premiered crowdfarming in Nigeria by its establishment in 2016, eight years after emergence of crowdfunding in 2008 as first home-built platform for agricultural investment. Later, Farm by, payfarmer, farmfunded, farmkart, smart farm, Farm4me, Ez Farming, porkvest, agrecourse, farm sponsor, farm centa, e-poultry, Nigeria farmers group, farm partner, agro partnership, Farminvest came onboard. Rate of return isusually between 15-35%. However, Analysis on three agriculture- based crowdfunding bynairaland in 2019 reveals that Thrive Agric, Farmkart and E-Farmsrecordedhigh returns of up to 50 per cent on investment. Agrawal, Catalini, and Goldfarb (2013) Opined that the commercialization of the internet makes crowdfarming an alternative source of finance and investment to small and medium investors and farmers through many ways. First, matching funders with farmers is now more efficient and effective due to lower search costs online. Second, risk exposure is reduced because funding in small increments is economically feasible online. Finally, low communication costs facilitate better (though far from perfect) information gathering and progress monitoring for distant funders and also better enable funders to participate in the monitoring of the business.

Early research on crowdfunding outside Nigeria indicates that Funding is not geographically constrained, The propensity of individual funders to invest in a project increases rapidly with accumulated capital (Agrawal, Catalini, and Goldfarb, 2011), and that the acceleration is particularly strong towards the end of the fundraising campaign, similar to online lending platforms (Zhang and Liu, 2012). Friends and family funding plays a key role in the early stages of fundraising, generating a signal for later funders through accumulated capital (Agrawal, Catalini, and Goldfarb, 2011). Funding follows existing agglomeration - Despite the decoupling of funding and location, funds from crowdfunding disproportionately flow to the same regions as traditional sources of finance (Agrawal, Catalini, and Goldfarb, 2013), perhaps due to the location of human capital, complementary assets, referral or bandwagon effects. Funders and creators are initially overoptimistic about outcomes to deliver a tangible return on investment but may later be disappointed by reality (Agrawal, Catalini, and Goldfarb, 2013).

Studies on crowdfarming are scanty or non-existent in Nigeria to the best of the researcher's knowlegde. A study by Soreh (2017) in three cities of Nigeria –Lagos, Port Harcort and Yenagoa - on the level of awareness and the peoples' attitude regarding the crowdfunding, adopting qualitative approach found that crowdfunding awareness was very low with 24% of respondents not aware and being unable to identify or name crowdfunding platforms operational in Nigeria.

Quite frankly crowdfarming has become aninvestment niche and vital source of alternative finance to farming especially in Nigeria even though much research efforts have not focused on this model. The growth and multiplicity of crowdfarming platforms suggests that crowdfarming is enjoying patronages among Nigerians. Since it is equity-based depicting increased inward flow of investment, this paper seek to empirically examine the diversity of crowdfarming among possible funders or investors in Lagos state. To our knowledge, no studies have explored this gap in literature with respect to Nigeria.

II. Methodology

The study area, Lagos State, has territorial land area of 351,861 hectares and is made up of five administrative divisions, namely, Ikeja, Badagry, Ikorodu, Lagos Island and Epe. This divisions were created in May 1968 by virtue of Administrative Divisions (Establishment) Edict No. 3 of April 1968. Lagos is investment hub and home to economic actors and activities spread across the five administrative divisions, thus, the most congenial for an investment/finance study of this nature. All the five administrative divisions were covered in the sample survey. A total of sixty (60) crowdfarming investors were purposively selected from the metropolitan areas of each administrative division. Hence, a total of 300 respondents were randomly sampled. No attempt was made to discriminate on the basis of platforms as investors were selected not minding which out of the twenty platforms he/her invested. Primary data was collected using questionnaire and semi-structured interview schedule. The instrument elicited information on socio-economics characteristics of respondents, level of investment and crowdfarming platforms they invested in. Respondents were also requested to identify and state if they have invested in multiple crowdfarming platforms. Information were collated on crowdfarming and summarized using Frequencies and percentage, and subjected to Shannon Index to test its diversity.

© 2022 Global Journals

The Shannon index has been a popular diversity index. It is known as Shannon's diversity index, the Shannon -Wiener index, the Shannon- Weaver index and the Shannon entropy (Poole, 1974; Niklaus et al., 2001, Hixon and Brostoff, 1983; Sax, 2002). The measure was originally proposed by Claude E. Shannon to quantify the entropy (uncertainty or information content) in strings of text. The idea is that the more different letters there are, and the more equals their proportional prevalence in the string of interest, the more difficult it is to correctly predict which letter will be the next one in the string. The Shannon entropy quantifies the uncertainty (entropy or degree of surprise) (Shannon, 1948) associated with this prediction. It is most often calculated as follows:

$$H = -\sum_{i=1}^{R} P_i \ln P_i$$

Where,

H = The Shannon diversity index

Pi = fraction of the entire population (respondents/ investors) made up of species I (Particular crowdfarming platform), i.e. pi is the proportion (n/N) of individuals of one particular species found (n) divided by the total number of individuals found (N)

S = Numbers of species encountered (crowdfarming Platforms)

ln= natural logarithm

$\sum$= sum from species 1 to species n (crowdfarming Platforms)

To calculate the index, we first divide the number of individuals on each crowdfarming platform from sample by the total number of individuals in all the crowdfarming platforms. This is Pi. Two, we multiply the fraction by its natural log (P_1ln* P_1). Three, Repeat this for all the different species that we have. The last species is species s. Four, Sum all the (P_i ln* products. Pi). Finally, the value which we get should be multiplied by -1, and then we get H. High values of H would be representative of more diverse communities. A community with only one species would have an H value of 0 because Pi would be equal to 1 and be multiplied by ln P_i which would equal to zero. If the species are evenly distributed then the H value would be high. So the H value allows us to know not only the number of species but how the abundance of the species is distributed among all the species in the community. We also calculate The Shannon Equitability Index to measure the evenness of species (Crowdfarming platform) in a community (the Divisions). The term "evenness" simply refers to how similar the abundances of different species are in the community.

Denoted as E_H, this index is calculated as:

$$E_H = H / ln(S)$$

where:

- H: The Shannon Diversity Index
- S: The total number of unique species (crowdfarming Platforms)

This value ranges from 0 to 1 where 1 indicates complete evenness.

III. Results and Discussion

a) Socio-demographic characteristics of Crowdfarming Participants

The socio-demographic characteristics of crowdfarming investors in the study area were summarized in Table 1. As shown in the table, majority of the participants were male (59%) with average household size of all crowdfarming participants being 6. Average household size was the samein Lagos (Eko) (7) and Epe (7) and lowest in Ikeja (4). Younger respondents (22-55 years) constitute the majority of crowdfarming participants (72%) while the older respondent (>55 years) were just 28%. The socio-demographic analysis further showed that 94% were economically active with 43.4% engaged in farming related activities and 56.6% in non-farm activities. 56% of the crowdfarming participants owned smart phone and was not clear how the rest engaged the platforms/ transaction since crowdfarming is largely internet dependent. The literacy level is considerably moderate with about 86% being either Primary school certificate (22.4%) or secondary school certificate (36.4%) or tertiary education certificate (27. 6%) holders. The highest numbers of illiterate participants was found in Epe (N=12) and Badagry (N=9). Average total amount invested was #566,634; highest in Ikeja (#230,000) and lowest in Epe (#95,155).Thus showing high rate of investment flow to crowdfarming and calls for measure to mitigate market failure.

Table 1: Socio-demographic Characteristics of Respondents (N=300)

Characteristics	Lagos State	Ikeja	Badagry	Ikorodu	LagosIsland	Epe
Sex:						
Male	177(59)	34(56.66)	48(80)	48(80)	34(56)	30(50)
Female	123(41)	26(43.33)	12(20)	12(20)	26(44)	30(50)
Age group (year):						
20-55	216(72)	46(76)	38(64)	49(82)	29(48)	54(90)
>55	84(28)	14(24)	22(36)	11(18)	31(52)	6(10)

© 2022 Global Journals

Education group:						
No education	42(13.6)	2.4(4)	10.8(18)	6(10)	7.2(12)	14.4(24)
Primary	66(22.4)	14.4(24)	20.4(34)	10.8(18)	13.2(22)	8.4(14)
Secondary	108(36.4)	19.2 (32)	16.8(28)	16.8(28)	22.8(38)	33.6(56)
Tertiary	84(27.6)	26.4(44)	12(20)	26.4(44)	16.8(28)	3.6(6)
Mean household size	6	4	6	5	7	7
Economically Active	282(94)	57(86)	58(96)	56(94)	58(96)	59(98)
Farming Related	130(43.4)	17.(30)	35(60)	20(36)	10(17)	42(71)
Non- Farm	152(56.6)	40(70)	23(40)	36(64)	48(83)	17s(29)
Own Smart Phone	158(56)	47(82)	17(30)	40(72)	44(76)	12(20)
Mean Amount Invested(₦)	566,634	230,000	110,234	222,567	340,122	95,155

Percentages are in parentheses

b) *Shannon's Entropy Index of Crowdfarming in Lagos State*

Table 2 shows the calculated Shannon's entropy index of crowdfarming in Lagos State. The Shannon diversity index is 1.16 depicting crowdfarming platforms are evenly distributed across the state. In other words, not only were the crowdfarming platforms increasing in their numbers but were also disperse across the state in their activities. A critical look at Table 2 further shows Farm Crowdy, Thrive Agric and Farmkart were among the most diversified in terms of participants on their platforms.

Table 2: The Shannon's Entropy Index of Crowdfarming in Lagos State

S/No.	Crowdfarming Platforms	Ikeja (n)	Badagry (n)	Ikorodu (n)	Lagos Island (n)	Epe (n)	Lagos (N)	Pi	ln(Pi)	Pi*ln(Pi)
1	FarmCrowdy	10	2	10	0	0	22	0.08	-1.06	-0,09
2	ThriveAgric	5	1	10	0	10	26	0.10	-0.98	-0,10
3	Farmkart	5	2	7	15	0	29	0.11	-0.94	-0,11
4	PorkMoney	6	2	7	0	0	15	0.06	-1.22	-0,07
5	E-farms Nigeria	3	2	6	8	5	24	0.10	-1.02	-0,10
6	Farmby,	1	1	0	0	0	2	0,01	-2.10	-0,02
7	Farmfunded,	3	1	0	0	0	4	0,02	-1.80	-0,03
8	Payfarmer,	2	1	3	5	10	21	0,08	-1.08	-0,09
9	Smart farm,	2	0	0	0	5	7	0.03	-1.55	-0,04
10	Farm4me,	3	10	2	5	8	28	0.11	-0.95	-0,11
11	EzFarming,	3	7	3	0	0	13	0.05	-1.28	-0,07
12	Porkvest,	1	3	0	0	0	4	0.02	-1.80	-0,03
13	Agrecourse,	0	0	0	0	0	0	0	0	0
14	Farmsponsor,	3	4	0	0	0	7	0.03	-1.55	-0,04
15	Farmcenta,	0	3	0	0	0	3	0.01	-1.92	-0,02
16	e-poultry,	3	1	2	5	7	18	0.07	-1.14	-0,08
17	Nigeria farmers group (NPG)	0	8	0	7	0	15	0.06	-1.22	-0,07
18	Farm partner,	0	2	0	0	5	7	0.03	-1.55	-0,04
19	Farminvest	0	0	0	0	0	0	0	0	0
20	Agropartnership,	0	0	0	5	0	5	0.02	-1.70	-0,03
									H=	1.16

Shannon Equitability Index= $E_H = H / ln (S)$
$= 1.16/\ln (20)$
$= 0.89$

The Shannon Equitability Index of 0.89 is high as is very close to 1, indicating similarity among the abundances of different platforms of crowdfarming in Lagos State.

© 2022 Global Journals

c) *Comparison of Crowdfarming diversities in the Administrative Divisions of Lagos State*

Table 3 shows the comparison of the Shannon diversity index of all the five administrative divisions of Lagos State. The Table shows the Administrative division with lowest and highest diversity of crowdfarming platforms. The Table shows that, Ikeja and Badagry have uniform diversity of Crowdfarming participants (H=1.07). This is followed by Ikorodu (H=0.89). Lagos Island (Eko) has the lowest diversity (H0.80). The Table further shows Equitability Index is highest for Epe division and lowest in Badagry. This indicates that Crowdfarming participants were evenly distributed in Epe and Badagry divisions than all other three divisions. Even distribution could indicate visibility of the various platforms, depicting that all the platforms have equal effects in their outreach or promotions to attract investors to their platforms.

Table 3: The Shannon's Diversity Index of Crowdfarming for Lagos Divisions

S/No	Administrative Divisions	Shannon Index (H)	(S)	Ln(s)	Equitability Index (*H* / *Ln*(s))
1	Ikeja	1.07	14	1.15	0.93
2	Badagry	1.07	16	1.20	0.89
3	Ikorodu	0.89	9	0.95	0.94
4	Lagos Island	0.80	7	0.85	0.94
5	Epe	0.83	7	0.85	0.98

(S)= No. of indicated Crowdfarming platforms by respondents in a division

IV. Conclusion

The study of Crowdfarming diversity among funders or investor in Lagos state shows that awareness about crowdfarming among respondent has risen and it is widely dispersed among the respondents across the five administrative divisions. The diversity and evenness of the abundances of platforms and investors signals potentials of crowdfarming to compete on variations in market design, employing different rules for engagement and tools for reputation, crowd due diligence, and provision point mechanisms, among others. New markets for trusted intermediaries will likely emerge. While it is economically plausible that fierce competition among crowdfarming platforms will stimulate innovation and reduce market failure, it is envisaged that without proper regulations, supervision and monitoring there will surely be spectacular failures. Funders will lose significant sums, not only to fraud, but also to incompetent managers, bad ideas, and bad luck. Agribusiness owners will litigate their investors, and investors will litigate Agribusiness owners. As expected, the benefits from crowdfarming will not be uniform across platforms due to capacities differentials of managers and uncertainty nature of agriculture in the developing world. Since crowdfarming occurs online, many of the actions of Agri business owners and investors are in digital form and thus leave a data trail. These data and the analyses they enable will be a valuable tool for policy makers and platform designers for addressing market failure, thus, enhancing their ability to harness the upside potential of crowdfarming and realise the social gains from trade that may result from financing an important yet potentially undercapitalized sector of the economy. Arising from the foregoing, the study Recommends as follows:

- The high level of awereness should be sustained by funders and investors.
- More Farmers should be encouraged to acquire smartphones. Since crowdfarming is majorly done online.
- There should be proper regulation, supervision and monitoring by the Regulating Body to mitigate maket failure and enshrine security of investments in crowdfarming.

References Références Referencias

1. Agrawal, A., C. Catalini, and A. Goldfarb (2011): \The Geography of Crowdfunding," *NBER Working Paper No. 16820*, http://www.nber.org/papers/w16820.
2. Agrawal, A., C. Catalini, and A. Goldfarb (2013): Crowdfunding's Role in the Rate and Direction of Innovative Activity,"*Working Paper, University of Toronto*.
3. Belleflamme, P., Lambert, T., and Schwienbacher, A. (2014). Crowdfunding: Tapping the right crowd. Journal of Business Venturing, 29(5), 585.
4. Calic, G (2018) Crowdfunding, *The SAGE Encyclopedia of the Internet*, 2018.
5. Diya,O.O (2020) Changing Face of Finance in Nigeria-Crowdfunding. Available online (https://www.mondaq.com/nigeria/financial-services/902132)
6. Gabison, G. A. (2014). Equity Crowdfunding: All Regulated but Not Equal. DePaul Bus. & Comm. LJ, 13, 359. Available at: http://via.library.depaul.edu/bclj/vol13/iss3/2
7. Hixon, M.A. and Brostoff, W.N. (1983), Damselfish as keystone species in reverse: intermediate disturbance and diversity of reef algae. Science, 220, pp 511-513., 71, pp 341-356.

© 2022 Global Journals

8. Massolution.Com (2015) the Report of Crowdfunding Industry. Available online: http://reports.crowdsourcing.org/index.php?route=product/product&product_id=54
9. *Merriam-webster.com (2017).* Definition of Crowdfunding*. www.merriam-webster.com. Retrieved October 23, 2017.*
10. Nairaland (2019). The Rise of Crowdfarming and Agricultural Startups in Nigeria. Online: https://invoice.ng/blog/crowdfarming-agricultural-startups-nigeria
11. Niklaus, P.A., Leadley, P.W., Schmid, B. and Korner, Ch (2001). A long-term field study on biodiversity X elevated CO2 interactions in grassland. *Ecological Monographs*
12. Nesta.org.uk. (2015). The Rise of Future Finance" (PDF). *Nesta.org.uk.* Archived from the original (PDF) on 2015-02-26. Retrieved 2015-07-24.
13. Pandey B.N. and Kulkarni G.K. (2006), Biodiversity and environment, S. B. Nangia, APH Publishing Corporation.
14. Price, P.W. (1975), Insect ecology, John Wiley and Sons.
15. Poole, R.W. (1974), An Introduction to quantitative ecology. McGraw-Hill, New York.
16. Sax, D.F. (2002), Equal diversity in disparate species assemblages: a comparison of native and exotic woodlands in California. Global Ecology and Biogeography, 11, pp 49-57.
17. Shannon, C.E. (1948), A mathematical theory of communication. Bell System Technical Journal, 27, pp 379-423
18. Schueffel, P. (2017). The Concise Fintech Compendium*.* Fribourg: School of Management Fribourg/Switzerland. ISBN 978-2-940384-44-0*. Archived from* the original *on 2017-10-24*. *Retrieved 2018-02-18*.
19. Soreh, W.C (2017). Awareness and Attitude towards Crowdfunding in Nigeria. *International Journal of African and Asian Studies* www.iiste.org. ISSN 2409-6938. Vol.36, 2017
20. World Bank (2013) Crowdfunding Potential for the developing World. Worldbank group, Washington D.C
21. Zhang, J., and P. Liu (2012): Rational Herding in Microloan Markets," Management Science, 58(5), 892{912.

© 2022 Global Journals

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 22 Issue 3 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

The Impact of Remittances from Overseas Workers on Economic Expansion at Home: Evidence from Bangladesh

By Mahadi Hasan, Md. Saiful Islam & Hillol Fouzder
University of Barishal

Abstract- The purpose of this research is to determine whether or not the money that Bangladeshi migrant workers send back to their families has an impact on the overall pace of economic growth in Bangladesh. The multiple regression model is used as an analytical technique in this study to estimate yearly timeseries data and parameters from 1999 to 2021. The study covers the time period from 1999 to 2021. The data from realworld applications provides credence to the theory that there is a significant and beneficial connection between the money that migrant workers send back to their families and the expansion of the economy. Other alterations in rules, such as those concerning gross capital creation and the size of the labor force, are also statistically significant. However, direct foreign investment is not included in these alterations. This article examines some significant research that demonstrates the significance of remittances sent by migrant workers as a means of contributing to the expansion of the economy. In addition, the length of the research, the estimating methodologies that were employed, as well as the variability of the controls, were all different from those that were used in prior studies. In conclusion, the empirical findings that have been developed are quite sound.

Keywords: remittances, migrant workers, economic growth, capital creation.

GJMBR-B Classification: DDC Code: 331.625910593 LCC Code: HD5856.B93



Strictly as per the compliance and regulations of:

© 2022. Mahadi Hasan, Md. Saiful Islam & Hillol Fouzder. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at https://creative commons.org/licenses/by-nc-nd/4.0/.

The Impact of Remittances from Overseas Workers on Economic Expansion at Home: Evidence from Bangladesh

Mahadi Hasan [α], Md. Saiful Islam [σ] & Hillol Fouzder [ρ]

Abstract- The purpose of this research is to determine whether or not the money that Bangladeshi migrant workers send back to their families has an impact on the overall pace of economic growth in Bangladesh. The multiple regression model is used as an analytical technique in this study to estimate yearly time-series data and parameters from 1999 to 2021. The study covers the time period from 1999 to 2021. The data from real-world applications provides credence to the theory that there is a significant and beneficial connection between the money that migrant workers send back to their families and the expansion of the economy. Other alterations in rules, such as those concerning gross capital creation and the size of the labor force, are also statistically significant. However, direct foreign investment is not included in these alterations. This article examines some significant research that demonstrates the significance of remittances sent by migrant workers as a means of contributing to the expansion of the economy. In addition, the length of the research, the estimating methodologies that were employed, as well as the variability of the controls, were all different from those that were used in prior studies. In conclusion, the empirical findings that have been developed are quite sound.

Keywords: remittances, migrant workers, economic growth, capital creation.

I. Introduction

Bangladesh is a South Asian country with a low- and middle-income level. There are several problems in the country, including a lack of trust in the government and political instability. There are more people in Bangladesh than there are in any other country in the globe. As long as human resources are utilized, the public will profit. The country's population grew from 125 million in 1999 to 167 million in 2021, while the total number of people employed climbed from 45 million in 1999 to 57 million in 2021. (World Bank, 2021). Most of these workers should be hired so that they may benefit from the economic growth of the country and raise their own living standards. Because of Bangladesh's large and diverse workforce—which includes individuals with a variety of skill levels—the country has enormous potential as a labor market. Remittances to a country rise when a big number of employees leave the country. The inflow of money into Bangladesh is expanding on an annual basis. An essential role is played by Bangladesh in the growth of both immigrant families and the country itself by Bangladesh.

Bangladesh, like many poor nations, relies heavily on remittances for its economic growth. Balance of payments is maintained, foreign currency reserves are increased, and gross domestic product is increased (GDP). It has not only increased in volume, but also in terms of its part of the country's GDP (GDP).

Table 1: Top remittance receiving countries in the world in 2021

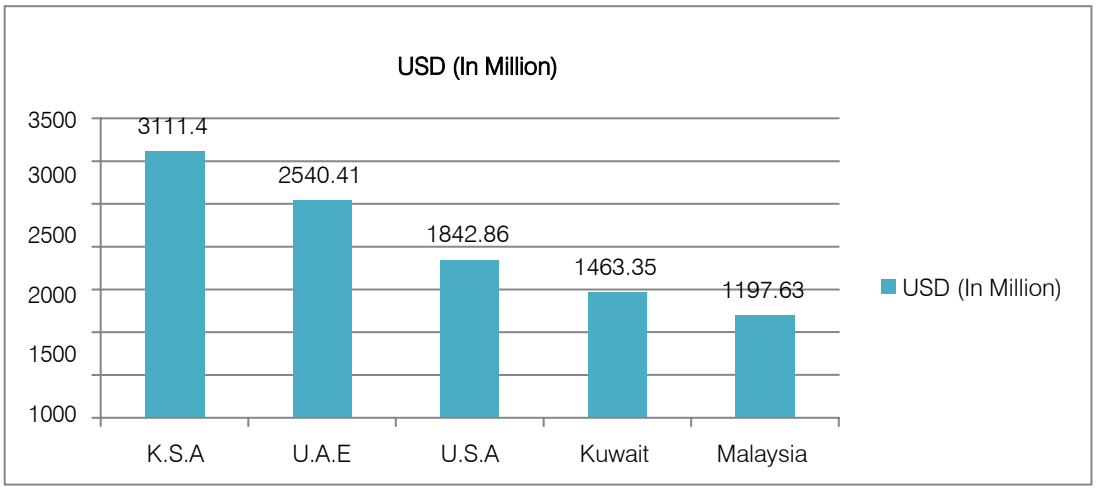
Country	Total Remittance Earnings (Billion US$)	Rank
India	83.1	1
China	59.5	2
Mexico	42.9	3
Philippines	34.9	4
Egypt	29.6	5
Pakistan	26.1	6
France	24.5	7
Bangladesh	21.8	8
Germany	17.9	9
Nigeria	17.2	10

Source: KNOMAD vai World Bank, 2021e

Remittance data from the World Bank for the year 2021 is shown in Table 1. India is the world's leading recipient of remittances, receiving $83.1 billion in 2021. Bangladesh is now one of the highest-earning countries in the world and is building up its foreign currency reserves. According to the 2021 World Economic Forum, Bangladesh ranked eighth among the world's top ten most populous countries (World Bank, 2021e). This is Fig. 1. Bangladesh's remittances to other countries (1999–2021).

Author α: Officer, Rupali Bank Limited, Bangladesh.
e-mail: mahadihasan9021@gmail.com
Author σ: Assistant Professor, Dept. of Finance and Banking, University of Barishal, Bangladesh. e-mail: saiful.ru10@gmail.com
Author ρ: Assistant Professor, Dept. of Management, Jatiya Kabi Kazi Nazrul Islam University, Mymensingh, Bangladesh.
e-mail: Hillolfouzder.nupt@gmail.com

© 2022 Global Journals



Source: Statistics Department, Bangladesh Bank.

Fig. 1: Remittance inflows of Bangladesh: Top 5 Countries Received

Bangladesh earned $ 1.8 billion in 1999, according to Fig. 1. From the $ 21.8 billion in 2021, this is an almost nine-fold rise (World Bank, 2021). Between 1999 and 2021, remittances rose by 12.85%. But it has emerged that Bangladesh's remittances have varied over the past many years. To illustrate this volatility, the amount of remittances received by Bangladesh from its citizens fluctuated from $ 15.3 billion in 2015 to $ 14 billion in 2016. In order to deal with the rising number of shipments from other nations, additional attention must be taken. Bangladesh's remittance inflows from the top five countries are seen in Fig. 2 above. Foreign remittance from the Kingdom of Saudi Arabia (KSA) was $ 3111.4 million for Bangladesh in 2013. US$2540,41, 1842,86, 1463,35, and 1197,63 million in remittances from Kuwait and Malaysia round out the top five countries in terms of total remittances received.

Therefore, it is critical to examine the impact of payments on the household and the economy. As a result, this study aims to examine the link between remittances and the Bangladeshi economy.

a) Research Objective

The objective of this study is to assess the relationship between remittance and economic development in Bangladesh. There are particular objectives that are also given below;

- To know about the GDP performance influenced by remittance in Bangladesh
- To identify the importance of remittance in Bangladesh

II. Literature Review

This document analyzes remittances and Bangladesh's economic progress. Remittances have been extensively studied. Since the article is on economic growth, this part will only evaluate relevant papers. Arusha Cooray (2012) discovered that immigrant wealth boosts economic growth in South Asia. Education and regional income growth show remittances' favorable influence on economic development. In 2010, Bichaka Fayissa and Christian Nsiah looked at how remittances affect economic growth and development in 36 African countries. Sending money can help the economy grow by giving people another way to use their money besides investing and by getting around liquidity problems. Nicholas P. Glytsos (2005) studied remittances' impact on growth. This research indicates national instability and uncertainty, with temporal and interstate changes in amounts. The data shows that changes in international priority and property expenses have an uneven effect. This means that the increased profit is less than the decreased loss. Gabriela Mundaca looked at remittances, the growth of financial markets, and economic growth in Latin America and the Caribbean in 2009. Remittances have been found to boost growth in the long term. Empirical studies show that financial intermediation tends to boost growth's ability to adapt to remittances. Esman Morekwa Nyamongo, Roseline N. Misati, Leonard Kipyegon, and Lydia Ndirangu studied the effects of remittances and financial development on economic growth in 36 African countries from 1980 to 2009. Using the group's econometric methodology, the study's major outcomes are: (1) remittance volatility tends to hurt Africa's future growth. Remittances enhance financial progress. (3) Financial development is less crucial in supporting economic growth in the nations investigated. Miguel D. Ramirez and Hari Sharma (2008) calculated remittances' influence on Latin American and Caribbean economies. Some panel unit root test macro variables The model includes the unit root; however, Pedroni's panel cointegration found a cointegration link between estimation model variables. FMOLS believes remittances boost both countries' economies. Remittances and financial development

© 2022 Global Journals

factors interact to make remittances' influence stronger. Soma Rani Sutradhar (2020) used balanced panel data to evaluate the influence of workers' remittances on four South Asian rising nations from 1977 to 2016. The model estimates remittance's effect using pooled OLS, fixed effects, random effects, and dummy variables. Remittances hurt Bangladesh, Pakistan, and Sri Lanka's economies, according to empirical regression. Remittances boost India's economy. This study is clear and negative. According to Thomas H.W. Ziesemer (2011), indirect effects are only considered in the interaction term. The simulations with anti-contractual policies "only 50% of remittances" or "no net migration anymore" reveal that remittances boost per capita GDP, investment, literacy, and growth rates. Negative impacts demonstrate that literacy and investment boost growth. Muhammad Azam (2015) looked at migrant workers' remittances and economic growth. This paper shows how migrant worker remittances boost economic growth. The study's control variables, time span, and estimating technique differ from earlier research. The empirical results are solid. Raju Jan Singh (2010) studied sub-Saharan remittances and their macroeconomic role. He collected the most complete set of data currently available on remittances in the region, including data for 36 countries from 1990 to 2008 and new data on the size and location of the diaspora. He found that although the effect of remittances on growth regression is negative, countries with good internal functioning seem to better unlock their potential. Remittances boost growth. The literature above focuses on remittances of emerging economies. Positive, negative, mixed, and neutral impacts were identified. Most of these papers identified the combined or individual country effects. Both impacts weren't analyzed. Do more research. Payment has two main consequences:

III. Methodology

The explanation of the sequence of the approach employed in this research is significant, and we will now examine any objections. The majority of the research employed panel data regression, although emerging or developing nations report on the disruption of remittances in terms of economic growth but not in their own sense. Utilizing time series data, investigate the effects of a particular nation. Using time series data, this study examines the link between remittances and economic development in Bangladesh. The F-test will be used to determine the importance of individual effects in concert.

a) Data

The dataset created for this document contains five variables collected from the World Bank's World Development Indicators Database for 23 years in Bangladesh from 1999 to 2021. This data uses time series data in this analysis. This study uses four independent variables such as Worker's Remittance, Gross Fixed Capital Formation, Foreign Direct Investment, Labor Force and one dependent variable as Gross Domestic Product.

Table 2: Variable Description and Source Information

Variable Abbreviation	Variable Description and Source
GDP	Gross Domestic Product, measured in current US dollars in billions.From the 2021 World Bank Data Set.
REM	Worker's Remittance, net inflows measured in current US dollars in billions. From the 2021 World Bank Data Set.
GFCF	Gross Fixed Capital Formation, measured in current US dollars in billions. From the 2021 World Bank Data Set.
FDI	Foreign Direct Investment, net inflows (BOP current US dollars in billions). From the 2021 World Bank Data Set.
LF	Labor Force, total. Measured in billions. From the 2021 World Bank Data Set.

b) Data Analysis Technique

Perform statistical measurements using STATA 14.2, MS Excel, MS Word, 2013 to evaluate the effectiveness and test the research hypotheses. The collected data were processed in a logical way and organized in tables for analysis. The relevant analysis is also presented in the Appendix. The formalized hypothesis was tested using the Student's t test at a significance level of 5%.

The study also uses descriptive statistical analysis to determine the relationship between GDP and remittance and uses skewness and kurtosis standards to test the normality of the data. Harris- Tzavalis unit root test and Hadri LM test were also used to determine the stationarity of the variables used.

© 2022 Global Journals

The study also analyzes the degree of correlation between independent variables and the correlation matrix to estimate the desired result. The variation inflation factor is used to test multicollinearity problems. Breusch-Pagan / Cook-Weisberg test was used to test different variances.

c) Hypothesis Development

The following research hypothesis has been formulated for testing;

Hypothesis

- ✓ H_0: There is no significant relationship between economic growth and remittance.
- ✓ H_1: There is positive significant relationship between economic growth and remittance.

IV. Empirical Findings

a) Unit Root Test

Time series data are often assumed to be non-stationary, so a preliminary test must be performed to ensure that there is a stationary relationship between the variables to avoid the false regression problem. Stationary test of variables is the important part of the empirical analysis. In this study, unit root methods namely ADF (Augmented Dickey–Fuller) and PP (Phillips–Perron) are used. The ADF test and PP test statistic outcome of the time series data for the period, 1999 – 2021 shows that all-time series data are stationary at first and second difference at 5% level of significance.

Table 3: Unit root test without difference

Variables	Linear unit root tests			
	ADF	p-value	P-P	p-value
GDP	9.261	1.000	9.587	1.000
Worker's Remittance	-0.44	0.9032	-0.456	0.9004
Gross Fixed Capital Formation	13.443	1.000	17.853	1.000
Foreign Direct Investment	-0.76	0.8307	-0.274	0.9291
Labor Force	2.201	0.9989	1.678	0.9981

NB: unit root hypotheses are tested at 5%

Interpretation

Using 5% significance level, both tests provide that all the variables including dependent such as GDP and independent such as Worker's Remittance, Gross Fixed Capital Formation, Foreign Direct Investment, and Labor Force are individually statistically insignificant without difference.

Table 4: Unit root test with difference

Variables	Linear unit root tests			
	ADF	p-value	P-P	p-value
GDP	-4.696	0.0001**	-4.960	0.0000**
Worker's Remittance	-3.107	0.0261*	-3.009	0.0341*
Gross Fixed Capital Formation	-5.246	0.0000**	-5.596	0.0000**
Foreign Direct Investment	-6.865	0.0000*	-7.043	0.0000*
Labor Force	-4.539	0.0002*	-4.580	0.0001*

**stationary of the variable at first difference*
***Stationary of the variable at second difference NB: unit root hypotheses are tested at 5%*

Interpretation

From the table, it is seen that the P-value of all the variables are less than .05. In both ADF and P-P test, worker's remittance, foreign direct investment and labor force time series data have become stationary after 1st difference at 5% level of significance. And In both ADF and P-P test, GDP and gross fixed capital formation time series data have become stationary after 2nd difference at 5% level of significance.

This implies that, all the time series data taken from year 2000-2021 are stationary. This means the data are time dependent and does not contain unit root.

© 2022 Global Journals

b) Normality Test

In statistics, normality tests are used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed.

Table 5: Normality result

	GDP	WorkersRem~e	GrossFixed~n	ForeignDir~t	LaborForce
Skewness	0.4654	0.8644	0.0370	0.3078	0.6356
Kurtosis	0.0806	0.0003	0.6499	0.0191	0.4797

Source: Calculations from STATA 14.2

Interpretation

Skewness and kurtosis standards are explored to test data normality. Since some of the variables examined are not normally distributed due to heteroscedasticity. But this study normalized the distribution of data through winsorising (Dhaliwal et al. 2012, p. 732; Artiach et al. 2010, p. 40). With Winsorising, the evaluated data are normally distributed, the skewness scores reach ± 1.96 and the kurtosis coefficient in the range of ± 3 (Haniffa and Hudaib 2006). The results are shown in Table, demonstrating the normal distribution of data.

c) Heteroskedasticity Test

Table 6: Heteroskedasticity result

Breusch-Pagan / Cook-Weisberg test	Cameron & Trivedi's decomposition of IM-test (White's test)
Ho: Constant variance Variables: fitted values of PBT chi2(1) = 10.76 Prob > chi2 = 0.1010	Ho: homoskedasticity against Ha: unrestricted heteroskedasticity chi2(14) = 19.85 Prob > chi2 = = 0.1350

Source: Calculations from STATA 14.2

Interpretation

To test heteroscedasticity, the Breusch-Pagan / Cook- Weisberg test and the Cameron & Trivedi IM-test were used. The results are given above. Here, both tests show Prob> chi2 = 0.1010 and Prob> chi2 = 0.1350, which means that Ho's decision is taken. As can be seen, prob> Chi2 is greater than 0.05, allowing the null hypothesis to show no threat of heteroscedasticity.

d) Autocorrelation Test

Table 7: Autocorrelation result

Breusch-Godfrey LM test	Durbin's alternative test
H0: no serial correlation chi2 = 0.527 Prob > chi2 = 0.4679	H0: no serial correlation chi2= 0.362 Prob > chi2 = = 0.5474

Source: Calculations from STATA 14.2

Interpretation:

Both the Breusch-Godfrey LM test and Durbin's alternative test indicate that the absence of first order autocorrelation among the variables used in the model. In both cases the prob are .4679 and .5474 at .05 significance level. So we cannot reject the null hypothesis.

e) Multicollinearity Test

Based on the normally distributed data, Table 8 examined the existence of multicollinearity between the independent variables.

Table 8: Multicollinearity Result

Variable	VIF	1/VIF
D Worker's Remittance	1.60	0.623409
DD Gross Fixed Capital Formation	1.40	0.712135
D Labor Force	1.15	0.871440

© 2022 Global Journals

D Foreign Direct Investment	1.12	0.891867
Mean VIF	1.32	

**D means 1st differencing*
**DD means 2nd differencing*

Interpretation

Multicollinearity statistics is the reliable measure for calculating the validity of regression analysis and this is usually done through STATA. Using multicollinearity statistics, Variance Inflation Factor (VIF) and tolerance level were calculated. Results in Tab-V can be evaluated based on specific criteria. For example, Gujarati (2007) suggested that VIF values should be below 5 and 1 / VIF (or multicollinearity) values should be closer to zero. If these conditions are met then regression analysis is considered valid. As shown in Tab-V that the variable VIF is below 5 and the value 1 / VIF is also closer to zero. This indicates the absence of multicollinearity in regression analysis.

f) Descriptive statistics

The table below presents the descriptive statistics for the variables in the study based on time series data from the year 1999 to 2021.

Table 9: Descriptive statistics result

Variable	GDP	WorkersRem~e	GrossFixed~n	ForeignDir~t	LaborForce
Mean	1.233444	0.7239474	0.4633889	0.1537895	.00012
Min	-8.641	-1.722	-2.602	-1.238	0.0001
Max	11.916	2.379	2.478	1.263	0.0003
Std. Dev.	4.521438	0.9592015	1.323003	0.6243133	0.0000562
Observation	21	22	21	22	22

Interpretation

Table presents descriptive statistics of the variables as part of the model examined, including both dependent and independent variables across the 20 observations collected. Results in Table shows that the highest amount was 11.916 billion US$ on GDP, 2.379 billion US$ on Workers Remittance, 2.478 billion US$ on Gross Fixed Capital Formation, 1.263 billion US$ on Foreign Direct Investment and .0003 billion US$ on Labor Force from the year 1999 to 2018

g) Pearson Correlation matrix

Following table displays the relationship between GDP and other independent variables. Pearson Correlation technique is employed for this mission, and these variables are examined at 5 percent significance level.

Table 10: Pearson correlation result

	GDP	WorkersRem~e	GrossFixed~n	ForeignDir~t	LaborForce
GDP	1.0000				
WorkersRem~e	-0.4250	1.0000			
GrossFixed~n	0.9110	-0.5191	1.0000		
ForeignDir~t	0.1395	0.2789	-0.0185	1.0000	
LaborForce	0.0592	0.3187	0.2034	-0.1838	1.0000

Interpretation

The above table presents the correlation between GDP and other variables, where there is a negative association GDP and workers remittance. Moreover, there is no high correlation among independent variables. Labor Force have positive correlation with all except FDI. Therefore, it can be concluded that there is no multicollinearity problem in this analysis, which usually requires a correlation between independent variables of the order of 0.80 or higher.

h) Regression Analysis

To examine the relationship between the economic growth and remittance, multiple regression analysis were analyzed in this analysis. The following table shows the result:

© 2022 Global Journals

Table 11: Regression analysis result

Variables	Coefficient	Std. Error	t-Statistic	Prob.
_cons	2.890372	.366453	7.89	0.000
WorkersRemittance	.0391636	. .0082322	4.76	0.000
GrossFixedCapitalFormation	.0105569	.0019205	5.50	0.000
ForeignDirectInvestment	.0025482	.0263539	0.10	0.924
LaborForce	187.6249	83.98918	2.23	0.041
R-squared	0.8647			
Adj R-squared	0.8231			
F(4, 13)	20.78	Prob > F	0.0001	

Interpretation

Table shows that if Workers Remittance is increased one unit, economic growth (GDP) is increased by .0391636. Again if Gross Fixed Capital Formation is increased one unit, economic growth (GDP) is increased by .0105569. Again if Foreign Direct Investment is increased one unit, economic growth (GDP) is increased .0025482 and if Labor Force is increased one unit, economic growth (GDP) is increased 187.6249. This implies that all independent variables have increased this in turn will have a significant impact on economic growth (GDP). However, the result shows that Workers Remittance, Gross Fixed Capita Formation and Labor Force are statistically significant to Bangladeshi gross domestic product at 5% level of significance. That means that our null hypothesis is rejected, that implies those variables have significant impact on economic growth. On the other hand Foreign Direct Investment statistically insignificant to gross domestic product at 5% level of significance. That means that we cannot reject the null hypothesis. But the model is overall significant with F-test. From the regression result the coefficient of determination, R2 (86%) shows the goodness of fit of the result and also indicates that eighty six percent of the variance in response variable can be explained by the explanatory variable. The remaining percent can be attributed to unknown.

i) Johansen tests for co-integration

The equilibrium relationship between a set of variables means that their probabilistic trends must be related. We are trying to determine if there is a long-term equilibrium between the study variables. At that time, the Johansen co-integration test was used. This test identifies the number of long-term relationships that exist between a set of integrated variables. Trace statistics test the null hypothesis that there are up to r co-integrated equations. Therefore, the rejection of the null hypothesis means that there is a co-integrating ratio greater than or equal to r.

Table 12: Co-integration result

Maximum rank	Trace statistic	5% critical value	Max statistic	5% critical value
None	141.2088 *	68.52	70.8988*	33.46
At most 1	70.3100*	47.21	36.3513*	27.07
At most 2	33.9587*	29.68	25.6591*	20.97
At most 3	8.2996	15.41	5.7819	14.07
At most 4	2.5178	3.76	2.5178	3.76

Interpretation

From the table, trace statistics 141.2088 *, 70.3100 * and 33.9587 * clearly exceed the critical values 68.52, 47.21 and 29.68, respectively, in the 95% confidence interval, so they do not accept the null hypothesis ... Most of the two co-integrating relationships, and therefore long- term equilibrium relationships, exist between variables. The maximum statistics of eigenvalues 70.8988 *, 36.3513 * and 25.6591 * also exceed the critical values 33.46, 27.07 and 20.97 with a confidence level of 95%, thus not accepting the null hypothesis of two relationships of agreement between the variables.

V. Conclusion

In this research, Bangladesh's economic growth and development will be compared to those of other external sources of FDI, gross fixed capital creation, and labor power. The findings suggest that remittances have a favorable impact on economic growth. Based on yearly time-series data from 1999 to 2018, the conclusions are empirical. GDP per capita income rises by 3.9 percent for every additional worker. The results of the regression show that the money sent home by migrant workers has a big and positive effect on economic growth. There is a positive and considerable

© 2022 Global Journals

influence on economic growth from other control variables, such as GDPF and the labor force, excluding FDI. As a result, these findings back up the researchers' predictions. The consequences on domestic labor markets of mass migration to specialized sectors such as higher education, government services, research and technology, and construction and services may also be negative. It is mainly skilled employees that are difficult and costly to replace. Providing food, health care, and education for the children of migrants can help alleviate short-term fiscal constraints for families. Migrant workers' remittances have clearly helped developing countries. At the same time, it's being examined to see if it aids in the economic transformation and growth of the countries of origin of recent immigrants.

References Références Referencias

1. Fayissa, B., & Nsiah, C. (2010). The Impact of Remittances on Economic Growth and Development in Africa. The American Economist, 55(2), 92–103. doi:10.1177/056943451005500210
2. LOONEY, R. E. (1990). Macroeconomic Impacts of Worker Remittances on Arab World Labor Exporting Countries. International Migration, 28(1), 25–45. doi:10.1111/j.14682435.1990.tb00133.x
3. Cooray, A. (2012). The Impact of Migrant Remittances on Economic Growth: Evidence from South Asia. Review of International Economics, 20(5), 985–998. doi:10.1111/roie.12008
4. Hansen, H., & Rand, J. (2006). On the Causal Links Between FDI and Growth in Developing Countries. The World Economy, 29(1), 21–41. doi:10.1111/j.1467-9701.2006.00756.x
5. Singh, R. J., Haacker, M., Lee, K. -w., & Le Goff, M. (2010). Determinants and Macroeconomic Impact of Remittances in Sub-Saharan Africa. Journal of African Economies, 20(2), 312–340. doi:10.1093/jae/ejq039
6. Nyamongo, E. M., Misati, R. N., Kipyegon, L., & Ndirangu, L. (2012). Remittances, financial development and economic growth in Africa. Journal of Economics and Business, 64(3), 240–260. doi:10.1016/j.jeconbus.2012.01.001
7. Ziesemer, T. H. W. (2012). Worker remittances, migration, accumulation and growth in poor developing countries: Survey and analysis of direct and indirect effects. Economic Modelling, 29(2), 103–118. doi:10.1016/j.econmod.2011.08.013
8. Amuedo-Dorantes, C., & Pozo, S. (2004). Workers' Remittances and the Real Exchange Rate: A Paradox of Gifts. World Development, 32(8), 1407–1417. doi:10.1016/j.worlddev.2004.02.004
9. Glytsos, N. P. (2005). The contribution of remittances to growth. Journal of Economic Studies, 32(6), 468–496. doi:10.1108/01443580510631379
10. Giuliano, P., & Ruiz-Arranz, M. (2009). Remittances, financial development, and growth. Journal of Development Economics, 90(1), 144–152. doi:10.1016/j.jdeveco.2008.10.005
11. Mundaca, B. G. (2009). Remittances, Financial Market Development, and Economic Growth: The Case of Latin America and the Caribbean. Review of Development Economics, 13(2), 288–303. doi:10.1111/j.1467-9361.2008.00487.x
12. Ramirez, M.D., Sharma, H., 2008. Remittances and growth in Latin America: a panel unit root and panel cointegration analysis. Department of Economics Yale University WP No. 51.
13. Ojede, A., Lam, E., & Okot, N. (2019). Identifying macro-determinants of remittance flows to a developing country: The case of Uganda. The Journal of International Trade & Economic Development, 28(4), 429-451.
14. Shakya, P., & Gonpu, G. P. (2021). Impact of Remittances on Economic Growth in Nepal. Nepal Public Policy Review, 31-47.
15. Rasamoelison, J. D., Averett, S., & Stifel, D. (2021). International student-migrant flows and growth in low-and middle-income countries: brain gain or brain drain? Applied Economics, 53(34), 3913-3930.

© 2022 Global Journals

Global Journal of Management and Business Research: B
Economics and Commerce
Volume 22 Issue 3 Version 1.0 Year 2022
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Reimagining Theory of Planned Behaviour in Exploitation of Public Private Partnership Opportunities to SMEs

By Hamisi K. Sama

Introduction- In light of the rapid increase SMEs importance to economy, this study aims to contribute to the existing literature regarding exploitation of opportunities by applying the Theory of Planned Behaviour (TPB) model to predict exploitation of opportunities favouring SMEs. The TPB is particularly suitable for this type of study since it has been suggested to be an effective model in predicting how and why some people intend to exploit business opportunities whereas others do not (Garba, et al., 2014; Crispeels, et al., 2012; de Jong, 2013; Nangoli et al., 2013). More generally speaking, the TPB seems to be an effective predictive model in fields that lead to a certain degree of behavioural change from individuals.

GJMBR-B Classification: DDC Code: 338.0409439 LCC Code: HD70.H8



Strictly as per the compliance and regulations of:

© 2022. Hamisi K. Sama. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at https://creative commons.org/licenses/by-nc-nd/4.0/.

Reimagining Theory of Planned Behaviour in Exploitation of Public Private Partnership Opportunities to SMEs

Hamisi K. Sama

I. Introduction

In light of the rapid increase SMEs importance to economy, this study aims to contribute to the existing literature regarding exploitation of opportunities by applying the Theory of Planned Behaviour (TPB) model to predict exploitation of opportunities favouring SMEs. The TPB is particularly suitable for this type of study since it has been suggested to be an effective model in predicting how and why some people intend to exploit business opportunities whereas others do not (Garba, et al., 2014; Crispeels, et al., 2012; de Jong, 2013; Nangoli et al., 2013). More generally speaking, the TPB seems to be an effective predictive model in fields that lead to a certain degree of behavioural change from individuals.

The exploitation of entrepreneurial opportunities has a positive impact on economic growth. With all economic advantages of SMEs, small companies and start-ups have been found to be more competent at identifying entrepreneurial opportunities but less effective at developing and sustaining capabilities needed to exploit them over time. Previous work has examined many different factors that play a role in the exploitation of opportunities for business ventures. Among these, however, some factors have been identified as especially important and received most attention: engaging in an active exploitation for opportunities in terms of cognitive perspective, social networks, financial constraints and human capital.

The TPB is a social cognition model that proposes that behavior is a linear function of behavioral intentions and perceived behavioral control, the perception of individual control over performing the behaviour. The TPB constitutes a promising model for understanding and predicting social behaviors in terms of specifying the relationship between potentially modifiable behaviours or determinants. Intentions, in turn, are assumed to be a linear function of three types of cognitions: Attitude (positive or negative evaluation of the behaviour), subjective norm (perceived approval of performing the behaviour), and perceived behavioural control (self-efficacy towards the behaviour). Attitudes, subjective norm, and perceived behavioural control are based on a set of more specific salient behavioural, normative, and control beliefs that reflect perceived outcomes associated with the target behaviour (behavioural beliefs), approval of important others (normative beliefs), and barriers and facilitators-control beliefs (Sniehotta, 2009).

According to the model attitudes, subjective norms and perceived behavioural control predict the intention of SMEs to exploit business opportunities, which in turn predicts the behaviour. Background variables, as demographical factors cognitive perspective, social networks, financial constraints and human capital), are supposed to influence the behaviour through the three determinants and the intention to exploit business opportunities. Attitudes, subjective norms and the perceived behavioural control, explain the behavioural intention before the behaviour takes place. The intention to exploit business opportunities is a good predictor of the actual behaviour. Theory also says that the perceived behavioural control is an estimate of the skills needed for expressing the behaviour and the possibility to overcome barriers. Therefore, a direct influence of perceived behavioural control on behaviour is supposed. The actual behaviour leads to feedback about the expectations of the behaviour. In Figure 1, this is shown by the 'feedback' arrow.

In general, the sequence of changes in an individual leading to behavioural change begins when the individual becomes aware of a problem or need which gives the individual an initial reason or incentive to pursue a given course of action. According to Ajzen (2006), when using the TPB, the action comprising the behaviour must be defined at an appropriate level of specificity to allow for useful generalisation. It is commonly accepted in the entrepreneurial literature that the entrepreneurial behaviour can be analysed through the lens of specific intentions, because the reasons individuals decide whether to exploit opportunities may depend on the specific form of actions. Mathieson (1991) also pointed out that the TPB focuses on "specific beliefs that are specific to each situation" providing specific information and insight into an individual's or a group's predispositions.

Author: Procurement and Supplies Department, College of Business Education, Dodoma Campus, P. O. Box 2077, Dodoma, Tanzania. e-mail: samakicheche@yahoo.com

© 2022 Global Journals

In addition, Giacalone and Jurkiewicz (2005) stated that entrepreneurs differ in their decision to participate in opportunity exploitation behaviors depending on their behavioural intentions. Entrepreneur's willingness to comply with motivation in exploiting opportunities depends on behavioural intentions. Therefore, willingness to comply with motivation in exploiting opportunities depends on relationship between beliefs and intentions that can influence behaviour, namely attitude, subjective norm and perceived behavioural control. Indeed, through TPB which is based on individual's intention (motivation) to engage in a specific behaviour, the stronger then intention, the greater the likelihood of engaging in the behaviour.

The TPB provides a simple conceptual framework for measuring the relationship between beliefs, attitudes, norms and intentions that can influence behaviour, namely attitude, subjective norm, and perceived behavioural control (PBC). Firstly, is the attitude, which refers to the degree to which an individual has a favorable or unfavorable evaluation of the behaviour in question. Secondly, subjective norms are conceptualized as the pressure that people perceive from important others to execute behaviour. Thirdly, PBC is a construct describing how easy or difficult the performance of the behaviour is and it also reflects past experience as well as external factors, such as anticipated resources, opportunities and obstacles that may influence the performance of the behaviour. Finally, attitudes, SN, and PBC are proposed to influence behaviour through their influence on intentions, which summarize a person's motivation to act in a particular manner and indicate how hard the person is willing to try and how much time and effort he or she is willing to devote in order to perform a behavior (Rivis and Sheeran, 2003).

According to Ajzen (1991), the more favourable the attitude, subjective norm, and perceived behavioural control toward a behaviour, the stronger should be their intention to exploit in that behaviour. This means, when an individual evaluate behaviour positively, believe on its performance, and perceive control over it, there is greater intention to exploit it. Intention is considered the direct antecedent of behaviour because given an adequate degree of actual control over certain behaviour individuals are expected to carry out their intentions. However, given the fact that many behaviours are not under one's complete aspiration to control, in that sense perceived behavioural control can be considered.

The aim of this paper is to respond to the calls referred to above, generating three contributions to the field of entrepreneurship and public procurement. Firstly, we shall examine the opportunity exploitation of SMEs in PPP contracts; in other words, we shall look at how such firms exploit the opportunities available in PPP contracts. Thirdly, to test how Theory of Planned Behaviour SMEs can be applied in exploitation of PPP contracts. Rarely, extensive empirical study on opportunity exploitation of SMEs in PPP contracts through the lenses of TPB. The study, therefore, serve to all the stakeholders involved in public procurement for improving the various aspects of SMEs in exploiting PPP opportunities in Tanzania particularly and developing countries in general.

II. Research Problem

Recent studies show that economic growth of any country is closely linked with Small and Medium Enterprises (SMEs) development by fostering accelerated economic growth, development and stability within several economies. A huge majority of firms worldwide are SMEs, and they play a significant role in the economy (Pasanen, 2003). Also, Tanzania's economic landscape conspicuously reflects the dominance of SMEs, whereby SMEs provide employment to more than 50% of all employed labour force (Matambalya and Wolf, 2001). However, there are also very high failure rate of SMEs in the world and performing less compared to bigger firms (Noshad *et al.,* 2019; Alam, *et al.,* 2020). Therefore, the central objective of this research is how and why leverage between SMEs opportunity recognition and accessibility of PPP contracts can be attained.

SMEs make-up the largest proportion of businesses all over the world and play tremendous roles in employment generation, provision of goods and services, creating a better standard of living, as well as immensely contributing to the gross domestic products (GDPs) of many countries (OECD 2000). In this way it is obvious that opportunity exploitation in PPP through SMEs results to economic growth hurdles through cognitive perspective, social networks, financial constraints and human capital.

Challenges of managing a successful SMEs business today are more multifaceted and tricky than any other time in the recent history (Arasti, *et al.,* 2014). Henceforth, SMEs due to their size face problems that make them vulnerable and prevent them from attaining growth (Hussain, *et al.,* 2010). *These problems are particularly significant in the areas of cognitive perspective, social networks, financial constraints and human capital. In presence of such problems, many SMEs are unable to solve challenges on exploitation of PPP opportunities. These problems act as constraints not only in exploitation of PPP opportunities but also in limiting economic growth*.

The participation of SMEs in public procurement markets is far below their share in national economies. There are both public and private-side reasons that contribute to the low exploitation of PPP opportunities through SMEs. Despite this, SMEs have historically been

© 2022 Global Journals

shut out of government business. SMEs perceived serious obstacles to their engagement in public procurement, where major barriers included lack of awareness of opportunities, difficulty in getting on the approved supplier list, lack of knowledge of the procurement process, and lengthy and complex tendering process (Loader, 2005). *As a result, SMEs have found bidding for public sector work excessively bureaucratic, time-consuming and expensive*.

However, irrespective of the country in which they exist, SMEs face common obstacles that weaken both their performance and survival rate. Nevertheless, there are also very high failure rate of SMEs in the world and performing less compared to bigger firms. *Cautiously, public sector-side encloses impressions that SMEs have limited financial and technical capacity to tender consequently inhibiting deliverance*.

Currently, the *entrepreneurial desires and competencies are achieved through government directives, policies, education and training to develop desire and culture of entrepreneurship* (Cooney, 2012, Brockner, *et al.,* 2004*)*. However, Bird (1988) suggests that entrepreneurial intention directs critical strategic thinking and decisions, and operates as a perceptual screen for viewing relationship, resources, and exchanges. Therefore, *willingness to comply with motivation in exploiting opportunities depends on relationship between beliefs and intentions that can influence behaviour, in terms of attitude, subjective norm and perceived behavioural control*. Bird (1988) further describes intention as a state of mind that focuses a person's attention, experience, and behaviour toward a specific object or method of behaving.

The sharing of risks and responsibilities of a PPP project attempts to attain the goal of asset maximisation, which is the optimal distribution of risks and value between the public and the private sector for a specific project. But, it is quite difficult to have a proper risk allocation arrangement because each party that is involved in a project frequently has different perceptions/perspectives regarding project risks (Chapman and Ward, 1991). By definition, economic efficiency requires that risks be evaluated and shared optimally between the partners: i.e., assigned to the state, to the private sector operator, or to an outside insurer *(*De Palma, *et al.,* 2009). There is no clear-cut way of sharing risks, but the literature suggests that most of them (not all) can be transferred to the private sector, whereas the state should essentially remain in charge of managing acts of nature (e.g., a volcanic eruption) and the fiscal risks (*ibid*). Therefore, allocation of risks between the PPP partners cannot rely on the implicit assumption that the public and private sectors are on an equal (or horizontal) footing in the partnership.

Principal-agency approach shows several conflicting goals inherently exist among the three major constituencies involved in public-private partnerships; thus leading to compounded agency problem: i.e. public sector operating as the contracting authority, the private sector and the consumers or end users of services. Public entities are more conscious of the need for investment which has spillover effects with widespread social and economic costs and benefits. While, private partners through using the interaction can set the policy agenda to address the problem in a way that avoids their own contribution to the problem, or divert attention away from potential solutions that do not serve private goals (Hawkes, 2008). These differing goals and interests imply great conflict potential, which, at least in times of economic growth, remains hidden under a "blanket of consensus".

The objective of the study is, twofold: first it investigates into the constraints that SMEs face in exploitation of PPP opportunities. Second, it suggests how TPB can help to remove the constraints to SMEs in exploitation of PPP opportunities. Therefore, the study investigates the current situation of SMEs and exploitation of PPP opportunities to enhance public-private cooperation in developing countries for SMEs development. The study, therefore, serve to all the stakeholders for improving the various aspects of SME in exploitation of PPP opportunities in Tanzania particularly and in developing countries in general.

III. Research Objectives and Propositions

The first objective is to investigate influence of behaviour to exploit PPP opportunities to SMEs. The second objective is to determine the influence of financial capability to SMEs in exploiting PPP opportunities. The second objective is to test if human capital will positively influence SMEs to exploit PPP opportunities. Fourth objective is to investigate if social networks will positively influence SMEs to exploit PPP opportunities. The fifth objective is to identify whether Intention to Exploit Opportunity PPP opportunities to SMEs will be positively influenced by opportunity exploitation behaviour. The sixth objective is to clarify any causal link between the exploitation of PPP opportunities and intention to exploit opportunities.

IV. Lenses of Public Private Partnership to SMEs

A PPP is a contractual arrangement between a public entity and a private entity, whereby the private entity performs part of a government entity's service delivery functions, and assumes the associated risks and management responsibility for a significant agreed period of time. In return, the private entity receives a benefit/financial remuneration according to predefined performance criteria. Such contractual partnerships are characterized by the sharing of investment, risk, responsibility and reward between the partners. Thus,

© 2022 Global Journals

PPPs imply a sort of collaboration to pursue common goals, while leveraging joint resources and capitalizing on the respective competences and strengths of the public and private partners (Widdus, 2017; Pongsiri, 2002; Nijkamp *et al.,* 2002).

PPP offers mutually strategic and operational choices to government. Strategically, the use of PPP promotes economic growth by developing new commercial opportunities and increasing competition in the provision of public services, thus providing avenue for SMEs to exploit opportunities. At the same time, it allows government to set policy and strategy, and where appropriate, to regulate economic activities, while leaving service delivery to the private sector. Operationally, PPP provides opportunities for efficiency gains (better quality and more cost-effective delivery of services), better asset utilisation, clearer customer focus (since payments are typically linked to performance rather than service inputs), and accelerated delivery of projects.

Participation in PPPs may take place in both productive and socio-economic services sectors including, but not limited to the following: Agriculture, infrastructure, manufacturing, education, health, natural resources, tourism, energy, mining, water, land development, environment and solid waste management, appropriate defense infrastructure, sports, communication, information and communication technology (ICT), trade, entertainment and recreation and irrigation (URT, 2014).

V. Exploitation of Opportunity to SMEs

Entrepreneurship involves phenomena and processes related to discovering, evaluating, and exploiting opportunities to create future goods and services (Shane and Venkataraman, 2000). However, Shane (2003) describes an entrepreneurial opportunity as a situation in which a person can create a new means-end framework for recombining resources that the entrepreneur believes will yield a profit. This definition of an entrepreneurial opportunity is useful in that entrepreneurial opportunities are of two categories: something happening in the resources (financial constraints and human capital) and environments (cognitive perspectives and social networks).

Entrepreneurial opportunity proves to be important phenomena for exploiting opportunities and stimulating economic growth. Entrepreneurial opportunity emerges at the nexus of individual aspirations with economic and social conditions perceived as favourable to create a new product or service, either in an existing market or a new one. However, Holcombe (2003) noted imperfection of entrepreneurial activity will leave room for others to exploit the opportunities left out ("existent") or created ("new") by its fore comers. One basic concern of the entrepreneurship approach is the question why some particular individuals, in similar conditions or otherwise, have the ability to recognize and exploit opportunities in various environments and undertake entrepreneurial actions, while others do not.

The decision to exploit an opportunity represents a commitment to cognitive perspective (Zahra, *et al.,* 2005), social networks (Fuentes Fuentes, *et al.,* 2010), financial constraints (Zahra, *et al.,* 2005) and human capital (Seppänen, *et al.,* 2018). These activities provide entrepreneurs with resources and strength needed for opportunity exploitation. By exploiting these opportunities before others, entrepreneurs may gain some first mover advantages, although, because information about these opportunities and how to exploit them typically diffuses quickly (Barney, 1991; Grant, 1996), these first mover advantages are often difficult to sustain (Lieberman and Montgomery, 1988). In acting and reacting, entrepreneurs enact the opportunities they ultimately exploit (Weick, 1979). Therefore, in this study, exploitation of PPP opportunity refers to those activities and investments committed to gain returns arising from the exploitation of PPP opportunity through financial capability, cognitive perspectives, human capital and social networks to efficient SMEs.

a) Cognitive Perspectives

Cognition has been defined as the knowledge structures or mental templates that actors impose on an information domain to give it form and meaning (Lyles and Schwenk, 1992; Walsh, 1995). The process of exploitation of PPP opportunities by SMEs is influenced by the cognitive mechanisms through which people acquire, store, transform and use information. Cognition perspectives activities arise from the actors' actions; therefore, understanding why and how these persons act as they do becomes essential to understanding relationship between SMEs, TPB and exploitation of PPP opportunities. The process of SMEs to exploit PPP opportunities is influenced by the cognitive mechanisms through which individuals acquire, store, transform and use information. Cognition is the mental processes and models that individuals employ to gather, organize and use information and develops through interactions with other people and the environment (Mitchell, *et al.,* 2002). It immediately precedes the occurrence of a conscious and intended behaviour such as the decision of SMEs to exploit PPP opportunities.

The cognitive perspective is concerned with understanding mental processes such as memory, perception, creativity, thinking, and problem solving, and how they may be related to behaviour of exploiting opportunities. Specifically, this perspective can help the field of entrepreneurship to answer three basic: firstly, why do some persons but not others choose to become

© 2022 Global Journals

PPP entrepreneurs? Secondly, why do some persons but not others recognise PPP opportunities that can be profitably exploited? And thirdly, why are some PPP entrepreneurs so much more successful than others? The cognitive perspective is composed of four processes of goal realization: self-observation, self-evaluation, self-reaction and self-efficacy (Redmond, 2010). The four components are interrelated and all have an effect on motivation and goal attainment to decision of SMEs to exploit PPP opportunities.

b) Human Capital Perspectives

The importance of human capital for economic increase can be characterized in relation to the implementation of the structural changes that contribute not only to quantitative but mainly to qualitative changes in the development of society and its output. The link between human capital and exploitation of PPP opportunities is based on capacity to express expandable, self-generating, transportable and sharable characteristics in producing economic values. Whereas natural resources and other material resources are passive economic factors in the sense that they are preference-free, in the case of human agents it is necessary in undertaking an economic analysis to distinguish between their preferences and their abilities, including their skills and knowledge, as these abilities contribute to the possibilities of realizing their preferences.

The importance of human capital for economic increase can be characterized in relation to the implementation of the structural changes that contribute not only to quantitative but mainly to qualitative changes in the development of society and its output. According to Frank and Bemanke (2007) human capital is an amalgam of factors such as education, competencies, skills, experience, training, intelligence, energy work habits, trustworthiness and initiatives. The success of SMEs in exploiting PPP opportunities depends on individuals' capability to exploit human capital. Constant interaction, exchange, mutual dependence and reinforcement between the individual and the collective give human capital the unique capacity for self-development and self-augmenting.

c) Financial Capability

A financial constraint is the situation whereby desired investment on exploited PPP opportunity exceeds available internal and external funds. However, SMEs continue to face significant obstacles to fulfilling their potential to innovate, grow and create jobs, particularly when it comes to obtaining access to finance. According to OECD 2014 report financing conditions for small and medium-sized enterprises (SMEs) remain a pressing concern in many countries. The effect of financial and legal development on the constraints-growth relationship is significantly stronger for SMEs than for large firms whereby SMEs experienced stiffer credit terms than large firms in the form of higher interest rates, shortened maturities and increased requests for collateral.

There are other various financial challenges that face SMEs in exploitation of PPP opportunities. Credit constraints operate in a variety of ways where undeveloped capital market forces entrepreneurs to rely on self-financing or borrowing from friends or relatives henceforth forces SMEs to rely on high cost short term finance (Kerr and Nanda, 2009). Studies have tried to identify financially constrained firms on the basis of the high cost of credit, high bank charges and fees, firm size, lengthy process for allocation of loans, Power of firm, industrial group membership, and nature of the bank-firm relationship. Therefore SMEs may fail to exploit PPP opportunities because cost effect arises due to higher levels of investment are associated with higher repayment costs, a higher risk of default, and consequently a higher marginal cost of debt finance.

d) Social Networks

Social networks are networks of social interactions and personal relationships with persons to whom an entrepreneur has direct and indirect relations. The personal or social network construct has its roots in social network theory. Social network theory suggests that individuals are interconnected thought their social networks. A social network facilitates the entrepreneurial opportunity exploitation process by linkages among entrepreneurs, resources and opportunities. Social network is social structure which represents resource and a potential capital while social capital is a network which is used to engage in productive economic activities (Lin, *et al.,* 2011). Through social network, the entrepreneur gains access to support, information and assistance while revealing how individuals are connected to each other (Ozgen, 2003).

Structural construct of social network consists of size of an entrepreneur's personal network, network diversity and targeted benefits (Witt, 2004). A first structural construct is the size of an entrepreneur's personal network, i.e. the number of different persons with whom the founder has talked about PPP exploitation plan or the exploitation of PPP opportunity. Second structural construct is the network diversity, i.e. the heterogeneity of network participants by classifying network partners into three groups, family, friends, and acquaintances, and then to measure the number of people in each group. The third group of network constructs directly targets the benefits obtained from entrepreneurial networking activities in relation to structural properties of personal networks this includes attempts to quantify the number and the value of network services that entrepreneurs received via network contacts.

© 2022 Global Journals

VI. Interactions between Theory of Planned Behaviour and Exploitation of PPP Opportunity

The TPB is based on individual's intention to engage in a specific behaviour, the stronger then intention, and the greater the likelihood of engaging in the behaviour. According to TPB theory, attitudes toward a target behaviour, subjective norms, and perceived behavioural control all feed into behavioural intention, which will ultimately drive the target behaviour. In considering entrepreneurship, the SMEs intention to exploit PPP opportunity is the behavioural intention towards entrepreneurship. Furthermore, the three predictors of intentions are defined as follows:

Attitude towards entrepreneurship is the degree to which the respondent has a favourable or unfavourable evaluation of being an entrepreneur. Hence, high attitude towards entrepreneurship indicates that the respondent is more in favour of exploiting PPP opportunity than other occupational options. Subjective norm refers the perceived social pressure to engage or not to engage in a behavior (Ajzen, 2006). Subjective norm indicates the recognizable opinions of others who are close to and important to an entrepreneur and who maintain influence over decision-making, which affects an entrepreneur's behaviour to exploit PPP opportunity or not to exploit PPP opportunity. Finally, perceived behavioral control indicates the perceived ability to become an entrepreneur and more specifically, it focus on the perceived ease or difficulty of exploiting PPP opportunity and the confidence SMEs ability to succeed.

According to Heinonen (2007), while the concept of entrepreneurial behaviour has become well known, there is a growing need to develop entrepreneurial abilities in order to deal with current challenges and the uncertain future. The most proximal predictor of the decision to engage in entrepreneurial behaviour is seen in *entrepreneurial intentions* (Bird, 1988). Measuring entrepreneurial intention automatically needs to incorporate insights from both economical and behavioural approaches. The results of the study of Giones, *et al.,* (2013) show that, regardless of the public or private institutional support gained in the *consensus-building* process, the entrepreneur's early needs for explicit support (e.g., external funding) to advance on the objectified opportunity would raise unexpected hurdles. Simply put, these are financial constraints, human capital, cognitive perspectives and social networks present person's readiness to engage in entrepreneurship. Entrepreneurial intentions signal how intensely one is prepared and how much effort one is planning to commit in order to carry out entrepreneurial behaviour (Obschonka, *et al.,* 2012).

In summation, more research on the interplay of resources (financial constraints and human capital) and environments (cognitive perspectives and social networks), in using a greater range of perceptions and behaviours, is needed in order to understand more fully the role of SMEs intention to exploit PPP opportunity in the attitude-behaviour context. The intention is acting as a conscious plan or decision to exert effort to enact the behaviour. In particular, it is important to test such interaction effects with behaviours that vary in the frequency with which they are performed and that vary in the extent to which they are related to intention exploit PPP opportunity. That is, with repeated performance of behaviour, that behavior is more likely to be seen as an important part of the SMEs intention to exploit PPP opportunity thus increasing the predictive power of SMEs intention to exploit PPP opportunity.

Proposition 1: Exploitation of PPP opportunities will have positive influence to SMEs intention to exploit opportunities

VII. Dimensioning Theory of Planned Behaviour

The Theory of Planned Behavior (TPB) started as the Theory of Reasoned Action in 1980 to predict an individual's intention to engage in a behavior at a specific time and place. It is one of the best-supported social psychological theories with respect to predicting human behaviour (Sommer, 2011). The theory intended to explain all behaviours over which people have the ability to exert self-control. Ajzen (1991) proposed the TPB wherein the individual's behaviour is best predicted by one's intentions; intentions are, in turn, predicted by attitudes about the behaviour, the subjective norms (a person's perception of important others' beliefs that he or she should or should not perform the behavior) encasing the execution of the behaviour, and the individual's perception of their control over the behaviour (*See Figure 1*).

True to its goal of *explaining* human behaviour, not merely predicting it, the TPB deals with the antecedents of attitudes, subjective norms, and perceived behavioural control, antecedents which in the final analysis will determine intentions and actions in exploitation of PPP opportunities. It is believed that the stronger a person's intention to perform a particular behaviour, the more successful they are expected to be. Intentions are a function of salient beliefs and/or information about the likelihood that performing a particular behaviour will lead to a specific outcome. Intentions can also change over time. The longer the time period between intention and behaviour, the greater the likelihood that unforeseen events will produce changes in intentions. Because Ajzen and Fishbein (1980) were not only interested in predicting behaviour but understanding it, they began trying to identify the determinants of behavioral intentions.

© 2022 Global Journals

Behavioral intention (BI) is an indication of a person's readiness to perform a given behaviour or action. Behavioural intention is considered to be the immediate antecedent of behaviour. This intention is based on attitude toward the behaviour, subjective norm, and perceived behavioural control, with each predictor weighted for its importance in relation to the behaviour and population of interest (Ajzen, 2006). In this study using the Theory of Planned Behaviour, behaviour intention variables included cognitive perspective, social networks, financial constraints and human capital. Ajzen's behavioural model requires the target behaviour to be as specific as possible.

a) Attitude

Attitude is defined as a cognitive process influenced by personal experiences and is expressed by either behavioral or emotional responses (Fishbein & Ajzen, 2010). Attitudes form from an individual's belief system and by measuring those beliefs the attitude toward the behavior in question can be calculated (Ajzen, 2006). Thus, according to the TPB, attitudes are function of beliefs (the cognitive element), and the evaluation of the outcome of these beliefs (the affective component) (Ajzen and Fishbein, 1975; 1980). The affective factor refers to a person's feelings toward and evaluation of some target, while cognition factor comprises knowledge, opinions, beliefs, and thoughts about the target. Important to note, however, is the assumption that a person is bound to possess a large number of beliefs linked to any given behavior, but only a limited number of these automatically come to mind whenever positively or negatively assessing the outcome (Holst and Iversen, 2012).

Attitude is populated to be the first antecedent of behavioural intention. It is an individual's positive or negative *belief* about performing a specific behaviour. These beliefs are called *behavioural beliefs.* An individual will intend to perform a certain behaviour when he or she evaluates it positively or negatively, favourable or unfavourable, *desirable* or *undesirable* and *good* or *bad*. Attitudes are determined by the individual's beliefs about the consequences of performing the behaviour (behavioural beliefs), weighted by the outcome expectancies of the behaviour which are corresponding positive or negative value judgments about the behaviour (outcome evaluations). Those attitudes are believed to have a direct effect on *behavioural intention* and are linked with *subjective norm* and *perceived behavioural control.*

Therefore, this study proposes that:

Proposition 4: Behavioural attitudes positively moderate SMEs to exploit PPP opportunities based on:

1. Human Capital Perspectives
2. Financial Capability
3. Social Networks
4. Cognitive Perspectives

b) Subjective Norms

According to Ajzen (1991) perceived expectations from others that influence a user to perform a particular behaviour. Subjective norm is a norm which departed from the inner element or the human conscience (Sumaryono, 2012). In this way, subjective norm comprises injunctive norms, which are prescriptive (or proscriptive) rules specifying behaviour that persons ought (or ought not) to engage in. Thus, subjective norms are SMEs' perception of others perceptions and opinions on behaviour towards exploitation of PPP. These opinions can play an influential role and put pressure on SMEs to behaviour of exploiting PPP. Therefore, subjective norms represent descriptive norms which are typical patterns of behaviour to exploit PPP opportunities accompanied by the expectation that SMEs will behave according to the public procurement patterns.

Generally, subjective norms refer to the belief that an important person or group of people will approve and support a particular behaviour (Ham, *et al.*, 2015). In this context subjective norms are SMEs' perception of the social pressure to exploit or not to exploit PPP opportunities. Therefore, subjective norms are determined by the perceived social pressure from others for an individual to behave in a certain manner and their motivation to comply with those people's views. Thus, the stronger the social pressure to influence SMEs' behaviour, the stronger the motivation on intention to exploit PPP opportunities.

Therefore, this study proposes that:

Proposition 2: Subjective norms positively moderate SMEs to exploit PPP opportunities based on:

1. Human Capital Perspectives
2. Financial Capability
3. Social Networks
4. Cognitive Perspectives

c) Perceived Behavioural Control

The meaning of perceived behavioural control can be expressed that SMEs makes judgement on the degree of difficulty in exploiting PPP opportunities. Performance of SMEs in PPP is influenced by the presence of adequate PPP opportunities and ability to control PPP opportunities to behaviors. This means, perceived behavioural control is also directly affects behaviour intention (Ajzen I., 2001). In this way, performance of SMEs in PPP can be influenced by the presence of adequate PPP opportunities and ability to control PPP opportunities to exploitation behaviours. Underestimation of PPP opportunities results in less success in Performance of SMEs in PPP. In most cases, perceived behavioural control can depend on the behavioural ability to control PPP opportunities, such as the human capital perspectives, financial capability, social networks and cognitive perspectives that SMEs think they need to exploit PPP opportunities.

© 2022 Global Journals

In reimagining TPB towards PPP exploitation, perceived behavioral control (PBC) is conceptualized as SMEs' conscious plan or decision to exert effort in order to behavioural engagement in exploiting PPP. Similarly, Francis, *et al*. (2004), asserts that perceived behavioural control can be conceptualised as people's ability to have control over their behaviour and their level of confidence in their ability to perform or not to perform. Therefore, SMEs' belief will influence the entrepreneurs' behavioural intention and stimulate SMEs to exploiting PPP opportunities. In this case, SMEs' behavioural intention is strongly influenced by level of confidence in actual exploitation of PPP opportunities' behaviour.

Therefore, this study proposes that:

Proposition 3: Perceived behavioural control positively moderate SMEs to exploit PPP opportunities based on:

1. Human Capital Perspectives
2. Financial Capability
3. Social Networks
4. Cognitive Perspectives

d) Intention to Exploit PPP Opportunity

Behavioural intention (BI) is an indication of a person's readiness to perform a given behaviour or action. Behavioural intention is considered to be the immediate antecedent of behaviour. This intention is based on attitude toward the behaviour, subjective norm, and perceived behavioural control, with each predictor weighted for its importance in relation to the behaviour and population of interest (Ajzen, 2006). In this study behavioural intention is the perceived likelihood one will engage in exploit PPP opportunity. It reflects an entrepreneur's readiness to engage in exploitation of PPP opportunity and is influenced by attitude, normative beliefs, subjective norm, and perceived behavioral control. Intention exploit PPP opportunity suggests a readiness to devote the required energy to exploit PPP opportunity. Therefore, entrepreneur's intention is the most critical factor and predictor in exploitation of PPP opportunity.

Behavioural intention is an indication of a person's readiness to perform a given behaviour or action. Behavioural intention is considered to be the immediate antecedent of behaviour. This intention is based on attitude toward the behaviour, subjective norm, and perceived behavioural control, with each predictor weighted for its importance in relation to the behaviour and population of interest (Ajzen, 2006). In this study using the Theory of Planned Behaviour, behaviour intention variables included cognitive perspective, social networks, financial constraints and human capital. Ajzen's behavioral model requires the target behaviour to be as specific as possible

The Theory of Planned Behaviour (TPB) will be employed as a means to measure the intentions of SMEs to in exploiting PPP opportunities and to uncover the behaviours the SMEs faced in making the decision to exploit PPP opportunities. Intentions to PPP exploitation behaviours can be predicted with high accuracy from attitudes toward the behaviour, subjective norms, and perceived behavioral control; and these intentions, together with perceptions of behavioural control, account for considerable variance in actual PPP exploitation behaviour. Measuring behavioural intention to exploit PPP opportunity is mainly conducted using such indicators as the cognitive perspective, social networks, financial constraints and human capital

Based on reviewed literature dimensioning of TPB in exploitation of PPP opportunities to SMEs, the following hypotheses have been proposed:

Propositions 4: Intention to exploit opportunity PPP opportunities to SMEs will be positively influenced by opportunity exploitation behaviour

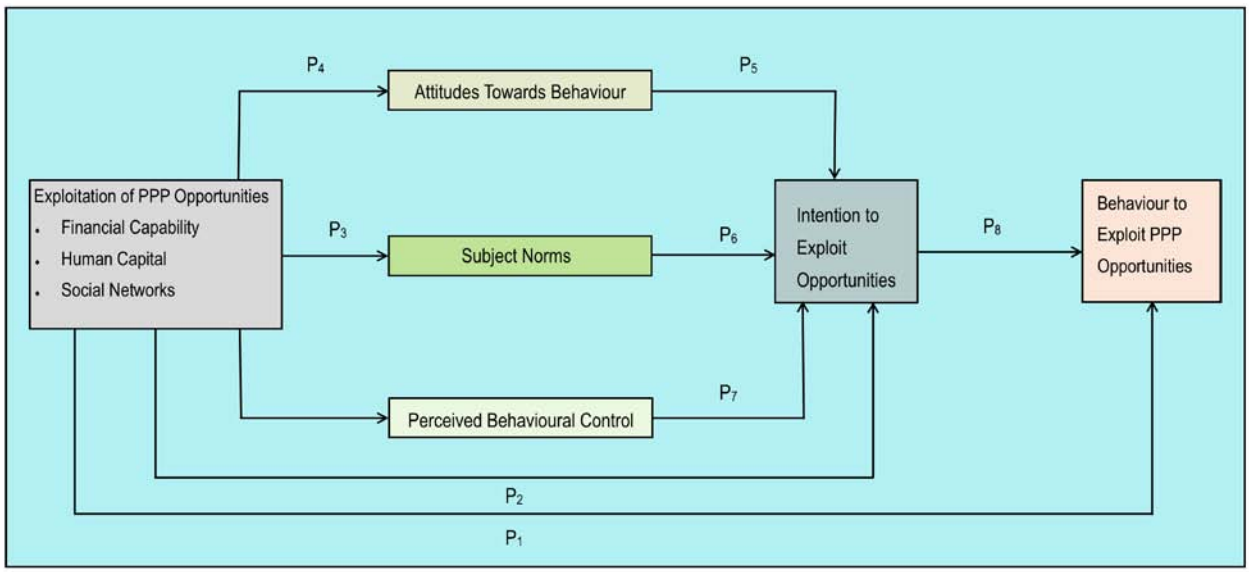


Figure 1: Conceptual Framework on Reimagining TPB in Exploitation of PPP Opportunities to SMEs

© 2022 Global Journals

VIII. Contributions

In understanding of the influence of SMEs' behaviour and their perceptions on the use of exploitation of PPP opportunities can be an important for prediction of their participation on public procurement. This study attempted to develop such an understanding by employing Theory of Planned Behaviour (TPB), which is a extensively functional social-psychological model. This paper attempts to understand influence of SMEs' behaviour and their perceptions on the use of exploitation of PPP opportunities can be an important for prediction of their participation on public procurement. This study endeavored to develop such an understanding by applying TPB, which is a widely applied social-psychological model. It can be noted that relationships among opportunity exploitation capability of SMEs' and its dimensions (financial capability, human capability and social networks) that are valuable for the researcher in order to enlarge their academic ventures in the future.

Moreover, it is also useful for procurement practitioners to be concerned about opportunity exploitation capability that has a direct effect on the behaviour of SMEs in PPP. Opportunity exploitation capability is of fundamental aspect to the behaviour of SMEs that is relevant to PPP award system and opportunity exploitation capability success. Therefore, this paper may encourage the public procurement practitioners to have concern for the development and improvement of opportunity exploitation capability in order to increase the financial capability, human capability and social networks.

For future research indications, the researcher proposed that TPB most suitably show evidence of this conceptual model for which there are three reasons: firstly, PPP projects can develop a sustainable SME sector that can create jobs for the unemployed and generate income for the poor, while at the same time addressing the challenge of infrastructure backlog (Mabuza, 2017). Secondly, given the nature and diversity of PPP, increase SMEs in exploitation in PPP opportunities, encourage subsequent adoptions, hence expand the reach and range of business conducted through PPP (Sama, 2015). Lastly, by taking a PPP strategy does not only encourage efficient allocation of public and private resources through leverage and long term capacity development but it also provides an opportunity for innovation, competitiveness and subsequent reduction in poverty levels (Verma, 2019). Therefore, future research is required to verify, expand, and examine hypotheses with empirical research in exploitation of PPP opportunities to SMEs that have continuous high growth.

IX. Conclusion

Despite decades of research, little is known about exploitation of PPP opportunities to SMEs. This is largely due to a insufficient measures that would enable realistic exploitation of PPP opportunities to SMEs. Without commonly agreed upon platform, predictions still forecasts another little progress SMEs. Thus it is hoped that other researchers will use the proposed mechanisms TPB on exploitation of PPP opportunities to SMEs as a starting point for future scholarly work. This invites research to develop objective measures on exploitation of PPP opportunities to SMEs. At that point, it makes sense to empirically test the proposed antecedents of exploitation of PPP opportunities to SMEs such as the dimensions discussed in this article. Then, there will be avenue to better understand role of TPB on exploitation of PPP Opportunities to SMEs.

References Références Referencias

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.
2. Ajzen, I. (2006). Behavioral interventions based on the theory of planned behavior.
3. Ajzen, I., & Fishbein, M. (1975). A Bayesian analysis of attribution processes. *Psychological bulletin*, *82*(2), 261.
4. Ajzen, I. and Fishbein, M. 1980. *Understanding Attitudes and Predicting Social Behavior* Englewood Cliffs, NJ: Prentice-Hall.
5. Alam, A., Uddin, M., Yazdifar, H., Shafique, S., & Lartey, T. (2020). R&D investment, firm performance and moderating role of system and safeguard: Evidence from emerging markets. *Journal of Business Research*, *106*, 94-105.
6. Arasti, Z., Zandi, F., & Bahmani, N. (2014). Business failure factors in Iranian SMEs: Do successful and unsuccessful entrepreneurs have different viewpoints?. *Journal of Global Entrepreneurship Research*, *4*(1), 1-14.
7. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, *17*(1), 99-120.
8. Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of management Review*, *13*(3), 442-453.
9. Brockner, J., Spreitzer, G., Mishra, A., Hochwarter, W., Pepper, L., & Weinberg, J. (2004). Perceived control as an antidote to the negative effects of layoffs on survivors' organizational commitment and job performance. *Administrative Science Quarterly*, *49*(1), 76-100.
10. Cooney, T. M. (2012). Entrepreneurship skills for growth-orientated businesses. In *Report for the Workshop on 'Skills Development for SMEs and Entrepreneurship* (Vol. 28).

© 2022 Global Journals

11. de Jong, J. P. (2013). The decision to exploit opportunities for innovation: a study of high–tech small–business owners. *Entrepreneurship Theory and Practice*, *37*(2), 281-301.
12. De Palma, A., Prunier, G., & Leruth, L. (2009). Towards a principal-agent based typology of risks in public-private partnerships.
13. Francis, J. J., M. P. Eccles, M. Johnston, A. Walker, J. Grimshaw, R. Foy, E. F. S. Kaner, L. Smith and D. Bonetti. 2004. Constructing questionnaires based on the theory planned behaviour: A manual for health researchers. University of Newcastle, UK: Centre for Health Services Research. Frank, Robert H. and Ben S. Bernanke (2007) Principles of Economics, 3rd Ed. New York: McGraw-Hill Irwin.
14. Fishbein, M., & Ajzen, I. (2010). Predicting and changing behavior: The reasoned action approach. New York, NY: Psychology Press
15. Fuentes Fuentes, M. D. M., Ruiz Arroyo, M., Bojica, A. M., & Fernández Pérez, V. (2010). Prior knowledge and social networks in the exploitation of entrepreneurial opportunities. *International Entrepreneurship and Management Journal*, *6*(4), 481-501.
16. Garba, A. S., Kabir, S., & Nalado, A. M. (2014). An Assessment of Students Entrepreneurial Intentions in Tertiary Institution: A Case of Kano State Polytechnic, Nigeria. *International Journal of Asian Social Science*, *2*(3), 434-443.
17. Giones, F., Zhou, Z., Miralles, F., & Katzy, B. (2013). From ideas to opportunities: Exploring the construction of technology-based entrepreneurial opportunities. *Technology Innovation Management Review, June*.
18. Grant, Robert (1996), Prospering in Dynamically-competitive Environments: Organizational Capability as Knowledge Integration, Organization Science 7, 375-387.
19. Ham, M., Jeger, M. and Ivković A. F. (2015) The role of subjective norms in forming the intention to purchase green food, Economic Research-Ekonomska Istraživanja, 28:1, 738-748, DOI: 10.1080/1331677X.2015.1083875
20. Hawkes, Corinna. "Dietary implications of supermarket development: a global perspective." *Development Policy Review* 26.6 (2008): 657-692.
21. Heinonen, J. (2007). An entrepreneurial-directed approach to teaching corporate entrepreneurship at university level. *Education+ Training*, *49*(4), 310-324.
22. Henle, C. A., Giacalone, R. A., & Jurkiewicz, C. L. (2005). The role of ethical ideology in workplace deviance. *Journal of business Ethics*, *56* (3), 219-230.
23. Holcombe R.G. (2007), Entrepreneurship and Economic Progress, Routledge Foundations of the Market Economy, Routledge, New York and London, 204 p.
24. Holst, A., & Iversen, J. M. (2012). *An application of a revised theory of planned behavior* (Doctoral dissertation, Copenhagen Business School).
25. Hussain, I., Si, S., Xie, X. M., & Wang, L. (2010). Comparative study on impact of internal and external CFFs on SMEs. *Journal of Small Business & Entrepreneurship*, *23*(4), 637-648.
26. Kerr, W. R., & Nanda, R. (2009). Democratizing entry: Banking deregulations, financing constraints, and entrepreneurship. *Journal of Financial Economics*, *94*(1), 124-149.
27. Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic management journal*, *9*(S1), 41-58.
28. Loader, K. (2005). Supporting SMEs through government purchasing activity. *The International Journal of Entrepreneurship and Innovation*, *6*(1), 17-26.
29. Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. *Information systems research*, *2*(3), 173-191.
30. Mabuza, P. (2017). A PPP Model for Developing a Sustainable SME Sector in Developing Countries. In *Advances in Public-Private Partnerships* (pp. 516-533). Reston, VA: American Society of Civil Engineers.
31. Matambalya, F., & Wolf, S. (2001). *The role of ICT for the performance of SMEs in East Africa: empirical evidence from Kenya and Tanzania* (No. 42). ZEF Discussion Papers on Development Policy.
32. Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P. P., Morse, E. A., & Smith, J. B. (2002). Toward a theory of entrepreneurial cognition: Rethinking the people side of entrepreneurship research. *Entrepreneurship theory and practice*, *27*(2), 93-104.
33. Nangoli, S., Basalirwa, E., Mayoka Kituyi, G., & Kusemererwa, C. (2013). Strategizing for firm excellence in Innovation: An exploratory study of Entrepreneurial Tendencies and Behaviors in SMEs in Uganda.
34. Nijkamp, P., Van Der Burch, M., & Vindigni, G. (2002). A comparative institutional evaluation of public-private partnerships in Dutch urban land-use and revitalisation projects. *Urban studies*, *39*(10), 1865-1880.
35. Noshad, M., Amjad, M., Shafiq, M. N., & Gillani, S. (2019). Performance and Obstacles of SMEs: An Empirical Evidence from BRICS Countries. *iRASD Journal of Economics*, *1*(2), 113-131.
36. Obschonka, M., Goethner, M., Silbereisen, R. K., & Cantner, U. (2012). Social identity and the transition to entrepreneurship: The role of group identification with workplace peers. *Journal of Vocational Behavior*, *80*(1), 137-147.

© 2022 Global Journals

37. Organisation for Economic Co-operation and Development (OECD) (2000). Small and Medium-sized Enterprises: local Strength, global reach, OECD Policy Review, pp. 1-8.
38. Ozgen, E. (2003). *Entrepreneurial opportunity recognition: information flow, social and cognitive perspectives*. Rensselaer Polytechnic Institute.
39. Pasanen, M. (2003). *In search of factors affecting SME performance: the case of Eastern Finland*. Kuopion yliopisto.
40. Pongsiri, N. (2002). Regulation and public-private partnerships. *International Journal of Public sector management*, Centre on Regulation and Competition, Institute for Development Policy and Management, University of Manchester, Manchester, UK
41. Rivis, A., & Sheeran, P. (2003). Social influences and the theory of planned behaviour: Evidence for a direct relationship between prototypes and young people's exercise behaviour. *Psychology and Health*, *18*(5), 567-583.
42. Sama, H.K. (2015) Leveraging Opportunity Exploitation and Public Private Partnership: A Review of SMEs Perspectives, Global Advanced Research Journal of Management and Business Studies (ISSN: 2315-5086), Vol. 4(7), pp 292-300
43. Seppänen, P., Liukkunen, K., & Oivo, M. (2018). Opportunity exploitation in software startups. A human capital view. In *International Conference of Software Business* (pp. 142-156). Springer, Cham.
44. Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, *25*(1), 217-226.
45. Sniehotta, F. (2009). An experimental test of the theory of planned behavior. *Applied Psychology: Health and Well-Being*, *1*(2), 257-270.
46. Sommer, L. (2011). The theory of planned behaviour and the impact of past behaviour. *International Business & Economics Research Journal (IBER)*, *10*(1).
47. Sumaryono. (2012). Legal Professional Ethics. Yogyakarta: Kanisius
48. URT (2014) Public Private Partnership (Amendment) Act. Dar es Salaam: Government Printers.
49. Verma, J. (2019) Public Private Partnership. Accessed on June 19, 2022 Available at https://www.jatinverma.org/wp-content/uploads/2019/08/ppp.pdf · PDF file.
50. Ward, S. C., Curtis, B., & Chapman, C. B. (1991). Objectives and performance in construction projects. *Construction Management and Economics*, *9*(4), 343-353.
51. Weick, K. E. 1979. The Social Psychology of Organizing (2nd ed.). New York: Random House.
52. Widdus, R. (2017). Public–private partnerships for health: their main targets, their diversity, and their future directions. In *Global Health* (pp. 431-438). Routledge.
53. Witt, P. (2004). Entrepreneurs' networks and the success of start-ups. *Entrepreneurship & Regional Development*, *16*(5), 391-412.
54. Xin, L., & Qin, K. (2011, August). Embeddedness, social network theory and social capital theory: Antecedents and consequence. In *2011 International Conference on Management and Service Science* (pp. 1-5). IEEE.
55. Zahra, S. A., Korri, J. S., & Yu, J. (2005). Cognition and international entrepreneurship: implications for research on international opportunity recognition and exploitation. *International business review*, *14*(2), 129-146.
56. Zahra, S. A., Korri, J. S., and Yu, J. (2005). Cognition and international entrepreneurship: implications for research on international opportunity recognition and exploitation. *International business review*, *14*(2), 129-146.

© 2022 Global Journals

Global Journals Guidelines Handbook 2022

www.GlobalJournals.org

Memberships

Fellows/Associates of Management and Business Research Council

FMBRC/AMBRC Memberships



Introduction

FMBRC/AMBRC is the most prestigious membership of Global Journals accredited by Open Association of Research Society, U.S.A (OARS). The credentials of Fellow and Associate designations signify that the researcher has gained the knowledge of the fundamental and high-level concepts, and is a subject matter expert, proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice. The credentials are designated only to the researchers, scientists, and professionals that have been selected by a rigorous process by our Editorial Board and Management Board.

Associates of FMBRC/AMBRC are scientists and researchers from around the world are working on projects/researches that have huge potentials. Members support Global Journals' mission to advance technology for humanity and the profession.

FMBRC

Fellow of Management and Business Research Council

FELLOW OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL is the most prestigious membership of Global Journals. It is an award and membership granted to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Fellows are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Fellow Members.

Benefit

To the institution

Get letter of appreciation

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



Exclusive Network

Get access to a closed network

A FMBRC member gets access to a closed network of Tier 1 researchers and scientists with direct communication channel through our website. Fellows can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career | Credibility | Exclusive | Reputation



Certificate

Certificate, LoR and Laser-Momento

Fellows receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career | Credibility | Exclusive | Reputation



Designation

Get honored title of membership

Fellows can use the honored title of membership. The “FMBRC” is an honored title which is accorded to a person’s name viz. Dr. John E. Hall, Ph.D., FMBRC or William Walldroff, M.S., FMBRC.

Career | Credibility | Exclusive | Reputation

Recognition on the Platform

Better visibility and citation

All the Fellow members of FMBRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All fellows get a dedicated page on the website with their biography.

Career | Credibility | Reputation

© Copyright by Global Journals | Guidelines Handbook

Future Work

Get discounts on the future publications

Fellows receive discounts on future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career | Financial



GJ Account

Unlimited forward of Emails

Fellows get secure and fast GJ work emails with unlimited forward of emails that they may use them as their primary email. For example,
john [AT] globaljournals [DOT] org.

Career | Credibility | Reputation



Premium Tools

Access to all the premium tools

To take future researches to the zenith, fellows receive access to all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

Conferences & Events

Organize seminar/conference

Fellows are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career | Credibility | Financial

Early Invitations

Early invitations to all the symposiums, seminars, conferences

All fellows receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subject.

Exclusive



Publishing Articles & Books

Earn 60% of sales proceeds

Fellows can publish articles (limited) without any fees. Also, they can earn up to 70% of sales proceeds from the sale of reference/review books/literature/publishing of research paper. The FMBRC member can decide its price and we can help in making the right decision.

Exclusive | Financial

Reviewers

Get a remuneration of 15% of author fees

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

Access to Editorial Board

Become a member of the Editorial Board

Fellows may join as a member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. Additionally, Fellows get a chance to nominate other members for Editorial Board.

Career | Credibility | Exclusive | Reputation

And Much More

Get access to scientific museums and observatories across the globe

All members get access to 5 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 10 GB free secure cloud access for storing research files.

ASSOCIATE OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL

ASSOCIATE OF MANAGEMENT AND BUSINESS RESEARCH COUNCIL is the membership of Global Journals awarded to individuals that the Open Association of Research Society judges to have made a 'substantial contribution to the improvement of computer science, technology, and electronics engineering.

The primary objective is to recognize the leaders in research and scientific fields of the current era with a global perspective and to create a channel between them and other researchers for better exposure and knowledge sharing. Members are most eminent scientists, engineers, and technologists from all across the world. Associate membership can later be promoted to Fellow Membership. Associates are elected for life through a peer review process on the basis of excellence in the respective domain. There is no limit on the number of new nominations made in any year. Each year, the Open Association of Research Society elect up to 12 new Associate Members.

To the institution

Get letter of appreciation

Global Journals sends a letter of appreciation of author to the Dean or CEO of the University or Company of which author is a part, signed by editor in chief or chief author.



Exclusive Network

Get access to a closed network

A AMBRC member gets access to a closed network of Tier 2 researchers and scientists with direct communication channel through our website. Associates can reach out to other members or researchers directly. They should also be open to reaching out by other.

Career | Credibility | Exclusive | Reputation



Certificate

Certificate, LoR and Laser-Momento

Associates receive a printed copy of a certificate signed by our Chief Author that may be used for academic purposes and a personal recommendation letter to the dean of member's university.

Career | Credibility | Exclusive | Reputation



Designation

Get honored title of membership

Associates can use the honored title of membership. The “AMBRC” is an honored title which is accorded to a person’s name viz. Dr. John E. Hall, Ph.D., AMBRC or William Walldroff, M.S., AMBRC.

Career | Credibility | Exclusive | Reputation

Recognition on the Platform

Better visibility and citation

All the Associate members of ASFRC get a badge of "Leading Member of Global Journals" on the Research Community that distinguishes them from others. Additionally, the profile is also partially maintained by our team for better visibility and citation. All associates get a dedicated page on the website with their biography.

Career | Credibility | Reputation

© Copyright by Global Journals | Guidelines Handbook

Future Work

Get discounts on the future publications

Associates receive discounts on the future publications with Global Journals up to 60%. Through our recommendation programs, members also receive discounts on publications made with OARS affiliated organizations.

Career | Financial



GJ Account

Unlimited forward of Emails

Associates get secure and fast GJ work emails with 5GB forward of emails that they may use them as their primary email. For example, john [AT] globaljournals [DOT] org..

Career | Credibility | Reputation



Premium Tools

Access to all the premium tools

To take future researches to the zenith, fellows receive access to almost all the premium tools that Global Journals have to offer along with the partnership with some of the best marketing leading tools out there.

Financial

Conferences & Events

Organize seminar/conference

Associates are authorized to organize symposium/seminar/conference on behalf of Global Journal Incorporation (USA). They can also participate in the same organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent. Additionally, they get free research conferences (and others) alerts.

Career | Credibility | Financial

Early Invitations

Early invitations to all the symposiums, seminars, conferences

All associates receive the early invitations to all the symposiums, seminars, conferences and webinars hosted by Global Journals in their subjec.

Exclusive



Publishing Articles & Books

Earn 60% of sales proceeds

Associates can publish articles (limited) without any fees. Also, they can earn up to 30-40% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.

Exclusive | Financial

Reviewers

Get a remuneration of 15% of author fees

Fellow members are eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get a remuneration of 15% of author fees, taken from the author of a respective paper.

Financial

And Much More

Get access to scientific museums and observatories across the globe

All members get access to 2 selected scientific museums and observatories across the globe. All researches published with Global Journals will be kept under deep archival facilities across regions for future protections and disaster recovery. They get 5 GB free secure cloud access for storing research files.

© Copyright by Global Journals | Guidelines Handbook

Associate	Fellow	Research Group	Basic
$4800 **lifetime designation**	$6800 **lifetime designation**	$12500.00 **organizational**	APC **per article**
Certificate, LoR and Momento **2** discounted publishing/year **Gradation** of Research **10** research contacts/day **1 GB** Cloud Storage **GJ** Community Access	**Certificate,** LoR and Momento **Unlimited** discounted publishing/year **Gradation** of Research **Unlimited** research contacts/day **5 GB** Cloud Storage **Online Presense** Assistance **GJ** Community Access	**Certificates,** LoRs and Momentos **Unlimited** free publishing/year **Gradation** of Research **Unlimited** research contacts/day **Unlimited** Cloud Storage **Online Presense** Assistance **GJ** Community Access	**GJ** Community Access

Preferred Author Guidelines

We accept the manuscript submissions in any standard (generic) format.

We typeset manuscripts using advanced typesetting tools like Adobe In Design, CorelDraw, TeXnicCenter, and TeXStudio. We usually recommend authors submit their research using any standard format they are comfortable with, and let Global Journals do the rest.

Alternatively, you can download our basic template from https://globaljournals.org/Template.zip

Authors should submit their complete paper/article, including text illustrations, graphics, conclusions, artwork, and tables. Authors who are not able to submit manuscript using the form above can email the manuscript department at submit@globaljournals.org or get in touch with chiefeditor@globaljournals.org if they wish to send the abstract before submission.

Before and during Submission

Authors must ensure the information provided during the submission of a paper is authentic. Please go through the following checklist before submitting:

1. Authors must go through the complete author guideline and understand and *agree to Global Journals' ethics and code of conduct,* along with author responsibilities.
2. Authors must accept the privacy policy, terms, and conditions of Global Journals.
3. Ensure corresponding author's email address and postal address are accurate and reachable.
4. Manuscript to be submitted must include keywords, an abstract, a paper title, co-author(s') names and details (email address, name, phone number, and institution), figures and illustrations in vector format including appropriate captions, tables, including titles and footnotes, a conclusion, results, acknowledgments and references.
5. Authors should submit paper in a ZIP archive if any supplementary files are required along with the paper.
6. Proper permissions must be acquired for the use of any copyrighted material.
7. Manuscript submitted *must not have been submitted or published elsewhere* and all authors must be aware of the submission.

Declaration of Conflicts of Interest

It is required for authors to declare all financial, institutional, and personal relationships with other individuals and organizations that could influence (bias) their research.

Policy on Plagiarism

Plagiarism is not acceptable in Global Journals submissions at all.

Plagiarized content will not be considered for publication. We reserve the right to inform authors' institutions about plagiarism detected either before or after publication. If plagiarism is identified, we will follow COPE guidelines:

Authors are solely responsible for all the plagiarism that is found. The author must not fabricate, falsify or plagiarize existing research data. The following, if copied, will be considered plagiarism:

- Words (language)
- Ideas
- Findings
- Writings
- Diagrams
- Graphs
- Illustrations
- Lectures

- Printed material
- Graphic representations
- Computer programs
- Electronic material
- Any other original work

Authorship Policies

Global Journals follows the definition of authorship set up by the Open Association of Research Society, USA. According to its guidelines, authorship criteria must be based on:

1. Substantial contributions to the conception and acquisition of data, analysis, and interpretation of 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.

Changes in Authorship

The corresponding author should mention the name and complete details of all co-authors during submission and in manuscript. We support addition, rearrangement, manipulation, and deletions in authors list till the early view publication of the journal. We expect that corresponding author will notify all co-authors of submission. We follow COPE guidelines for changes in authorship.

Copyright

During submission of the manuscript, the author is confirming an exclusive license agreement with Global Journals which gives Global Journals the authority to reproduce, reuse, and republish authors' research. We also believe in flexible copyright terms where copyright may remain with authors/employers/institutions as well. Contact your editor after acceptance to choose your copyright policy. You may follow this form for copyright transfers.

Appealing Decisions

Unless specified in the notification, the Editorial Board's decision on publication of the paper is final and cannot be appealed before making the major change in the manuscript.

Acknowledgments

Contributors to the research other than authors credited should be mentioned in Acknowledgments. The source of funding for the research can be included. Suppliers of resources may be mentioned along with their addresses.

Declaration of funding sources

Global Journals is in partnership with various universities, laboratories, and other institutions worldwide in the research domain. Authors are requested to disclose their source of funding during every stage of their research, such as making analysis, performing laboratory operations, computing data, and using institutional resources, from writing an article to its submission. This will also help authors to get reimbursements by requesting an open access publication letter from Global Journals and submitting to the respective funding source.

Preparing your Manuscript

Authors can submit papers and articles in an acceptable file format: MS Word (doc, docx), LaTeX (.tex, .zip or .rar including all of your files), Adobe PDF (.pdf), rich text format (.rtf), simple text document (.txt), Open Document Text (.odt), and Apple Pages (.pages). Our professional layout editors will format the entire paper according to our official guidelines. This is one of the highlights of publishing with Global Journals—authors should not be concerned about the formatting of their paper. Global Journals accepts articles and manuscripts in every major language, be it Spanish, Chinese, Japanese, Portuguese, Russian, French, German, Dutch, Italian, Greek, or any other national language, but the title, subtitle, and abstract should be in English. This will facilitate indexing and the pre-peer review process.

The following is the official style and template developed for publication of a research paper. Authors are not required to follow this style during the submission of the paper. It is just for reference purposes.

Manuscript Style Instruction (Optional)

- Microsoft Word Document Setting Instructions.
- Font type of all text should be Swis721 Lt BT.
- Page size: 8.27" x 11'", left margin: 0.65, right margin: 0.65, bottom margin: 0.75.
- Paper title should be in one column of font size 24.
- Author name in font size of 11 in one column.
- Abstract: font size 9 with the word "Abstract" in bold italics.
- Main text: font size 10 with two justified columns.
- Two columns with equal column width of 3.38 and spacing of 0.2.
- First character must be three lines drop-capped.
- The paragraph before spacing of 1 pt and after of 0 pt.
- Line spacing of 1 pt.
- Large images must be in one column.
- The names of first main headings (Heading 1) must be in Roman font, capital letters, and font size of 10.
- The names of second main headings (Heading 2) must not include numbers and must be in italics with a font size of 10.

Structure and Format of Manuscript

The recommended size of an original research paper is under 15,000 words and review papers under 7,000 words. Research articles should be less than 10,000 words. Research papers are usually longer than review papers. Review papers are reports of significant research (typically less than 7,000 words, including tables, figures, and references)

A research paper must include:

a) A title which should be relevant to the theme of the paper.
b) A summary, known as an abstract (less than 150 words), containing the major results and conclusions.
c) Up to 10 keywords that precisely identify the paper's subject, purpose, and focus.
d) An introduction, giving fundamental background objectives.
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.
f) Results which should be presented concisely by well-designed tables and figures.
g) Suitable statistical data should also be given.
h) All data must have been gathered with attention to numerical detail in the planning stage.

Design has been recognized to be essential to experiments for a considerable time, and the editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned unrefereed.

i) Discussion should cover implications and consequences and not just recapitulate the results; conclusions should also be summarized.
j) There should be brief acknowledgments.
k) There ought to be references in the conventional format. Global Journals recommends APA format.

Authors should carefully consider the preparation of papers to ensure that they communicate effectively. Papers are much more likely to be accepted if they are carefully designed and laid out, contain few or no errors, are summarizing, and follow instructions. They will also be published with much fewer delays than those that require much technical and editorial correction.

The Editorial Board reserves the right to make literary corrections and suggestions to improve brevity.



Format Structure

It is necessary that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

All manuscripts submitted to Global Journals should include:

Title

The title page must carry an informative 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) where the work was carried out.

Author details

The full postal address of any related author(s) must be specified.

Abstract

The abstract is the foundation of the research paper. It should be clear and concise and must contain the objective of the paper and inferences drawn. It is advised to not include big mathematical equations or complicated jargon.

Many researchers searching for information online will use search engines such as Google, Yahoo or others. By optimizing your paper for search engines, you will amplify the chance of someone finding it. In turn, this will make it more likely to be viewed and cited in further works. Global Journals has compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Keywords

A major lynchpin of research work for the writing of research papers is the keyword search, which one will employ to find both library and internet resources. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining, and indexing.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy: planning of a list of possible keywords and phrases to try.

Choice of the main keywords is the first tool of writing a research paper. Research paper writing is an art. Keyword search should be as strategic as possible.

One should start brainstorming lists of potential keywords before even beginning 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 a research paper?” Then consider synonyms for the important words.

It may take the discovery of only one important paper to steer in the right keyword direction because, in most databases, the keywords under which a research paper is abstracted are listed with the paper.

Numerical Methods

Numerical methods used should be transparent and, where appropriate, supported by references.

Abbreviations

Authors must list all the abbreviations used in the paper at the end of the paper or in a separate table before using them.

Formulas and equations

Authors are advised to submit any mathematical equation using either MathJax, KaTeX, or LaTeX, or in a very high-quality image.

Tables, Figures, and Figure Legends

Tables: Tables should be 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. Authors must submit tables in an editable format and not as images. References to these tables (if any) must be mentioned accurately.

Figures

Figures are supposed to be submitted as separate files. Always include a citation in the text for each figure using Arabic numbers, e.g., Fig. 4. Artwork must be submitted online in vector electronic form or by emailing it.

Preparation of Eletronic Figures for Publication

Although low-quality images are sufficient for review purposes, print publication requires high-quality images to prevent the final product being blurred or fuzzy. Submit (possibly by e-mail) EPS (line art) or TIFF (halftone/ photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Avoid using pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings). 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: Authors are advised 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. Also, you can email your editor to remove the color fee after acceptance of the paper.

Tips for writing a good quality Management Research Paper

Techniques for writing a good quality management and business research paper:

1. Choosing the topic: In most cases, the topic is selected by the interests of the author, but it can also be suggested by the guides. You can have several topics, and then judge which you are most comfortable with. This may be done by asking several questions of yourself, like "Will I be able to carry out a search in this area? Will I find all necessary resources to accomplish the search? Will I be able to find all information in this field area?" If the answer to this type of question is "yes," then you ought to choose that topic. In most cases, you may have to conduct surveys and visit several places. Also, you might have to do a lot of work to find all the rises and falls of the various data on that subject. Sometimes, detailed information plays a vital role, instead of short information. Evaluators are human: The first thing to remember is that evaluators are also human beings. They are not only meant for rejecting a paper. They are here to evaluate your paper. So present your best aspect.

2. Think like evaluators: If you are in confusion or getting demotivated because your paper may not be accepted by the evaluators, then think, and try to evaluate your paper like an evaluator. Try to understand what an evaluator wants in your research paper, and you will automatically have your answer. 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.

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

4. Use of computer is recommended: As you are doing research in the field of management and business then this point is quite obvious. Use right software: Always use good quality software packages. If you are not capable of judging good software, then you can lose the quality of your paper unknowingly. There are various programs available to help you which you can get through the internet.

5. Use the internet for help: An excellent start for your paper is using Google. It is a wondrous search engine, where you can have your doubts resolved. You may also read some answers for the frequent question of how to write your research paper or find a model research paper. You can download books from the internet. If you have all the required books, place importance on reading, selecting, and analyzing the specified information. Then sketch out your research paper. Use big pictures: You may use encyclopedias like Wikipedia to get pictures with the best resolution. At Global Journals, you should strictly follow here.



© Copyright by Global Journals | Guidelines Handbook

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

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

8. Make every effort: Make every effort to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in the introduction—what is the need for a particular research paper. Polish your work with good writing skills and always give an evaluator what he wants. Make backups: When you are going to do any important thing like making a research paper, you should always have backup copies of it either on your computer or on paper. This protects you from losing any portion of your important data.

9. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several unnecessary diagrams will degrade the quality of your paper by creating a hodgepodge. So always try to include diagrams which were made by you to improve the readability of your paper. Use of direct quotes: When you do research relevant to literature, history, or current affairs, then use of quotes becomes essential, but if the study is relevant to science, use of quotes is not preferable.

10. Use proper verb tense: Use proper verb tenses in your paper. Use past tense to present those events that have happened. Use present tense to indicate events that are going on. Use future tense to indicate events that will happen in the future. Use of wrong tenses will confuse the evaluator. Avoid sentences that are incomplete.

11. Pick a good study spot: Always try to pick a spot for your research which is quiet. Not every spot is good for studying.

12. Know what you know: Always try to know what you know by making objectives, otherwise you will be confused and unable to achieve your target.

13. Use good grammar: Always use good grammar and words that will have a positive impact on the evaluator; use of good vocabulary does not mean using tough words which the evaluator has to find in a dictionary. Do not fragment sentences. Eliminate one-word sentences. Do not ever use a big word when a smaller one would suffice.
Verbs have to be in agreement with their subjects. In a research paper, do not start sentences with conjunctions or finish them with prepositions. When writing formally, it is advisable to never split an infinitive because someone will (wrongly) complain. Avoid clichés like a disease. Always shun irritating alliteration. Use language which is simple and straightforward. Put together a neat summary.

14. 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 for your topic. You may also maintain your arguments with records.

15. Never start at the last minute: Always allow enough time for research work. Leaving everything to the last minute will degrade your paper and spoil your work.

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

17. Never copy others' work: Never copy others' work and give it your name because if the evaluator has seen it anywhere, you will be in trouble. Take proper rest and food: No matter how many hours you spend on your research activity, if you are not taking care of your health, then all your efforts will have been in vain. For quality research, take proper rest and food.

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

19. Refresh your mind after intervals: Try to give your mind a rest by listening to soft music or sleeping in intervals. This will also improve your memory. Acquire colleagues: Always try to acquire colleagues. No matter how sharp you are, if you acquire colleagues, they can give you ideas which will be helpful to your research.

20. Think technically: Always think technically. If anything happens, search for its reasons, benefits, and demerits. Think and then print: When you go to print your paper, check that tables are not split, headings are not detached from their descriptions, and page sequence is maintained.

21. Adding unnecessary information: Do not add unnecessary information like "I have used MS Excel to draw graphs." Irrelevant and inappropriate material is superfluous. Foreign terminology and phrases are not apropos. One should never take a broad view. Analogy is like feathers on a snake. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Never oversimplify: When adding material to your research paper, never go for oversimplification; this will definitely irritate the evaluator. Be specific. Never use rhythmic redundancies. Contractions shouldn't be used in a research paper. Comparisons are as terrible as clichés. Give up ampersands, abbreviations, and so on. Remove commas that are not necessary. Parenthetical words should be between brackets or commas. Understatement is always the best way to put forward earth-shaking thoughts. Give a detailed literary review.

22. Report concluded results: Use concluded results. From raw data, filter the results, and then conclude your studies based on measurements and observations taken. An appropriate number of decimal places should be used. Parenthetical remarks are prohibited here. Proofread carefully at the final stage. At the end, give an outline to your arguments. Spot perspectives of further study of the subject. Justify your conclusion at the bottom sufficiently, which will probably include examples.

23. Upon 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 for 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 of 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 criteria peer reviewers will use for grading the final paper.

Final points:

One purpose of organizing a research paper is to let people interpret your efforts selectively. The journal requires the following sections, submitted in the order listed, with each section starting on a new page:

The introduction: This will be compiled from reference matter and reflect the design processes or outline of basis that directed you to make a study. As you carry out the process of study, the method and process section will be constructed like that. The results segment will show related statistics in nearly sequential order and direct reviewers to similar intellectual paths throughout the data that you gathered to carry out your study.

The discussion section:

This will provide understanding of the data and projections as to the implications of the results. The use of good quality references throughout the paper will give the effort trustworthiness by representing an alertness to 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 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 avoid:

- Insertion of a title at the foot of a page with subsequent text on the next page.
- Separating a table, chart, or figure—confine each to a single page.
- Submitting a manuscript with pages out of sequence.
- In every section of your document, use standard writing style, including articles ("a" and "the").
- Keep paying attention to the topic of the paper.



© Copyright by Global Journals | Guidelines Handbook

- Use paragraphs to split each significant point (excluding the abstract).
- Align the primary line of each section.
- Present your points in sound order.
- Use present tense to report well-accepted matters.
- Use past tense to describe specific results.
- Do not use familiar wording; don't address the reviewer directly. Don't use slang or superlatives.
- Avoid use of extra pictures—include only those figures essential to presenting results.

Title page:

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

Abstract: This summary should be two hundred words or less. It should clearly and briefly explain the key findings reported in the manuscript and must have precise statistics. It should not have acronyms or abbreviations. It should be logical in itself. Do not cite 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 approaches 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. Use comprehensive sentences, and do not sacrifice readability for brevity; you can maintain it succinctly by phrasing sentences so that they provide more than a 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 limit the initial two items to no more than one line each.

Reason for writing the article—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 for this; results of any numerical analysis should be reported. Significant conclusions or questions that emerge from the research.

Approach:

- Single section and succinct.
- An outline of the job done is always written in past tense.
- Concentrate on shortening results—limit background information to a verdict or two.
- Exact spelling, clarity 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 of comprehending and calculating the purpose of your study without having to refer to other works. The basis for the study should be offered. Give the most important references, but avoid making a comprehensive appraisal of the topic. Describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will give no attention to your results. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here.

The following approach can create a valuable beginning:

- Explain the value (significance) of the study.
- Defend the model—why did you employ this particular system or method? What is its compensation? Remark upon its appropriateness from an abstract point of view as well as pointing out sensible reasons for using it.
- Present a justification. State your particular theory(-ies) or aim(s), and describe the logic that led you to choose them.
- Briefly explain the study's tentative purpose and how it meets 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 for every section. If you make the four points listed above, you will need at least four paragraphs. Present surrounding information only when it is necessary to support a situation. The reviewer does not desire to read everything you know about a topic. Shape the theory 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 soundly written procedures segment allows a capable scientist to replicate 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 to give the least amount of information that would permit another capable scientist to replicate 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 section, mention the specific item describing the way, but draw the basic principle while stating the situation. The purpose is to show 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:

Materials may be reported in part of a section or else they may be recognized along with your measures.

Methods:

- Report the method and not the 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—detail how procedures were completed, not how they were performed on a particular day.
- If well-known procedures were used, account for the procedure by name, possibly with a reference, and that's all.

Approach:

It is embarrassing to use vigorous voice when documenting methods without using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result, when writing up the methods, most authors use third person passive voice.

Use standard style in this and 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 as 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. Use statistics and tables, if suitable, to present consequences most efficiently.

You must clearly differentiate material which would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matters should not be submitted at all except if requested by the instructor.



© Copyright by Global Journals | Guidelines Handbook

Content:

- Sum up your conclusions in text and demonstrate them, if suitable, with figures and tables.
- In the manuscript, explain each of your consequences, and point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation of an exacting study.
- Explain results of control experiments and give 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 manuscript.

What to stay away from:

- Do not discuss or infer your outcome, report surrounding information, or try to explain anything.
- Do not include raw data or intermediate calculations in a research manuscript.
- Do not present similar data more than once.
- A manuscript should complement any figures or tables, not duplicate information.
- Never confuse figures with tables—there is a difference.

Approach:

As always, use past tense when you submit 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 section.

Figures and tables:

If you put figures and tables at the end of some details, make certain that they are visibly distinguished from any attached appendix materials, such as raw facts. Whatever the position, each table must be titled, numbered one after the other, and include a heading. All figures and tables must be divided from the text.

Discussion:

The discussion is expected to be the trickiest segment to write. A lot of papers submitted to the journal are discarded based on problems with the discussion. There is no rule for how long an 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 implications of the study. The purpose here is to offer an understanding of your results and support all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of results should be fully 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 the prospect, and let it drop at that. Make a decision as to whether each premise is supported or 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 an experiment might be personalized to accomplish a new idea.
- Give details of all of your remarks as much as possible, focusing on mechanisms.
- Make a decision as to whether the tentative design sufficiently addressed the theory and whether or not it was correctly restricted. Try to present substitute explanations if they are sensible alternatives.
- One piece of 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 other available information. Present work done by specific persons (including you) in past tense.

Describe generally acknowledged facts and main beliefs in present tense.

The Administration Rules

Administration Rules to Be Strictly Followed before Submitting Your Research Paper to Global Journals Inc.

Please read the following rules and regulations carefully before submitting your research paper to Global Journals Inc. to avoid rejection.

Segment draft and final research paper: You have to strictly follow the template of a research paper, failing which your paper may get rejected. You are expected to write each part of the paper wholly on your own. The peer reviewers need to identify your own perspective of the concepts in your own terms. Please do not extract straight from any other source, and do not rephrase someone else's analysis. Do not allow anyone else to proofread your manuscript.

Written material: You may discuss this with your guides and key sources. Do not copy anyone else's paper, even if this is only imitation, otherwise it will be rejected on the grounds of plagiarism, which is illegal. Various methods to avoid plagiarism are strictly applied by us to every paper, and, if found guilty, you may be blacklisted, which could affect your career adversely. To guard yourself and others from possible illegal use, please do not permit anyone to use or even read your paper and file.

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

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.

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

Index

A

Adolescents · 5, 12
Aesthesia · 2

B

Badagry · 15, 16, 17, 18, 19

C

Catholicism · 5
Conspicuously · 30
Contrary · 9, 10

E

Econometric · 3, 5, 22
Employ · 32
Enormous · 21

F

Farminvest · 16, 18
Fiscal · 28, 31
Foetus · 1, 2

H

Heterogeneity · 33
Heteroscedasticity · 25

K

Kurtosis · 23, 25

N

Neonatal · 2, 11

P

Patronages · 16
Polysemous · 4
Poponguine · 10
Porkvest · 16
Proximal · 34

Q

Quackery · 15

T

Trimester · 2
Trisomy · 1





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